

THE CITY OF SAN DIEGO

DEVELOPMENT SERVICES DEPARTMENT

Date of Notice: June 16, 2017

PUBLIC NOTICE OF THE PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

SAP No.: 24006842

PUBLIC NOTICE: The City of San Diego as the Lead Agency has determined that the project described below will require the preparation of an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act (CEQA). This Notice of Preparation of a project EIR was publicly noticed and distributed on June 16, 2017, was published in the *San Diego Daily Transcript*, and was placed on the City of San Diego website at the following location: http://www.sandiego.gov/city-clerk/officialdocs/notices/. In addition, the Public Notice was distributed

SCOPING MEETING: A public scoping meeting will not be held.

to the Central Library, as well as the Clairemont Branch Library.

Written/mail-in comments may be sent to Courtney Holowach, City of San Diego Development Services Center, 1222 First Avenue, MS 501, San Diego, CA 92101 or comments may be e-mailed to DSDEAS@sandiego.gov, referencing the Project Name (Morena Apartment Homes) and Project Number (526167) in the subject line within 30 days of the posting of this notice/date of the Public Notice above. Responsible agencies are requested to indicate their statutory responsibilities in connection with this project when responding. An EIR incorporating public input will then be prepared and distributed for the public to review and comment.

Project Name/PTS No.: Morena Apartment Homes/526167

Community Plan Area: Clairemont Mesa

Council District: Council District 2 (Council Member Lorie Zapf)

Project Description: GENERAL PLAN AMENDMENT, COMMUNITY PLAN AMENDMENT, REZONE, PLANNED DEVELOPMENT PERMIT, SITE DEVELOPMENT PERMIT, AND VESTING TENTATIVE MAP to construct 150 market-rate multi-family units with an approximately 4,400-square-foot clubhouse facility with leasing and exercise areas, recreational facility, landscaped areas including a pool and approximately 319-square-foot pool house building, and a water quality detention basin. The project would include a total of 265 vehicular parking spaces, including 99 attached garages, 52 detached carports, and 114 open parking spaces. Three handicap spaces would be accommodated on-site. In addition, 70 bicycle parking spaces and 16 motorcycle parking spaces are proposed. The project site consists of two parcels (Assessor Parcel Numbers 436-020-40 and -41). Figure 1 shows the regional location of the project site. Figure 2 shows an aerial photograph of the project vicinity. The project site is currently developed with the Coastal Trailer Villa Recreational Vehicle (RV) park. All existing uses would be removed and grading would occur on 5.73 acres of the 6.21-acre project site. Additionally, construction of the project would include a net import of approximately 1,300 cubic yards of soil in order to increase elevations and raise all portions of the project site on which housing would be constructed out of the 100-year floodplain.

The project would include an amendment to the Clairemont Mesa Community Plan to remove the mobile home park overlay and apply a medium density residential (15 to 30 dwelling units per acre) designation to the site, a rezone from the RS-1-7 and CC-4-2 zones to the RM-2-5 zone, a Vesting Tentative Map to create condominium units, a Site Development Permit due to the presence of environmentally sensitive lands (special flood hazard area), and a Planned Development Permit to allow for deviations to the retaining wall heights, to allow carports to encroach into setbacks, and to maintain the current roadway width of Tonopah Avenue. A Federal Emergency Management Agency Letter of Map Revision/Conditional Letters of Map Revisions Based on Fill documenting that the project would be constructed on elevations outside of the 100-year floodplain would be required. The site is not included on any Government Code listing of hazardous waste sites.

The City is currently preparing the Morena Corridor Specific Plan, which builds upon the Morena Boulevard Station Area Planning Study. The Specific Plan will provide policies and recommendations that address mobility, and urban design to enhance the corridor. Although proposed Morena Corridor Specific Plan is not yet approved, the project is intended to provide transit supportive densities consistent with the overarching goals of the Morena Corridor Specific Plan.

Applicant: Fairfield Realty III, LLC, 5510 Morehouse Drive, Suite 200, San Diego, CA 92121

Recommended Finding: Pursuant to Section 15060(d) of CEQA Guidelines, it appears that the proposed project may result in significant environmental impacts in the following areas: **LAND USE**,

TRANSPORTATION/CIRCULATION, CULTURAL RESOURCES, AIR QUALITY, GREENHOUSE GASES, NOISE, VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER, HEALTH AND SAFETY/HAZARDOUS MATERIALS, HYDROLOGY, WATER QUALITY, GEOLOGY AND SOILS, PUBLIC SERVICES, PUBLIC UTILITIES, and TRIBAL CULTURAL RESOURCES.

Availability in Alternative Format: To request the attachments in an alternative format, call the Development Services Department at (619) 446-5460 immediately to ensure availability. This information is ALSO available in alternative formats for persons with disabilities; to request this notice in alternative format, call (619) 446-5446 or (800) 735-2929 (TEXT TELEPHONE).

Additional Information: For environmental review information, contact Courtney Holowach at (619) 446-5187. The Scoping Letter and supporting documents may be reviewed, or purchased for the cost of reproduction, at the fifth floor of the Development Services Center. For information regarding public meetings/hearings on this project, contact Project Manager Paul Godwin at (619) 446-5190. This notice was published in the *San Diego Daily Transcript* and distributed on June 16, 2017.

Kerry Santoro
Deputy Director
Development Services Department

DISTRIBUTION: See Attached

ATTACHMENTS: Figure 1: Regional Location

Figure 2: Project Location on Aerial Photograph

Scoping Letter

Distribution:

STATE OF CALIFORNIA

Caltrans District 11 (31)
State Clearinghouse (46A)
California Department of Transportation (51)
California Transportation Commission (51A)
California Transportation (51B)
California Native American Heritage Commission (222)

CITY OF SAN DIEGO

Mayor's Office (91)
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Councilmember Ward, District 3
Councilmember Cole, District 4 (MS 10A)
Councilmember Kersey, District 5 (MS 10A)
Councilmember Cate, District 6 (MS 10A)
Councilmember Sherman, District 7 (MS 10A)
Councilmember Alvarez, District 8 (MS 10A)
Councilmember Gomez, District 9, (MS 10A)
Development Services Department

Paul Godwin, Development Project Manager Jeff Szymanski, EAS Courtney Holowach, EAS Kristal Feilen, LDR Planning Jeff Tamares, LDR Engineering Rudy Jauregui, LDR Transportation Jacobe Washburn, LDR Geology Vanessa Kohakura, LDR Landscaping

Michael Prinz, Long Range Planning Shannon Scoggins, Parks and Recreation Bobby Mordenti, Plan Airport Camille Pekarek, Plan Historic Lisa Wood, Environmental Services Central Library (81A) Clairemont Branch Library (81H) Historical Resources Board (87) Tom Tomlinson, Facilities Financing (93B) City Attorney (93C)

OTHER ORGANIZATIONS AND INTERESTED INDIVIDUALS

San Diego County Apartment Association (152) San Diego Board of Realtors (154) San Diego Chamber of Commerce (157) Balboa Avenue Citizens Advisory Committee (246) Clairemont Mesa Planning Committee (248) San Diego Mesa College (250) University of San Diego (251)

Clairemont Senior Citizens Club (252)

Tecolote Canyon Citizens Advisory Committee (254)

Friends of Tecolote Canyon (255)

Tecolote Canyon Rim (256)

Linda Vista Planning Group (267)

Clairemont Town Council (257)

San Diego Unified School District (132)

Carmen Lucas (206)

South Coastal Information Center (210)

San Diego Archaeological Center (212)

Save Our Heritage Organization (214)

Ron Christman (215)

Clint Linton (215B)

Frank Brown – Inter Tribal Cultural Resources (216)

Campo Band of Mission Indians (217)

San Diego County Archaeological Society, Inc. (218)

Kumeyaay Cultural Preservation (223)

Kumeyaay Cultural Repatriation Committee (225)

Native American Distribution (225 A-S)

Native American Distribution (222)

San Diego History Center (211)

SANDAG (108)

Metropolitan Transit System (112)

San Diego Gas & Electric (114)

Figure 1: Regional Location Map



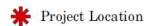
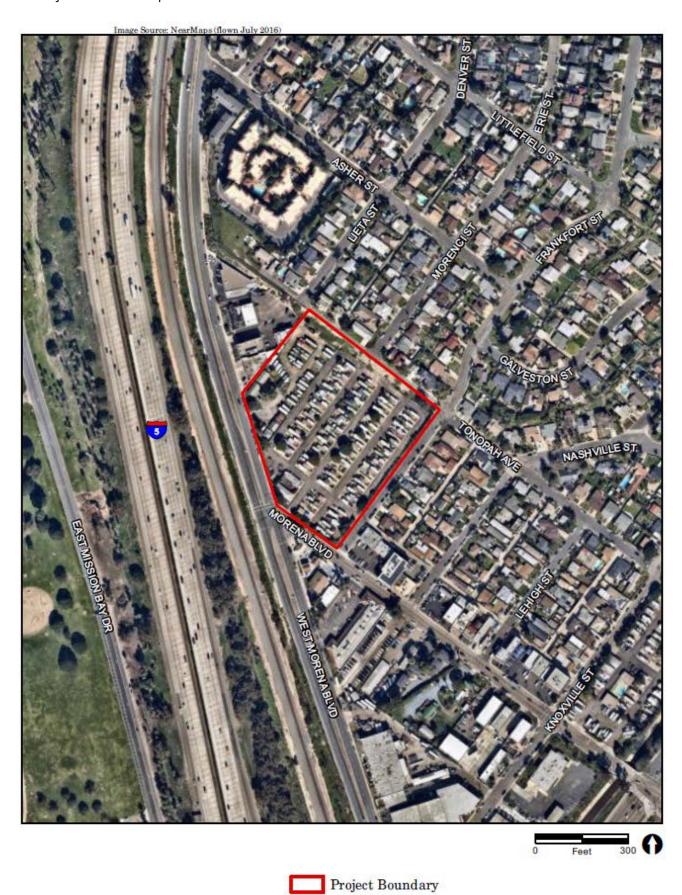


Figure 2: Project Location Map





June 16, 2017

Mr. Shon Finch Fairfield Realty III, LLC 5510 Morehouse Drive, Suite 200 San Diego, CA 92121

Subject: Scope of Work for an Environmental Impact Report for the Morena Apartment

Homes Project (Project No. 526167)

Dear Mr. Finch:

Pursuant to Section 15060(d) of the California Environmental Quality Act (CEQA), the Environmental Analysis Section (EAS) of the City of San Diego Development Services Department has determined that the project may have significant effects on the environment, and the preparation of an Environmental Impact Report (EIR) is required.

The purpose of this letter is to identify the specific issues to be addressed in the EIR. The EIR shall be prepared in accordance with the attached "City of San Diego Technical Report and Environmental Impact Guidelines" (Updated December 2005). A copy of the current guidelines is attached. A Notice of Preparation will be distributed to the Responsible Agencies and others who may have an interest in the project. Scoping meetings are required by CEQA Section 21083.9(a)(2) for projects that may have statewide, regional, or area-wide environmental impacts. The City's EAS staff has determined this project does not meet this threshold.

Changes or additions to the scope of the EIR may be required as a result of input received in response to the Notice of Preparation. In addition, the applicant may adjust the project over time, and these changes would be disclosed in the EIR.

Each section and issue area of the EIR shall provide a descriptive analysis of the project followed by a comprehensive evaluation. The EIR shall also include sufficient graphics and tables to provide a complete description of all major project features.

Project Description: The project would construct 150 market-rate multi-family residential units with a clubhouse/recreational area including exercise and common areas, a pool, and pool house. The project would provide off-street vehicular parking spaces consistent with City of San Diego Municipal Code requirements. In addition, 70 bicycle parking spaces and 16 motorcycle parking spaces are proposed. The project site consists of two parcels (Assessor Parcel Numbers 436-020-40 and -41).

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The project site is currently developed with the Coastal Trailer Villa Recreational Vehicle park. All existing uses would be removed and grading would occur on approximately 5.73 acres of the 6.21-acre project site. Additionally, construction of the project would include a net import of approximately 1,300 cubic yards of soil in order to increase elevations and raise all portions of the project site on which housing would be constructed out of the 100-year floodplain.

The project requires an amendment to the Clairemont Mesa Community Plan to remove the mobile home park overlay and apply a medium-density residential (15 to 30 dwelling units per acre) designation to the site; a rezone from the RS-1-7 and CC-4-2 zones to the RM-2-5 zone, a Vesting Tentative Map to create condominium units; a Site Development Permit due to the presence of environmentally sensitive lands (special flood hazard area); and a Planned Development Permit to allow for deviations to the retaining wall heights, to allow carports to encroach into the setbacks, and to maintain the current roadway width of Tonopah Avenue. Project design and construction methods to increase elevations at the project are being reviewed by the Federal Emergency Management Agency (FEMA) for ultimate issuance of a Letter of Map Revision/Conditional Letters of Map Revision Based on Fill (LOMR/CLOMR-F) documenting that the project would be constructed on elevations outside of the 100-year floodplain upon approval.

EIR FORMAT/CONTENT REQUIREMENTS

The EIR serves to inform governmental agencies and the public of a project's environmental impacts. Emphasis in the EIR must be on identifying feasible solutions to environmental problems. The objective is not to simply describe and document an impact, but to actively create and suggest mitigation measures or project alternatives to substantially reduce significant adverse environmental impacts. The adequacy of the EIR will depend greatly on the thoroughness of this effort.

The EIR must be written in an objective, clear, and concise manner, in plain language. Each section and issue area of the EIR shall provide a descriptive analysis of the project followed by a comprehensive evaluation of the issue area and use graphics and tables to replace extensive word descriptions and to assist in clarification. Conclusions must be supported with quantitative, as well as qualitative information, to the extent feasible.

Prior to public review, Conclusions to be attached at the front of the Draft EIR will also need to be prepared. The Conclusions cannot be prepared until an approved draft has been submitted and accepted by the City. The Draft EIR shall include a title page including the Project Tracking System number and the date of the publication. **The entire document must be left justified. In addition, the environmental document is required to utilize Open sans, 10-point font.** Please refer to the "Environmental Impact Report Guidelines" (updated December 2005) for additional details regarding the required information.

I. <u>CERTIFICATION PAGE</u>

Prior to the distribution of the Draft EIR for public review, the Certification Page, which is attached at the front of the Draft EIR, will need to be prepared. The Certification Page cannot be prepared until an approved draft document has been submitted and accepted by the City of San Diego.

II. <u>TITLE PAGE</u>

The EIR shall include a Title Page that includes the Project Tracking System number, State Clearinghouse number, and date of publication. DO NOT include any company logos and applicant's or consultant's names.

III. TABLE OF CONTENTS

The EIR shall include a Table of Contents and must list all sections included in the EIR, as well as a list of the Appendices, Tables, and Figures. Immediately following the Table of Contents, a list of acronyms and abbreviations used in the document must be provided.

IV. <u>EXECUTIVE SUMMARY</u>

The consultant shall prepare the Executive Summary to be submitted for review with the last screencheck Draft EIR, unless otherwise determined. The Executive Summary shall have an independent page numbering system (e.g., S-1, S-2). In general, the Executive Summary should reflect the EIR outline but does not need to contain every element of the EIR. At a minimum, the Executive Summary must include a brief project description; impacts determined to be significant (including cumulative effects); impacts found to be less than significant; alternatives; areas of controversy; and, lastly, a matrix listing the impacts and mitigation measures. Please refer to the City of San Diego Environmental Report Guidelines for further detailed information.

V. <u>INTRODUCTION</u>

Introduce the project with a brief discussion on the intended use and purpose of the EIR. Describe and/or incorporate by reference any previously certified environmental documents that address the project site. Briefly describe areas where the project is in compliance or non-compliance with assumptions and mitigation contained in these previously certified documents. Additionally, this section shall provide a brief description of any other local, state, and federal agencies that may be involved in the project review and or any grant approvals.

VI. <u>ENVIRONMENTAL SETTING</u>

The EIR shall describe the precise location of the project and present it on a detailed topographic map and regional map. Provide a local and regional description of the environmental setting of the project, as well as the zoning and land use designations of the site and its contiguous properties, area topography, drainage characteristics, and vegetation. Include the existing and planned land uses in the vicinity, on- and off-site resources, the community plan area land use designations(s), Multi-Habitat Planning Area, existing zoning, all utility easements and any required maintenance access, and any overlay zones within this section. Include any applicable jurisdictional boundaries, land use plans and overlay zones

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that affect the project site, such as the City of San Diego General Plan. This section shall also discuss the provision of emergency services.

VII. PROJECT DESCRIPTION

Per Section 15124 of the CEQA Guidelines, the EIR shall include a discussion of the project goals and objectives. Project objectives will be critical in determining the appropriate alternatives for the project, which would avoid or substantially reduce potentially significant impacts. The description of the project shall include an overview of all major project features and phasing, including land use, grading quantities, and locations, retaining walls (number of retaining walls and their individual heights and lengths), landscaping, drainage design, improvement plans, including any off-site components, vehicular access points, and parking areas associated with the project. The project description shall provide a discussion of all applicable discretionary actions required for the project (e.g., Site Development Permit), as well as a discussion of all permits and approvals required by federal, state, and other regulatory agencies.

VIII. <u>HISTORY OF PROJECT CHANGES</u>

This section of the EIR shall outline the history of the project and any physical changes that have been made to the project in response to environmental concerns identified during the City of San Diego's review of the project.

IX. <u>ENVIRONMENTAL ANALYSIS</u>

The potential for significant environmental impacts must be thoroughly analyzed and mitigation measures that would avoid or substantially lessen any such significant impacts must be identified. The EIR must represent the independent analysis of the City of San Diego as Lead Agency; therefore, all impact analysis must be based on the current City of San Diego CEQA Significance Determination Thresholds (Updated July 2016). Below are key environmental issue areas that have been identified for this project, within which the issue statements must be addressed individually. Discussion of each issue statement shall include an explanation of the existing project site conditions, impact analysis, significance determination, and appropriate mitigation. The impact analysis shall address potential direct and indirect impacts that could be created through implementation of the project.

In each environmental issue section, mitigation measures to avoid or substantially lessen impacts must be clearly identified and discussed. The ultimate outcome after mitigation shall also be discussed (i.e., significant but mitigated, significant and unmitigated). If other potentially significant issue areas arise during detailed environmental investigation of the project, consultation with Development Services Department is required to determine if these areas need to be added to the EIR. As supplementary information is required, the EIR may also need to be expanded.

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LAND USE

- Issue 1: Would the project result in a conflict with the environmental goals, objectives, or recommendations of the General/Community Plan in which it is located?
- Issue 2: Would the project require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?
- Issue 3: Would the project conflict with the provisions of the City's Multiple
 Species Conservation Program (MSCP) Subarea Plan or other approved local, regional, or state habitat conservation plan?
- Issue 3: Would the project physically divide an established community?
- Issue 4: Would the proposal result in the exposure of people to current or future noise levels which exceed standards established in the Noise Element of the General Plan or an adopted Airport Land Use Compatibility Plan (ALUCP)?

The project site is located within the CC-4-2 and RS-1-7 zones, the Clairemont Mesa Height Limitation Overlay Zone (30 feet), the Mobile Home Park Overlay Zone, the Airport Influence Area Overlay Zone (SD International Airport Review Area 2), the Airport FAA Part 77 Noticing Area Overlay Zone (SD International Airport threshold at 150-160 Mean Sea Level), the FEMA Floodways and Floodplains Overlay Zone (FP 100 Special Flood Hazard Area), and within the Clairemont Mesa Community Plan Area.

As indicated under Project Description, the project includes an amendment to the Clairemont Mesa Community Plan, a rezone from the RS-1-7 and CC-4-2 zones to the RM-2-5 zone, a Vesting Tentative Map; a Site Development Permit; and a Planned Development Permit. The EIR shall evaluate consistencies/inconsistencies (including all deviations, variances, etc.) with local, state, and federal regulations (i.e., the City's General Plan, Mission Valley Community Plan, and City of San Diego Land Development Code). If the project is found to be inconsistent with any adopted land use plans, the EIR would disclose and analyze any physical effects that may result from the inconsistency that could be considered significantly adverse.

This section of the EIR shall address whether the project would result in an inconsistency or conflict with any environmental goals, objectives, or policies of the community plan or general plan, thereby resulting in a significant environmental impact. This section of the EIR would also evaluate whether the project would divide an established community and whether the project's proposed land uses would be consistent with the Airport Influence Area Overlay Zone (Review Area 2) of the San Diego International Airport.

The site is not located within or adjacent to any Multi-Habitat Planning area of the Multiple Species Conservation Program (MSCP). The closest MHPA is located within Tecolote Canyon, east of the project site. Therefore, no land use conflicts with the MSCP Subarea Plan are anticipated. This shall be disclosed and discussed in the Land Use section of the EIR.

TRANSPORTATION/CIRCULATION

- Issue 1: Would the project result in traffic generation in excess of specific community plan allocation?
- Issue 2: Would the project result in an increase in projected traffic, which is substantial in relation to the existing traffic load and capacity of the street system?
- Issue 3: Would the project result in an addition of a substantial amount of traffic to a congested freeway segment, interchange, or ramp?
- Issue 4: Would the project result in an increased demand for off-site parking or affect existing parking?
- Issue 5: Would the project result in a substantial impact upon existing or planned transportation systems?
- Issue 6: Would the project result in substantial alterations to present circulation movements including effects on existing public access to beaches, parks, or other open space areas?
- Issue 7: Would the project result in an increase in traffic hazards for motor vehicles, bicyclists, or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access restricted roadway)?
- Issue 8: Would the project result in a conflict with adopted policies, plans, or programs supporting alternative transportation models (e.g., bus turnouts, bicycle racks)?

This section of the EIR shall identify potential impacts to the traffic and circulation system based on the results of the Morena Apartments Project Traffic Impact Analysis (TIA). The TIA was prepared consistent with the City of San Diego Traffic Impact Study Manual and shall be included as an appendix to the EIR. A summary of the approved TIA shall be included in the body of the EIR and document the effect the project would have on surrounding circulation element roadways and intersections within the study area. The analysis shall focus on segment and intersection conditions for existing, near-term, and horizon year conditions with or without the project and shall be cumulative in nature and will consider future growth within the study area and proposed changes to surrounding circulation network.

This section of the EIR shall also identify potential impacts on parking and public access to beaches, parks, or other open space areas. Finally, this section shall describe the impacts the project may have on the walkability, pedestrian, and bicycle connectivity within the project site and off-site areas. If significant traffic impacts are identified, this section shall also describe mitigation measures that would reduce impacts to below a level of significance per the standards set by the City of San Diego.

CULTURAL RESOURCES

Issue 1: Would the project result in an alteration, including the adverse physical

or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or

object or site?

Issue 2: Would the project result in any impact to existing religious or sacred

uses within the potential impact area?

Issue 3: Would the project result in the disturbance of any human remains,

including those interred outside of formal cemeteries?

Cultural resources include all properties or sites that are eligible or potentially eligible for the National Register of Historic Places, as well as those that may be significant pursuant to state and local laws and registration programs such as the California Register of Historical Resources or the City of San Diego Historical Resources Register. Historical resources include buildings, structures, objects, archaeological sites, districts, landscaping, and traditional cultural properties possessing physical evidence of human activities that are typically over 45 years old, regardless of whether they have been altered or continue to be used. CEQA requires that before approving discretionary projects, the Lead Agency must identify and examine the significant adverse environmental effects which may result from that project. Pursuant to Section 21084.1 of the CEQA Guidelines, a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Provided information regarding the age of the existing building to be demolished and evidence relative to its historic relevance.

Plan Historic staff has reviewed the submitted material and based on their review it was determined that the property does not meet local designation criteria as an individually significant resource under any adopted Historical Resources Board Criteria. Therefore, no historical research report would be required at this time.

Qualified City staff conducted an archaeological data base search and no archaeological sites have been mapped in or adjacent to the project site. Additionally, staff evaluated the developed project site in order to determine if archaeological resources could be buried below the surface. Based upon the lack of recorded resources, the disturbed nature of the site and the scope of work qualified staff determined that the project had very little potential to impact archaeological resources.

AIR QUALITY

Issue 1: Would the project result in a conflict with or obstruct implementation of the applicable air quality plan?

Issue 2: Would the project result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation?

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Issue 3: Would the project expose sensitive receptors to substantial pollutant

concentrations including air toxics such as diesel particulates?

Issue 4: Would the project result in creating objectionable odors affecting a

substantial number of people?

Issue 5: Would the project generate in excess of 100 pounds per day of

Particulate Matter (PM)(dust)?

This section of the EIR shall summarize the findings of the Air Quality Analysis prepared for the project. This section of the EIR shall analyze potential impacts associated with emissions of criteria pollutants during both construction and operation of the project. This section of the EIR shall also provide a qualitative discussion of potential impacts associated with odor. If significant air quality impacts are identified, the EIR shall include mitigation measures that would reduce impacts to below a level of significance per the standards set by the City of San Diego.

The EIR will describe the project's climatological setting within the San Diego Air Basin and the basin's current attainment levels for State and Federal Ambient Air Quality Standards. Discuss short- and long-term and cumulative impacts on regional air quality, including construction and operational-related sources of air pollutants. Discuss the potential impacts from the increase in trips to the Regional Air Quality Standards, and the overall air quality impacts from such trips, and any proposed mitigation measures. Should the project result in a significant decrease in transportation levels of service of any intersection in the vicinity of a sensitive receptor, the EIR will address the potential degradation of localized air quality, which may result, including the possibility of "hot spots" within the area. The EIR will also include a discussion of potential dust generation during construction within this section of the document, together with any required dust suppression measures that would avoid or lessen dust-related impacts to sensitive receptors within the area.

GREENHOUSE GASES

Issue 1: Would the project generate greenhouse gas emissions, either directly or

indirectly, that may have a significant impact on the environment?

Issue 2: Would the project conflict with the City's Climate Action Plan or another

applicable plan, policy or regulation adopted for the purpose of

reducing the emissions of greenhouse gases?

This section shall present an overview of greenhouse gases (GHG) including the most recent information regarding the current understanding of the mechanisms behind current conditions and trends, and the broad environmental issues related to global climate change. A discussion of current domestic legislation, plans, policies, and programs pertinent to global climate change shall also be included. The EIR shall provide details of the project's sustainable features such as pedestrian access and orientation, sustainable design and building features, and others that meet criteria outlined in the Conservation Element of the General Plan.

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Additionally, this section of the EIR shall summarize the findings of the City of San Diego Climate Action Plan Consistency Checklist prepared for the project. This section of the EIR shall also evaluate whether the project would generate greenhouse gas emissions that would result direct or indirect impacts on the environment or whether the project would conflict with the City's Climate Action Plan.

Noise

- Issue 1: Would the project result in or create a significant increase in the existing ambient noise levels?
- Issue 2: Would the project result in exposure of people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan or an adopted airport Comprehensive Land Use Plan?

This section of the EIR shall summarize the findings of the Noise Technical Report prepared for the project. This section of the EIR shall estimate future vehicular traffic noise levels. Noise levels shall be calculated for the affected roadway segments with and without project implementation, and noise level increases/decreases shall be assessed for existing land uses. The results of the model shall be expressed in community noise equivalent levels and shall programmatically evaluate noise impacts for sensitive receptors surrounding the project roadway network. This section would also analyze potential noise impacts associated with construction and operation of the project. If significant noise impacts are identified, the EIR shall include mitigation measures that would reduce impacts to below a level of significance.

Additionally, the noise report shall evaluate the project's consistency with the General Plan Noise Element. If there is a potential for proposed uses to be incompatible with exterior noise levels at outdoor amenities or interior areas, measures must be included as project design features in order to ensure consistency with the General Plan Noise Element (i.e., setbacks, use of double-paned glass, noise walls/berms and other noise attenuation techniques).

VISUAL EFFECTS AND NEIGHBORHOOD CHARACTER

- Issue 1: Would the project result in a substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan?
- Issue 2: Would the project result in the creation of a negative aesthetic site or project?
- Issue 3: Would the project result in bulk, scale, materials, or style which would be incompatible with surrounding development?
- Issue 4: Would the project cause a substantial alteration to the existing or planned character of the area?

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Issue 5: Would the project result in the loss of a distinctive landmark as

identified in the community plan?

Issue 6: Would the project result in a substantial change in the existing

landform?

Issue 7: Would the project result in substantial light or glare which would

adversely affect daytime or nighttime view in the area?

This section should evaluate grading associated with the project and the potential change in the visual environment based on the development. Provide an evaluation of the Visual Quality/Neighborhood Character (Aesthetics) impacts due to the project. Describe the structures in terms of building mass, bulk, height, and architecture. Describe or state how this complies with or is allowed by the City's standards for the zone (or proposed zone). Describe how the character of the surrounding community area would be affected with development of the project. Address visual impacts of the project from public vantage points. Visibility of the site from public vantage points should be identified through a photo survey/inventory and/or photo simulations, and any changes in these views should be described.

Describe how the character of the surrounding area would be affected with development of the project. Describe any unifying theme proposed for the development area, and include a description of the design guidelines. Would the project result in a homogenous style of architecture, or would varied architectural designs be encouraged? Also address any zone deviations (such as height) that could result in substantial impacts to the visual environment.

If significant impacts to Visual Quality/Neighborhood Character are identified, mitigation measures and/or project alternatives that would reduce significant impacts to below a level of significance should be provided. Any and all deviations/variances relating to visual quality/neighborhood character and bulk and scale must be discussed in this section.

HEALTH AND SAFETY/HAZARDOUS MATERIALS

Issue 1: Would the project result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-

mile of an existing or proposed school?

Issue 2: Would the project impair implementation of, or physically interfere

with an adopted emergency response plan or emergency evacuation

plan?

Issue 3: Would the project be located on a site which is included on a list of

hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public

or environment?

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Issue 4: Would the project result in a safety hazard for people residing or working in a designated airport influence area?

This section of the EIR shall evaluate whether the project would be located on a site which is included on a list of hazardous materials sites based on the results of the Phase I Environmental Site Assessment prepared for the project. If hazardous materials are identified that require removal and disposal, this section of the EIR will document appropriate mitigation measures consistent with applicable regulatory guidance. This section of the EIR would also evaluate whether the project would generate hazardous emission within 0.25-mile of an existing school, result in impacts on emergency response and evacuation, the potential for the project to be impacted by wildland fires, and whether the project would result in any airport hazards. The project site is located within the Airport Influence Area Overlay Zone (SD International Airport Review Area 2).

HYDROLOGY

- Issue 1: Would the project result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?
- Issue 2: Would the project develop wholly or partially within the 100-year floodplain identified in the FEMA maps or impose flood hazards on other properties?
- Issue 3: Would the project result in a substantial increase in impervious surfaces and associated increased runoff?

This section of the EIR shall evaluate potential impacts related to hydrology based on the results of the Preliminary Drainage Report and Storm Water Quality Management Plan prepared for the project. This section of the EIR shall evaluate the potential for the project to increase the volume and flow rates of runoff through an increase in impervious surfaces or result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes. This section would also evaluate the potential for the project to develop structures within the 100-year floodplain that would be subject to flood hazards or impose flood hazards on other properties. If significant impacts related to hydrology are identified, the EIR shall include mitigation measures that would reduce impacts to below a level of significance per the standards set by the City of San Diego.

WATER QUALITY

- Issue 1: Would the project result in an increase in pollutant discharge to receiving waters during or following construction?
- Issue 2: Would the project discharge identified pollutants to an already impaired water body?

This section of the EIR shall evaluate potential impacts related to water quality based on the results of the Storm Water Quality Management Plan prepared for the project. This section of the EIR will evaluate whether the project would impact the water quality within the project

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area and downstream and document example Best Management Practices to be implemented during construction and operation of the project. This section will also evaluate the project's consistency with City of San Diego storm water requirements. If significant impacts related to water quality are identified, the EIR shall include mitigation measures that would reduce impacts to below a level of significance per the standards set by the City of San Diego.

GEOLOGY AND SOILS

- Issue 1: Would the project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?
- Issue 2: Would the project result in a substantial increase in wind or water erosion of soils, either on or off the site?
- Issue 3: Would the project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

This section of the EIR shall summarize the findings of the Preliminary Geotechnical Evaluation prepared for the project. This section of the EIR shall analyze potential impacts related to geologic hazards such as earthquakes, landslides, mudslides, ground failure, lateral spreading, subsidence, liquefaction, or collapse. If significant impacts related to geology and soils are identified, the EIR shall include mitigation measures that would reduce impacts to below a level of significance per the standards set by the City of San Diego.

PUBLIC SERVICES

Issue 1: Would the project have an effect upon, or result in a need for new or altered governmental services in any of the following areas: Fire/Life Safety Protection; Police Protection; Schools; Parks or other recreational facilities; Maintenance of public facilities, including roads; and Libraries which would result in physical impacts?

This section of the EIR shall evaluate whether the project would increase demand for fire/life safety protection, police protection, schools, parks or other recreational facilities, and libraries necessitating construction of additional facilities. If significant impacts related to public services are identified, the EIR shall include mitigation measures that would reduce impacts to below a level of significance per the standards set by the City of San Diego.

PUBLIC UTILITIES

Issue 1: Would the project result in the need for new systems, or require substantial alterations to existing utilities, the construction of which would create physical impacts (water, sewer, and solid waste disposal, natural gas, and communication systems)?

Issue 2: Would the project result in the use of excessive amounts of water?

Issue 3: Does the proposal propose landscaping which is predominantly non-drought resistant vegetation?

This section of the EIR shall evaluate whether the project would increase demand for public utilities. If significant impacts related to public utilities are identified, the EIR shall include mitigation measures that would reduce impacts to below a level of significance per the standards set by the City of San Diego.

TRIBAL CULTURAL RESOURCES

Issue 1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

This section of the EIR shall evaluate the potential for the project to impact tribal cultural resources consistent with guidance provided in the CEQA Significance Determination Thresholds (updated July 2016) and the CEQA Guidelines and Public Resources Code regarding tribal cultural resources.

X. <u>SIGNIFICANT ENVIRONMENTAL EFFECTS, WHICH CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED</u>

This section shall describe the significant unavoidable impacts of the projects, including those significant impacts that can be mitigated but not reduced to below a level of significance.

XI. <u>SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES</u>

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In conformance with CEQA Section 15126.2(b) and (c), the EIR shall discuss the significant environmental effects which cannot be avoided if the project is implemented; and the significant irreversible changes that would result from the implementation of the project. Address the use of nonrenewable resources during the construction and life of the project.

XII. GROWTH INDUCEMENT

The EIR shall address the potential for growth inducement through implementation of the project. The EIR shall discuss the ways in which the project could foster economic or population growth either directly or indirectly. Accelerated growth could further strain existing community facilities or encourage activities that could significantly affect the environment. This section need not conclude that growth-inducing impacts, if any, are significant unless the project would induce substantial growth or concentration of population.

XIII. <u>CUMULATIVE IMPACTS</u>

When the project is considered with other past, present, and reasonably foreseeable projects in the project area, implementation could result in significant environmental changes, which are individually limited but cumulatively considerable. In accordance with Section 15130 of the CEQA Guidelines, potential cumulative impacts shall be discussed in a separate section of the EIR.

XIV. <u>EFFECTS FOUND NOT TO BE SIGNIFICANT</u>

A separate section of the EIR shall include a brief discussion of why certain areas were not considered to be potentially significant and were therefore not included in the EIR. It is anticipated that these issues would include agricultural resources, biological resources, mineral resources, and paleontological resources. However, if these or other potentially significant issue areas arise during the detailed environmental investigation of the project, consultation with EAS staff is required to determine if these or other issue areas need to be more fully addressed within the EIR. Additionally, as supplementary information is submitted, the EIR may need to be expanded to include additional areas.

XV. <u>ALTERNATIVES</u>

The EIR must place major attention on reasonable alternatives that avoid or mitigate the significant impacts for the environmental issue sections that are addressed in detail in the environmental impact analysis. These alternatives should be identified and discussed in detail and should address all new significant impacts associated with the project. The alternatives analysis should be conducted in sufficient detail to clearly assess the relative level of impacts and feasibility. See Section 15364 of the CEQA Guidelines for the CEQA definition of "feasible."

The alternatives discussion should provide a meaningful evaluation, analysis and comparison of impacts as compared to those of the proposed project (matrix format recommended). The EIR is required to provide sufficient quantitative and qualitative information to allow the public and the decision makers the ability to conduct a meaningful

Page 15 of 16 Mr. Shon Finch June 16, 2017

comparison. The analysis should provide appropriate tables and conceptual site plans and any other visual aids to allow evaluation.

If applicable provide a section entitled "Alternatives Considered but Rejected." This section should include a discussion of preliminary alternatives that were considered but not analyzed in detail. The reasons for their rejection must be explained in detail and demonstrate to the public the analytical route followed in rejecting certain alternatives.

The analysis should consider the ability of each alternative to meet the project objectives while reducing or substantially lessening significant environmental impacts. The following alternatives, at a minimum, must be considered:

<u>No Project Alternative:</u> The No Project Alternative shall qualitatively discuss potential impacts associated with leaving the project as it is currently configured as a mobile home park.

<u>Current Plan Alternative</u>: The Current Plan Alternative would evaluate development of the site under the current land use and zoning which could allow community commercial and mixed-use development.

<u>Reduced Project Alterative:</u> A Reduced Project Alternative would evaluate the effects of redeveloping the site at a smaller scale and/or reduced density.

Other alternatives, such as alternative sites, may be developed based on results of the impact analysis and consultation with City staff.

XVI. MITIGATION, MONITORING, AND REPORTING PROGRAM (MMRP)

For each of the issue areas discussed above, mitigation measures shall be clearly identified, discussed, and their effectiveness assessed in each issue section of the EIR. A Mitigation, Monitoring, and Reporting Program (MMRP) for each mitigation measure must be identified. At a minimum, the program shall identify: (1) the City department or other entity responsible for the monitoring; (2) the monitoring and reporting schedule; and (3) the completion requirements. The separate MMRP shall also be contained (verbatim) as a separate chapter within the EIR. When appropriate, EAS staff will provide the applicant with specific MMRPs to be incorporated into the EIR.

XVII. <u>REFERENCES</u>

Materials must be reasonably accessible. Use the most up-to-date possible and reference source documents

XVIII. INDIVIDUALS AND AGENCIES CONSULTED

List those consulted in preparation of the EIR. Seek out parties who would normally be expected to be a responsible agency or an interest in the project.

XIV. CERTIFICATION PAGE

Page 16 of 16 Mr. Shon Finch June 16, 2017

Include City and Consulting staff members, titles, and affiliations

XV. <u>APPENDICES</u>

Include the EIR Notice of Preparation, and any comments received regarding the Notice of Preparation and Scoping Letter. Include all accepted technical studies.

Until a screencheck Draft EIR is submitted which addresses all of the above issues, the environmental processing timeline for this project will be held in abeyance.

Conclusion:

If other potentially significant issue areas arise during detailed environmental investigation of the project, consultation with this division is required to determine if these other areas need to be addressed in the EIR. Should the project description be revised, an additional scope of work may be required. Furthermore, as the project design progresses and supplementary information becomes available, the EIR may need to be expanded to include additional issue areas.

It is important to note that timely processing of your project will be contingent in large part on your selection of a well-qualified consultant. Prior to starting work on the EIR, a meeting between the consultant and EAS is required to discuss and clarify the scope of work.

If a screencheck Draft EIR is not submitted to EAS for review within 30 days of the date of this letter, the application processing timeline will be held in abeyance until the report has been provided.

Should you have any questions, please contact the environmental analyst, Courtney Holowach at (619) 446-5187; for general question regarding the project contact Paul Godwin, Project Manager, at (619) 446-5190.

Sincerely,

Kerry Santoro
Deputy Director
Development Services Department

cc: Courtney Holowach, Development Services Department Jeffrey Szymanski, Development Services Department Environmental Project File



STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Notice of Preparation

June 16, 2017

To:

Reviewing Agencies

Re:

Morena Apt Homes VTM PDP SDP

SCH# 2017061040

Attached for your review and comment is the Notice of Preparation (NOP) for the Morena Apt Homes VTM PDP SDP draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Courtney Holowach City of San Diego 1222 First Avenue, MS-501 San Diego, CA 92101

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely.

Scott Morgan

Director, State Clearinghouse

Attachments cc: Lead Agency

Document Details Report State Clearinghouse Data Base

SCH# 2017061040

Project Title Morena Apt Homes VTM PDP SDP

Lead Agency San Diego, City of

Type NOP Notice of Preparation

Description Community Plan Amendment, Rezone, Vesting Tentative Map, Planned Development Permit & Site

Development Permit to rezone from CC-4-2/RS-1-7 to RM-2-5 also to remove mobile home overlay & consolidate two lots for the construct of 150 multi-family dwelling units, work includes deviations within Environmental Sensitive Land. The 5.70 acre site is located at 1623 & 1577 Morena Blvd within the

Clairemont Mesa Community Plan area within Council District 2.

Lead Agency Contact

Name Courtney Holowach

Agency City of San Diego

Phone 619-446-5187

email

Address 1222 First Avenue, MS-501

City San Diego

State CA Zip 92101

Fax

Project Location

County San Diego

City San Diego

Region

Cross Streets Morena Blvd and Frankfort Street

Lat / Long 32° 46' 34.67" N / 112° 12' 23.64" W

Parcel No. 436-020-4000

Township Range Section Base

Proximity to:

Highways :

Airports

Railways

Waterways San Diego River

Schools SDSU

Land Use CC-4-2/Rs-1-7

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Flood Plain/Flooding; Geologic/Seismic; Noise;

Traffic/Circulation; Water Quality; Growth Inducing

Reviewing Resources Agency; Department of Parks and Recreation; Department of Water Resources;

Agencies Department of Fish and Wildlife, Region 5; Native American Heritage Commission; California Highway

Patrol; Caltrans, District 11; Regional Water Quality Control Board, Region 9

Date Received 06/16/2017 Start of Review 06/16/2017 End of Review 07/17/2017

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

sch#7061040

Project Title: Morena Apt Homes VTM PDP SDP					
Lead Agency: City of San Diego		Contact Person: Courtney Holowach			
Mailing Address: 1222 1st Ave		Phone: 619-446-5187			
City: San Diego	Zip: 92120	Zip: <u>92120</u> County: <u>Sa</u>		an Diego	
Project Location: County: San Diego		st Community: San			
Cross Streets: Morena Blvd and Frankfort Street	46 ′34.67″N/	117 - 10 - 100 6		Zip Code: 92120	
Eongrado, Editade (degrees, minates and seconds).				5.7	
Assessor's Parcel No.: 436-020-4000			Range:	Base:	
Within 2 Miles: State Hwy #: 5		Waterways: San Diego River Railways: Schools: San Diego State U		n Diogo Ctoto Universi	
Airports:	Railways:		Schools: Sal	n Diego State Univer	
Document Type: CEQA: NOP Draft EIR	NEPA:	□ NOI	Other:	nt Document	
Early Cons Supplement/Subseque Neg Dec (Prior SCH No.) Mit Neg Dec Other:	nt EIR	☐ EA ☐ Draft EIS ☐ FONSI	Final Oth	al Document er:	
Local Action Type: General Plan Update General Plan Amendment General Plan Element Flanned Unit Development Community Plan Site Plan	opment Use	vernor's Office of Pla cone JUN 16 Permit d Division (Subdiv		Annexation Redevelopment Coastal Permit Other: Site Developmes	
Development Type:	D-1 D-1 D-1 D-1 D-1	LIBILVELIN	M BOOK BOOM BOOK BOOK BOOK		
Commercial:Sq.ft. Acres Employ Industrial: Sq.ft. Acres Employ Educational: Recreational:	/ees	ining: Mir ower: Typ aste Treatment: Typ	neral pe pe	MGD	
Project Issues Discussed in Document:				. Now how how how how how how	
★ Aesthetic/Visual ☐ Fiscal ☐ Agricultural Land ★ Flood Plain/Flooding ★ Air Quality ☐ Forest Land/Fire Hate ★ Archeological/Historical ★ Geologic/Seismic ☐ Biological Resources ☐ Minerals ☐ Coastal Zone ★ Noise ☐ Drainage/Absorption ☐ Population/Housing ☐ Economic/Jobs ☐ Public Services/Faci	g School zard Septic Sewer Soil Er Solid V Balance Toxic/	tion/Parks s/Universities Systems Capacity osion/Compaction/ Vaste Hazardous /Circulation	⊠ Wat Wat Wet Grading ⊠ Gro Land Cun	etation er Quality er Supply/Groundwater land/Riparian wth Inducement d Use nulative Effects er:	
Present Land Use/Zoning/General Plan Designation CC-4-2/RS-1-7	 n:				

Project Description: (please use a separate page if necessary)
Community Plan Amendment, Rezone, Vesting Tentative Map, Planned Development Permit & Site Development Permit to rezone from CC-4-2/RS-1-7 to RM-2-5 also to remove mobile home overlay & consolidate two lots for the construct of 150 multi-family dwelling units, work includes deviations within Environmental Sensitive Land. The 5.70-acre site is located at 1623 & 1577 Morena Blvd within the Clairemont Mesa Community Plan area within Council District 2.

Regulation

CEOA Coordinator

Last Updated 4/28/17

DEPARTMENT OF TRANSPORTATION

DISTRICT 11 4050 TAYLOR STREET, M.S. 240 SAN DIEGO, CA 92110 PHONE (619) 688-6960 FAX (619) 688-4299 TTY 711 www.dot.ca.gov



June 28, 2017

11-SD-5 PM 20.836 Morena Apt Homes VTM PDP SDP SCH#: 2017061040

Ms. Courtney Holowach City of San Diego 1222 First Avenue, MS-501 San Diego, CA 92101

Dear Ms. Holowach:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Notice of Preparation for Draft Environmental Impact Report (EIR) for the proposed Morena Apt Homes VTM PDP SDP located near I-5. The mission of Caltrans is to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities.

Caltrans would like to submit the following comments:

Traffic Impact Study and Safety Investigation

A Traffic Impact Study (TIS) is necessary to determine the proposed project's near-term and long-term impacts to State facilities, including an analysis of existing and proposed conditions. The TIS should propose appropriate mitigation measures.

- Please include the ramp intersections at I-5/SeaWorld Drive & Tecolote Road and I-5/Clairemont Road. The geographic area examined in the traffic study should also include as a minimum all regionally significant arterial system segments and intersections, including State transportation facilities where the project will add over 100 peak hour trips. State transportation facilities that are experiencing noticeable delays should be analyzed in the scope of the traffic study for projects that add 50 to 100 peak hour trips.
- A focused analysis may be required for project trips assigned to a State transportation facility that is experiencing significant delay, such as where traffic

Ms. Courtney Holowach June 28, 2017 Page 2

- queues exceed ramp storage capacities. A focused analysis may also be necessary if there is an increased risk of a potential traffic accident.
- All freeway entrance and exit ramps where a proposed project will add a significant number of peak-hour trips that may cause any traffic queues to exceed storage capacities should be analyzed.
- If ramp metering is to occur, a ramp queue analysis for all nearby Caltrans
 metered on-ramps is required to identify the delay to motorists using the onramps and the storage necessary to accommodate the queuing. The effects of
 ramp metering should be analyzed in the traffic study. For metered freeway
 ramps, LOS does not apply. However, ramp meter delays above 15 minutes are
 considered excessive.
- In addition, the TIS could also consider implementing vehicles miles traveled (VMT) analysis into the modeling projections.
- Any increase in goods movement operations and its impacts to State highway facilities should be addressed in the TIS.
- Include truck turning templates from the Caltrans Highway Design Manual.
- The data used in the TIS should not be more than 2 years old.
- The study should use as a guideline the Caltrans Guide for the Preparation of Traffic Impact Studies http://www.dot.ca.gov/hq/tpp/offices/ocp/igr ceqa files/tisguide.pdf.
- Please provide the electronic analysis, Synchro files version 8, and other technical appendices with the TIS to facilitate the review process.
- Early collaboration is recommended.

Drainage/Hydrology

Please provide a copy of the drainage report/study.

IGR Encroachment Permit

Caltrans endeavors that any direct and cumulative impacts to the State Transportation System be eliminated or reduced to a level of insignificance pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) standards.

Any work performed within Caltrans right-of-way (R/W) will require discretionary review and approval by Caltrans and an encroachment permit will be required for any work within the Caltrans R/W prior to construction. As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans's R/W, and any corresponding technical studies.

Ms. Courtney Holowach June 28, 2017 Page 3

Caltrans appreciates the continued coordination with City staff on this plan. If you have any questions, please contact Kimberly Dodson, of the Caltrans Development Review Branch, at (619) 688-2510 or Kimberly.dodson@dot.ca.gov.

Sincerely,

MAURICE EATON, Acting Chief Development Review Branch



San Diego County Archaeological Society, Inc.

Environmental Review Committee

24 June 2017

To:

Ms. Courtney Holowach

Development Services Department

City of San Diego

1222 First Avenue, Mail Station 501

San Diego, California 92101

Subject:

Notice of Preparation of a Draft Environmental Impact Report

Morena Apartment Homes

Project No. 526167

Dear Ms. Holowach:

Thank you for the Notice of Preparation for the subject project, received by this Society last week.

We are pleased to note the inclusion of historical resources in the list of subject areas to be addressed in the DEIR, and look forward to reviewing it during the upcoming public comment period. To that end, please include us in the distribution of the DEIR, and also provide us with a copy of the cultural resources technical report(s).

SDCAS appreciates being included in the City's environmental review process for this project.

Sincerely,

James W. Royle, Jr., Chairperson

Environmental Review Committee

cc:

SDCAS President

File

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone (916) 373-3710



June 21, 2017

Courtney Holowach City of San Diego 1222 First Avenue, MS-501 San Diego, CA 92101

Sent via e-mail: DSDEAS@sandiego.gov

RE:

SCH# 2017061040; Morena Apt Homes VTM PDP SDP Project, City of San Diego; San Diego County,

California

Dear Ms. Holowach:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for Draft Environmental Impact Report for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd. (a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code § 21084.2). Please reference California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form,"

http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf. Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015. If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). Both SB 18 and AB 52 have tribal consultation requirements. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends **lead agencies consult with all California Native American tribes** that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of <u>portions</u> of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws**.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
- 3. <u>Mandatory Topics of Consultation If Requested by a Tribe</u>: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
- 4. <u>Discretionary Topics of Consultation</u>: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
- 6. <u>Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:</u> If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

- 7. <u>Conclusion of Consultation</u>: Consultation with a tribe shall be considered concluded when either of the following occurs:
 - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - **b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).
- **10.** Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
 - a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - **b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - **c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
 - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
 - **b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

This process should be documented in the Cultural Resources section of your environmental document.

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires **local governments** to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

- 1. <u>Tribal Consultation</u>: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe. (Gov. Code § 65352.3 (a)(2)).
- 2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
- 3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
- 4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
- 2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
- 3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - **b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
- Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources)
 does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Please contact me if you need any additional information at gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton, M.A., PhD.

Associate Governmental Program Analyst

cc: State Clearinghouse



401 B Street, Suite 800 San Diego, CA 92101-4231 (619) 699-1900 Fax (619) 699-1905 sandag.org July 14, 2017

File Number, 3300300

Ms. Courtney Holowach, Environmental Planner City of San Diego Development Services Center 1222 First Avenue, Mail Station 501 San Diego, CA 92101

MEMBER AGENCIES

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> San Diego Unified Port District

San Diego County Water Authority

Southern California Tribal Chairmen's Association

Мехісо

Dear Ms. Holowach:

SUBJECT: Morena Apartment Homes Notice of Preparation (Project No. 526167)

Thank you for the opportunity to comment on the City of San Diego's Morena Apartment **Homes** Notice of Preparation (NOP). (SANDAG) San Diego Association of Governments appreciates the City of San Diego's efforts to implement the policies included in San Diego Forward: The Regional Plan (Regional Plan) that emphasize the need for better land use and transportation coordination. These policies help provide people with more travel and housing choices, protect the environment, create healthy communities, and stimulate economic growth. SANDAG's comments are based on policies included in the Regional Plan and are submitted from a regional perspective.

Long Range Transportation

SANDAG advises the City of San Diego to consider both existing and planned transportation projects outlined in the region's long-range transportation and land use planning document, the Regional Plan. These projects are highlighted in Appendix A of the Regional Plan. Such projects in the vicinity of the Morena Apartment Homes Project include the Mid-Coast Trolley Extension.

Smart Growth

SANDAG appreciates the City of San Diego prioritizing transit-oriented development and land use changes that support the Smart Growth Concept Map and Regional Plan. A key goal of the Regional Plan is to focus growth in Smart Growth Opportunity Areas. Development in these areas support a sustainable and healthy region, a vibrant economy, and an outstanding quality of life for all.

This project is located in an Existing/Planned Mixed-Use Transit Corridor (SD CM-7), a Smart Growth Opportunity Area identified on the Smart Growth Concept Map. The Mixed-Use Transit Corridor place type has a minimum density target of 25 dwelling units per acre. To achieve the benefits of a Smart Growth Opportunity Area, SANDAG encourages the City of San Diego to review the proposed project to ensure it meets or exceeds this target density.

The proposed project is currently served by a high-frequency local bus route (Route 50). Several other transit services are planned for the project area, including a high-frequency local bus route (Route 105) and the Mid-Coast Trolley Extension. SANDAG strongly encourages the City of San Diego to facilitate access to these transit services as a part of this proposed project.

Transportation Demand Management

When preparing the Environmental Impact Report (EIR) for the Morena Apartment Homes Project, please consider incorporating transportation demand management (TDM) strategies to help mitigate traffic impacts and parking demand. SANDAG is developing a Mid-Coast Corridor Mobility Hub Implementation Strategy. Mobility hubs provide integrated transportation services and amenities that will improve access to the Mid-Coast transit stations. In support of the mobility hub concept, the Morena Apartment Homes could provide TDM programs and services that connect tenants to the future Tecolote and Clairemont Trolley Stations. Additional TDM strategies to consider include:

- Provision and promotion of shared mobility services for residents (e.g., carshare, bikeshare)
- Enhanced bicycle and pedestrian facilities that provide safe connections to major community destinations, bikeways, and the future Trolley stations
- Reduced parking requirements, given the proximity to the future Trolley stations
- Subsidized or discounted transit passes for residents to encourage transit ridership

iCommute, the SANDAG TDM program, can assist with promoting regional TDM services that encourage the use of transportation alternatives and reduce traffic congestion. Regional TDM programs include online ridematching services, multimodal trip planning, the Guaranteed Ride Home service, and support for bicycling. Information on the SANDAG TDM program can be accessed through iCommuteSD.com. Additional information on the Mid-Coast Mobility Hub Implementation Strategy is available at SDForward.com/MidCoastMobilityHubs.

Other Considerations

SANDAG has several resources that can be used for additional information or clarification on the topics discussed in this letter. These can be found on the SANDAG website at sandag.org/igr:

- 1. Planning and Designing for Pedestrians, Model Guidelines for the San Diego Region
- 2. Integrating Transportation Demand Management into the Planning and Development Process A Reference for Cities

When available, please send any additional environmental documents related to this project to:

SANDAG

Attention: Intergovernmental Review

401 B Street, Suite 800 San Diego, CA 92101

We appreciate the opportunity to comment on the City of San Diego's Morena Apartment Homes NOP. If you have any questions, please contact me at (619) 699-1943 or seth.litchney@sandag.org.

Sincerely,

SETH LITCHNEY

Senior Regional Planner

SLI/khe/pro

RINCON BAND OF LUISEÑO INDIANS

Cultural Resources Department

1 W. Tribal Road · Valley Center, California 92082 (760) 297-2330 Fax:(760) 297-2339



June 21, 2017

Courtney Holowach City of San Diego Development Services Center 1222 First Avenue, MS 501 San Diego, CA 92101

Re: Morena Apartment Homes Project No. 526167

Dear Ms. Holowach:

This letter is written on behalf of the Rincon Band of Luiseño Indians. Thank you for inviting us to submit comments on the Morena Apartment Homes Project No. 526167. Rincon is submitting these comments concerning your projects potential impact on Luiseño cultural resources.

The Rincon Band has concerns for the impacts to historic and cultural resources and the finding of items of significant cultural value that could be disturbed or destroyed and are considered culturally significant to the Luiseño people. This is to inform you, your identified location is not within the Luiseño Aboriginal Territory. We recommend that you locate a tribe within the project area to receive direction on how to handle any inadvertent findings according to their customs and traditions.

If you would like information on tribes within your project area, please contact the Native American Heritage Commission and they will assist with a referral.

Thank you for the opportunity to protect and preserve our cultural assets.

Sincerely,

Destiny Colocho

Manager

Rincon Cultural Resources Department

VIEJAS
TRIBAL GOVERNMENT

June 21, 2017

PO Box 908 Alpine, CA 91903 #1 Viejas Grade Road Alpine, CA 91901

Phone: 619445.3810 Fax: 619445.5337

us vija į viejas calguras (albūs) ir viejas.com

Courtney Holowach Environmental Planner City of San Diego 1222 First Avenue, MS 501 San Diego, CA 92101

RE: Morena Apartment Homes 526167 Project

Dear Ms. Holowach,

The Viejas Band of Kumeyaay Indians ("Viejas") has reviewed the proposed project and at this time we have determined that the project site has cultural significance or ties to Viejas.

Viejas Band request that a Kumeyaay Cultural Monitor be on site for ground disturbing activities to inform us of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

Please call me at 619-659-2312 or Ernest Pingleton at 619-659-2314 or email, rteran@viejas-nsn.gov or epingleton@viejas-nsn.gov, for scheduling. Thank you.

Sincerely,

Ray Teran, Resource Management

VIEJAS BAND OF KUMEYAAY INDIANS

Jennifer Campos

From: George Henderson < george.henderson@gmail.com>

Sent: Monday, July 17, 2017 6:26 PM

To: DSD EAS

Subject: EIR Preparation Noticefor Morena Apartment Homes and Project Number 526167

RE: MORENA APARTMENT HOMES, PROJECT NUMBER 526167

I believe that the project description for this "Notice of the Preparation of an Environmental Impact Report" (SAP No 24006842) includes inaccurate and misleading information. <u>Development Services Department should require the applicant to revise and resubmit.</u>

In the project description section, the author of the notice seems to mis-represent the Morena Corridor Specific Plan.

"Although proposed Morena Corridor Specific Plan is not yet approved, the project is intended to provide transit supportive densities consistent with the overarching goals of the Morena Corridor Specific Plan."

The Morena Corridor Specific Plan has no authority to recommend land use. This authority was specifically removed by the Planning Department.

Land use recommendations will now be published as part of the Clairemont Community Plan Update process. Fairfield Properties' prediction of land use changes is at best premature, and very likely to be grossly inaccurate.

This EIR should focus upon its request for deviation from the exiting Clairemont Mesa Community Plan which was published in 1989, Of particular concern to me is that this applicant should address the community plan's objective as stated on Page 11, Paragraph 2:

"2. Preserve the mobile home parks on Morena Boulevard to continue providing alternative means of housing."

Thank you.

George Henderson 3151 Driscoll Drive San Diego, CA 92117 george.henderson@gmail.com

Jennifer Campos

From: Julie Mckane <jmckane38@gmail.com>

Sent: Saturday, July 15, 2017 5:15 PM

To: DSD EAS

Subject: Morena Apartment Homes

Due to the severe lack of "affordable" housing in the area, I would request that at least 10% of the 150 units be made available as section 8 or other low income rentals. Even with those units, there is plenty of room for profit. Also, low income people tend to have fewer or no cars, thereby lessening the traffic impact in this heavily trafficked Morena Blvd area.

Julie McKane 4221 Dakota Dr Sd 92117 jmckane38@gmail.com 858-262-3330

ASSESSMENT OF ENVIRONMENTAL NOISE

MORENA APARTMENT HOMES

September 8, 2017

Ву

Veneklasen Associates, Inc. 1711 16th Street Santa Monica, CA 90404

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ASSESSMENT OF ENVIRONMENTAL NOISE

1.0 INTRODUCTION

This report evaluates potential impacts associated with the construction and operation noise of the Morena Apartment Homes project in San Diego, California.

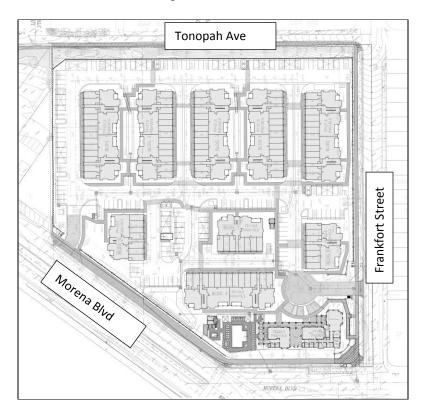
1.1 Project Description

The proposed project consists of a 6.21-acre site located at 1577-79 Morena Boulevard. The project will include 9 separate buildings containing 150 market-rate multi-family units, a clubhouse facility with leasing and exercise areas, recreational facility, landscaped areas including a pool, and a water quality detention basin.

The project site is bounded by Tonopah Avenue to the north, commercial buildings to the west, Frankfort Street to the east, and Morena Boulevard, West Morena Boulevard, and Interstate 5 freeway to the south of the project site.

The surrounding land uses include commercial, single-family detached housing, mobile homes, and multi-family residential. According to the San Diego Association of Governments (SANDAG) projections, some of the surrounding land uses will be converted from commercial to mixed use.

Figure 1 – Site Plan





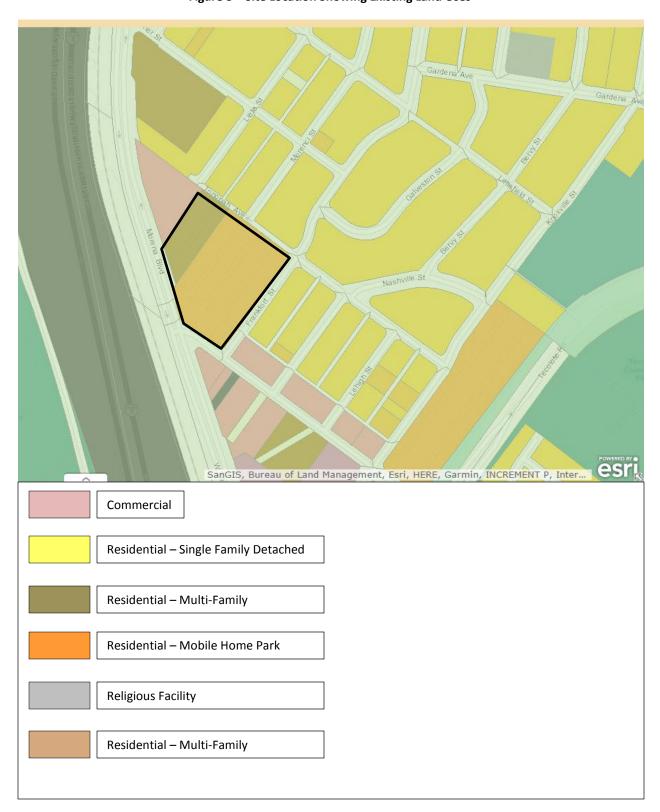


Figure 3 – Site Location Showing Existing Land Uses

Gardena Ave SanGIS, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, Inter... Commercial Residential – Single Family Detached Residential – Multi-Family Residential – Mobile Home Park **Religious Facility** Mixed Use

Figure 4 – Site Location Showing Planned Land Uses

1.2 Characteristics of Noise

Noise is usually defined as unwanted sound and can be an undesirable by-product of society's normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, causes actual physical harm, or has an adverse effect on health.

People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness." However, the sound pressure magnitude can be objectively measured and quantified using a logarithmic ratio of pressures which yields the level of sound, utilizing the measurement scale of decibels (dB). The decibel is generally adjusted to the A-weighted level (dBA) which de-emphasizes very low frequencies to better approximate the human ear's range of sensitivity. In practice, the noise level of a sound source is measured using a sound level meter that includes an electronic filter corresponding to the A-weighting curve. Table A.1 in Appendix A of this report defines the decibel along with other technical terms used in this analysis.

Even though the A-weighted scale accounts for the relative loudness perceived by the human ear and, therefore, is commonly used to quantify individual events or general community sound levels, the degree of annoyance or other response effects also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- Magnitude of the event sound level relative to the background noise
- Spectral (frequency) composition (e.g. presence of tones)
- Duration of the sound event
- Number of event occurrences, repetitiveness, and intermittency
- Time of day the event occurs.

In determining the daily level of environmental noise, it is important to account for the difference in human responses to daytime and nighttime noises. At night, exterior background noise levels are generally lower than daytime levels. However, most household noise also decreases at night, and exterior noise may become increasingly noticeable. Further, most people sleep at night and have greater sensitivity to noise intrusion. To account for human sensitivity to nighttime noise levels, a 24-hour descriptor, the Community Noise Equivalent Level (CNEL) has been developed. The CNEL divides the 24-hour day into a daytime period of 7:00 a.m. to 7:00 p.m., an evening period from 7:00 p.m. to 10:00 p.m., and a nighttime period of 10:00 p.m. to 7:00 a.m. In determining the CNEL, noise levels occurring during the evening period are increase by 5 dB, while noise levels occurring during the nighttime period are increased by 10 dB to account for the greater sensitivity during the evening and nighttime periods.

The effects of noise on people fall into three general categories:

Morena Apartment Homes Noise Report September 8, 2017

- Subjective effects of annoyance and nuisance
- Interference with activities such as speech, sleep and learning
- Physiological effects such as hearing loss

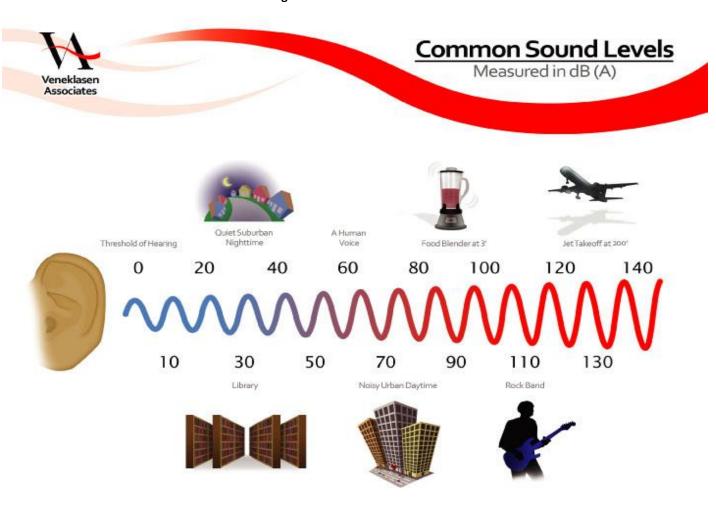
In most cases, the levels associated with environmental noise produce effects only in the first two categories. However, workers in industrial plants may experience noise effects in the last category. There is no completely effective way to measure the subjective effects of noise or the corresponding reactions of annoyance, because of the wide variation in individual thresholds of annoyance and degrees to which people become acclimated to noise. Thus, an important way of determining a person's subjective reaction to a new noise source is by comparison to the existing environment to which they are accustomed (the "ambient environment"). In general, the more the level of a noise event exceeds the prevailing ambient noise level, the less acceptable the noise source will be to those exposed to it.

With regard to increases in A-weighted noise levels, the following relationships are applicable to this analysis:

- Except in carefully controlled laboratory experiments, a 1 dB change cannot be perceived.
- Outside of a laboratory, a 3 dBA change will be generally perceivable by most people.
- A change in level of at least 5 dBA is considered a noticeable change by most people.
- A 10 dBA change will result in the perception of doubling or halving the loudness of the noise.

Common noise levels associated with various activities are shown on Figure 5, Common Noise Levels.

Figure 5 - Common Noise Levels



Noise sources are either "point sources", such as stationary equipment or individual motor vehicles, or "line sources", such as a roadway with a large number of mobile point sources (motor vehicles). Sound generated by a stationary point source typically diminishes (attenuates) at a rate of 6 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites, and at a rate of 7.5 dBA at acoustically "soft" sites. For example, a 60 dBA noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dBA at 100 feet from the source and it would be 48 dBA at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling of distance from the source to the receptor for hard and soft sites, respectively. Man-made or natural barriers can also attenuate sound levels.

U.S. Department of Transportation, Federal Highway Administration, *Highway Noise Fundamentals*, (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 97. A "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt, concrete, and very hard packed soils. An acoustically "soft" or absorptive site is characteristic of normal earth and most ground with vegetation.

U.S. Department of Transportation, Federal Highway Administration, Highway Noise Fundamentals, (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 97.

The minimum attenuation of exterior to interior noise provided by typical structures is provided in **Table 1**, **Outside to Inside Noise Attenuation**.

Table 1
Outside to Inside Noise Attenuation (dBA)

Building Type	Open Windows	Closed Windows ¹
Residences	17	25
Schools	17	25
Churches	20	30
Hospitals/Convalescent Homes	17	25
Offices	17	25
Theaters	20	30
Hotels/Motels	17	25

Source: Transportation Research Board, National Research Council, Highway Noise: A Design Guide for Highway Engineers, National Cooperative Highway Research Program Report 117.

1.3 Characteristics of Vibration

Vibration is minute variation in pressure through structures and the earth, whereas, noise is minute variation in pressure through air. Some vibration effects can be caused by noise; e.g., the rattling of windows from truck passbys. This phenomenon is related to the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Ground-borne vibration attenuates rapidly as distance from the source of the vibration increases. Vibration amplitude can be measured as peak particle velocity (PPV), the maximum instantaneous peak amplitude in inches per second, or root-mean-square (RMS) velocity in inches per second or as vibration level in decibels (VdB) referenced to 1 micro-inch per second. The ratio between the PPV and the maximum RMS amplitude is termed the "crest factor." According to the Federal Transit Administration (FTA), the PPV level for construction equipment is typically 1.7 to 6 times greater than the RMS vibration level. The FTA uses a crest factor of 4 for the conversion of PPV levels to RMS vibration levels. For the purposes of ground-borne vibration analysis of impacts to existing structures, vibration velocity is described in terms of PPV. For the analysis of the human response to vibration, VdB is utilized.

The vibration velocity threshold of perception for humans is approximately 65 VdB, and a vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people³. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Common ground-induced vibrations related to roadway traffic and construction activities pose no threat to buildings or structures. If a roadway is

¹ As shown, structures with closed windows can attenuate exterior noise by a minimum of 25 to 30 dBA.

³ – U.S. Department of Transportation, Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, (Washington, DC: U.S. Department of Transportation, Federal Transit Administration, May 2006), p. 7-8.

smooth, the ground-borne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is typically the background vibration velocity, to 94 VdB. This 94 VdB vibration level corresponds to 0.2 PPV, which is the general threshold where minor damage can occur in non-engineered timber and masonry buildings.

2.0 REGULATORY FRAMEWORK

Many government agencies have established noise regulations and policies to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise and ground-borne vibration. The City of San Diego has adopted the Noise Element which is based in part on Federal and State regulations and is intended to control, minimize, or mitigate environmental noise effects. The regulations and policies that are relevant to project construction and operation noise are discussed below.

2.1 Applicable State Noise Standards

2.1.1 Residential

The California Environmental Quality Act (CEQA) Guidelines establishes guidelines for the evaluation of significant impacts of environmental noise attributable to a proposed project. The guidelines ask whether the project would result in:

- 1. Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or Noise Ordinance or applicable standards of other agencies.
- 2. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.
- 3. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- 4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- 5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- 6. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The CEQA Guidelines and the City's Noise Element provide no definition of what constitutes a substantial noise increase. Typically, in high noise environments, if the CNEL due to the project would increase by 3 dBA at noise sensitive receptors, the impact is considered significant.

2.2 City of San Diego Noise Element & Municipal Code – Noise Ordinance

The City of San Diego Noise Element establishes noise/land use compatibility criteria. For Residential multi-family uses, noise levels up to 60 CNEL can be considered compatible. Noise levels up to 70 CNEL are conditionally compatible. Additionally, the building structure must attenuate exterior noise to 45 CNEL. At outdoor use areas, feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable. According to Table NE-3, the acceptable exterior noise limit at outdoor use areas is 60 CNEL. Noise levels above 70 CNEL are incompatible and new construction should not be undertaken. Although generally not considered compatible, the City conditionally allows multi-family uses up to 75 CNEL in areas affected primarily by motor vehicle noise with existing residential uses.

For single-family uses, the City of San Diego Noise Element establishes a "compatible" zone up to 60 CNEL. Sound levels up to 65 CNEL are conditionally compatible, requiring an interior noise level of 45 CNEL. Sound levels over 65 CNEL are considered incompatible.

For multi-family residential, Article 9.5 of the San Diego Municipal Code states that the one-hour average sound level cannot exceed 55 dBA between 7:00 A.M. and 7:00 P.M., 50 dBA between 7:00 P.M. and 10:00 P.M., and 45 dBA between 10:00 P.M. and 7:00 A.M. For single-family residential, the same hours apply, with limits established at 50, 45, and 40 dBA, respectively. The noise subject to these limits is that part of the total noise at the specified location that is due solely to the action of said person, measured at the project's property lines.

This section also states that it shall be unlawful to conduct construction activities between 7:00 P.M. and 7:00 A.M., or on legal holidays, that would create disturbing, excessive, or offensive noise unless a permit has been applied for and granted beforehand. Additionally, it shall be unlawful to conduct construction activity so as to cause, at or beyond the property lines of residential property, an average sound level greater than 75 dBA during daytime hours.

2.3 California Green Building Code (CALGreen)

Section 5.507.4.2 of the 2013 California Green Building Code stipulates that for buildings exposed to a noise level of 65 dB or more when measured as a 1-hour Equivalent Sound Level (Leq), the building façade, including walls, windows, and roofs, shall provide enough sound insulation so that the interior sound level from exterior sources does not exceed 50 dBA during any hour of operation. This applies to non-residential spaces such as retail space, leasing, and amenities.

2.4 City of San Diego – Ground-Borne Vibration

The City of San Diego does not establish criteria for maximum vibration thresholds.

The Federal Transit Administration (FTA) provides standards and guidelines for perceptibility and annoyance for ground-borne vibration as well as construction vibration impact criteria for building damage. As discussed in the *Characteristics of Vibration* section above, in most circumstances common ground-induced vibrations related to roadway traffic and construction activities pose no threat to buildings or structures, and for smooth roadways, the ground-borne vibration from traffic is barely perceptible.

The FTA has published a technical manual titled, "Transit Noise and Vibration Impacts Assessment," that provides ground-borne vibration impact criteria with respect to building damage and human response during construction activities. As discussed above, building vibration damage is measured in peak particle velocity described in the unit of inches per second. Table 2, below, provides the Federal Transit Administration vibration criteria applicable to construction activities. According to Federal Transit Administration guidelines, a vibration criterion of 0.20 inch per second should be considered as the significant impact level for non-engineered timber and masonry buildings. Furthermore, structures or buildings constructed of reinforced-concrete, steel, or timber, have vibration damage criteria of 0.50 inch per second pursuant to the FTA guidelines.

Table 2
Federal Transit Administration Construction Vibration Impact Criteria for Building Damage

Building Category	Peak Particle Velocity (inch per second)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Impacts for the human response to vibration levels are given in VdB by the FTA in Table 8-1 of the *Transit Noise and Vibration Impact Assessment* manual⁴, as shown in Table 3 below. The FTA Land Use Category 1 impact criteria is intended for vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. These Category 1 impact criteria vibration levels are well below those associated with human annoyance, but are equal to the threshold of perceptibility. The FTA vibration criteria for Category 2, residential impact, indicate impacts occur at a 72 VdB vibration level for frequent events occurring more than 70

⁴ U.S. Department of Transportation, Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, (Washington, DC: U.S. Department of Transportation, Federal Transit Administration, May 2006), p. 8-3

times per day, at 75 VdB for occasional events occurring between 30 and 70 times per day, and at 80 VdB for infrequent events occurring less than 30 times per day.

Table 3
Federal Transit Administration Ground-Borne Vibration Impact Criteria for General Assessment

Land Use Category	GBV Impact Levels			
	(VdB re 1 micro-inc	(VdB re 1 micro-inch /sec)		
	Frequent Events ¹	Occasional Events ²	Infrequent Events ³	
Category 1:				
Buildings where vibration would interfere	65 VdB ⁴	65 VdB ⁴	65 VdB ⁴	
with interior operations				
Category 2:				
Residences and buildings where people	72 VdB	75 VdB	80 VdB	
normally sleep				
Category 3:				
Institutional land uses with primarily	75 VdB	78 VdB	83 VdB	
daytime use				

Notes:

- 1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
- 2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
- 3. "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
- 4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

Source: Federal Transit Administration, 2006.

2.5 Project Requirements

The above requirements for the project are summarized in the following Table 4.

Table 4
Project Requirements

Activity	Standard
Exterior Noise at Multi-Family Residences	60 CNEL Conditionally Acceptable up to 75 CNEL when affected by traffic noise.
Exterior Noise at Single-Family Residences	60 CNEL Conditionally Acceptable up to 65 CNEL.
Interior Noise at Multi-Family and Single-Family Residences	45 CNEL
Interior Noise at Non-Residential Spaces (CALGreen)	50 dBA during any hour of operation
Construction Noise	Limited to the hours of: 7:00am – 7:00pm Maximum of 75 dBA at Residential Property Line during construction hours.
Operational Noise	At multi-family residential property, one-hour average sound level: 55 dBA from 7:00 a.m. to 7:00 p.m. 50 dBA from 7:00 p.m. to 10:00 p.m. 45 dBA from 10:00 p.m. to 7:00 a.m. At single-family residential property, one-hour average sound level: 50 dBA from 7:00 a.m. to 7:00 p.m. 45 dBA from 7:00 p.m. to 10:00 p.m. 40 dBA from 10:00 p.m. to 7:00 a.m.
Vibration	At residences where people normally sleep: 72 VdB – greater than 70 events per day. 75 VdB – between 30-70 events per day. 80 VdB – less than 30 events per day.

3.0 IMPACTS AND SIGNIFICANCE

3.1 Significance Thresholds

The following significance thresholds are used in this report to evaluate the significance of the project noise impacts:

- Project would expose persons to or generate noise levels in excess of standards established in the City's Noise Element or Noise Ordinance.
- Project would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. A substantial permanent increase in traffic noise would occur if the project would result in an increase of 3 dBA CNEL or more.
- Project would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Construction noise would be considered significant if it would take place outside of the allowable hours set forth in Table 4.

3.2 Impact 1. Noise levels in excess of standards

Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or Noise Ordinance or applicable standards of other agencies?

3.2.1 Methodology

Analysis of the existing and future noise environments presented in this section is based on technical reports, noise monitoring, and noise prediction modeling. Noise modeling procedures involved the calculation of existing and future vehicular noise levels along individual roadway segments. This was accomplished using the Federal Highway Administration Highway Noise Prediction Model (TNM Version 2.5). The California Department of Transportation (Caltrans) published the "Technical Noise Supplement (TeNS)" in October of 1998 which defines how to predict traffic noise for projects in California. The TeNS, Section N-5520 requires that any traffic noise study conducted after March 30, 2000 utilize the calculation methods used by Federal Highway Administration (FHWA) TNM. This model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site conditions. The off-site traffic noise is analyzed on an increase in CNEL basis to determine the project's impact.

Traffic volumes utilized as data inputs to the noise prediction model will be calculated based on information provided in the traffic study by Linscott, Law, and Greenspan, dated July 20, 2017.

3.2.2 Existing Ambient Monitored Noise Levels

Vehicular traffic on Morena Boulevard, West Morena Boulevard, I-5, and the railway line to the west are the primary noise sources around the project site. The land uses surrounding the project are mainly single-family residential, commercial, and retail.

To establish existing ambient noise levels in areas surrounding the project site, a field monitoring study was conducted. Measurements were performed on the project site (see Figure 6, below) for documenting the ambient conditions. A Bruel & Kjaer Model 2270 Sound Level Meter, which satisfies the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation, was located on the western property line of the project site to the west of the project site on Wednesday, August 24, 2016. Noise readings were measured over 5-minute intervals with "A" frequency fast time weighting. Appendix B of this report lists the results of the noise monitoring.



Figure 6 - Project Site and Noise Monitoring Location

At the monitor position, the 1-hour L_{EQ} was measured at 71 dBA. VA estimated the CNEL noise level from the short-term measurements. This was calculated to be 75 CNEL.

3.2.3 Future Project Noise Levels

An analysis of future noise levels was performed by VA, based on the measurements and computer model. VA calculated that the facades of the residences that face the noise sources will experience noise levels up to CNEL 74. This is generally an incompatible land use; however, the City conditionally allows multi-family uses up to 75 CNEL in areas affected by traffic noise with existing residential uses. The project must include attenuation measures to ensure that an interior noise level of 45 CNEL is met.

To simplify the presentation of the exterior noise levels, VA has separated the site into locations based on the sound exposure and required mitigation. The future predicted noise level contours are shown in Figure 7. The future noise levels were broken down by zone, shown in Figure 8 and listed in Table 5.

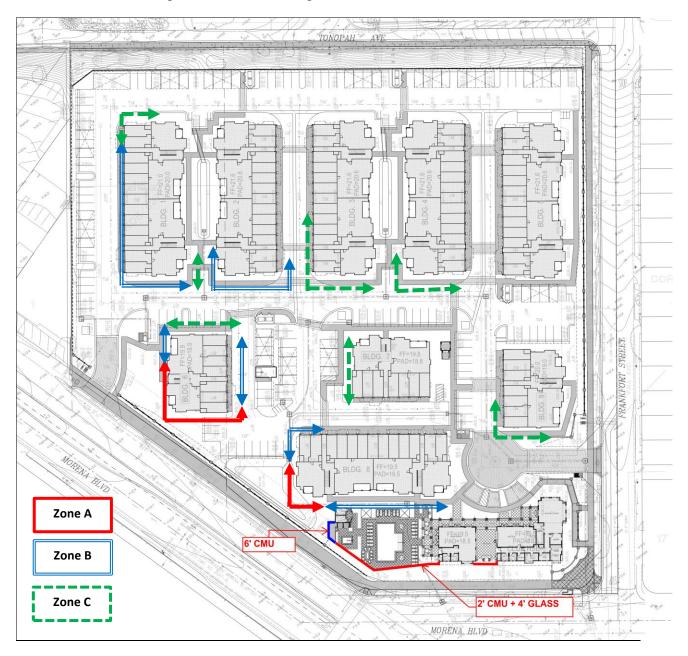
70 CNEI 6' CMU MORENA BLVD

Figure 7 – Site Plan Showing Future Noise Contours

Table 5 – Exterior Noise Levels

Location	Exterior Noise Level, CNEL
Zone A	71 - 74
Zone B	65 - 70
Zone C	≤ 65
Pool/Recreation Area	74

Figure 8 – Site Plan Showing Noise Zones and Barrier Location



As shown in Table 5 and Figure 8, the exterior noise levels exceed the 60 CNEL threshold at the west side of the site facing Morena Boulevard and the I-5 freeway. As stated, the City conditionally allows multi-family uses up to 75 CNEL in areas affected by traffic noise with existing residential uses. The project design proposes a 6-foot high sound barrier at the locations shown in Figure 8. The mitigated and unmitigated noise level at the outdoor use area is shown in Table 6. Both options will meet the 75 CNEL conditional requirement set forth by the City. The material should be solid, with no holes or gaps, with a minimum density of 2.5 lbs/sq. ft. Barrier calculations are included as Appendix C.

Table 6 - Sound Barrier Options

Location	Sound Barrier Height	Exterior Noise Level, CNEL
Dool/Doorootion Area	Unmitigated	74
Pool/Recreation Area	6 ft.	72

VA calculated the interior average noise level within the residential units given the predicted noise environment. As mentioned, the code requirement for the interior noise level is 45 CNEL at habitable residential spaces. Detailed plans were not available, therefore, VA based the calculations on typical dimensions for similar projects of this type. Table 7 shows the glazing required for all windows and doors to meet the minimum City and State code requirements using this assumption. The predicted interior CNEL noise levels are based on the full glazing assemblies (glass, frame, and seals).

Table 7 - Calculated Interior CNEL Noise Levels

Location	Exterior Noise Level, CNEL	Window/ Door Rating	Interior Noise Level, CNEL
Zone A	71 – 74	STC 40	41-45
Zone B	65 - 70	STC 35	41-45
Zone C	60 - 65	STC 30	40-45
Remaining Facades	≤ 60	STC 30**	≤ 45

^{**}No requirement by code; STC-30 recommended.

In addition, upgraded glazing is required to meet the interior noise limits at non-residential spaces set forth by CALGreen. VA calculated the interior noise level within the recreation building and determined that STC 30 dual-glazed windows are required to meet the 50 dBA CALGreen noise level goal.

Mitigation 1. The impact is less than significant with mitigation. Interior and exterior noise levels will exceed the standards established in the local General Plan, Noise Ordinance and applicable standards of other agencies. In order to meet the standards, as described in Table 4, the following mitigation is required:

Morena Apartment Homes Noise Report September 8, 2017

• The City can Conditionally approve projects based on the General Plan language that conditionally allows multi-family uses up to 75 CNEL in areas affected primarily by motor vehicle noise with existing residential uses. The unmitigated condition would be 74 CNEL meeting this requirement. Therefore, a Condition could be to construct a barrier of any height that is feasible and the resulting sound level would meet the requirement. A barrier height of 6 feet would be common in this condition.

• Exterior glazing with minimum STC ratings as shown in Table 7 are required to meet the interior noise criteria at residential units.

• STC 30 glazing is required at the recreation building in order to meet CALGreen interior noise standards at non-residential spaces.

 At such time that final building plans are available, another study can be performed to determine if mitigation measures are sufficient.

3.3 Impact 2. Excessive ground-borne vibration

Would the project result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

The proposed project site is approximately 175 feet from the railway line. The line currently services San Diego Coaster trains and Amtrak trains. According to the posted schedule, there are 30 total pass-bys per day. According to the FTA guidelines, this would fall into the occasional events category. For occasional events, the criterion for ground-borne vibration is 75 VdB. Vibration measurements of train pass-bys were conducted at Position 1. The maximum vibration levels for train events measured at this position was 58 VdB. This is below the FTA criteria.

Construction equipment associated with building the project would be the only vibration generating sources introduced by the project, but there are no regulatory requirements for vibration and, therefore, no impact.

The ground-borne vibration levels meet the FTA guidelines. Additionally, there are no construction vibration guidelines. There are no impacts regarding ground-borne vibration.

This impact is non-existent. No mitigation required.

3.4 Impact 3. Permanent increase in ambient noise levels

Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

3.4.1 Increase due to Project Traffic

Based on the Transportation Impact Analysis, dated December 2, 2016, the changes in CNEL levels were calculated for potential future noise conditions due to future traffic volumes associated with the proposed project and increases in background traffic. The calculated decibel effects due to traffic changes are shown in Table 9 below, regardless of distance to the project site.

Table 8
Traffic Volumes

Road	Existing Traffic (2016)	Existing Plus Project	Future Year No Project	Future Year with Project
Morena Boulevard (Frankfort St to Knoxville St)	8,130 ADT	8,664	7,700	8,234
West Morena Boulevard (Asher Street to Morena Blvd)	17,360 ADT	17,428	16,100	16,168

Table 9
Traffic Noise Levels

Road	Increase in Noise Level from Project Traffic	Significant Impact?
Morena Boulevard (Frankfort St to Knoxville St)	0.2 CNEL	No
West Morena Boulevard (Asher Street to Morena Blvd)	0.0 CNEL	No

With decibel increases of 0.2 CNEL, the proposed project will not result in any new uses or traffic generation that would increase noise levels in the vicinity. Since project-generated traffic does not exceed the 3 CNEL threshold, the impact is less than significant.

This impact is less than significant.

3.4.2 Operational Noise

The project will include mechanical equipment, including split-system outdoor condensing units. The mechanical equipment schedule is not yet available; therefore, VA performed calculations based on published sound power data for units of typical residential size (Carrier CA15NA-042, 3.5 ton unit). According to the sound power data provided by the manufacturer, VA calculated the resulting sound pressure levels near the project site. VA made calculations under the assumption that 3 units would be operating simultaneously.

Table 10
Condensing Unit Noise Levels

Condensing Unit	Sound Power Level	Number of Units Operating	Sound Pressure Level at 60 ft
Carrier CA15NA-042, 3.5 ton unit	75 dBA	3	40 dBA

Mitigation 2. Locate residential split-system condensing units a minimum of 60 feet from the closest project property line or provide acoustical screening between the unit and the property line.

This impact is anticipated to be less than significant with mitigation.

3.5 Impact 4. Temporary increase in ambient noise levels

Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Construction activity will result in a temporary increase in ambient noise levels in the vicinity of the project. Construction noise analysis follows the procedures of the Federal Highway Administration utilizing acoustic factors such as the construction equipment reference noise levels, the usage factor of the equipment, the site conditions and the distance to each receptor. The types and locations of specific equipment were not provided so VA has estimated the equipment usage for each construction phase on the project site. Parameters used for the analysis of construction phases are included in Appendix D.

The construction of the proposed project would increase noise levels in the area. The construction noise impacts were analyzed for long-term noise exposure due to all anticipated construction equipment operating during each phase of construction as well as for short-term noise exposure from equipment operating along the project site perimeter. Typical construction equipment utilized for each type of activity is indicated in Appendix D. The equipment noise level for all equipment listed for each activity was predicted for each phase in the proposed construction schedule at various locations around the project site. The noise levels predicted include the short-term noise levels while construction activity occurs along the project site boundaries. Construction is expected to begin in the summer of 2018 and be completed by the end of 2019.

The nearest off-site sensitive receivers are located to the north, south, and east of the project site. The closest property line of the sensitive receivers is approximately 50 feet from the perimeter of the project site. This location represents the worst-case exposure; more distant property lines would experience lower levels. The maximum predicted hourly average noise levels at these sensitive receptors due to construction operations are shown in Table 11 below.

Table 11
Construction Noise Levels

Receptor	Existing Noise Level at Project Site Boundaries, Leq dBA	Construction Noise Level at Project Site Boundaries, Leq dBA
Building Demolition	56-73	75
Asphalt Demolition	56-73	73
Site Preparation	56-73	78
Grading	56-73	76
Utility Trenching & Installation	56-73	72
Building Construction	56-73	75
Asphalt Paving	56-73	70
Architectural Coating	56-73	62

According to Table 11, construction of the project would potentially generate noise levels up to 78 dBA at the sensitive receptors. This will exceed the City's Municipal Code noise limit of 75 dBA.

During some construction phases noise levels could exceed the 75 dBA construction noise level limit set forth by the Municipal Code. As shown in the table, the highest noise levels occur during the excavation and grading phases (site preparation). Therefore, these activities should be scheduled so as to limit the number of heavy construction machines operating simultaneously. Additionally, a temporary construction noise barrier is required at the northern, southern, and eastern property lines of the project site in order to reduce the noise impacts to the residential uses. The barrier should block the line of sight from the noise source to the receiver and have no holes or gaps. The minimum density should be 2 lbs./sq. ft.

Mitigation 3. The impact is less than significant with mitigation. The following measures are identified to reduce the potential effects of construction noise on adjacent properties.

- Limit construction activity to the hours listed in Table 4 (7:00 am to 7:00 pm).
- Schedule highest noise-generating activity and construction activity away from noise-sensitive land uses.
- Equip internal combustion engine-driven equipment with original factory (or equivalent) intake and exhaust mufflers which are maintained in good condition.
- Prohibit and post signs prohibiting unnecessary idling of internal combustion engines.
- Locate all stationary noise-generating equipment such as air compressors and portable generators as far as
 practicable from noise-sensitive land uses.

- Utilize "quiet" air compressors and other stationary equipment where feasible and available.
- Designate a noise disturbance coordinator who would respond to neighborhood complaints about
 construction noise by determining the cause of the noise complaints and require implementation of
 reasonable measures to correct the problem. Conspicuously post a telephone number for the disturbance
 coordinator at the construction site.
- Install a temporary noise barrier that breaks the line of sight between the nearest noise-sensitive land uses and the project's construction activities. The noise barrier shall be solid with no gaps or holes and have a minimum density of 2 lbs/sq. ft. Access at construction entrance(s) to the site through the barrier can be accomplished in a manner to preclude a direct line of sight between on-site construction activity and nearby noise-sensitive land uses.

3.6 Impact 5. Airport noise exposure

For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project is not within two miles of a public airport or public use airport. Therefore, there is no noise impact.

3.7 Impact 6. Private airstrip noise exposure

For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The project is not within the vicinity of a private airstrip. Therefore, there is no impact.

4.0 SUMMARY

4.1 Summary of significance of impacts

Noise Impact Question		No Impact	Less Than Significant	Less Than Significant with Mitigation	Potentially Significant
1	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
2	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	X			
3	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
4	A substantial temporary or periodic increase in ambient noise levels in the project vicinity about levels existing without the project?			X	
5	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	X			
6	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	X			

4.2 Summary of Mitigation Measures

Mitigation 1. The impact is less than significant with mitigation. Interior and exterior noise levels will exceed the standards established in the local General Plan, Noise Ordinance and applicable standards of other agencies. In order to meet the standards, as described in Table 4, the following mitigation is required:

- The City can Conditionally approve projects based on the General Plan language that conditionally allows multi-family uses up to 75 CNEL in areas affected primarily by motor vehicle noise with existing residential uses. The unmitigated condition would be 74 CNEL meeting this requirement. Therefore, a Condition is suggested to construct a barrier of height that is feasible and the resulting sound level would meet the 75 CNEL conditional limit. A barrier height of 6 feet would be common in this condition.
- Exterior glazing with minimum STC ratings as shown in Table 7 are required to meet the interior noise criteria at residential units.
- STC 30 glazing is required at the recreation building in order to meet CALGreen interior noise standards at non-residential spaces.

 At such time that final building plans are available, another study can be performed to determine if mitigation measures are sufficient.

Mitigation 2. Locate residential split-system condensing units a minimum of 60 feet from the closest project property line or provide acoustical screening between the unit and the property line.

Mitigation 3. The impact is less than significant with mitigation. The following measures are identified to reduce the potential effects of construction noise on adjacent properties.

- Limit construction activity to the hours listed in Table 4 (7:00 am to 7:00 pm).
- Schedule highest noise-generating activity and construction activity away from noise-sensitive land uses.
- Equip internal combustion engine-driven equipment with original factory (or equivalent) intake and exhaust mufflers which are maintained in good condition.
- Prohibit and post signs prohibiting unnecessary idling of internal combustion engines.
- Locate all stationary noise-generating equipment such as air compressors and portable generators as far as practicable from noise-sensitive land uses.
- Utilize "quiet" air compressors and other stationary equipment where feasible and available.
- Designate a noise disturbance coordinator who would respond to neighborhood complaints about
 construction noise by determining the cause of the noise complaints and require implementation of
 reasonable measures to correct the problem. Conspicuously post a telephone number for the disturbance
 coordinator at the construction site.
- Install a temporary noise barrier that breaks the line of sight between the nearest noise-sensitive land uses and the project's construction activities. The noise barrier shall be solid with no gaps or holes and have a minimum density of 2 lbs/sq. ft. Access at construction entrance(s) to the site through the barrier can be accomplished in a manner to preclude a direct line of sight between on-site construction activity and nearby noise-sensitive land uses.

APPENDIX A

Table A.1 – Definitions of Noise-Related Terms

Term	Definition
Decibel, dB	A unit describing the amplitude of sound equivalent to 20 times the logarithm, to the base 10, of the ratio of the pressure of the sound to the reference pressure of 20 $\mu Pa.$
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured in an A-weighting filter network. The A-weighting de-emphasizes the very low frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are in the A-weighted scale.
Lo (L _{max}), L2, L8, L25, L50	The A-weighted noise levels that are exceeded 0 percent (maximum noise level), 2 percent, 8 percent, 25 percent, and 50 percent of the time during the measurement period.
Equivalent Noise Level, L _{eq}	The average A-weighted noise level during the stated measurement period.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 P.M. to 10:00 P.M., and after addition of 10 decibels to noise levels in the night between 10:00 P.M. and 7:00 A.M.
Day-Night Noise Level, DNL, Ldn	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 P.M. and 7:00 A.M.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Impulsive Noise	Sound of short duration. Typically associated with an abrupt onset and rapid decay (i.e., gun-shots, etc.).
Pure Tones	A sound wave, residing over a small range of frequencies, which has a sinusoidal behavior over time.
VdB	Unit of measurement used by FHWA to describe ground-borne vibration. Equivalent to 20 times the logarithm, to the base 10, of the ratio of the root mean square ground-borne velocity to the reference of reference of $1x10^{-6}$ in/sec.

APPENDIX B

Table B.1 – Summary of Measured Sound Levels at Position 1

Measurement Date	Measurement Time	Exterior Sound Level, 1-hour LAeq	Statistical Loudest Hour, LAeq	CNEL*
	9-10am	71		
August 24, 2016	10-11am	70	72	75
	11-12pm	70		

^{*}CNEL noise levels were estimated based on short-term measurements and traffic patterns.

APPENDIX C

6 ft. Barrier

Barrier Parameters												
Source Height:	hs=	27.0	(ft)									
Barrier Height:	hв =		(ft)									
Receiver Height:	hr =	25.0	(ft)									
Horizontal Source to Barrier Distance:	dsb =	395.0	(ft)									
Horizontal Barrier to Receiver Distance:	d _{BR} =	15.0	(ft)									
Path Calculations												
Source to Barrier Edge Path Distance:	d1 =	395.0	(ft)									
Barrier to Receiver Diffracted Path Distance:	d ₂ =	15.1	(ft)									
Source to Receiver Direct Path Distance:	r =	410.0	(ft)									
Sound Pressure Level												
Octave Band	63	125	250	500	1000	2000	4000	8000	dBA			
Sound Pressure Level: Lp = Lw - 20 log(r) - 0.75	74.6	74.0	69.3	69.8	71.0	66.0	57.5	49.3	74.0	at	410.0	(ft
Barrier Insertion Loss Calculations												
Octave Band	<u>63</u>	<u>125</u>	<u>250</u>	<u>500</u>	<u>1000</u>	2000	4000	8000	(Hz)			
Wavelength: λ		9.04	4.52	2.26	1.13	0.57	0.28	0.14	(ft)			
Fresnel Number: $N = (2/\lambda) [d_1 + d_2 - d]$		-0.02	-0.03	-0.06	-0.12	-0.25	-0.50	-0.99				
Barrier Insertion Loss: IL = 10 log [3+10N]	4.7	4.5	4.3	3.8	2.4	0.0	0.0	0.0	(dB)			
Sound Pressure Level With Barrier: Lp - IL	69.9	69.4	65.0	66.1	68.6	66.0	57.5	49.3	71.99	at	410.0	(ft
Combined Sound Pressure Level at Receiver	With Ba	rrier										
Total Sound Pressure Level:	72.0	(dBA)										
# of sources	1											
Combined Sound Pressure Level:		(dBA) at	410.0	(ft)								

APPENDIX D

Table C.1 - Typical Construction Equipment Noise

Equipment Type	FHWA Lmax @ 50 ft.	Usage Factor (%)
Excavator	81	40
Loader	79	40
Water Truck	90	40
Grinder	80	40
Rubber Tired Dozer	82	40
Tractor/Loader/Backhoe	84	40
Grader	85	40
Crane	81	16
Forklifts	84	40
Generator Sets	81	50
Welder	74	40
Paver	77	50
Paving Equipment	82	20
Rollers	80	20
Air Compressors	78	40

Table C.2 – Calculated Construction Noise Impacts by Phase

Phase	Equipment Type	Unit Amount	Hours/Day	Calculated Noise Level at Nearest Sensitive Receptors (Hourly Leq, dBA)
Building Demolition	Excavator	2	8	75
	Loader	1	8	
	Skid Loader	2	8	
	Crusher	1	8	
	Water Truck	1	-	
Asphalt Demolition	Grinder	1	8	73
	Loader	1	8	
	Skid Steer	1	8	
	Water Truck	1	-	
Site Preparation	Rubber Tired Dozer	3	8	78
	Tractor/Loader/Backhoe	4	8	
	Water Truck	1	-	
Grading	Excavator	1	8	76
	Grader	1	8	
	Rubber Tired Dozer	1	8	
	Tractor/Loader/Backhoe	3	8	
	Water Truck	1	-	
Utility Trenching & Installation	Excavator	1	8	72
	Water Truck	1	-	
Building Construction	Crane	1	7	75
	Forklifts	3	8	
	Generator Sets	1	8	
	Tractor/Loader/Backhoe	3	7	
	Welder	1	8	
Asphalt Paving	Paver	2	8	70
	Paving Equipment	2	8	
	Rollers	2	8	
Architectural Coating	Air Compressors	1	6	62



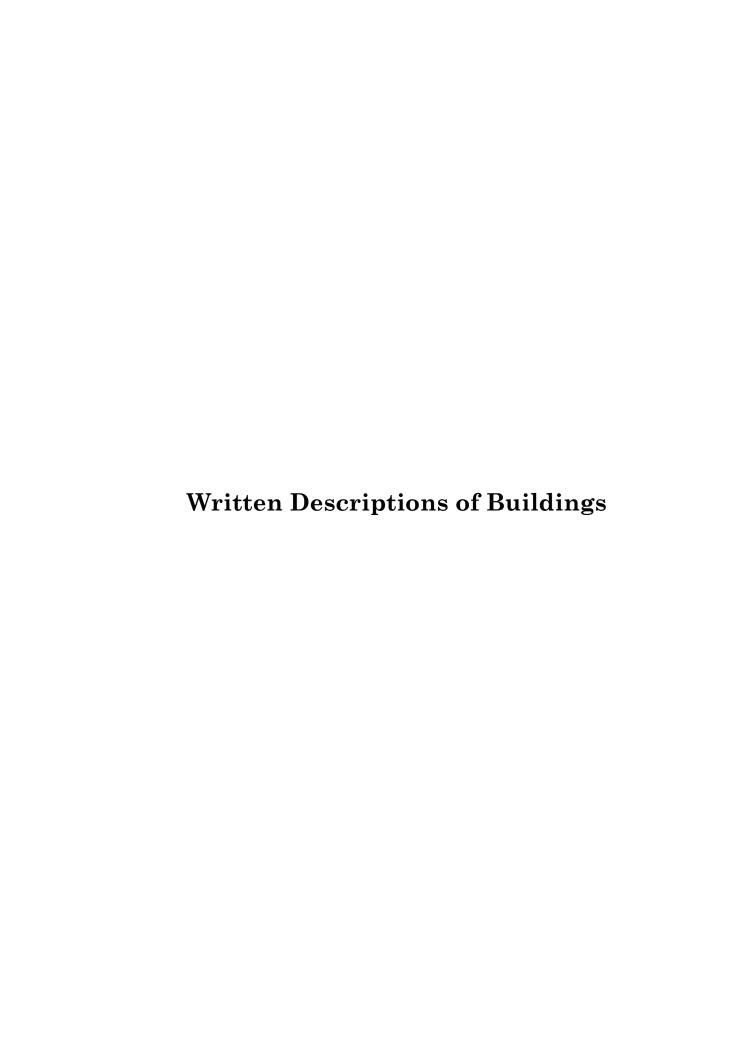
Potential Historical Resource Review for the Morena Apartment Homes Project San Diego, California

Prepared for Fairfield Residential Company LLC 5510 Morehouse Drive, Suite 200 San Diego, CA 92121 Contact: Mr. Shon Finch

Prepared by RECON Environmental, Inc. 1927 Fifth Avenue San Diego, CA 92101 P 619.308.9333

RECON Number 8456 April 17, 2017

Harry J. Price, Preparer



DESCRIPTIONS OF BUILDINGS ON THE MORENA APARTMENT HOMES PROPERTY OVER 45 YEARS OLD

This report provides a description of the buildings on the project site that are 45 years old or older. The Morena Apartment Homes project includes two parcels; APN 436-020-4000 and 436-020-4000. The northern parcel 436-020-4000 contains five buildings and a structure. The southern parcel, 436-020-4100 contains three buildings.

The five buildings on the northern parcel, APN 436-020-4000, consist of two duplexes, a single-family dwelling, a garage, and a barn. The structure is a large metal-sided shed.

The two duplexes, with the addresses 1639/1641 Morena Boulevard and 1643/1645 Morena Boulevard, are identical in layout and construction. They are single-story, rectangular buildings constructed of cinderblock, on slab foundations, measuring approximately 40 feet long by 22 feet wide, with the long axis running north-south. The architecture is very utilitarian, probably closest to Minimal Traditional but with no typical detailing such as shutters, chimney, or front-facing gable. The roofs are side-gabled, with moderate pitch angle, and are roofed with composition shingles. The gables are cladded with vertically set tongue and groove wood siding, with the bottoms cut in half-round scallops. Eaves are open, with fascia boards on the gable ends only. There are slatted attic vent openings on both ends, set close to the gable apex. The façades face east, onto gravel parking areas. The façade is set up so the left and right side are mirror images. There is an eight-light metal casement window near the building corner, with the front door set approximately six feet from the corner. A second eight-light metal casement window is set approximately ten feet from the corner. A small roof extension covers each door. The roof extensions have no sides and are supported by knee braces cut in a shallow S-curve. A poured concrete walkway runs across the front of both duplexes. The left and right sides of the duplexes are identical, with two evenly spaced eight-light metal-framed casement windows. The rear of the buildings faces west. The rear walls each have four windows, two six-light, metal-framed casement windows grouped together near the middle of the wall, and an eight-light, metal-framed casement window set on either side of the central windows, approximately midway to the corners of the duplex. All windows have concrete sills.

The single-family house, at 1623 Morena Boulevard, is a single-story, wood-framed building with a square footprint, approximately 25 feet on a side. The architectural style is a basic vernacular style, with a small amount of Italianate influence in the bay window, pyramid roof and boxed eaves. The roof is pyramidal, with a low pitch angle, and is covered with composition shingles. Eaves are boxed, with an approximately 12-inch overhang in the front and approximately four-inch overhang on the rest of the house. The house is cladded in horizontal aluminum siding approximately ten inches wide, in clapboard style. The house façade faces south, toward Morena Boulevard. The façade is asymmetrical, with a bay window on the right side of the centrally placed door and a flush window on the left. The bay window extends down to the foundation, but does not extend to the roof. It is covered by a separate shed roof set approximately six inches below the main roof eaves. The bay windows themselves are wood-framed, two-over-two, double-hung, with wood casings and sills. The window to the left of the front door is also wood-framed, two-over-two, double-

hung, with wood casing and sill. The door is covered by a metal security door. Access to the door is from poured concrete steps, five steps high, with no landing. A poured concrete planter sits to the left of the steps, below the window. The northwest side of the house has a red brick chimney, set to the south of center. Two narrow wood-framed, windows with wood casings and sills are set between the chimney and the south corner; one a fixed, double-light and the other a two-over-two, double-hung. The southeast side of the house has four windows of different sizes, with wood casings and sills similar to the other house windows. Some are fixed and some are double-hung. There is a shed roof covering a porch on the rear (northeast) of the house. The porch is not full length, but is offset to the right. The shed roof has ends enclosed with siding, and open eaves with side fascia boards. The roof is supported by three square posts. Hand railing is supported by narrow vertical slats. The entrance to the porch is on the right side. There is a door and a single, wood-framed, two-over-two, double-hung, with wood casing and sill window; the door on the left side of the porch and the window on the right. The porch floor is tongue and groove wood flooring, set approximately 10 inches off the ground.

The fourth building is a garage, approximately 25 feet by 25 feet, with a side gabled, low angle pitch roof covered with composition shingles. It is constructed of cinderblock and set just to the north of the wood-framed house. Eaves are open, with fascia boards on the gable ends. The gables are cladded in horizontally laid tongue and groove wood siding. The front faces northwest, and is dominated by a large, upward opening wood door. There is a narrow entrance door on the immediate left of the main door, possible created by installing a smaller main door sometime after the garage was constructed, leaving room for a small entrance door. The rear of the garage has two boarded-up windows, which lack casings and have small concrete sills. The southeast side of the garage has two evenly spaced eight-light metal-framed casement windows. The rear windows may be of the same style. The northeast side has two small rectangular boarded-up windows.

The fifth building is a small, wood-framed barn located in the central portion of the parcel. It measures approximately 21 feet by 23 feet, and has a front gable roof, with a moderately steep angle pitch, covered with badly deteriorating composition shingles. Cladding is simple drop wood siding, laid horizontally. The front faces south, with a centrally located vertical batten constructed wood door. There is a hastily boarded-up window, with wood framing and casing, to the right of the door, and a well boarded-up area to the left of the door, which may also be a window. A loft entrance is set near the apex of the gable, above the entrance door. The east wall has a door and two small rectangular, awning hung, wood-framed windows. The door is wood, of vertical batten construction. The west side has what appear to be three small boarded-up windows and a vertical batten constructed wood door. Two windows are set north of the door and one to the south. The rear of the barn (north side) has a loft entrance set near the apex of the gable. Below is an opening approximately 10 feet wide. The top half has door hinged on the top. The bottom half appears open on the left and closed on the right by vertical boards.

The structure on this parcel is a single-story, metal shed, measuring approximately 33 feet by 22 feet, with the long axis oriented north-south. The roof is flat and covered by corrugated metal sheets. There is a front door approximately 18 feet wide, set on the south side of the west-facing façade. A smaller entrance door is set immediately to the left of the large door. The walls are flat metal sheets of varying sizes. There are what appear to be two covered windows/openings on the back wall, both on the southern half. They are covered with sheet metal. There is a similar possible covered opening on the north wall. The south half has a concrete slab floor; the remainder of the floor may be dirt. The framing appears to be metal, but that could not be confirmed.

The three buildings on the southern parcel, APN 436-020-4100, consist of a residence, a laundry room/storage room building, and a small office. In addition there are 33 small bathroom/shower buildings adjacent to trailer stalls for use by residents.

The residence, at 1597 ½ Morena Boulevard, is single-story, with a rectangular footprint measuring approximately 62 feet by 26 feet. The residence is oriented with the long axis running east-west. A two-car garage is attached to the east end of the residence. The hipped roof has a shallow pitch angle, and is covered with composition shingles. The eaves are boxed and narrow. The building is cladded in stucco. The architecture is very utilitarian, probably closest to Minimal Traditional but with no typical detailing such as shutters, chimney, or front-facing gable. The façade faces south, looking onto Morena Boulevard. The front yard is heavily overgrown concealing some details of the façade. There is a partial porch, covered by a shed roof of shallow pitch angle. The porch roof is supported by four evenly spaced square, wood posts. Both ends of the porch are closed off, using vertical wood siding. There is a security door on the east end, allowing entrance to the porch area. The porch covers two windows and two doors. From east to west the arrangement is window, door, window, and door. Outside of the porch, on the far west end of the façade is a third window. Of the three windows in the façade, two are eight-light, metal-framed casement windows. The third window is a replacement metal-framed sliding window. What appears to be a second door north of the existing door has been removed and the opening is filled with plywood. There is a poured concrete walkway along the front. The west and east walls each have a single eight-light, metal-framed casement window placed centrally in the wall. The rear wall of the building has two doors and four windows set in the western (residence) end, and no doors or windows in the garage portion of the rear wall. From west to east the layout is window, window, door, door window, and window. Three of the windows are eightlight, metal-framed, casement-style, and the fourth is a replacement metal-framed, slidingstyle window. The doors are wood; one is a three-panel, solid-style and the other is has a one-over-one, metal-framed window in the upper half.

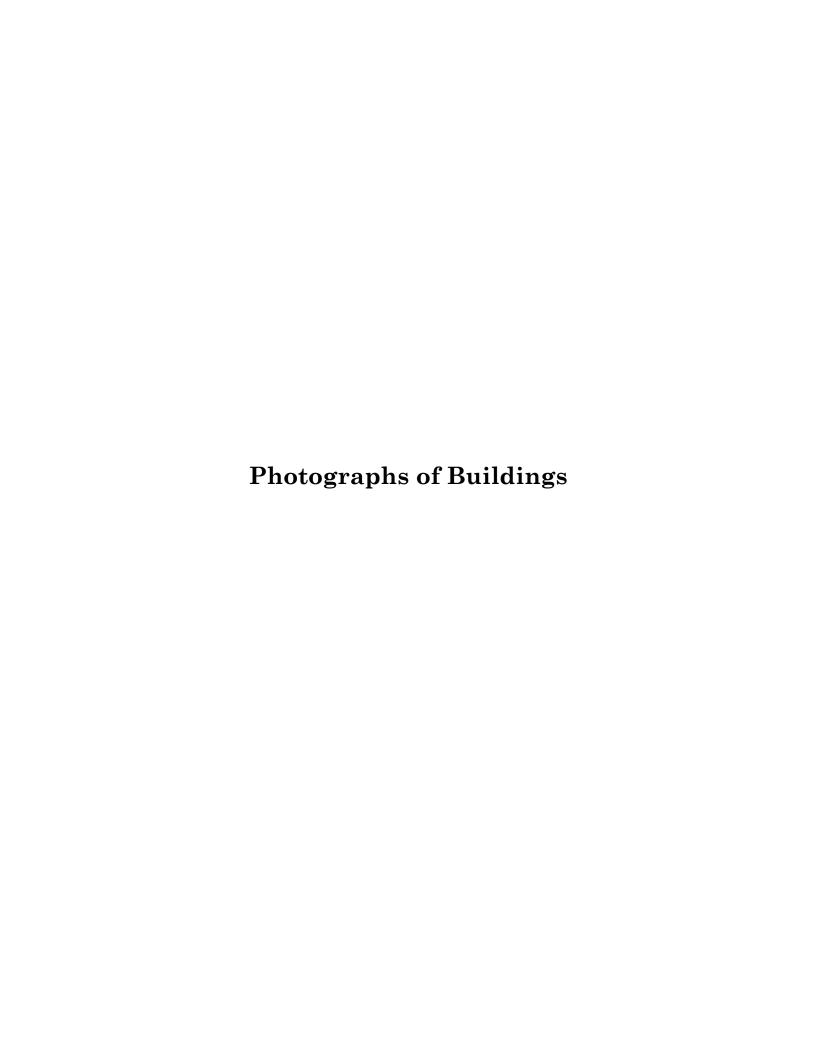
The laundry room/storage building is a single-story, rear-facing, L-shaped building with a low-pitch angle, cross-hipped, roof covered in composition shingles. The walls are cladded in stucco. The building is oriented with the long axis running east-west, and measures approximately 45 feet by 25 feet (wide end) and 21 feet (narrow end). Eaves are boxed and narrow. The façade faces north, with the laundry on the right and the storage rooms on the left. There are three doors and three windows, arranged (from east to west) door, door, window, window, door, and window. The doors are solid, six-panel style. The windows are metal-framed sliding-style. The east wall has two windows set on either side of a door placed slightly left of center. The windows are the same metal-framed sliding type as on the front. The west wall has a single centrally located window of the same style. A single-car

carport has been added to this side of the building attached by knee braces and beams. The rear (south wall) of the building has one window set in the eastern storage portion (same style as the other building windows) with false shutters, and a door and window in the western laundry side. The window is a metal-framed sliding type and it is set between the door and the west corner of the building. A water heater closet is attached to the rear at the angle of the L.

The office is a small, rectangular building with a shallow pitch angle end gable roof, measuring approximately 20 feet by 16 feet. The roof is covered with composition shingles. The eaves are boxed and narrow. The building is stuccoed, with the gables filled with vertically oriented wood siding. The front has a centrally placed door with metal-framed, sliding-style windows on either side. The windows have false, slatted wood shutters, with small planter boxes attached at the bottom of the windows. A small fabric awning with pipe frame covers the front door. The west wall has a single centrally-placed, metal-framed sliding-style window. The rear of the office has a single door offset to the east of center, and a small, metal-framed, sliding-style window set to the west of center. The east wall has no windows or doors.

The 33 bathroom/shower buildings vary in detail but share basic structural characteristics and layout. They measure 18 feet by 10 feet with a very shallow pitch, simple hipped roof covered with rolled composition roofing. A wood post extends up out of the roof. This was originally used for electric service. The eaves are close, with crown moulding fascia boards. In 31 of the buildings the walls are poured concrete, possibly precast. There are two variations in wall ornamentation; 23 have 1-2 large slightly recessed rectangular panels per wall face, the remaining eight have smaller rectangles in offset horizontal rows. The remaining three buildings are constructed of cinderblock. These are rather roughly constructed, with block slightly misaligned and some extruding mortar.

In the east elevation is a door, set slightly left of center, with two small square metal vents to the left of the door and a blank space to the right. Almost all of the buildings have the doors and windows boarded up; the few visible doors are multi-paneled wood doors. The north elevation has no openings. The west elevation has a single door offset slightly to right of center. The south elevation has two small rectangular windows. The one window seen that was not boarded up has an opening that was boarded in and a smaller plastic-coated, metal framed sliding window installed.





PHOTOGRAPH 1 1639/1641 Morena Boulevard – Façade (East Elevation)



PHOTOGRAPH 2 1639/1641 Morena Boulevard – North Elevation





PHOTOGRAPH 3 1639/1641 Morena Boulevard – West Elevation



PHOTOGRAPH 4 1639/1641 Morena Boulevard – South Elevation





PHOTOGRAPH 5 1643/1645 Morena Boulevard – Façade (East Elevation)



PHOTOGRAPH 6 1643/1645 Morena Boulevard – North Elevation





PHOTOGRAPH 7 1643/1645 Morena Boulevard – South Elevation



PHOTOGRAPH 8 1623 Morena Boulevard – Façade (South Elevation)



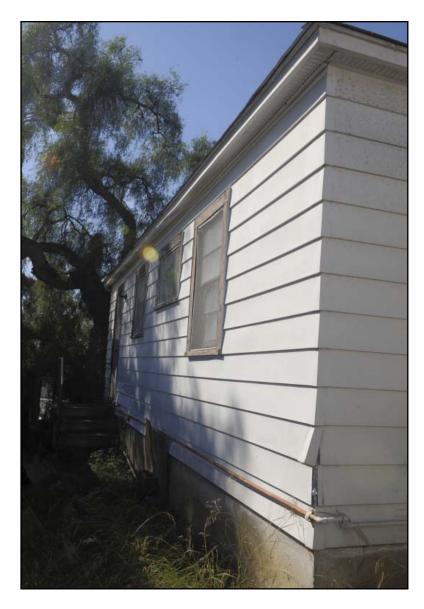


PHOTOGRAPH 9 1623 Morena Boulevard – West Elevation



PHOTOGRAPH 10 1623 Morena Boulevard – North & West Elevations



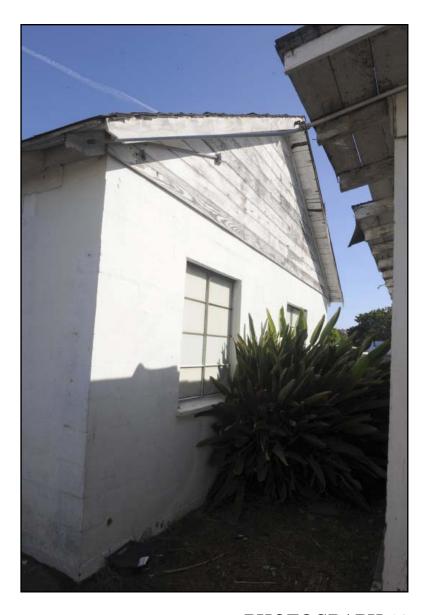


PHOTOGRAPH 11 1623 Morena Boulevard – East Elevation



PHOTOGRAPH 12 Garage – Façade (West Elevation)





PHOTOGRAPH 13 Garage – South Elevation





PHOTOGRAPH 14 Garage – East Elevation



PHOTOGRAPH 15 Barn – Façade (South Elevation)





PHOTOGRAPH 16 Barn – East Elevation





PHOTOGRAPH 17 Barn – North Elevation





PHOTOGRAPH 18 Barn – West Elevation



PHOTOGRAPH 19 Metal Shed – Façade (West Elevation)





PHOTOGRAPH 20 Metal Shed – South Elevation



PHOTOGRAPH 21 Metal Shed – East Elevation





PHOTOGRAPH 22 Metal Shed – North Elevation



 $PHOTOGRAPH\ 23$ 1579½ Morena Boulevard – Partial Façade (South Elevation)





PHOTOGRAPH 24 1579½ Morena Boulevard – East Elevation



 $\begin{array}{c} PHOTOGRAPH~25\\ 1579\frac{1}{2}~Morena~Boulevard-North~Elevation \end{array}$





PHOTOGRAPH 26 1579½ Morena Boulevard – West Elevation



 $PHOTOGRAPH\ 27$ Laundry/Storage – Façade (North Elevation)





PHOTOGRAPH 28 Laundry/Storage – East Elevation



PHOTOGRAPH 29 Laundry/Storage – South Elevation





PHOTOGRAPH 30 Laundry/Storage – West Elevation



PHOTOGRAPH 31 Office – South & West Elevations





PHOTOGRAPH 32 Office – North & West Elevations



PHOTOGRAPH 33 Typical Bathroom/Shower Building, North Elevation





PHOTOGRAPH 34 Typical Bathroom/Shower Building, East Elevation



 ${\bf PHOTOGRAPH~35}$ Typical Bathroom/Shower Building, West Elevation





PHOTOGRAPH 36 Typical Bathroom/Shower Building, South Elevation



PHOTOGRAPH 37 Cinderblock Version of Bathroom/Shower Building



PHOTOGRAPH 38 View of Trailer Park, Looking North from Entrance





PHOTOGRAPH 39
East End of Trailer Park,
Looking North from Southeast Corner of Park



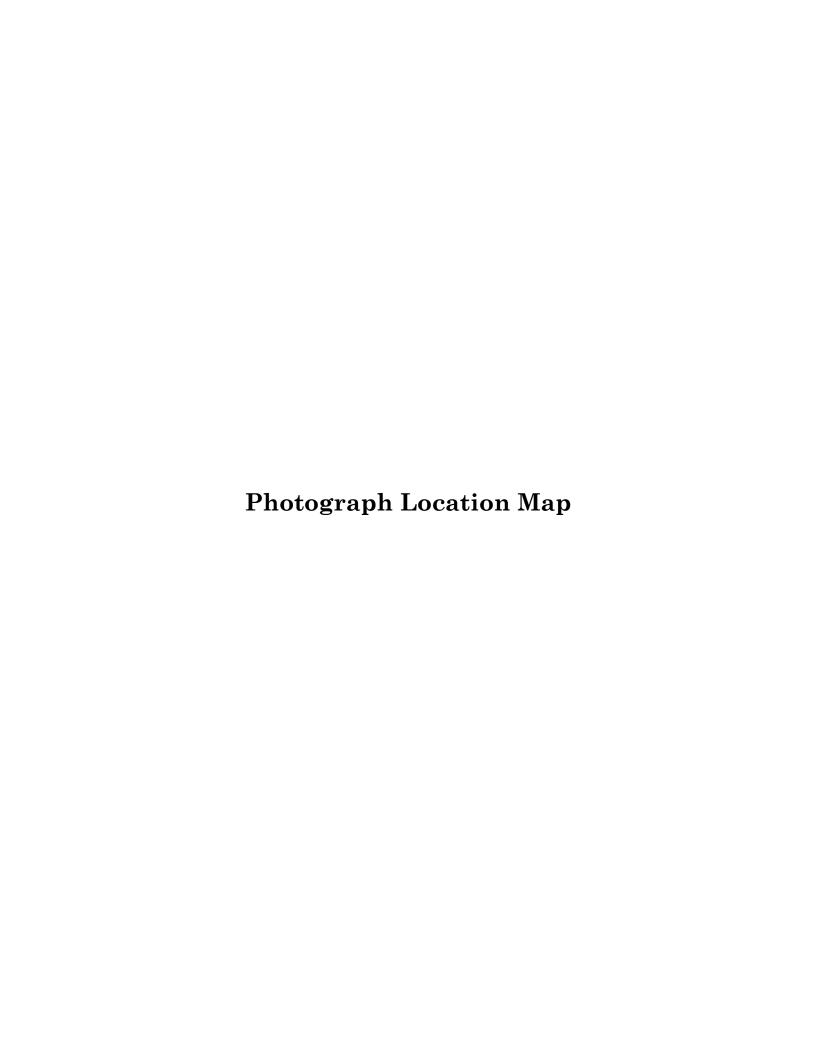
PHOTOGRAPH 40 Looking Southwest for Northeast Corner of Park





PHOTOGRAPH 41
West End of Trailer Park,
Looking South from Northwest Corner of Park





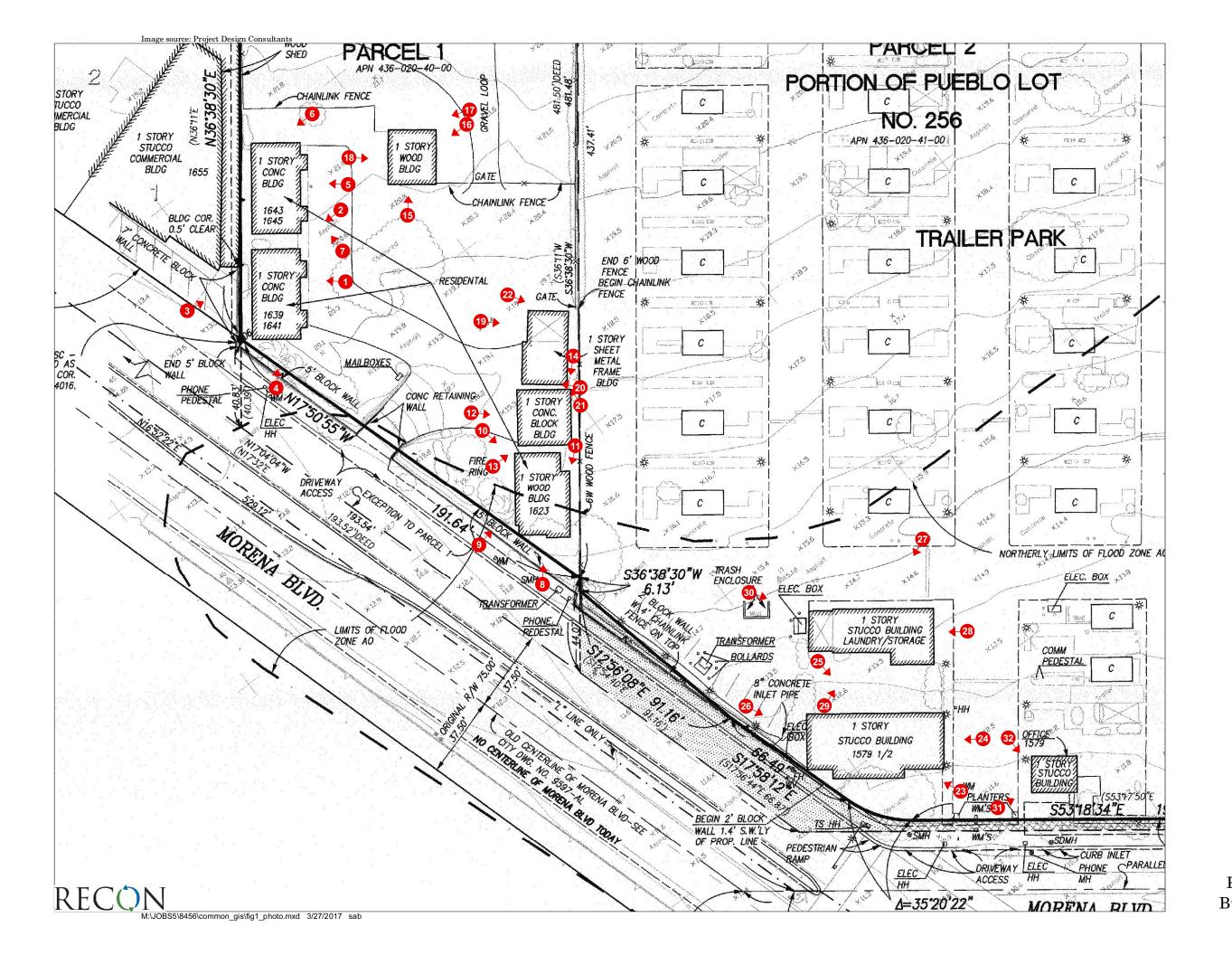






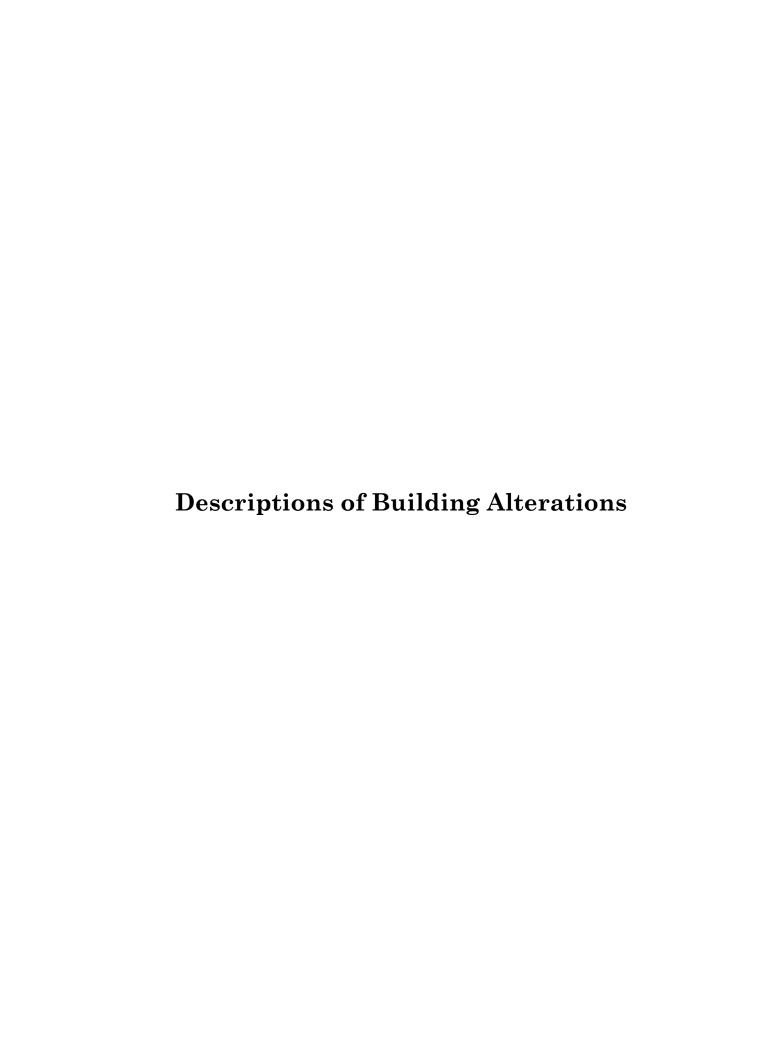
FIGURE 1
Photo Locations of Existing
Buildings, Photographs 1-32





FIGURE 2

Photo Locations of Bathroom/Shower Buildings and Site Overviews, Photographs 33-41



MORENA APARTMENT HOMES PROJECT DESCRIPTIONS OF BUILDING ALTERATIONS

Buildings on Parcel APN 436-020-4000

According to the Residential Building Records (RBR), the duplex at 1639/1641 Morena Boulevard was constructed in 1950 and the duplex at 1643/1645 Morena Boulevard was constructed in 1959. Neither appear to have been altered from their original configuration. The RBR does not list any additions or alterations such as window replacements. There are no visible additions or deletions, the building footprints appear the same as shown on the 1964 aerial photographs (http://www.historicaerials.com/aerials.php?scale=2000&lon=-117.0877&lat=32.701553&year=2005).

According to the RBR, the single-family house, at 1623 Morena Boulevard was constructed in 1939. It may have had the back porch added at some time, although it is present in a 1953 aerial photograph obtained from the San Diego Historical Society (see attached photograph). The back porch is also present on the RBR, although the records are dated 1958. The building is currently cladded in aluminum siding, which may or may not be original, but the RBR do not list a change on cladding. Aluminum siding entered the market after World War II. Windows appear to be original, and no changes re listed in the RBR. Since the house was moved from its original location approximately 40 feet north of its current location, the foundation, concrete steps, and planters and walkways date from the move.

No date of construction is listed on the RBR for the garage. It is present on a 1964 air photograph, but not on the 1953 air photograph. The garage appears basically unaltered structurally. The current front door with small side door may be a reconfiguration of an earlier single larger door. No changes are listed on the RBR

The RBR lists 1939 as the date for construction of the small barn in the middle of the parcel. It has been heavily altered, although these alterations are not listed in the RBR. The 1953 aerial photograph (see attached photograph) shows a full-length shed roof extending off the east side. An enclosed room extends off the west side, with two small sheds attached to this.

The metal shed, called a shop on the RBR, is listed as being constructed in 1939. The metal shed appears basically unaltered from its configuration on the 1953 air photograph and its description on the RBR.

Buildings on Parcel APN 436-020-4100

The RBR lists the construction of the house at 1597 ½ Morena Boulevard as 1947. It may have originally been a duplex. There are two doors on the rear and what appears to be a boarded up door-sized opening on the façade. The walls closing off the ends of the front porch may not be original. Some windows have been replaced. There have been no additions since the 1953 aerial photographs were taken. The RBR lists no additions or alterations and does not state that it was a duplex, calling the building a residence.

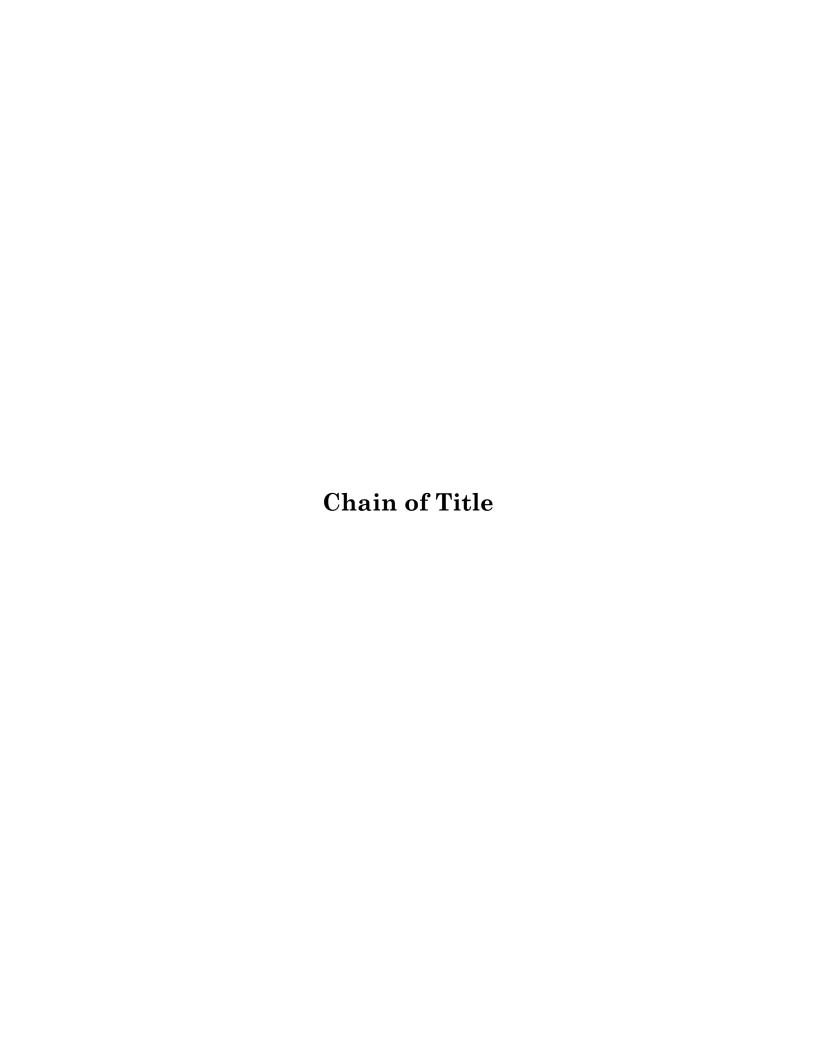
The RBR lists the construction of the laundry room/storage building as 1947. The building has had a single car wide carport constructed off the west wall at some point in time. The windows are currently of the metal framed sliding style and appear to be original. The basic structure of the building does not appear to have been altered since original construction. The RBR lists no additions or alterations.

The RBR lists the construction of the office building as 1947. The office building has been altered by the addition of the false shutters on either side of the windows and the planter boxes below the façade and west widows. The basic structure does not appear to be altered since the 1953 aerial photograph was taken. The RBR lists no additions or alterations.

The RBR lists the construction of the bathroom/shower buildings in 1947. As there are no later listings for new bathroom/shower buildings, it seems probable that the three cinderblock examples were constructed at the same time as the cast concrete examples. Aside from the boarding up of doors, there appear to be no exterior alterations to these buildings.

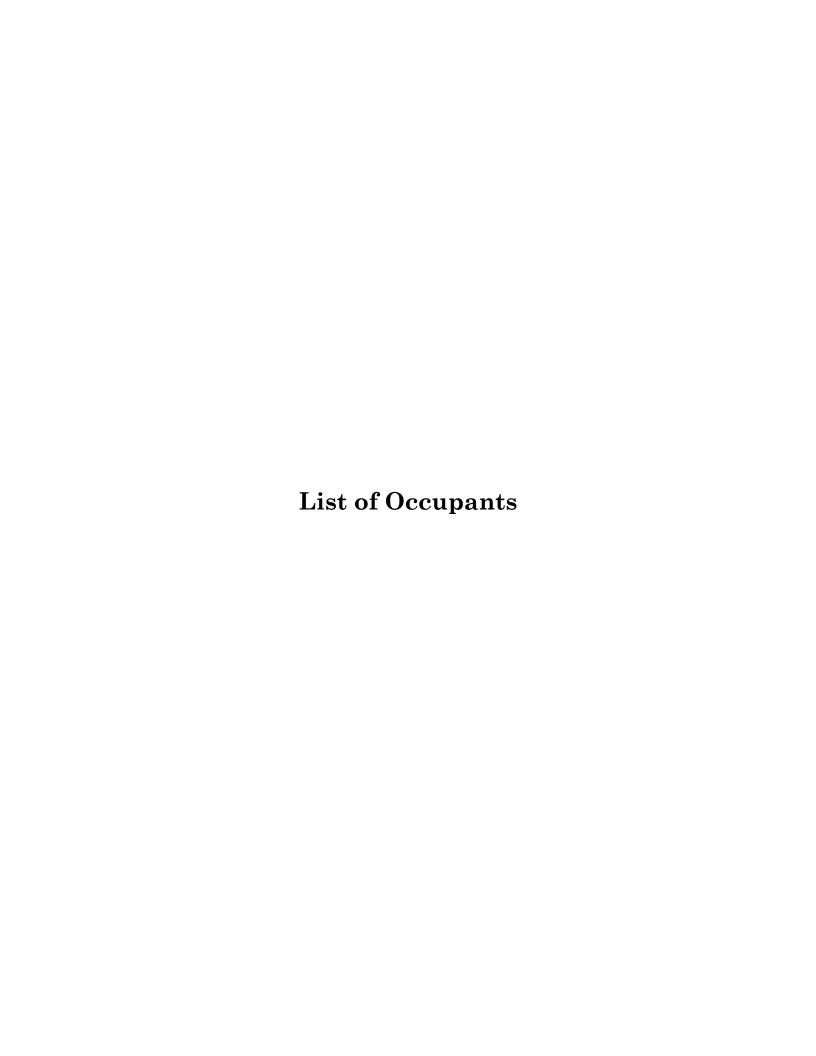


MORENA APARTMENT HOMES REZONE NO. XXXXXXX/VESTING TENTATIVE MAP NO. XXXXXXX/PLANNED DEVELOPMENT PERMIT NO. XXXXXXXX SITE DEVELOPMENT PERMIT NO. XXXXXXX/ COMMUNITY PLAN AMENDMENT NO. XXXXXXX MAP 4016 N36'38'30"E 326.19' 1) PROPOSED TYPE 'G' CURB & GUTTER PER SDG-150 2) PROPOSED 30' RADIUS CURB RETURN 3) PROPOSED 20' RADIUS CURB RETURN 4) PROPOSED 24' DRIVEWAY PER SDG-159 PROPOSED 24' DRIVEWAY PER SDG-163 PROPOSED PCC SIDEWALK PER SDG-155 EXISTING TYPE 'G' CURB & GUTTER TO BE REMOVED 8) EXISTING SDG&E TRANSFORMER TO BE RELOCATED 9 FXISTING FIRE HYDRANT TO BE RELOCATED 19.47 TC 18.97 FL 17.75% 19.89 TC 19.39 FS EXISTING TRAFFIC SIGNAL POLE TO BE RELOCATED PROPOSED FIRE HYDRANT ASSEMBLY 22.05 TC / 21.55 FS / 12) EXISTING STREET TREE TO BE REMOVED (TYPICAL) FF=21.0 BLDG. PAD=20.0 13) PROPOSED RETAINING WALL 14) PROPOSED ELECTRIC TRANSFORMER LOCATION FF=19.9 BLDG. 6 PAD=18.9 16) PROPOSED STORM DRAIN INLET (PRIVATE) 21.81 TC / 21.31 FS 17) PROPOSED STORM DRAIN (PRIVATE) - SIZE VARIES FROM 18" TO 24' RCP 18) PROPOSED TYPE A-4 STORM DRAIN CLEANOUT PER D-09 (PUBLIC) 19) PROPOSED 6" SEWER LATERAL (PRIVATE) FF=21.6 BLDG, 2 21) PROPOSED DOMESTIC/FIRE BACKFLOW (PRIVATE) PAD=20.6 22) PROPOSED 8" DOMESTIC/FIRE WATER MAIN (PRIVATE) PROPOSED 2" IRRIGATION SERVICE (PUBLIC) 24) PROPOSED IRRIGATION 2" REDUCED PRESSURE DETECTOR ASSEMBLY (PRIVATE) (26) SIGHT DISTANCE LINE 25.6' TW=32.4; FG=32.2: TF=21.03 22.12 TC 21.62 FS MORENCI VARIES FROM STREET 22.59 TC 22.09 FS FF=21.6 BLDG. 3 PAD=20.6 24' DRIVE AISLE 22.34 TC 21.84 FS DRIVE AISLE SECTION BOULEVARD FF=21.6 BLDG. 4 PAD=20.6 22.69 TE 22.19 FS SITE AND GRADING PLAN 22.17 TC 21.67 FS PROJECT DESIGN CONSULTANTS TW=30.41 FG=30.23 TF=21.03 PREPARED BY NAME: PROJECT DESIGN CONSULTANTS REVISION 14: 8 REVISION 13: ADDRESS: 701 'B' STREET, SUITE 800 REVISION 12-SAN DIEGO, CALIFORNIA 9210 REVISION 11: PHONE #: (619) 235-6471 REVISION 10: FF=20.0 BLDG. 5 PROJECT ADDRESS: REVISION 08: REVISION 07: SAN DIEGO, CALIFORNIA REVISION 06: REVISION 05: REVISION 04: REVISION 03: N O O REVISION 02: ORTION LOT N PM 12/05/2016 L=31.41' FRANKFORT STREET PROPOSED RIGHT-OF-WAY/ PROJECT BOUNDARY SITE AND GRADING PLAN CORELLA TRACT MAR NO. 1571



	Chain of Title		
Grantor	Grantee	Date Recorded	Deed Type
Durrill, Lina H.	Odom, W. P.	1943, November 27	Grant
Odom, W. P. and Ruth C.	Williams, Harry and Sanna Dean	1947, October 22	Grant
Williams, Harry and Sanna Dean	Lambert, Frank C. and Clara R.	1947, October 22	Grant
Williams, Harry and Sanna Dean	Murphy, Martin E. and Nellie C.	1949, July 25	Grant
Murphy, Martin E. and Nellie C.	Williams, Harry and Sanna Dean	1949, July 25	Grant
Williams, Harry and Sanna Dean &	O'Connell, Lawrence and Mabelle Jean &	1950, January 19	Grant
Lambert, Frank C. and Clara R.	Raymond and Genevieve O'Connell		
O'Connell, Raymond and Genevieve	O'Connell, Lawrence	1954, February 10	Grant
O'Connell, Lawrence and Mabelle Jean	San Diego, City of	1956, January 5	Grant
O'Connell, Lawrence and Mabelle Jean	Knobel Investment Company &	1965, March 11	Grant
	Pickering, Paul P. and Dorothy B. 45% interest		
	Cheryl Co. & Moore, Lawrence T. 29% interest		
	Howard, John P. and Patricia P. 13% interest		
	Metzler, Donald J. and Diane W. 13% interest		
Moore, Patricia C.	Moore, Lawrence T.	1965, March 11	Quit Claim
Howard, John P. and Patricia P.	Howard, John P., Trustee		Grant
Moore, Patricia C.	Moore, Lawrence T.	1974, May 30	Quit Claim
Pickering, Dorthy B.	Pickering, Paul P.	1974, May 30	Quit Claim
Pickering, Paul P.	California First Bank	1976, December 21	Grant
Howard, John P., Trustee	Knobel Investment Company &	1979, June 6	Grant
	Pickering, Paul P. and Dorothy B. 4%		
	Lawrence T. Moore, M.D. &		
	Moore, Lawrence T. 4%		
	Metzler, Donald J. and Diane W. 5%		
Knobel Investment Company	Caifornia First Bank &	1981, January 26	Quit Claim
	Pickering III, Paul P. and Dorothy B, Trustees		
Caifornia First Band &	Pickering III, Paul P. and Dorothy B, Trustees	1983, March 14	Quit Claim
Pickering III, Paul P. and Dorothy B, Trustees			
Metzler, Donald J. and Diane W.	Metzler, Donald J., Trustee	1983, October 7	Grant
Moore, Lawrence T. and Patricia C.	Moore, Lawrence T., Trustee	1985, March 21	Quit Claim
Moore, Lawrence T. and Patricia C.	Moore, Lawrence T., Trustee	1985, April 26	Quit Claim
Pickering III, Paul P. and Dorothy B, Trustees	Moore, Lawrence T., M.D., Trustee	1986, March 25	Grant
Pickering III, Paul P. and Dorothy B, Trustees	Moore, Lawrence T., M.D., Trustee	1990, April 11	Grant

	Chain of Title		
Grantor	Grantee	Date Recorded	Deed Type
Pickering, Dorothy B., and Pickering III,	Pickering III, Paul P. and Dorothy B, Trustees 31.2%	1992, January 21	Grant
Paul P. and Dorothy B, Trustees;	Moore, Lawrence T., Inc. 9.5%		
Moore, Lawrence T., Inc.;	Barlow, Pamela Ann 41.3%?		
Barlow, Pamela Ann, Successor Trustee			
Barlow, Pamela Ann, Trustee	Barlow, Bruce and Pamela Ann Trust	1992, December 29	Quit Claim
Barlow, Pamela Ann, Trustee	Barlow, Bruce and Pamela Ann Trust	1992, December 29	Quit Claim
Pickering III, Paul P. and Dorothy B, Trustees	Metzler, Donald J., Trustee	1995, May 1	Grant
Pickering III, Paul P., Successor Trustee	Metzler, Donald J., Trustee	2001, February 14	Grant
Pickering III, Paul P., Successor Trustee	Pickering III, Paul P., Trustee	2003, April 4	Quit Claim
Pickering III, Paul P., Successor Trustee	Clark, Brown Pickering	2003, April 4	Quit Claim
Pickering III, Paul P., Successor Trustee	Hughes, Palmer and Priscilla P., Trustees	2003, April 4	Quit Claim
Clark, Brown Pickering	Clark, Brown Pickering, Trustee	2004, February 24	Quit Claim
Clark, Brown Pickering, Trustee	Metzler, Donald J., Trustee	2008, October 3	Grant



		List	t of Occupants		
City Directory	House		•		
Year	Number	Tenant(s)	Employer	Job Title	Notes
1984	1579	Martin, C.L. and Opel	Coaster Trailer Villa	Manager	
1984	1623	Carter, Walter H. and Lilly P.	Coaster Trailer Villa	Landscape Gardener	
1984	1639	Bailey, Pauline	Retired		
1984	1641	Kinney, Ronald	Clairemont General Hospital	Orderly	
1984	1643	Israel, Margarita	Retired		
1984	1645	Davis, B.			
1980	1643	Bitto, Betty			
1980	1645	Israel, Margarita			
1979	1579	Sowa, Adam P. and Margaret	Coaster Trailer Villa	Manager	
1979	1643	Shinn, Beryl	Retired		
1976	1623	Batson, Roy and Edith		Construction Worker	
1976	1643	Simpson, Jack	Retired		
1975	1579	Ellis, Daymon	Coaster Trailer Villa	Manager	
1975	1623	Nold, C. John			
1975	1643	Ellis, Wayny			
1974	1623	Cornelius, W.L.			
1973	1623	Fougeron, Gertrude C.	Retired		
1973	1639	Stern, Mary			
1973	1641	Massey, Beth	Retired		
1973	1643	Connell, Ora E.	Retired		
1971	1639	Kenton, Harry			
1971	1641	Card, Dode			
1969–70	1639	Kemp, Harry			
1969–70	1641	Miller, Richard	Retired		
1969–70	1645	Jacobs, Charles			
1968	1641	Collins, W.M.	Retired		
1966	1579	O'Connell, Lawrence	Coaster Trailer Villa	Manager	
1966	1639	Jennings, Ethel			
1965	1639	Bean, Benjiman	Retired		
1963–64	1579	Mendenhall, Fred T.	Coaster Trailer Villa	Manager	
1963–64	1623	Fougeron, Augustus F. and Gertrude C.			
1963–64	1641	Savage, Andrew F. and Florence K.	Long Marker & Holly	Engineer/Contractor	
1961	1639	Ray, Adam R. and Elise T.	USN		
1961	1645	Peters, Helen ^o	Boulevard Inn	Waitress	
1960	1643	Godfrey, Paul S. and Louise G.	Tools 1205 Cushman		

		Lis	t of Occupants		
City Directory	House				
Year	Number	Tenant(s)	Employer	Job Title	Notes
1959	1639	McNeil, Clyde W. and Catherine W.	Stewart Co.	Construction Worker	
1959	1645	Drew, Daryl T. and Maurine L.	USMC		
1956	1641	Hawkins, Marion and Leetha	USMC		
1955	1639	Gable, Joy H.			Also listed as "Jay"
1953–54	1639	Leitka, Frank and Hester R.	Caudell & Johnson	Welder	
1942	1623				First listing. 1942–1952
					only 1623 appears with
					Fougeron, Augustus F.
					and Gertrude C.
1941					No Listings

Notes: All addresses were researched for all years beginning with the date of construction of each structure. Missing years for addresses indicate that no listing was found for that year. In addition, for the years 1957–1958, 1962, 1967, and 1972 no listing for any addresses were found for those years.





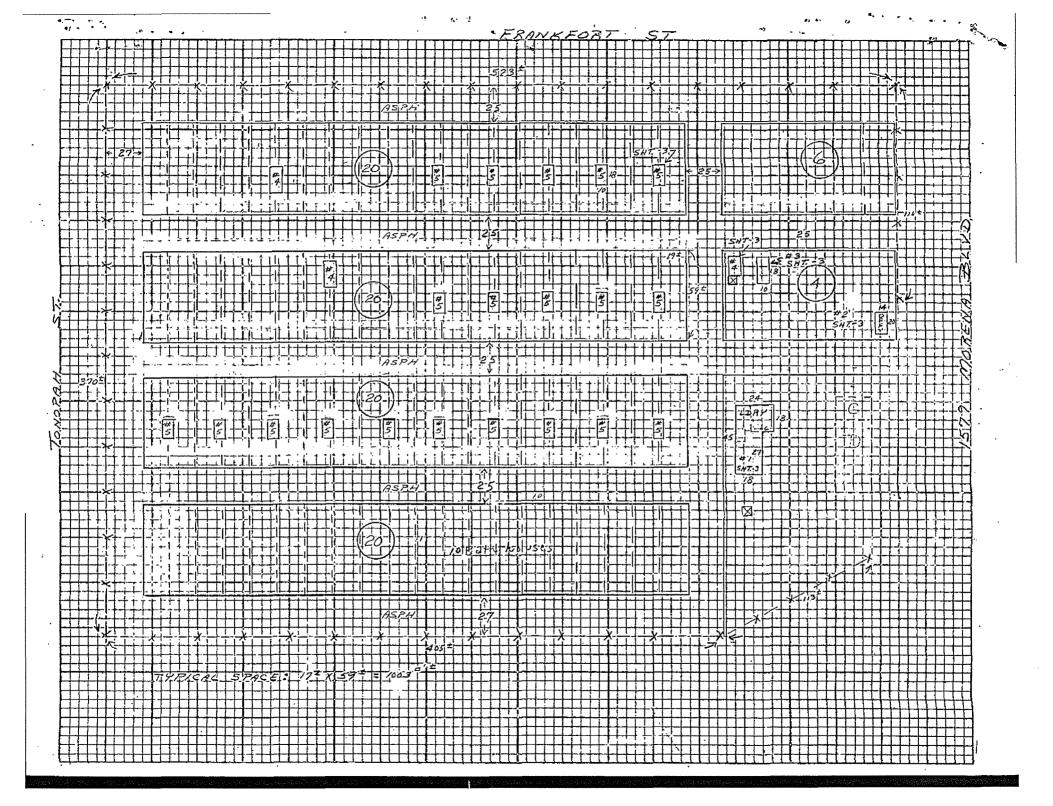
COMMERCIAL-INDUSTRIAL BUILDING RECORD . 436-020-4. Account No. Parcel No. 435 280 - 4 ASSESSOR, SAN DIEGO COUNTY 1579 MORENA BLUD NAME COASTAL TRAILER VILLA-SHEET ____ OF 3 ADDRESS CLASS & SHAPE FRAME TRUSSES EXT. FINISH ROOF LIGHTING FRONT INTERIOR CONSTRUCTION Heavy FURB Wood Light Flat -NUMBER OF ROOMS Type Standard 5 Concrete Reinf. Wood Steel Stucco Shed B M 1 2 3 FLOORS GD WALLS GD CEILING G Below Standard Steel Metal Arch Stories. * Span Spaced No Frame **FLOORS** Gable Bsmt Veneer **FIXTURES** Glass in USE DESIGN FLEDWALLS Concrete Wood Wood Matal Wood Fluorescent Garage Wood Wood Glass Metal Incondescent Glass Doors Store Brick Unfinished Concrete Auto No. Sub-Floor Office Conc. Blk Bulkhead Elevation Office Quality Factory Metal -ROOF COVER Quantity Back Trim Lobby Warehouse Tile Up FOUNDATION **WINDOWS** Composition PLUMBING Lighting Hall Pilasters Concrete Reinf. Matal Built-Up Fixtures Drop Cailing Bath Perty Disp.Platform Masonry Matal Quality Restroom Sprinklers Quality SPECIAL FEATURES CONSTRUCTION RECORD RATING (E,G,A,F,P) NO - CAPACITY MATERIAL OR TYPE NORMAL % GOOD EFFEC. APPR. Arch. Func. Ade- Wkm- Air Cond.
Attr. Plan quacy ship Permit Toble YEAR Amount Date YEAR Life For No. 7300 19/47 48 64 16 44711 UTILITY 08-20 41. EACH 10/47 19 OP 20 45152 TO GO BATH HSES 1970 44701 TO 10 BATH HSES 6000 19/47 42427 70-G 10/48 70507 BATH HSE 1200 393 950 Doors 89165 FENCES Sky-Lites Elevator 10-10-63 Appraiser and Date AREA/ COST COST COST COST UNIT UNIT COST TRAILER 90 490 44 100 125000 1500 ~ SPACES Y-1MPS 41176 14340 83 790 TOTAL 135000 NORMAL % GOOD uno - 45 R.C.L.N.D. CHECKED REVIEWED A-21 (1-58)

MISCELLANEOUS STRUCTURES ... STRUCTURE FOUND FLOOR CONST. 67000 @ 40¢ 700000 @ 174 163. EENCE 1400 ,60 400 640. ,00 COMPUTATIONS 100 SPACES = 200 SEWER TYPICAL SPACE; GAS = 60 17X 585 = 994 ± . WATER = 150 = 30 TELG 490 REMARKS: 1. 90 SPACES 40 SPACES 41. TH PRIVATE BATHES RENT @ 460 \$ 50 SPACES WITH COMMUNITY FACILITIES RENT P \$30. 10-10-63

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RESIDENTIAL BUILDING RECORD OV- 5

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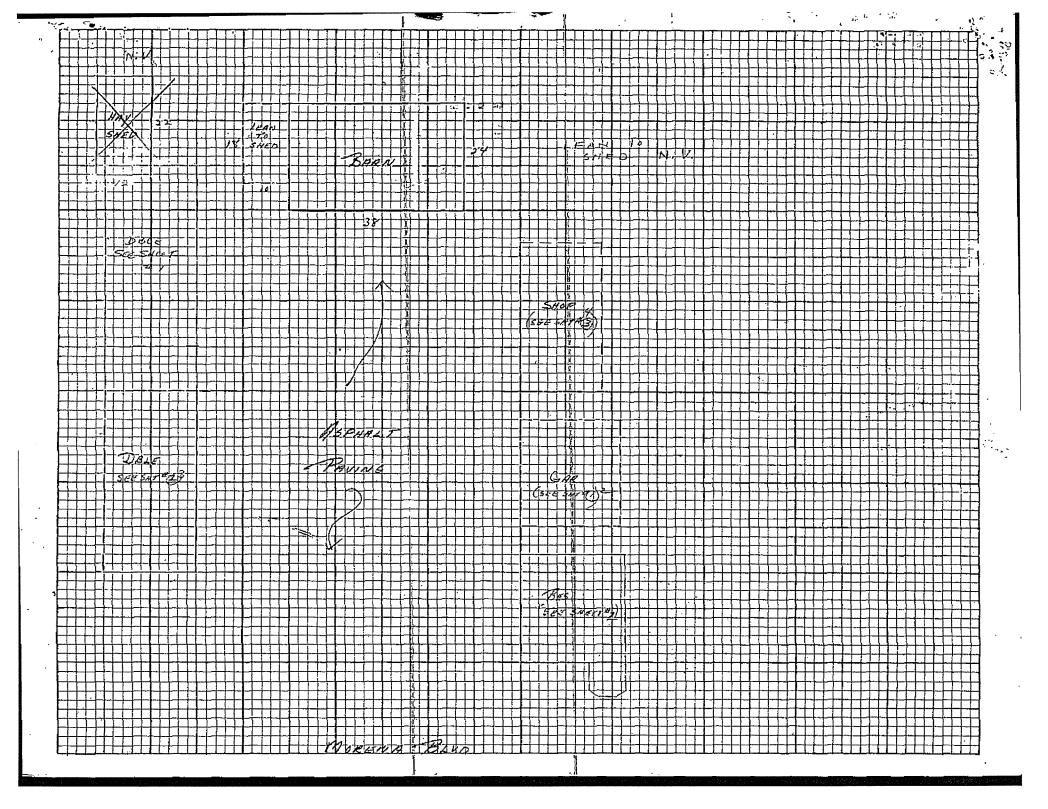
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COUNTY ASSESSOR

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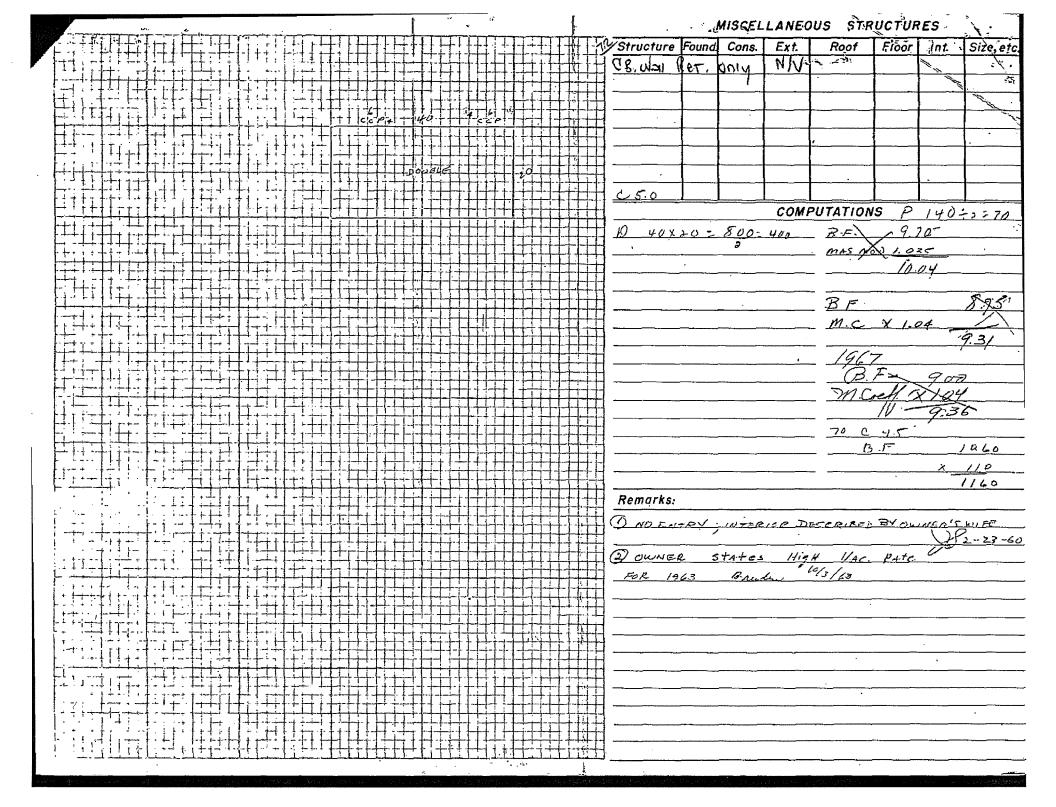
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Notices of Completion

Notices of Completion were not found.

Sanborn Maps The project area is not covered by Sanborn mapping.



FINAL TRANSPORTATION IMPACT ANALYSIS MORENA APARTMENT HOMES

San Diego, California April 30, 2018

LLG Ref. 3-16-2660

Linscott, Law & Greenspan, Engineers

4542 Ruffner Street Suite 100 San Diego, CA 92111 858.300.8800 τ

858.300.8810 F

www.llgengineers.com

EXECUTIVE SUMMARY

Linscott, Law & Greenspan, Engineers (LLG) has been retained to assess the traffic impacts associated with the Morena Apartment Homes redevelopment (hereby referred to as the proposed "Project"). The site is located on the northeast corner of the W. Morena Boulevard/Morena Boulevard intersection, east of Interstate 5 and north of Tecolote Road in the Clairemont Mesa Community Plan Area.

The existing use of the property is the 5.8-acre, 90-unit Coastal Trailer Villa recreational vehicle park. The Project proposes the redevelopment this site with 150 units of market-rate apartments. A total of 267 vehicular parking spaces is proposed, along with 70 bicycle parking spaces and 16 motorcycle spaces.

The transportation impact analysis was completed for a study area comprising six (6) intersections and seven (7) street segments. Analysis of four near-term conditions was conducted: existing; existing + Project; near-term (Year 2021), and; near-term + Project (Opening Day 2021). Buildout analysis of two buildout conditions (Horizon Year 2035 without Project and Horizon Year 2035 with Project) were also completed.

Existing traffic volumes were collected in October/November 2016 when local schools were in session. Net-new Project traffic volumes were calculated by conservatively estimating only 50% (45 spaces) of the existing Coastal Trailer Villa was occupied during the time of the counts. The net new increase in traffic with the Project was calculated to be 796 ADT with 63 total AM peak hour trips and 69 total PM peak hour trips. No additional reduction for existing or future transit (e.g. "Midcoast trolley line") were assumed to be conservative.

Cumulative Project traffic was calculated based on average annual growth between existing and Year 2035 volumes. Peak hour volumes were derived for this ADT growth based on existing peak hour turn volume patterns.

Buildout conditions (volumes/roadway capacities) were obtained from the Morena Boulevard Station Area Planning Study (MBAP) for the Preferred Alternative for 2035. These volumes are used as the baseline for Year 2035, and assume that the Project volumes are included, consistent with the MBAP's higher residential density assumptions.

The analyses showed no Project impacts at any of the study area intersections, based on the City's significance criteria. Project V/C increases were shown to exceed the City's allowable threshold for two (2) segments of Morena Boulevard in the Near-Term and Horizon Year 2035 scenarios, resulting in significant direct and cumulative impacts. Mitigation measures are proposed to provide adaptive signal control for three signalized intersections along these segments that will mitigate the Project impacts to less than significant.

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TRANSPORTATION IMPACT ANALYSIS MORENA APARTMENT HOMES

San Diego, California April 30, 2018

1.0 Introduction

The following transportation impact analysis has been prepared to determine and evaluate the traffic impacts on the local circulation system due to the redevelopment of the existing Coastal Trailer Villa property with the proposed Morena Apartment Homes Project (proposed "Project") in the Clairemont Mesa Community Plan Area, east of Interstate 5 in the City of San Diego. The purpose of this study is to assess the potential impacts to the local circulation system as a result of the Project.

Included in this traffic study are the following:

- Project Description
- Existing Conditions Discussion
- Study Area, Analysis Approach & Methodology
- Significance Criteria
- Analysis of Existing Conditions
- Trip Generation, Distribution & Assignment
- Analysis of Existing + Project Scenario
- Near-Term Cumulative Conditions Discussion
- Analysis of Near-Term Scenarios
- Horizon Year 2035 Conditions Discussion
- Analysis of Horizon Year 2035 Scenarios
- Other Transportation Modes
- Parking Discussion
- Access Assessment
- Significance of Impacts, and Mitigation Measures

2.0 PROJECT DESCRIPTION

2.1 Project Location

The 5.8-acre project site is located at 1577-79 Morena Boulevard in the city of San Diego, immediately east of Interstate 5 (I-5) and Morena Boulevard. The project site is within the Morena Corridor Specific Plan area which covers approximately 300 acres bounded by Gesner Drive to the north, I-5 to the west, and Friars Road to the south. The eastern Specific Plan area boundary follows the properties that front Morena Boulevard within Clairemont Mesa. The Project site consists of two parcels.

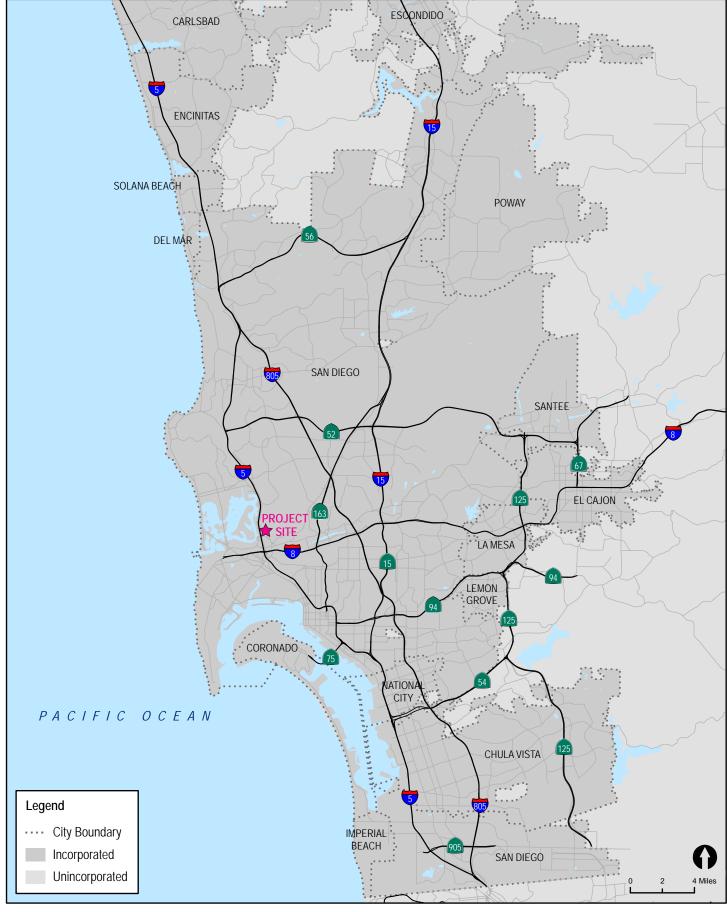
Figure 2-1 shows the vicinity map. Figure 2-2 shows a more detailed Project area map.

2.2 Project Description

The Project requires a Community Plan Amendment/Rezone/Planned Development Permit/Site Development Permit/ Vesting Tentative Map. The Project site is currently developed with the Coastal Trailer Villa recreational vehicle park. The Project would remove the existing recreational vehicle park and construct 150 market rate multi-family apartment units with an approximately 4,400 square foot clubhouse facility with leasing and exercise areas, recreational facility, landscaped areas including a pool and approximately 319 square foot pool house building, and a water quality detention basin. The Project proposes a total of 267 vehicular parking spaces, including 99 attached garages, 52 detached carports 115 open parking spaces (with 2 handicap parking spaces) and 1 detached maintenance garage. In addition, 70 bicycle parking spaces and 16 motorcycle parking spaces are proposed.

Project access is proposed at the existing full-access driveway on Frankfort Street as well as a right-in/right-out only driveway on Morena Boulevard north of the intersection of W. Morena Boulevard and Morena Boulevard. Project access is discussed in more detail in *Section 15*.

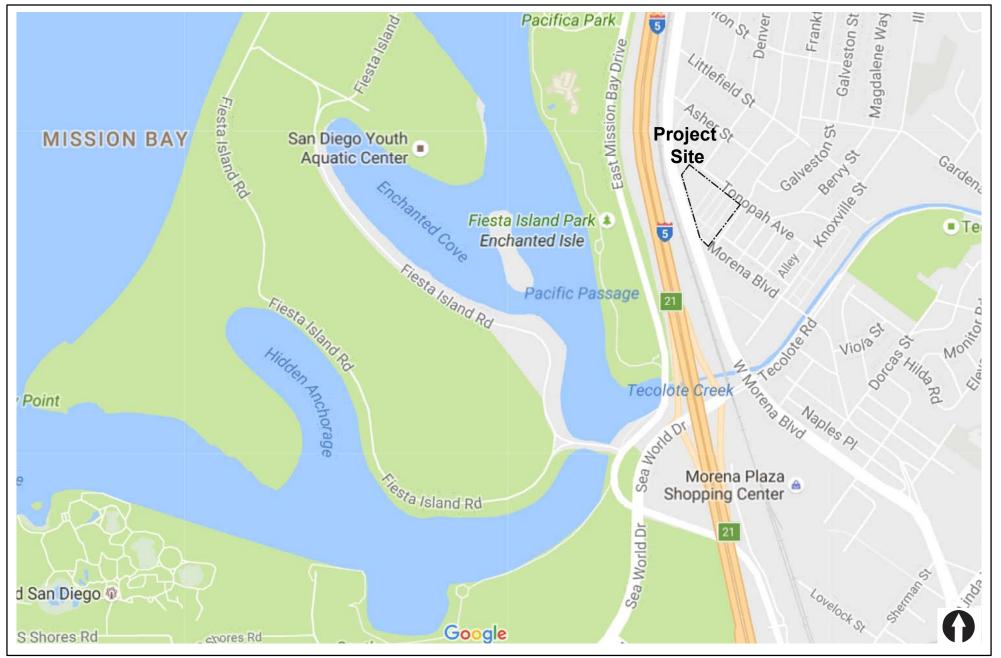
Figure 2–3 shows the conceptual site plan.





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Vicinity Map





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Project Area Map

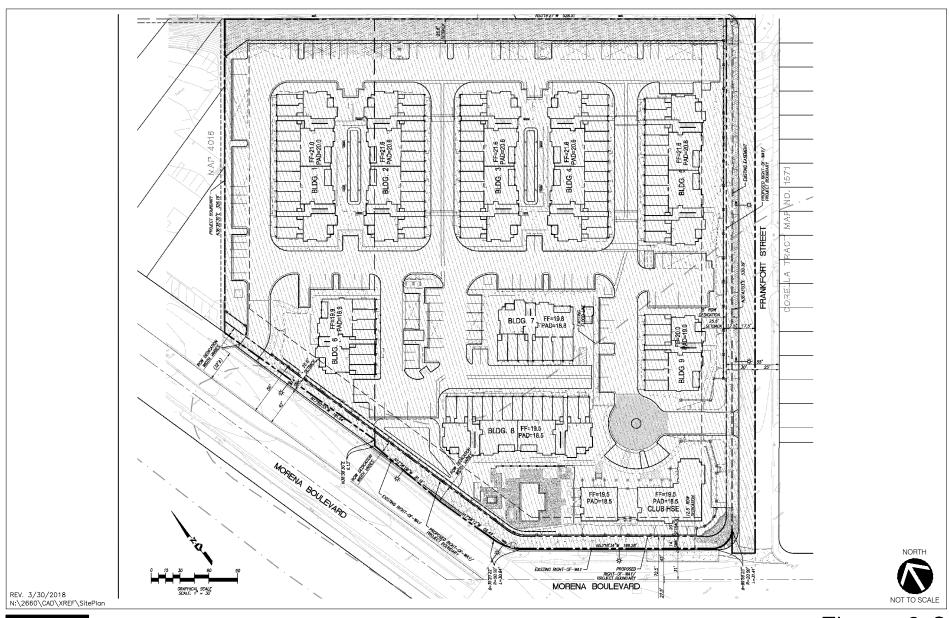




Figure 2-3

Site Plan

3.0 Existing Conditions

3.1 Existing Street System

The following provides a brief description of the street system in the Project area. *Figure 3–1* illustrates existing conditions in terms of traffic lanes and intersection controls.

Morena Boulevard is a north-south running roadway along the southerly Project frontage. It is classified in the Linda Vista Community Plan and built as a Three-Lane Collector from its split with W. Morena Boulevard (south) up to Tecolote Road providing one lane in each direction divided by a two-way left-turn lane (TWLTL). North of Tecolote Road, it is classified in the Clairemont Community Plan as a Two-Lane Collector (with TWLTL) to W. Morena Boulevard (north). It is currently built as a two-lane undivided roadway. No bike lanes are provided, and curbside parking is generally permitted in both directions.

In the Linda Vista Community Plan, Morena Boulevard from Tecolote Road to Knoxville Street is classified as a Four-Lane Collector. This portion of the roadway is currently built as a four-lane undivided roadway with a substandard paved width. Curbside parking is not permitted, bus stops are located along the roadway, and no bike lanes are provided. The posted speed limit in the study area ranges between 30-35 mph.

Morena Boulevard is also a north-south running roadway along the westerly Project frontage. It is classified in the Linda Vista Community Plan as a Five-Lane Major Roadway from its intersection with W. Morena Boulevard (south) to the Tecolote Road overpass. North of Tecolote Road, it is classified as a Four-Lane Major Roadway in the Clairemont Mesa Community Plan and the Linda Vista Community Plan. A Class II bike lane is provided in the southbound direction. Curbside parking is permitted in the northbound direction.

W. Morena Boulevard is currently constructed as a four-lane divided roadway in the Project vicinity. Curbside parking is permitted intermittently, bus stops are located along the roadway, and a Class II bike lane is provided in the southbound direction and curbside parking is permitted in the northbound direction. The posted speed limit in the study area is 40 mph.

Tecolote Road is an east-west running roadway. East of I-5, Tecolote Road is classified in the Linda Vista Community Plan and built primarily as a Four-Lane Major roadway to its terminus approaching Tecolote Recreational Park, approximately 0.40 miles east of Morena Boulevard. Curbside parking is prohibited between the I-5 southbound ramps and Morena Boulevard, and Class II bike lanes are provided in both directions along this segment as well. East of Morena Boulevard, a Class II bike lane is provided in the eastbound direction only. Curbside parking is permitted in both directions along Tecolote Road east of Morena Boulevard. The posted speed limit in the vicinity is 40 mph.

Sea World Drive (west of I-5) is a north-south running roadway and is classified in the Linda Vista Community Plan and built as a Five-Lane Primary Arterial immediately west of Interstate 5.

Curbside parking is prohibited in the study area, and neither bus stops nor bike lanes are provided east of East Mission Bay Drive. The posted speed limit in the vicinity is 40 mph.

3.2 Existing Bicycle Network

Based on a review of the City of San Diego *Bicycle Master Plan*, and field observations, within the Project study area there are existing Class II bike lanes provided on portions of Tecolote Road east of I-5, and Morena Boulevard south of Tecolote Road.

Per the *Bicycle Master Plan*, Class II bike lanes are proposed for W. Morena Boulevard / Morena Boulevard.

3.3 Existing Transit Conditions

Based on the most recent information on the San Diego Metropolitan Transit System (MTS) website, the following transit conditions are noted.

Route 105 (Old Town – UTC) runs between the Old Town Transit Center and the UTC Transit Center primarily via Morena Boulevard and Clairemont Drive. Weekday service runs from shortly after 5 AM to 10 PM and is at approximately 30-minute headways (including peak hours), reducing to hourly headways in the evening hours. Saturday/Sunday service runs from 6 AM to 8:30 PM with hourly headways all day.

Route 105 provides a direct connection to the San Diego Trolley Blue and Green lines at the Old Town Transit Center.

The nearest bus stop to the Project for Route 105 is located on Morena Boulevard, west of Frankfort Street, immediately adjacent to the Project site.

The Mid-Coast Corridor Transit Project will extend Trolley Blue Line service from the Old Town Transit Center to major destinations to the north including UCSD and Westfield UTC. The route begins just north of the Old Town Transit Center and travels in existing railroad right-of-way alongside Interstate 5. The extension will serve nine new stations including Tecolote Road, in close proximity to the Project. As of spring 2017 the Mid-Coast Trolley extension is under construction with service anticipated to begin in 2021.

3.4 Existing Pedestrian Conditions

Based on field observations within the study area, the following pedestrian conditions are noted:

Morena Boulevard: Contiguous sidewalks are provided along both sides of Morena Boulevard within the study area, including both the 2-4 lane Collector segment generally south of the Project site and the 4-Lane Arterial segment north of the site.

W. Morena Boulevard: Limited sidewalk facilities are available where development fronts this street segment, but generally do not continue or connect the full length of the street within the study area.

Tecolote Road / SeaWorld Drive: Contiguous sidewalks are provided on both sides of this street in the study area. However, where this street segment crosses the I-5 interchange, the sidewalk facilities are narrow and do not have curb ramps at the intersection crossings.

3.5 Existing Traffic Volumes

Existing AM and PM peak hour traffic volumes at key area intersections and 24-hour street segment counts were collected on Wednesday, October 26, 2016 and November 9, 2016 while schools were in session.

Table 3–1 shows the existing street segment Average Daily Traffic (ADT) volumes in the Project area. **Figure 3–2** shows the existing AM/PM peak hour turning movements and ADTs.

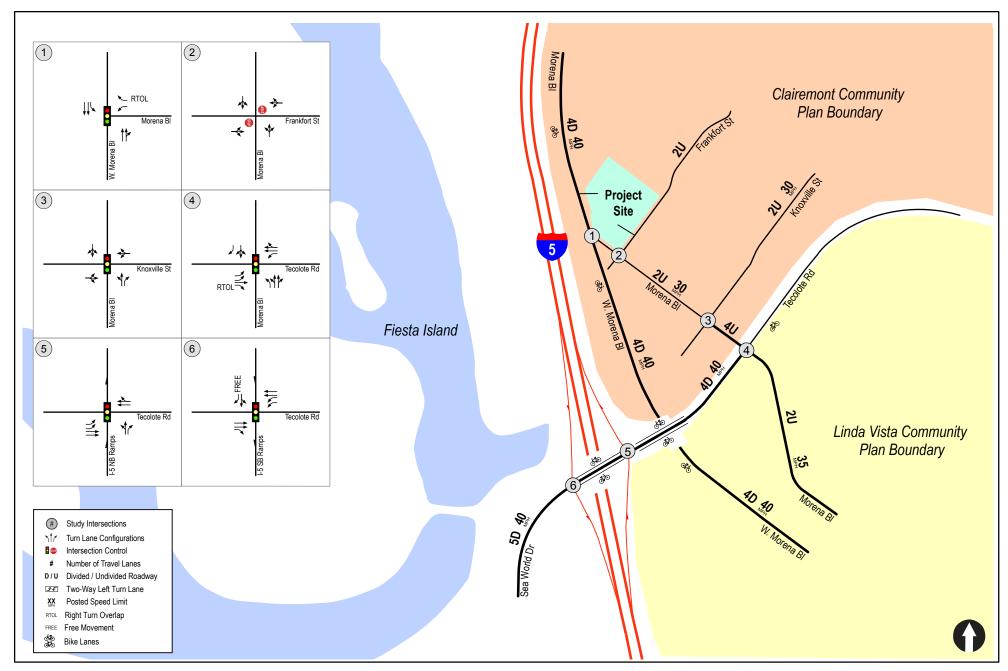
Appendix A contains the peak hour intersection and daily segment count sheets.

TABLE 3–1
EXISTING TRAFFIC VOLUMES

Stree	t Segments	ADT ^a
More	na Boulevard	
1.	Asher Street to W. Morena Boulevard	17,360
2.	Frankfort Street to Knoxville Street	8,130
3.	Knoxville Street to Tecolote Road	16,050
4.	Tecolote Road to Viola Street	15,610
W. M	orena Boulevard	
5.	Morena Boulevard to Sea World Drive Overcrossing	11,990
Tecol	ote Road	
6.	I-5 NB Ramps to Morena Boulevard	22,310 b
SeaW	orld Drive	
7.	E. Mission Bay Drive to I-5 SB Ramps	32,530

Footnotes:

- a. Average Daily Traffic Volumes. Data collected by LLG, Engineers on Wednesday, October 26, 2016 while schools were in session.
- b. Source: City of San Diego, November 2016.

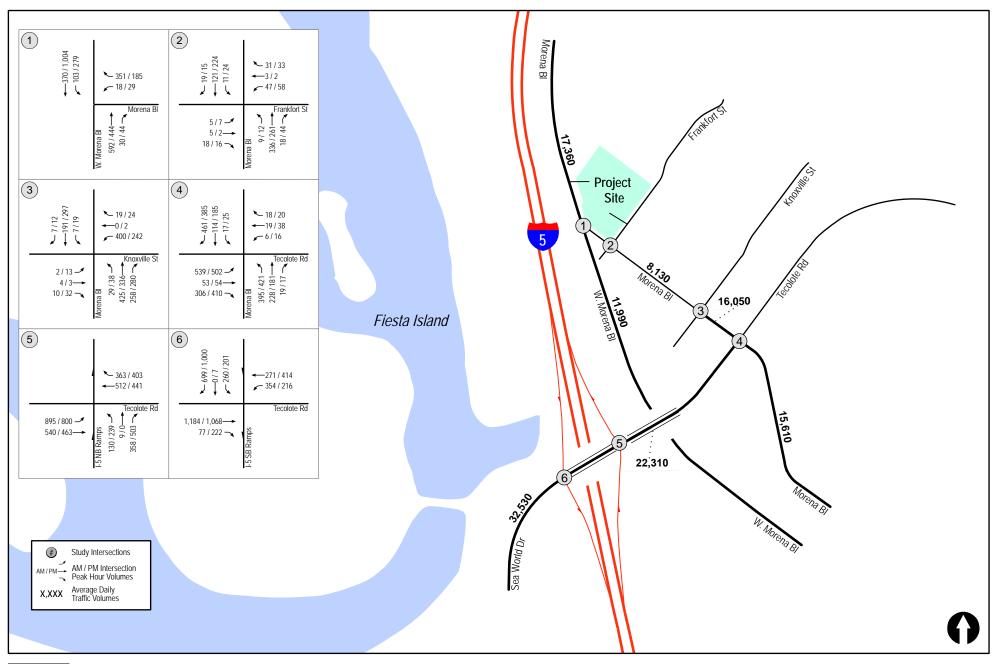




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Figure 3-1

Existing Conditions Diagram





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Existing Traffic Volumes

4.0 STUDY AREA, ANALYSIS APPROACH AND METHODOLOGY

4.1 Study Area

The study area was based on the criteria identified in the City of San Diego *Traffic Impact Study Manual*, July 1998. Based on this criteria, the traffic study shall evaluate all adjacent intersections plus the first major signalized intersection in each direction of the site. Beyond this minimum requirement, all known congested or potentially congested locations that may be impacted by the proposed development should be studied. As stated in the City's guidelines, the study area must include "all regionally significant arterial system segments and intersections, including freeway on/off ramp intersections, where the proposed project will add 50 or more peak hour trips in either direction to the adjacent street traffic. Mainline freeway locations where the project will add 150 or more peak hour trips in either direction [must also be considered]."

Given these criteria, this traffic analysis evaluates the operations of study area intersections and street segments only. Since less than 150 and 20 net peak hour Project trips are added to nearby freeway mainlines and ramp meters, respectively, analysis of these facilities was not included.

The Project study area includes the following locations:

Intersections

- 1. Morena Boulevard/W. Morena Boulevard
- 2. Morena Boulevard/ Frankfort Street
- 3. Morena Boulevard/ Knoxville Street
- 4. Morena Boulevard/ Tecolote Road
- 5. Tecolote Road/ I-5 NB Ramps
- 6. SeaWorld Drive/ I-5 SB Ramps

Segments

Morena Boulevard

- 1. Asher Street to Morena Boulevard
- 2. Frankfort Street to Knoxville Street
- 3. Knoxville Street to Tecolote Road
- 4. Tecolote Road to Viola Street

W. Morena Boulevard

5. Morena Boulevard to Sea World Drive Overcrossing

Tecolote Road

6. I-5 NB Ramps to Morena Boulevard

SeaWorld Drive

7. E. Mission Bay Drive to I-5 SB Ramps

4.2 Analysis Approach

The Project site is currently developed with 90 recreational vehicle spaces over 5.8 acres. As such, the site is currently generating traffic. The Project proposes to redevelop the site with 150 units of market rate apartments. Therefore, this analysis was completed analyzing the net increase in traffic with the proposed Project. *Section 7.0* of this report discusses the changes in trip generation in more detail.

Table 4–1 shows the analyses performed for each of the scenarios to determine the potential impacts to the road network.

TABLE 4–1
ANALYSIS SCENARIOS

Scenario	Analysis Performed
Existing & Near-Term Conditions	
ExistingExisting + Project	AM/PM Peak Hour Intersection Analysis
Near-TermNear-Term + Project (2021)	Street Segment Analysis
Year 2035 Conditions	
 Year 2035 Without Project 	AM/PM Peak Hour Intersection Analysis
■ Year 2035 With Project	Street Segment Analysis

4.3 Methodology

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment or intersection under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.3.1 *Intersections*

Signalized intersections were analyzed under weekday 7:00-9:00 AM and 4:00-6:00 PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 18 of the 2010 Highway Capacity Manual (HCM), with the assistance of the Synchro (version 9) computer software. The delay values (represented in seconds) were qualified with a corresponding intersection Level of Service (LOS). City of San Diego and Caltrans location-specific signal timing information such as minimum greens, cycle lengths, phasing, and splits for the freeway interchanges, where available, and real-time peak hour field observations were included in the analysis.

Unsignalized intersections were analyzed under weekday 7:00-9:00 AM and 4:00-6:00 PM peak hour conditions. Average vehicle delay and Levels of Service (LOS) were determined based upon the procedures found in Chapters 19 and 20 of the *2010 HCM*, with the assistance of the *Synchro* (version 9) computer software.

4.3.2 Street Segments (Volume to Capacity)

Buildout (ultimate) street segment classifications were taken from the Clairemont Mesa and Linda Vista Community Plans and the Morena Boulevard Station Area Planning Study. Street segment analyses are based upon the comparison of daily traffic volumes (ADTs) to a roadway capacity presented in the City of San Diego's *Roadway Classification*, *Level of Service*, *and ADT Table*. This table provides generalized segment capacities for different street classifications based on factors such as traffic volumes, roadway widths, speed limits, curve radii, parking provisions, etc. The ADT volume for a subject roadway is compared to the table, and a volume-to-capacity (V/C) ratio is calculated by dividing the volume by the capacity.

Copies of the Community Plan/Area Plan roadway classification maps and the City of San Diego roadway classification table are attached in *Appendix B*.

5.0 SIGNIFICANCE CRITERIA

According to the City of San Diego's *Significance Determination Thresholds* report dated July 2016, a project is considered to have a significant impact if the new project traffic has decreased the operations of surrounding roadways by a City defined threshold. For projects deemed complete on or after January 1, 2011, the City defined threshold by roadway type or intersection is shown in *Table 5–1*.

The impact is designated either a "direct" or "cumulative" impact. According to the City's Significance Determination Thresholds report,

"Direct traffic impacts are those projected to occur at the time a proposed development becomes operational, including other developments not presently operational but which are anticipated to be operational at that time (near term)."

"Cumulative traffic impacts are those projected to occur at some point after a proposed development becomes operational, such as during subsequent phases of a project and when additional proposed developments in the area become operational (short-term cumulative) or when affected community plan area reaches full planned Year 2035 (long-term cumulative)."

"It is possible that a project's near term (direct) impacts may be reduced in the long term, as future projects develop and provide additional roadway improvements (for instance, through implementation of traffic phasing plans). In such a case, the project may have direct impacts but not contribute considerably to a cumulative impact."

"For intersections and roadway segments affected by a project, LOS D or better is considered acceptable under both direct and cumulative conditions."

If the project exceeds the thresholds in *Table 5–1*, then the project may be considered to have a significant "direct" or "cumulative" project impact. A significant impact can also occur if a project causes the LOS to degrade from D to E, even if the allowable increases in *Table 5–1* are not exceeded. A feasible mitigation measure will need to be identified to return the impact within the City thresholds, or the impact will be considered significant and unmitigated.

Table 5–1 City Of San Diego

TRAFFIC IMPACT SIGNIFICANT THRESHOLDS

		Allo	wable Increa	se Due to Proje	ct Impacts ^a		
Level of Service with Project ^b	Fr	reeways	Roadwa	y Segments	Intersections	Ramp Metering ^c	
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)	
Е	0.010	1.0	0.02	1.0	2.0	2.0	
F	0.005 0.5		0.01	0.5	1.0	1.0	

Footnotes:

- a. If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. The project applicant shall then identify feasible improvements (within the Transportation Impact Study) that will restore/and maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note b), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating the project's direct significant and/or cumulatively considerable traffic impacts.
- b. All LOS measurements are based upon Highway Capacity Manual procedures for peak-hour conditions. However, V/C ratios for roadway segments are estimated on an ADT/24-hour traffic volume basis (using Table 2 of the City's *Traffic Impact Study Manual*). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped locations). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.
- c. The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 minutes. The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 minute. *No ramp meters were analyzed in this report since none of the study area freeway on-ramps are currently metered.*

General Notes:

- 1. Delay = Average control delay per vehicle measured in seconds for intersections or minutes for ramp meters
- 2. LOS = Level of Service
- 3. V/C = Volume to Capacity ratio
- 4. Speed = Arterial speed measured in miles per hour

6.0 Analysis of Existing Conditions

The following section presents the analysis of existing study area locations.

6.1 Peak Hour Intersection Operations

Table 6–1 summarizes the existing intersections LOS. As seen in *Table 6–1*, all intersections are calculated to currently operate at LOS D or better.

Appendix C contains the Existing intersection analysis worksheets.

6.2 Daily Street Segment Operations

Table 6–2 summarizes the existing roadway segment operations. As seen in *Table 6–2*, the study area segments are calculated to currently operate at LOS C or better, except the following:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS F
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F
- Segment #4. Morena Boulevard: Tecolote Road to Viola Street LOS F

Table 6–1
Existing Intersection Operations

	Intersection	Control	Peak	Existing			
		Туре	Hour	Delay ^a	LOS b		
1	Marrie Bl. J./W. Marrie Bl. J	G: 1	AM	13.8	В		
1.	Morena Blvd / W. Morena Blvd	Signal	PM	10.3	В		
2	Marana Dlad / Fundafant Ct	MSSC c	AM	14.0	В		
2.	Morena Blvd / Frankfort St	MSSC	PM	15.1	C		
2	Morena Blvd / Knoxville St	G: 1	AM	13.0	В		
3.		Signal	PM	7.7	A		
	N	a	AM	32.6	С		
4.	Morena Blvd / Tecolote Rd	Signal	PM	29.6	С		
			AM	42.0	D		
5.	Tecolote Rd / I-5 NB Ramps	Signal	PM	48.7	D		
	SeaWorld Dr / I-5 SB Ramps		AM	22.1	С		
6.		Signal	PM	19.8	В		

Foot	notes:	SIGNALIZI	ED	UNSIGNALIZED			
a. b.	Average delay expressed in seconds per vehicle. Level of Service.	DELAY/LOS THRI	ESHOLDS	DELAY/LOS THR	ESHOLDS		
c.	MSSC = Minor Street Stop-Controlled intersection.	Delay	LOS	Delay	LOS		
	Worst movement delay reported.	$0.0 \le 10.0$	A	$0.0 \le 10.0$	A		
Gono	eneral Notes:	10.1 to 20.0	В	10.1 to 15.0	В		
	Sig = Significant impact, yes or no.	20.1 to 35.0	C	15.1 to 25.0	C		
	Sig = Significant impact, yes of no.	35.1 to 55.0	D	25.1 to 35.0	D		
		55.1 to 80.0	E	35.1 to 50.0	E		
		≥ 80.1	F	≥ 50.1	F		

TABLE 6-2 **EXISTING DAILY STREET SEGMENT OPERATIONS**

	Street Segment	Currently Built As	Capacity (LOS E) a	ADT b	LOS°	V/C d
More	na Boulevard					
1.	Asher Street to W. Morena Boulevard	4-Ln Major	40,000	17,360	В	0.434
2.	Frankfort Street to Knoxville Street	2-Ln Collector	8,000	8,130	F	1.016
3.	Knoxville Street to Tecolote Road	4-Ln Collector	15,000	16,050	F	1.070
4.	Tecolote Road to Viola Street	3-Ln Collector	15,000	15,610	F	1.041
W. M	orena Boulevard					
5.	Morena Boulevard to Sea World Drive Overcrossing	4-Ln Major	40,000	11,990	A	0.300
Tecol	ote Road					
6.	I-5 NB Ramps to Morena Boulevard	4-Ln Major	40,000	22,310	С	0.558
SeaW	orld Drive					
7.	E. Mission Bay Drive to I-5 SB Ramps	5-Ln Prime	55,000	32,530	С	0.591

Footnotes:

- Capacities based on City of San Diego Roadway Classification & LOS table (See *Appendix B*). Average Daily Traffic Volumes. Level of Service.
- b.
- c.
- Volume to Capacity.

7.0 Trip Generation/Distribution/Assignment

As discussed in *Section 2.2* of this report, the Project proposes to redevelop the existing 6-acre site with 150 multi-family residential dwelling units.

The following is a discussion on the net additional traffic expected to be generated with the development of these homes.

7.1 Trip Generation

7.1.1 Existing Trip Generation

The existing Coastal Trailer Villa development is currently comprised of a 90-space recreational vehicle park. Trip generation for the existing development was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation*, 9th Edition, (use 416, "Campground/Recreational Vehicle Park") as the City of San Diego does not publish a trip generation rate for a comparable land use. The driveway geometrics precluded the use of road tube sets to collect site-specific trip generation empirically.

The existing trailer park allows for stay of up to 6 months, and does not provide on-site amenities typical of the campground/RV park use described in the ITE rates, such as a swimming pool, on-site store, or immediate proximity to recreation (such as a lake, river, hiking trails, etc.). Also, there are six-full time dwelling units (2 duplexes and 2 single-family dwelling units) on the site, as well as 7 full-time RV residents. This, coupled with the lengthy stay limits indicate that some trips to/from the site may in fact be more akin to residential trips, which would generate more trips. To be conservative, LLG used the ITE rate described above for the AM and PM "peak of the street" calculations. These rates were compared with "mobile home" rates, which could be considered applicable to some of the trips based on the "residential" characteristics described above. The comparison shows that the AM and PM peak of the street rates for Campground/Recreational Vehicle Park were consistent at 45-47% of the Mobile Home rates. The daily rate for Campground/Recreational Vehicle Park was not provided, so the Mobile Home rate was similarly indexed to yield a daily rate for the site.

The existing trip generation to be removed assumes that a modest 50% (i.e., 45 units) of the total 90 recreational vehicle spaces were occupied at the time of existing counts. Using the ITE hybrid rates, the existing land use was therefore determined to conservatively generate 104 ADT with 9 trips during the AM peak hour (3 inbound/ 6 outbound) and 12 trips during the PM peak hour (8 inbound/ 4 outbound).

7.1.2 Gross Project Trip Generation

The Project proposes to develop 150 multi-family market rate residential dwelling units. Using the City of San Diego *Trip Generation Manual, May 2003*, the Project's gross trip generation was calculated at a rate of six (6) trips per dwelling unit, based on the proposed site density of >20 units/acre. The proposed Project is forecasted to generate a gross total of 900 ADT with 72 trips

during the AM peak hour (14 inbound/ 58 outbound) and 81 trips during the PM peak hour (57 inbound/ 24 outbound).

7.1.3 Net Project Trip Generation

Subtracting the existing site trip generation from the proposed Project, the net new trips expected on the street system with redevelopment of the site is 796 ADT with 63 trips during the AM peak hour (11 inbound/ 52 outbound) and 69 trips during the PM peak hour (49 inbound/ 20 outbound).

Table 7–1 shows the Existing, proposed Project, and Net New traffic generation.

Table 7–1
Project Trip Generation

Land Use	Si-o		Daily Trip Ends (ADTs)			AM Peak Hour				PM Peak Hour						
	512	Size		4 - 9	X 7 - 1	% of	In:Out	1	olum	e	% of	% of In:Out		Volume		
				Rate ^a		Volume	ADT	Split	In	Out	Total	ADT	Split	In	Out	Total
Proposed Project																
Multi-Family Residential	150	DU	6.0	/DU	900	8%	20:80	14	58	72	9%	70:30	57	24	81	
Existing Use to be Remov	Existing Use to be Removed															
"Campground/Recreation al Vehicle Park" b	45	DU	2.3	/DU	(104)	0.21	36:64	(3)	(6)	(9)	0.27	65:35	(8)	(4)	(12)	
Net Trip Generation	ı	-	_	-	796	-	_	11	52	63	-	_	49	20	69	

Footnotes:

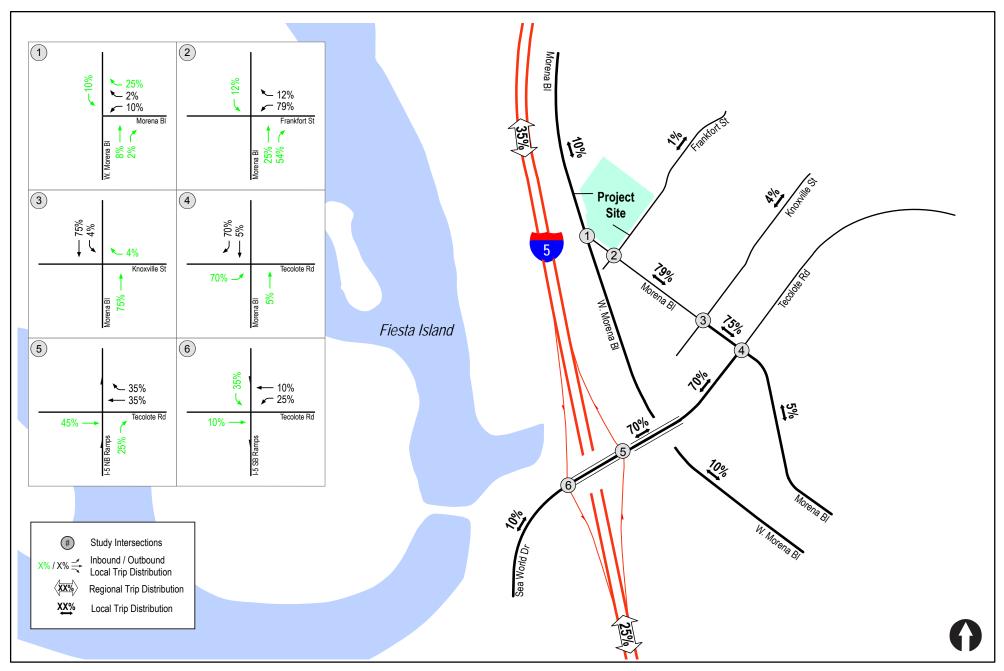
7.2 Trip Distribution/Assignment

The Project traffic was distributed based on traffic patterns observed from existing count data and professional engineering judgment. Given the Project's proximity to I-5, it was estimated that approximately 60% of Project traffic would be oriented to regional facilities via the I-5 / Seaworld Drive / Tecolote Road interchange. The remaining 40% of Project trips were distributed to the local street system, including 10% to the west via Sea World Drive, 15% to the south via Morena Boulevard and W. Morena Boulevard, 10% to the north via Morena Boulevard, and 5% to the east via Frankfort Street and Knoxville Street.

Figure 7–1 shows the Project Trip Distribution. The Project-generated traffic was then assigned to the study area street system based on this distribution. *Figure 7–2* depicts the Project traffic assignment. *Figure 7–3* depicts the Existing + Net Project traffic volumes.

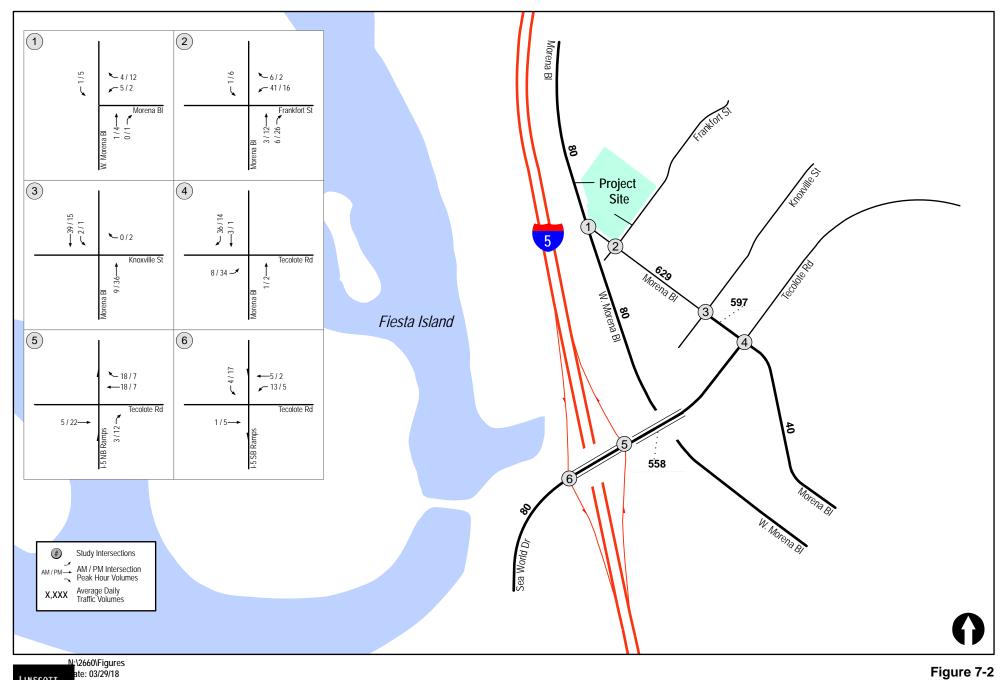
a. Rate is based on the City of San Diego's Trip Generation Manual, revised May 2003 (Proposed Project) and ITE's Trip Generation, 9th ed. (Existing Use).

b. Rate is based on the Institute of Transportation Engineers' Trip Generation, 9th Edition for Land Use 416: Campground/Recreational Vehicle Park (AM/PM peak of the street ratios). The daily rate was derived from the ITE "Mobile Home Park" rate as compared to the Campground/Recreational Vehicle Park peak hour rates. The Coastal Trailer Villa located on the site contains 90 RV spaces, and occupancy is variable based on seasonal and other factors. This analysis conservatively assumes only 50% (45 spaces) were occupied at the time counts were conducted in 2016, although field observations of the site at that time indicated more than 50% were occupied.





N:\2660\Figures Date: 02/21/18 Figure 7-1

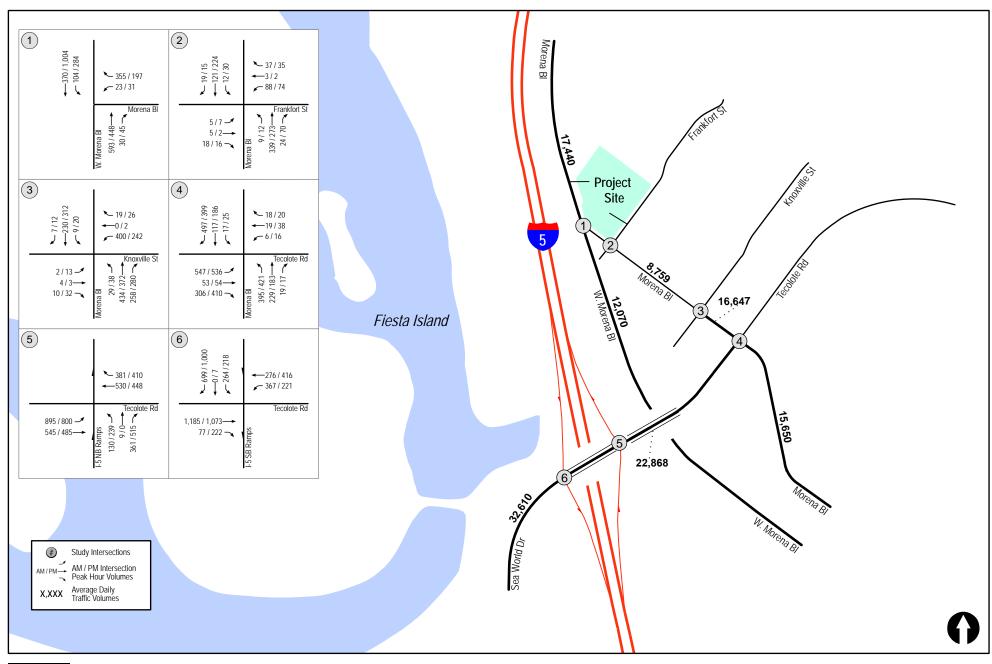


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Project Traffic Volumes



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N:\2660\Figures Date: 03/29/18 Figure 7-3

8.0 Analysis of Existing + Project Conditions

The following section presents the analysis of Existing + Project study area locations. The Existing + Project condition represents the effect of Project traffic on the existing street network, at the time of traffic data collection (October 2016) without assuming either additional cumulative projects or additional road improvements in the baseline condition.

8.1 Peak Hour Intersection Operations

Table 8–1 summarizes the existing intersections LOS. As seen in *Table 8–1*, with the addition of Project traffic, all intersections are calculated to continue to operate at LOS D or better.

Based on City of San Diego significance criteria, <u>no significant direct impacts</u> were calculated with the addition of Project traffic to study area intersections.

Appendix D contains the Existing + Project intersection analysis worksheets.

8.2 Daily Street Segment Operations

Table 8–2 summarizes the existing roadway segment operations. As seen in *Table 8–2*, with the addition of Project traffic, the study area segments are calculated to continue to operate at LOS C or better, except the following:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS F
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F
- Segment #4. Morena Boulevard: Tecolote Road to Viola Street LOS F

The increase in V/C ratio due to the Project on the segments **bolded** and <u>underlined</u> above exceeds the allowable 0.01 for a LOS F-operating street segment.

Table 8–1
Existing + Project Intersection Operations

Intersection		Control			ing	Existing + 1	Project	Delay	Sig?	
		Туре	Hour	Delay ^a	LOS b	Delay	LOS	Δ ^c		
1. Morena Blvd / W	. Morena Blvd	Signal	AM PM	13.8 10.3	B B	14.0 10.6	B B	0.2 0.3	No	
2. Morena Blvd / Fr	ankfort St	MSSC d	AM PM	14.0 15.1	B C	16.1 16.8	C C	2.1 1.7	No	
3. Morena Blvd / K	noxville St	Signal	AM PM	13.0 7.7	B A	13.3 7.9	B A	0.3 0.2	No	
4. Morena Blvd / To	ecolote Rd	Signal	AM PM	32.6 29.6	C C	34.8 30.3	C C	2.2 0.7	No	
5. Tecolote Rd / I-5	NB Ramps	Signal	AM PM	42.0 48.7	D D	46.6 49.5	D D	4.6 0.8	No	
6. SeaWorld Dr / I-	5 SB Ramps	Signal	AM PM	22.1 19.8	C B	22.5 20.7	C C	0.4 0.9	No	

Footnotes.	 a. Average delay expressed in seconds per vehicle. b. Level of Service. c. Δ denotes the increase in delay due to Project. d. MSSC = Minor Street Stop-Controlled intersection. Worst movement delay reports. 	SIGNALIZ	ED	UNSIGNALIZED		
 b. Level of Service. c. Δ denotes the increase in delay due to Proj. d. MSSC = Minor Street Stop-Controlled interest General Notes:		DELAY/LOS THR	ESHOLDS	DELAY/LOS THR	ESHOLDS	
c.	Δ denotes the increase in delay due to Project.	Delay	LOS	Delay	LOS	
d.	MSSC = Minor Street Stop-Controlled intersection. Worst movement delay reported.	$0.0 \le 10.0$	A	$0.0 \le 10.0$	A	
Gonoral N	Totas	10.1 to 20.0	В	10.1 to 15.0	В	
	*****	20.1 to 35.0	C	15.1 to 25.0	C	
	ong onguine impact, yes or not	35.1 to 55.0	D	25.1 to 35.0	D	
		55.1 to 80.0	E	35.1 to 50.0	E	
		≥ 80.1	F	≥ 50.1	F	

TABLE 8–2
EXISTING + PROJECT STREET SEGMENT OPERATIONS

Street Segment	Existing Capacity	Existing			Existing + Project			A e	Sig?	
G	(LOS E)a	ADT b	LOS c	V/C d	ADT	LOS	V/C		J	
Morena Boulevard										
1. Asher Street to W. Morena Boulevard	40,000	17,360	В	0.434	17,440	В	0.436	0.002	No	
2. Frankfort Street to Knoxville Street	8,000	8,130	F	1.016	8,759	F	1.095	0.079	Yes	
3. Knoxville Street to Tecolote Road	15,000	16,050	F	1.070	16,647	F	1.110	0.040	Yes	
4. Tecolote Road to Viola Street	15,000	15,610	F	1.041	15,650	F	1.043	0.002	No	
W. Morena Boulevard										
5. Morena Boulevard to Sea World Drive Overcrossing	40,000	11,990	A	0.300	12,070	A	0.302	0.002	No	
Tecolote Road										
6. I-5 NB Ramps to Morena Boulevard	40,000	22,310	C	0.558	22,868	C	0.572	0.014	No	
SeaWorld Drive										
7. E. Mission Bay Drive to I-5 SB Ramps	55,000	32,530	C	0.591	32,610	С	0.593	0.002	No	

Footnotes:

- a. Capacities based on City of San Diego Roadway Classification & LOS table (See *Appendix B*).
- b. Average Daily Traffic.
- c. Level of Service.
- d. Volume to Capacity ratio.
- e. Δ denotes a Project-induced increase in the Volume to Capacity ratio. A 0.01 increase is allowable at LOS F.

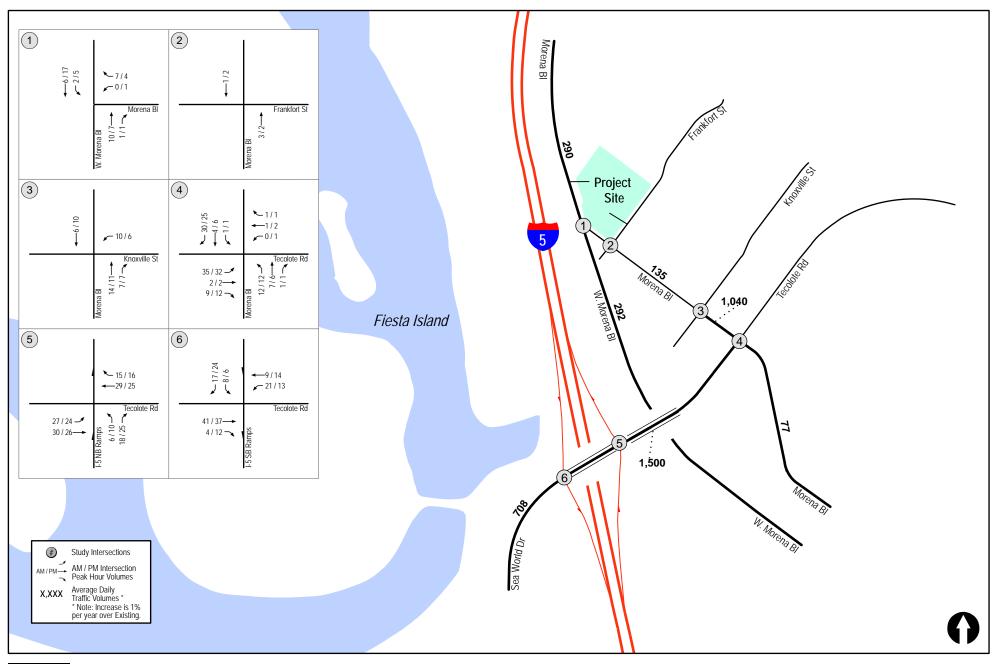
General Notes:

- 1. Sig = Significant impact, yes or no.
- 2. **Bold** typeface and shading represents a significant direct impact.

NEAR-TERM CUMULATIVE PROJECTS CONDITIONS 9.0

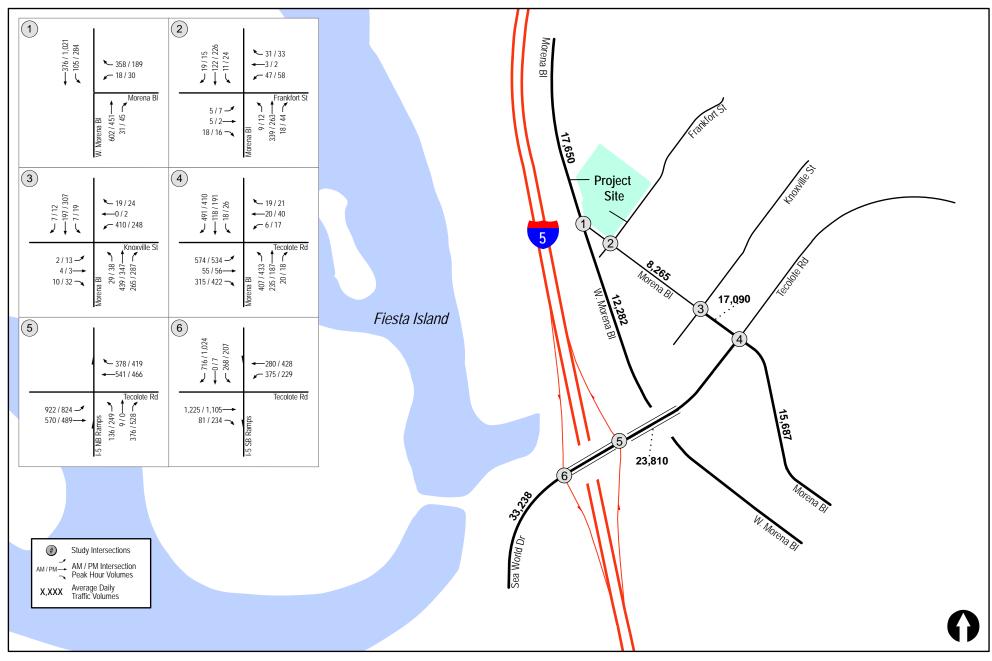
Cumulative projects are other projects in the study area that will add traffic to the local circulation system in the near future. LLG reviewed the City's Open DSD website to identify relevant, pending cumulative projects in the study area that could be constructed and generating traffic in the study area vicinity by completion of the Project (approximately Year 2021). Research to locate future projects in the study area produced limited results. Therefore, growth factors were determined on a segment-by-segment basis for the intervening five years between existing and Project opening day by comparing existing volumes with projected Horizon Year 2035 volumes, and deriving an average ADT/year increase (approximately 1% per year on average throughout the study area). Peak hour intersection turning movement traffic volumes were determined based on this forecasted change in daily traffic volumes on each approach segment.

Figure 9-1 depicts the increase in baseline traffic volumes. Figure 9-2 depicts the Near-Term traffic volumes and *Figure 9–3* depicts the Near-Term + Project traffic volumes.



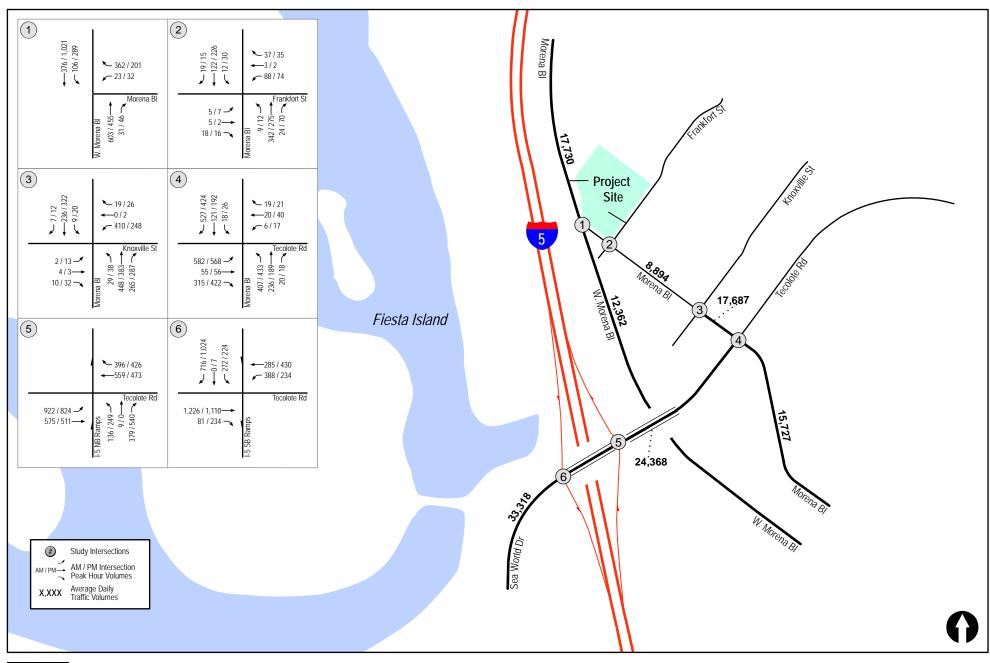
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N:\2660\Figures Date: 04/16/18 Figure 9-1



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10.0 Analysis of Near-Term Scenarios

All near-term analyses were completed assuming the existing lane geometries and intersection controls.

10.1 Near-Term without Project

10.1.1 Intersection Analysis

Table 10–1 summarizes the peak hour intersection operations for the Near-Term condition. As seen in *Table 10–1*, with the addition of cumulative projects traffic, all intersections are calculated to operate at LOS D or better.

Appendix E contains the peak hour intersection analysis worksheets for the Near-Term condition.

10.1.2 Segment Operations

Table 10–2 summarizes the key segment operations in the study area for the Near-Term condition. As seen in *Table 10–2*, with the addition of cumulative projects traffic, the study area segments are calculated to operate at LOS C or better, except the following:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS F
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F
- Segment #4. Morena Boulevard: Tecolote Road to Viola Street LOS F

10.2 Near-Term + Project

10.2.1 Intersection Analysis

Table 10–1 summarizes the peak hour intersection operations for the Near-Term + Project condition. As seen in *Table 10–1*, with the addition of cumulative projects and Project traffic, all intersections are calculated to continue to operate at LOS D or better.

Based on City of San Diego significance criteria, <u>no significant direct impacts</u> were calculated with the addition of Project traffic.

Appendix F contains the peak hour intersection analysis worksheets for the Near-Term + Project condition.

10.2.2 Segment Operations

Table 10–2 summarizes the key segment operations in the study area for the Near-Term + Project condition. As seen in *Table 10–2*, with the addition of cumulative projects and Project traffic, the study area segments are calculated to continue to operate at LOS C or better, except the following:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS F
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F
- Segment #4. Morena Boulevard: Tecolote Road to Viola Street LOS F

Based on the City of San Diego's published criteria, significant direct impacts are calculated for the following two segments:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS F
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F

Mitigation measures are discussed in Section 16.2 of this study.

Table 10–1
Near-Term Intersection Operations

Intersection	Control Type	Peak Hour	Near–Term		Near-Term	Delay	Sig?	
			Delay ^a	LOS b	Delay	LOS	Δ ^c	
1. Morena Blvd / W. Morena Blvd	Signal	AM PM	14.1 10.5	B B	14.2 10.8	B B	0.1 0.3	No
2. Morena Blvd / Frankfort St	MSSC d	AM PM	14.1 15.1	B C	16.2 17.0	C C	2.1 1.9	No
3. Morena Blvd / Knoxville St	Signal	AM PM	13.7 7.8	B A	14.0 8.0	B A	0.3 0.2	No
4. Morena Blvd / Tecolote Rd	Signal	AM PM	35.7 31.7	D C	38.5 32.5	D C	2.8 0.8	No
5. Tecolote Rd / I-5 NB Ramps	Signal	AM PM	48.2 52.8	D D	53.3 53.8	D D	5.1 1.0	No
6. SeaWorld Dr / I-5 SB Ramps	Signal	AM PM	23.0 20.8	C C	23.5 21.7	C C	0.5 0.9	No

r ooi	notes:		
	A ******	daları	~ ***

- a. Average delay expressed in seconds per vehicle.
- b. Level of Service.
- c. Δ denotes the increase in delay due to Project.
- d. MSSC = Minor Street Stop-Controlled intersection. Worst movement delay reported.

General Notes:

1. Sig = Significant impact, yes or no.

SIGNALIZED		UNSIGNALIZED					
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS					
Delay	LOS	Delay	LOS				
$0.0 \le 10.0$	A	$0.0 \le 10.0$	A				
10.1 to 20.0	В	10.1 to 15.0	В				
20.1 to 35.0	C	15.1 to 25.0	C				
35.1 to 55.0	D	25.1 to 35.0	D				
55.1 to 80.0	E	35.1 to 50.0	E				
≥ 80.1	F	≥ 50.1	F				

Table 10–2
Near-Term Street Segment Operations

G G	Existing	Near–Term		Near–Term + Project				GL 0	
Street Segment	Capacity (LOS E) ^a	ADT b	LOS c	V/C d	ADT	LOS	V/C	Δ e	Sig?
Morena Boulevard]
1. Asher Street to W. Morena Boulevard	40,000	17,650	В	0.443	17,730	В	0.443	0.002	No
2. Frankfort Street to Knoxville Street	8,000	8,265	F	1.033	8,894	F	1.112	0.079	Yes
3. Knoxville Street to Tecolote Road	15,000	17,090	F	1.139	17,687	F	1.179	0.040	Yes
4. Tecolote Road to Viola Street	15,000	15,687	F	1.046	15,727	F	1.048	0.002	No
W. Morena Boulevard									
5. Morena Boulevard to Sea World Drive Overcrossing	40,000	12,282	A	0.307	12,362	A	0.309	0.002	No
Tecolote Road									
6. I-5 NB Ramps to Morena Boulevard	40,000	23,810	C	0.595	24,368	C	0.609	0.014	No
SeaWorld Drive									
7. E. Mission Bay Drive to I-5 SB Ramps	55,000	33,238	C	0.604	33,318	C	0.606	0.002	No

Footnotes:

- a. Capacities based on City of San Diego Roadway Classification & LOS table (See Appendix B).
- b. Average Daily Traffic.
- c. Level of Service.
- d. Volume to Capacity ratio.
- e. Δ denotes a Project-induced increase in the Volume to Capacity ratio. A 0.01 V/C increase is allowable at LOS F.

General Notes:

- 1. Sig = Significant impact, yes or no.
- 2. **Bold** typeface and shading represents a significant direct impact.

11.0 HORIZON YEAR 2035 CONDITIONS

Horizon Year 2035 transportation network conditions and vehicular volumes are based on the analysis completed for the City's Morena Boulevard Station Area Planning Study (MBAP). The MBAP is designed to address the future form of the Morena Boulevard corridor as that community changes both through expected urban development and the introduction of the Mid-Coast Light Rail Transit Trolley extension. The MBAP study area is bounded by Gesner Street on the north, Friars Road on the south, Interstate 5 on the west, and various streets on the east which generally demarcate the boundary between commercial and single family land uses.

LLG coordinated with the City of San Diego Planning Department, and determined that the City is currently in the process of preparing the EIR for the Morena Corridor Specific Plan. The Project study area is fully within the MBAP study area with the exception of the I-5/ Tecolote Road/ SeaWorld Drive freeway interchange.

11.1 Horizon Year 2035 Network Conditions

The MBAP Recommended Mobility Plan focuses on improvements to Morena Boulevard and W. Morena Boulevard within the MBAP study area. The plan includes new street connections in the southern portion of the study area and the reorganization of roadway conditions around the triangular parcel of land bordered by Napa Street, Morena Boulevard, and Linda Vista Road.

The following elements are specific to the northern portion of the MBAP study area, north of the new Tecolote LRT, which generally covers the Project study area:

- Morena Boulevard and portions of W. Morena Boulevard are designed to have one lane southbound and two lanes northbound.
- Parallel parking is provided on the eastern side of Morena Boulevard between Lister Street and Knoxville Street.
- Buffered Class 2 bike lanes are included on both sides of Morena Boulevard.
- A multi-use Class 1 path, with a tree-planted parkway buffer is proposed on the west side of Morena Boulevard
- In various locations, tree pop-out are proposed on the east side of Morena Boulevard that work with on-street parallel parking.
- A new standard "T" intersection is proposed where Knoxville Street meets W. Morena Boulevard.
- A trail is proposed along Tecolote Creek on the northern side of Tecolote Road between Morena Boulevard and W. Morena Boulevard, providing pedestrian access.

Table 11–1 provides a summary of the Community Plan Roadway Classifications and capacities assumed in the analysis.

TABLE 11–1
COMMUNITY PLAN ROADWAY CLASSIFICATIONS

Street Segment	Currently Built As	MBAP Preferred Alternative Classification ^a
Morena Boulevard		
1. Asher Street to W. Morena Boulevard	4-Ln Major	3-Ln Collector
2. Frankfort Street to Knoxville Street	2-Ln Collector	2-Ln Collector
3. Knoxville Street to Tecolote Road	2-Ln Collector	2-Ln Collector
4. Tecolote Road to Viola Street	3-Ln Collector	3-Ln Collector
W. Morena Boulevard		
Morena Boulevard to Sea World Drive Overcrossing	4-Ln Major	3-Ln Collector
Tecolote Road		
6. I-5 NB Ramps to Morena Boulevard	4-Ln Major	4-Ln Major
SeaWorld Drive		
7. E. Mission Bay Drive to I-5 SB Ramps	5-Ln Prime	5-Ln Prime

Footnotes:

a. General Plan classifications shown are based on Morena Boulevard Station Area Planning Study.

General Notes:

 Year 2035 traffic analysis in this report assumes Morena Boulevard Station Area Planning Study Preferred Alternative Roadway Classifications.

11.2 Horizon Year 2035 Traffic Volumes

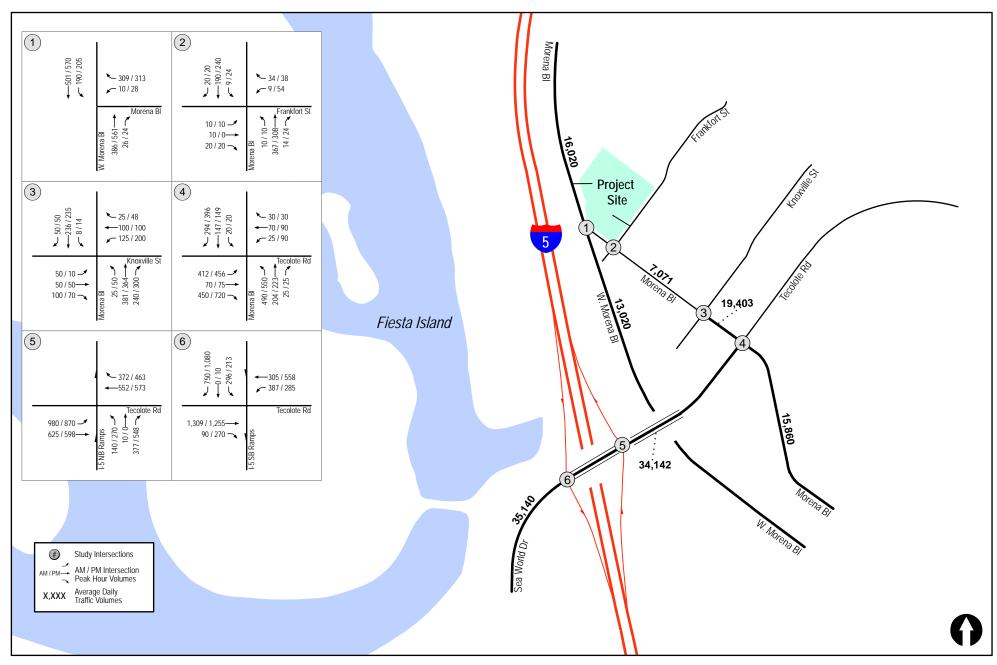
LLG used the Preferred Alternative Long-Term traffic volumes presented in the MBAP as a baseline for Horizon Year 2035 analysis. Daily traffic volumes under the MBAP proposed land use alternative, with the proposed long-term roadway network configuration, were determined by the City of San Diego, using the SANDAG Series 12 travel demand model. Peak hour intersection turning movement traffic volumes were determined based on the forecast change in daily traffic volumes on each approach segment.

Traffic volume forecasting at intersections outside the MBAP study area (i.e., I-5/ Tecolote Road interchange) was completed by LLG using SANDAG Series 12 forecast volumes, adjusted to be consistent and balance with adjacent facilities forecasted in the MBAP study.

The proposed land use for the Project site under the MBAP Preferred Alternative is Residential – Medium High, which is consistent with the proposed Project. Therefore, the Horizon Year volumes presented for the MBAP Preferred Alternative and those derived by LLG using consistent methodology are taken to represent Horizon Year 2035 With Project conditions. Proposed Project traffic was therefore deducted from these volumes to establish the Horizon Year 2035 Without Project scenario.

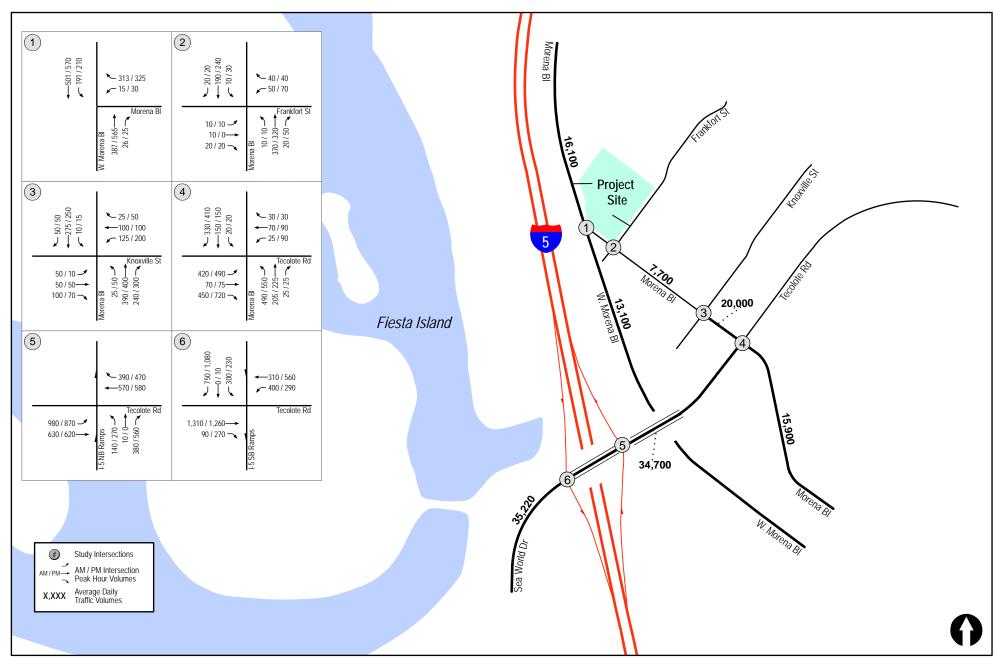
Appendix G contains excerpts from the MBAP study including the Proposed Land Scenario illustrating the "Residential – Medium High" zoning as well as the MBAP Horizon Year 2035 traffic volume forecast.

Figure 11–1 depicts the Horizon Year 2035 Without Project traffic volumes. *Figure 11–2* depicts the Horizon Year 2035 With Project traffic volumes.



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12.0 Analysis of Horizon Year 2035 Scenarios

12.1 Horizon Year 2035 Without Project

12.1.1 Intersection Analysis

Table 12–1 summarizes the peak hour intersection operations for the Horizon Year 2035 Without Project condition. As seen in *Table 12–1*, all intersections are calculated to continue to operate at LOS D or better except for the following:

■ Intersection #5. Tecolote Road/ I-5 NB Ramps – LOS E during the PM peak hour

Appendix H contains the peak hour intersection analysis worksheets for the Horizon Year 2035 Without Project condition.

12.1.2 Segment Operations

Table 12–2 summarizes the key segment operations in the study area for the Horizon Year 2035 Without Project condition. As seen in *Table 12–2*, the study area segments are calculated to operate at LOS D or better, except for the following:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS E
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F
- Segment #4. Morena Boulevard: Tecolote Road to Viola Street LOS F

12.2 Horizon Year 2035 With Project

12.2.1 Intersection Analysis

Table 12–1 summarizes the peak hour intersection operations for the Horizon Year 2035 With Project condition. As seen in *Table 12–1*, with the addition of Project traffic, all intersections are calculated to continue to operate at LOS D or better except for the following:

Intersection #5. Tecolote Road/ I-5 NB Ramps – LOS E during the PM peak hour

Based on City of San Diego significance criteria, <u>no significant cumulative impacts</u> were calculated with the addition of Project traffic at the intersection above, as the increase in delay associated with the Project is less than the allowable thresholds.

Appendix I contains the peak hour intersection analysis worksheets for the Horizon Year 2035 With Project condition.

12.2.2 Segment Operations

Table 12–2 summarizes the key segment operations in the study area for the Horizon Year 2035 With Project condition. As seen in *Table 12–2*, with the addition of Project traffic, the study area segments are calculated to continue to operate at LOS D or better, except the following:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS E
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F

■ Segment #4. Morena Boulevard: Tecolote Road to Viola Street – LOS F

Based on the City of San Diego's published criteria, a significant cumulative impact is calculated for the following segments:

- Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street LOS F
- Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road LOS F

Mitigation measures are discussed in Section 16.2 of this study.

Table 12–1
Horizon Year 2035 Intersection Operations

Intersection	Control Type	Peak Hour	Horizon Ye Without I		Horizon Ye With Pro		Delay Δ°	Sig?
	Турс	Hour	Delay	LOS	Delay	LOS	Δ.	
1. Morena Blvd/ W. Morena Blvd	Signal	AM PM	12.3 13.4	B B	12.4 13.8	B B	0.1 0.4	No
2. Morena Blvd/ Frankfort St	MSSC d	AM PM	12.9 15.6	C C	15.8 17.7	C C	2.9 2.1	No
3. Morena Blvd/ Knoxville St	Signal	AM PM	8.0 9.4	A A	8.1 9.7	A A	0.1 0.3	No
4. Morena Blvd/ Tecolote Rd	Signal	AM PM	31.7 41.6	C D	34.1 42.5	C D	2.4 0.9	No
5. Tecolote Rd/ I-5 NB Ramps	Signal	AM PM	48.9 71.3	D E	50.9 72.7	D E	2.0 1.4	No
6. SeaWorld Dr/ I-5 SB Ramps	Signal	AM PM	26.9 24.1	C C	27.4 25.1	C C	0.5 1.0	No

Foot	notes:				
a.	Average delay expressed in seconds per vehicle.	SIGNALIZE	ED	UNSIGNALI	ZED
b.	Level of Service.	DELAY/LOS THRI	ESHOLDS	DELAY/LOS THR	ESHOLDS
c. d.	Δ denotes the increase in delay due to Project. MSSC = Minor Street Stop-Controlled intersection. Worst movement delay	Delay	LOS	Delay	LOS
	reported.	$0.0 \le 10.0$	A	$0.0 \le 10.0$	A
	1	10.1 to 20.0	В	10.1 to 15.0	В
Gene	ral Notes:	20.1 to 35.0	C	15.1 to 25.0	C
1.	Sig = Significant impact, yes or no.	35.1 to 55.0	D	25.1 to 35.0	D
		55.1 to 80.0	Е	35.1 to 50.0	E

 ≥ 80.1

≥ 50.1

TABLE 12–2 HORIZON YEAR 2035 STREET SEGMENT OPERATIONS

Street Segment	General Plan	Existing Capacity	Horizon Year 2035 Without Project				on Year th Proje		Л е	Sig?
	Capacity	(LOS E) a	ADT b	LOS c	V/C d	ADT	LOS	V/C		
Morena Boulevard										
1. Asher Street to W. Morena Boulevard	22,500	40,000	16,020	D	0.712	16,100	D	0.716	0.004	No
2. Frankfort Street to Knoxville Street	8,000	8,000	7,071	E	0.884	7,700	E	0.963	0.079	Yes
3. Knoxville Street to Tecolote Road	15,000	15,000	19,403	F	1.294	20,000	F	1.333	0.039	Yes
4. Tecolote Road to Viola Street	15,000	15,000	15,860	F	1.057	15,900	F	1.060	0.003	No
W. Morena Boulevard										
5. Morena Boulevard to Sea World Drive Overcrossing	22,500	40,000	13,020	C	0.579	13,100	С	0.582	0.003	No
Tecolote Road										
6. I-5 NB Ramps to Morena Boulevard	40,000	40,000	34,142	D	0.854	34,700	D	0.868	0.014	No
SeaWorld Drive										
7. E. Mission Bay Drive to I-5 SB Ramps	55,000	55,000	35,140	C	0.639	35,220	С	0.640	0.001	No

Footnotes:

- Capacities based on City of San Diego Roadway Classification & LOS table (See *Appendix B*). Average Daily Traffic Volumes.
- Level of Service.
- Volume to Capacity.
- Δ denotes a Project-induced increase in the Volume to Capacity ratio. Increases of 0.02/0.01 in V/C are allowable at LOS E/LOS F, respectively.

General Notes

1. Sig = Significant impact, yes or no.

13.0 OTHER TRANSPORTATION MODES

13.1 Pedestrians

Sidewalks are provided along two of the four fronting roadways, Morena Boulevard between W. Morena Boulevard and Frankfort Street and Morena Boulevard north of W. Morena Boulevard. Currently, no sidewalks are provided along Frankfort Street and Tonopah Avenue. The Project will include frontage improvements on both Morena Boulevard frontages and along the Frankfort Street frontage to include standard City sidewalks.

Tonopah Avenue is an unclassified local roadway that runs one-way east-to-west above the site's northern boundary, terminating on a bluff of private property at a grade well above Morena Boulevard. Tonopah Avenue is completely separated from the site by this existing grade, and is not anticipated to accommodate much of the pedestrian, bicycle or vehicular Project traffic given the existing grade and limited utility of the roadway for local circulation. Tonopah Avenue is not shown on the regional model to connect to Morena Boulevard in the future, and minimal frontage improvements would be expected.

13.2 Bicycles

There are currently no bicycle facilities provided on either fronting roadway. As discussed in Section 11.1, the MBAP identified numerous enhancements in the vicinity of Morena Boulevard and W. Morena Boulevard, including the following:

- Buffered Class 2 bike lanes are included on both sides of Morena Boulevard.
- A multi-use Class 1 path, with a tree-planted parkway buffer is proposed on the west side of Morena Boulevard
- A trail is proposed along Tecolote Creek on the northern side of Tecolote Road between Morena Boulevard and W. Morena Boulevard, providing pedestrian access.

The Project will provide half-width frontage improvements to Morena Boulevard along the east side (northbound direction) to provide the buffered Class 2 bike lane described above, as well as the following lane configuration:

- Two travel lanes.
- Buffered bike lane.
- Parking lane

The Project will also provide 70 bicycle parking spaces.

13.3 Transit

As mentioned earlier in *Section 3.3* of this report, there is a bus stop located on Morena Boulevard immediately adjacent to the site, served by Route 105 which includes a bench. This bus stop will be relocated to the same general area after the frontage improvements are made. These improvements include an installation of a concrete bus pad (12 feet wide by 75 feet long) on Morena Boulevard. The Project will include any additional convenience features to the bus stop (shelter, trash can, etc.) to the satisfaction of MTS. The Project also plans to offer information on local transit options in the leasing office.

Route 105 travels between the Old Town Transit Station and the UTC Transit Center, Monday through Friday it travels with 30 minute frequencies in the morning and 60 minute frequencies in the evening, between 5:00 AM and 10:00 PM. On Saturdays, it travels between 6:00 AM and 8:30 PM with 60 minute frequencies. Sundays it travels between 6:07 AM and 8:36 PM with hour long frequencies.

The Mid-Coast Corridor Transit Project will extend Trolley Blue Line service from the Old Town Transit Center to major destinations in the north including UCSD and Westfield UTC. The extension will serve nine new stations including Tecolote Road, in close proximity to the Project. As of spring 2017, the Mid-Coast Trolley extension is under construction with service anticipated to begin in 2021.

14.0 Parking Discussion

14.1 Parking

Based on the proposed multi-family residential use, total minimum parking requirements for the site would be 263 vehicular parking spaces, 1 handicap space, 68 bicycle parking spaces, and 15 motorcycle spaces. The project would provide parking in excess of City requirements, as detailed in *Table 14-1*.

TABLE 14–1
PARKING SUMMARY

Туре	Minimum Required Spaces	Spaces Provided
Vehicular Parking	263 spaces 1 accessible space	 267 spaces total 99 attached garages 52 detached carports (includes 1 accessible) 115 open spaces (includes 2 accessible) 1 detached garage/maintenance
Motorcycle Parking	15	16 spaces
Bicycle Parking	68	70 spaces (10 bike racks located throughout)

Source: RECON Environmental Inc. 2018

15.0 Access Assessment

15.1 Site Access

Existing site access for the Coastal Trailer Villa recreational vehicle park is through a full-access driveway on Frankfort Street, approximately 155 feet from its intersection with Morena Boulevard, and via a right-in/right-out driveway on Morena Boulevard, immediately east of the W. Morena Boulevard/Morena Boulevard intersection. A right-in/right-out only driveway serving the RV storage area of the existing site is located along Morena Boulevard approximately 315 feet north of the Morena Boulevard/ W. Morena Boulevard intersection. As the site is currently configured, the RV storage area is physically separated from the remainder of the site and there is no internal circulation between the two driveways serving the recreational vehicle park and the single driveway serving the storage area.

With the redevelopment of the site, the Project will continue to use the access points on Frankfort Street and the W. Morena Boulevard access north of the intersection of Morena Boulevard/W. Morena Boulevard, closing the access on Morena Boulevard at the intersection of Morena Boulevard/W. Morena Boulevard. The configurations of the two Project driveways will generally be maintained, with the Frankfort Street driveway as full-access and the remaining Morena Boulevard driveway as right-in/right-out only. Redevelopment of on-site circulation will allow either of the two driveways to be accessed from any Project dwelling unit. It is anticipated that the Frankfort Street driveway will serve 67% of inbound and 92% of outbound Project traffic. The Morena Boulevard driveway is expected to serve 33% of inbound and 8% of outbound Project traffic.

Given the size of the net Project, it is expected that both access points will continue to function adequately. Frankfort Street is a low-volume local road with an existing load of 163 total bidirectional PM peak hour trips in the vicinity of the Project driveway. The right-in/right-out driveway on Morena Boulevard located at the north end of the site provides maximum separation downstream of the signalized W. Morena Boulevard/Morena Boulevard intersection. The signal operations at this intersection will create sufficient gaps for existing Project traffic to enter.

W. Morena Boulevard is a tangent roadway segment in the Project vicinity, and stopping/corner sight distance triangles should not be affected by roadway characteristics such as horizontal or vertical curves. The onsite placement of landscaping and monument signs will maintain appropriate sight distance.

16.0 Significance of Impacts and Mitigation Measures

16.1 Significance of Impacts

Based on the City of San Diego's published significance criteria, and the analysis methodology presented in this report, the following is a summary of the significant near-term direct and Horizon Year 2035 cumulative impacts. Mitigation measures are recommended to reduce the Project's impacts to less-than-significant.

16.1.1 Near-Term Significant Direct Impacts

The Project would result in significant near-term direct impacts to the following street segments:

- TRA-1. Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street
- TRA-2. Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road

16.1.2 Horizon Year 2035 Significant Cumulative Impacts

The Project would result in significant Horizon Year 2035 cumulative impacts to the following street segments:

- TRA-3. Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street
- TRA-4. Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road

16.2 Mitigation Measures

LINSCOTT, LAW & GREENSPAN, engineers

The following mitigation measures, would mitigate the significant near-term direct and Horizon Year 2035 cumulative impacts to less than significant:

- TRA-1. Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street (Direct) —
 Prior to issuance of any building permit, the Owner/Permittee shall assure, by permit
 and bond, the installation of an adaptive signal control system at three intersections
 on Morena Boulevard, to the satisfaction of the City Engineer. The three intersections
 would include W. Morena Boulevard, Knoxville Street and Tecolote Road.
 Improvements shall include enhanced fiber optic signal interconnects and
 communications, additional detection sensors and computer equipment at each
 intersection, and a remote link to the Traffic Management Center downtown
 satisfactory to the City Engineer. All improvements shall be completed and accepted
 by the City Engineer prior to first occupancy.
- TRA-2. Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road (Direct) Prior to issuance of any building permit, the Owner/Permittee shall assure, by permit and bond, the installation of an adaptive signal control system at three intersections on Morena Boulevard, to the satisfaction of the City Engineer. The three intersections would include W. Morena Boulevard, Knoxville Street and Tecolote Road. Improvements shall include enhanced fiber optic signal interconnects and communications, additional detection sensors and computer equipment at each intersection, and a remote link to the Traffic Management Center downtown

satisfactory to the City Engineer. All improvements shall be completed and accepted by the City Engineer prior to first occupancy.

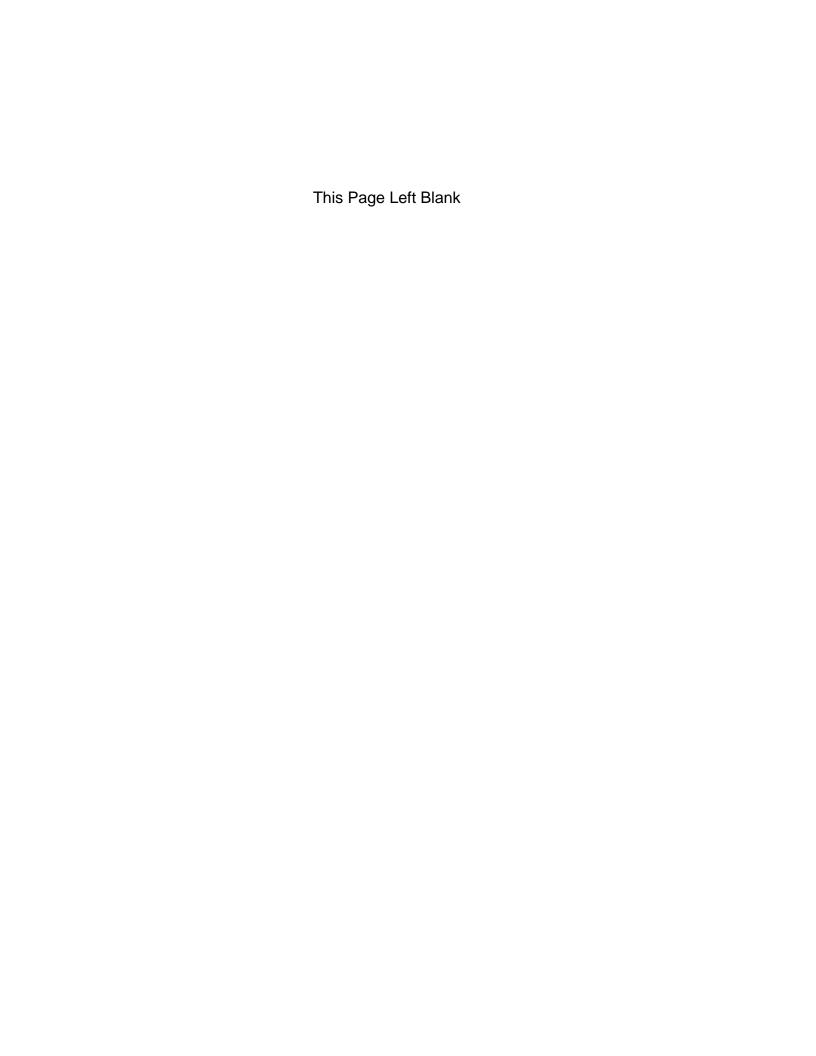
- TRA-3. Segment #2. Morena Boulevard: Frankfort Street to Knoxville Street (Cumulative) - Implementation of TRA-1 above for the direct impact will also mitigate the cumulative impact at this location. No additional cumulative impact mitigation is required.
- TRA-4. Segment #3. Morena Boulevard: Knoxville Street to Tecolote Road (Cumulative) – Implementation of TRA-2 above for the direct impact will also mitigate the cumulative impact at this location. No additional cumulative impact mitigation is required.

17.0 RECOMMENDATIONS

It is recommended that the Project's half-width frontage improvements be consistent with those identified in the MBAP Recommended Mobility Plan. Minimal improvements may be provided for the frontage with Tonopah Avenue although not much of the pedestrian, bicycle or vehicular Project traffic is expected to use that road.

The Project should also ensure that adequate sight distance triangles are maintained at the driveways (e.g. no monument signs or obscuring landscaping), especially the right-in/right-out driveway to Morena Boulevard.

End of Report



APPENDIX A
INTERSECTION AND SEGMENT COUNT SHEETS
LLG Ref. 3-16-2660





Turn Count Summary

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ W. Morena Blvd

Date of Count: Wednesday, October 26, 2016

Analysts: LV

Weather: Sunny
AVC Proj No: 16-0579





Vehicular Count

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ W. Morena Blvd

	AM Period (7:00 AM - 9:00 AM)													
	Southbou	nd	Wes	tbound	N ₁	orthbound								
	Thru	Left	Right	Left	Right	Thru		TOTAL						
7:00 AM	61	17	65	4	3	102		252						
7:15 AM	68	19	69	2	5	103		266						
7:30 AM	91	25	72	0	2	150		340						
7:45 AM	103	29	91	3	9	178		413						
8:00 AM	92	29	93	3	9	124		350						
8:15 AM	63	28	90	6	2	132		321						
8:30 AM	112	17	77	6	10	158		380						
8:45 AM	108	39	97	5	2	153		404						
Total	698	203	654	29	42	1,100		2,726						

AM Intersection Peak Hour: 7:45 AM - 8:45 AM Intersection PHF: 0.89

	Southbound		W	Westbound		orthbound	TOTAL
	Thru	Left	Right	Left	Right	Thru	IOIAL
Volume	370	103	351	18	30	592	1,464
PHF	0.83	0.89	0.94	0.75	0.75	0.83	0.89
Movement PHF	0.90			0.96		0.83	0.89

	PM Period (4:00 PM - 6:00 PM)											
	Southbound		Westbound	Northbound								
	Thru Le	eft Right	t Left	Right	Thru		TOTAL					
4:00 PM	175 3	8 48	8	11	108		388					
4:15 PM	194 5	6 64	6	11	81		412					
4:30 PM	198 7	3 49	4	11	98		433					
4:45 PM	251 5	2 51	5	3	102		464					
5:00 PM	254 7	7 32	7	14	109		493					
5:15 PM	246 7	1 48	11	10	126		512					
5:30 PM	253 7	9 54	6	17	107		516					
5:45 PM	239 4	7 51	4	6	98		445					
Total	1810 49	397	51	83	829		3,663					

PM Intersection Peak Hour: 4:45 PM - 5:45 PM Intersection PHF: 0.96

	Southbou	ınd	W	estbound	N	orthbound	TOTAL	
	Thru L		Right	Left	Right Thru		TOTAL	
Volume	1004	279	185	29	44	444	1985	
PHF	0.988	0.883	0.856	0.659	0.647	0.881	0.96	
Movement PHF	0.97			0.89		0.90	0.96	



Turn Count Summary

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ Frankfort St

Date of Count: Wednesday, October 26, 2016

Analysts: LV/CD
Weather: Sunny





Vehicular Count

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ Frankfort St

	AM Period (7:00 AM - 9:00 AM)													
	S	outhbou	nd	W	estbour	ıd	N	Northbound			astboun	.d		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL	
7:00 AM	10	1	10	7	66	1	2	1	0	2	19	1	120	
7:15 AM	9	1	20	5	66	2	4	0	2	1	19	4	133	
7:30 AM	4	0	8	5	74	4	6	0	1	3	18	2	125	
7:45 AM	8	0	16	2	79	2	5	0	1	3	26	6	148	
8:00 AM	7	1	14	4	80	3	5	0	2	4	35	6	161	
8:15 AM	8	1	12	5	84	3	4	2	1	3	20	2	145	
8:30 AM	7	0	10	5	82	3	6	1	1	5	29	1	150	
8:45 AM	9	1	11	4	90	0	3	2	1	7	37	2	167	
Total	62	5	101	37	621	18	35	6	9	28	203	24	1,149	

AM Intersection Peak Hour: 8:00 AM - 9:00 AM Intersection PHF: 0.93

	Southbound			Westbound			Northbound			Е	TOTAL		
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	IOIAL
Volume	31	3	47	18	336	9	18	5	5	19	121	11	623
PHF	0.86	0.75	0.84	0.90	0.93	0.75	0.75	0.63	0.63	0.68	0.82	0.46	0.93
Movement PHF		0.92			0.97			0.88			0.82		0.93

				PM F	Period (4:00 PN	/I - 6:00	PM)					
	S	outhbou	nd	V	/estbour	ıd	N	orthbou	nd	Е	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	7	0	10	19	52	1	6	0	3	8	31	5	142
4:15 PM	7	1	9	17	60	3	7	0	3	2	44	5	158
4:30 PM	10	2	14	8	54	3	5	0	0	3	72	4	175
4:45 PM	6	0	16	11	71	0	0	0	0	1	49	4	158
5:00 PM	5	1	23	15	63	2	3	0	1	4	60	4	181
5:15 PM	16	1	9	10	60	4	3	2	2	4	54	7	172
5:30 PM	8	0	14	7	69	4	3	0	2	4	63	6	180
5:45 PM	4	0	12	12	69	2	7	0	2	3	47	7	165
Total	63	5	107	99	498	19	34	2	13	29	420	42	1,331

PM Intersection Peak Hour: 5:00 PM - 6:00 PM Intersection PHF: 0.96

	S	outhbou	nd	W	/estboun	d	No	orthbou	nd	Е	astboun	d	TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	IOIAL
Volume	33	2	58	44	261	12	16	2	7	15	224	24	698
PHF	0.52	0.5	0.63	0.733	0.946	0.75	0.571	0.25	0.875	0.938	0.889	0.857	0.96
Movement PHF		0.80			0.95			0.69			0.90		0.96



Turn Count Summary

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ Knoxville St

Date of Count: Wednesday, October 26, 2016

Analysts: LV/CD
Weather: Sunny





Vehicular Count

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ Knoxville St

				AM F	eriod (7:00 AN	Л - 9:00	AM)					
	S	outhbou	ınd	W	estbour	ıd	N	orthbou	nd	Е	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	7	0	77	23	83	4	3	0	0	0	39	2	238
7:15 AM	8	0	64	28	79	2	1	0	0	1	35	1	219
7:30 AM	6	1	78	81	91	7	0	0	1	1	40	1	307
7:45 AM	3	0	105	110	114	9	2	0	0	1	48	1	393
8:00 AM	5	0	144	39	101	4	2	2	0	2	49	5	353
8:15 AM	4	0	79	40	116	4	2	1	1	2	38	1	288
8:30 AM	7	0	72	69	94	12	4	1	1	2	56	0	318
8:45 AM	9	3	102	84	109	5	4	0	0	3	47	4	370
Total	49	4	721	474	787	47	18	4	3	12	352	15	2,486

AM Intersection Peak Hour: 7:45 AM - 8:45 AM Intersection PHF: 0.86

	S	outhbou	nd	W	estbour	nd	No	orthbou	nd	Е	astboun	d	TOTAL
	Right	Thru	Left	IOIAL									
Volume	19	0	400	258	425	29	10	4	2	7	191	7	1,352
PHF	0.68	#####	0.69	0.59	0.92	0.60	0.63	0.50	0.50	0.88	0.85	0.35	0.86
Movement PHF		0.70			0.76			0.67			0.88		0.86

				PM F	Period (4:00 PN	/ 1 - 6:00	PM)					
	S	outhbou	nd	V	estbour	ıd	N	orthboui	nd	Е	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	3	0	60	68	91	5	9	0	4	6	48	1	295
4:15 PM	4	1	59	84	79	13	9	1	6	3	62	4	325
4:30 PM	7	1	67	68	80	9	7	2	0	4	82	2	329
4:45 PM	3	0	55	67	94	10	8	0	2	4	69	7	319
5:00 PM	10	0	61	61	83	6	8	0	5	1	84	6	325
5:15 PM	5	0	51	78	86	3	7	1	0	3	67	3	304
5:30 PM	8	0	56	71	92	4	5	0	4	3	81	5	329
5:45 PM	2	2	51	72	96	2	8	0	0	3	63	9	308
Total	42	4	460	569	701	52	61	4	21	27	556	37	2,534

PM Intersection Peak Hour: 4:15 PM - 5:15 PM Intersection PHF: 0.99

	S	outhbou	ınd	W	estbour	nd	N	orthbou	nd	Е	astboun	d	TOTAL
	Right	Thru	Left	IOIAL									
Volume	24	2	242	280	336	38	32	3	13	12	297	19	1298
PHF	0.60	0.5	0.903	0.833	0.894	0.731	0.889	0.375	0.542	0.75	0.884	0.679	0.99
Movement PHF		0.89			0.93			0.75			0.90		0.99



Turn Count Summary

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ Tecolote Rd

Date of Count: Wednesday, October 26, 2016

Analysts: LV/CD
Weather: Sunny
AVC Proi No: 16-0579





Vehicular Count

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Morena Blvd @ Tecolote Rd

				AM F	eriod (7:00 AN	/I - 9:00	AM)					
	S	outhbou	nd	V	estbour	ıd	N	orthbou	nd	Е	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	2	2	0	0	33	111	43	4	70	99	20	2	386
7:15 AM	0	2	1	1	30	80	52	9	87	93	24	1	380
7:30 AM	6	4	1	5	56	127	62	6	133	83	14	1	498
7:45 AM	10	4	3	7	69	90	62	25	182	125	35	9	621
8:00 AM	3	3	2	3	48	79	52	7	136	152	39	4	528
8:15 AM	3	3	0	4	45	93	84	10	114	91	30	2	479
8:30 AM	2	9	1	5	66	133	108	11	107	93	10	2	547
8:45 AM	7	1	2	5	69	99	62	25	148	123	24	6	571
Total	33	28	10	30	416	812	525	97	977	859	196	27	4,010

AM Intersection Peak Hour: 7:45 AM - 8:45 AM Intersection PHF: 0.88

	S	outhbou	nd	W	estbour	ıd	No	orthbou	nd	Е	astboun	d	TOTAL
	Right	Thru	Left	IOIAL									
Volume	18	19	6	19	228	395	306	53	539	461	114	17	2,175
PHF	0.45	0.53	0.50	0.68	0.83	0.74	0.71	0.53	0.74	0.76	0.73	0.47	0.88
Movement PHF		0.63			0.79			0.83			0.76		0.88

				PM F	eriod (4:00 PN	/I - 6:00	PM)					
	S	outhbou	nd	W	estbour	ıd	N	orthbou	nd	Е	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	7	6	4	3	38	122	113	16	119	89	39	5	561
4:15 PM	3	8	6	7	48	108	133	8	109	81	42	8	561
4:30 PM	4	1	3	4	37	120	115	15	91	100	49	2	541
4:45 PM	3	9	0	5	45	86	141	12	113	90	51	8	563
5:00 PM	4	18	14	2	42	111	81	17	126	101	48	6	570
5:15 PM	5	4	0	7	49	119	107	15	133	81	40	5	565
5:30 PM	8	7	2	3	45	105	81	10	130	113	46	6	556
5:45 PM	7	8	1	3	49	93	85	10	107	79	32	7	481
Total	41	61	30	34	353	864	856	103	928	734	347	47	4,398

PM Intersection Peak Hour: 4:45 PM - 5:45 PM Intersection PHF: 0.99

	S	outhbou	nd	N W	/estbour	ıd	N ₀	orthbou	nd	E	astboun	d	TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	IOIAL
Volume	20	38	16	17	181	421	410	54	502	385	185	25	2254
PHF	0.63	0.528	0.286	0.607	0.923	0.884	0.727	0.794	0.944	0.852	0.907	0.781	0.99
Movement PHF		0.51			0.88			0.91			0.90		0.99



Turn Count Summary

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Tecolote Rd (Seaworld Dr) @ I-5 NB Ramps

Date of Count: Wednesday, October 26, 2016

Analysts: LV/CD
Weather: Sunny





Vehicular Count

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Tecolote Rd (Seaworld Dr) @ I-5 NB Ramps

				AM F	eriod (7:00 AN	Л - 9:00	AM)					
	S	outhbou	nd	W	estbour	ıd	N	orthbou	nd	Е	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	0	0	0	124	88	0	55	4	17	0	62	229	579
7:15 AM	0	0	0	94	81	0	54	1	29	0	94	226	579
7:30 AM	0	0	0	110	104	0	80	2	30	0	121	243	690
7:45 AM	0	0	0	83	136	0	107	1	29	0	162	234	752
8:00 AM	0	0	0	86	148	0	70	3	25	0	125	234	691
8:15 AM	0	0	0	73	114	0	85	3	39	0	123	202	639
8:30 AM	0	0	0	121	114	0	96	2	37	0	130	225	725
8:45 AM	0	0	0	91	132	0	112	2	47	0	123	213	720
Total	0	0	0	782	917	0	659	18	253	0	940	1,806	5,375

AM Intersection Peak Hour: 7:45 AM - 8:45 AM Intersection PHF: 0.93

	S	outhbou	ınd	W	estbou	nd	No	orthbou	nd	Е	astboun	d	TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	IOIAL
Volume	0	0	0	363	512	0	358	9	130	0	540	895	2,807
PHF	#####	#####	#####	0.75	0.86	######	0.84	0.75	0.83	######	0.83	0.96	0.93
Movement PHF	i	#DIV/0!			0.93			0.91			0.91		0.93

				PM F	Period (4:00 PN	/I - 6:00	PM)					
	S	outhbou	nd	W	estbour	nd	N	orthbou	nd	Е	astboun	ıd	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	0	0	0	124	93	0	121	0	55	0	127	182	702
4:15 PM	0	0	0	102	95	0	134	0	50	0	116	231	728
4:30 PM	0	0	0	112	109	0	111	0	52	0	110	204	698
4:45 PM	0	0	0	95	90	0	143	0	60	0	123	174	685
5:00 PM	0	0	0	101	129	0	123	0	45	0	101	210	709
5:15 PM	0	0	0	99	105	0	135	0	65	0	120	184	708
5:30 PM	0	0	0	108	117	0	102	0	69	0	119	232	747
5:45 PM	0	0	0	96	84	0	96	0	50	0	106	161	593
Total	0	0	0	837	822	0	965	0	446	0	922	1,578	5,570

PM Intersection Peak Hour: 4:45 PM - 5:45 PM Intersection PHF: 0.95

	S	outhbou	nd	W	/estboui	nd	N	orthboui	nd	E	astboun	d	TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	IOIAL
Volume	0	0	0	403	441	0	503	0	239	0	463	800	2849
PHF	#####	#####	#####	0.933	0.855	#####	0.879	#####	0.866	#####	0.941	0.862	0.95
Movement PHF		#DIV/0!			0.92			0.91			0.90		0.95



Turn Count Summary

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Seaworld Dr @ 1-5 SB Ramps

Date of Count: Wednesday, October 26, 2016

Analysts: LV/CD
Weather: Sunny

Weather: Sunny
AVC Proj No: 16-0579





Vehicular Count

Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: Seaworld Dr @ I-5 SB Ramps

				AM F	Period (7:00 AN	Л - 9:00	AM)					
	S	outhbou	nd	V	/estbour	ıd	N	orthbou	nd	E	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
7:00 AM	126	0	37	0	51	54	0	0	0	15	254	0	537
7:15 AM	157	0	50	0	50	60	0	0	0	16	270	0	603
7:30 AM	201	0	54	0	65	69	0	0	0	12	310	0	711
7:45 AM	168	0	77	0	76	89	0	0	0	18	319	0	747
8:00 AM	164	0	64	0	64	109	0	0	0	25	295	0	721
8:15 AM	166	0	65	0	66	87	0	0	0	22	260	0	666
8:30 AM	170	0	73	0	74	77	0	0	0	21	282	0	697
8:45 AM	155	2	67	0	99	80	0	0	0	18	269	0	690
Total	1,307	2	487	0	545	625	0	0	0	147	2,259	0	5,372

AM Intersection Peak Hour: 7:30 AM - 8:30 AM Intersection PHF: 0.95

	S	outhbou	nd	W	estbour	nd	N	orthbou	nd	Е	astboun	ıd	TOTAL
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	IOIAL
Volume	699	0	260	0	271	354	0	0	0	77	1,184	0	2,845
PHF	0.87	#####	0.84	#####	0.89	0.81	#####	#####	#####	0.77	0.93	#####	0.95
Movement PHF		0.94			0.90		1	#DIV/0!			0.94		0.95

				PM F	eriod (4:00 PN	/I - 6:00	PM)					
	S	outhbou	nd	W	estboun	ıd	N	orthbou	nd	E	astboun	d	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	TOTAL
4:00 PM	265	2	70	0	91	57	0	0	0	62	239	0	786
4:15 PM	289	3	66	0	95	50	0	0	0	50	281	0	834
4:30 PM	231	1	42	0	107	54	0	0	0	64	272	0	771
4:45 PM	242	1	53	0	100	50	0	0	0	44	244	0	734
5:00 PM	238	2	40	0	112	62	0	0	0	64	271	0	789
5:15 PM	225	0	63	0	109	61	0	0	0	53	241	1	753
5:30 PM	237	2	50	0	120	66	0	0	0	66	301	0	842
5:45 PM	229	0	41	0	95	39	0	0	0	53	226	0	683
Total	1956	11	425	0	829	439	0	0	0	456	2,075	1	6,192

PM Intersection Peak Hour: 4:15 PM - 5:15 PM Intersection PHF: 0.94

	S	outhbou	ınd	N.	estbour	ıd	N	orthbou	nd	Е	astbour	ıd	TOTAL
	Right	Thru	Left	IOIAL									
Volume	1000	7	201	0	414	216	0	0	0	222	1068	0	3128
PHF	0.87	0.583	0.761	#####	0.924	0.871	#####	#####	#####	0.867	0.95	#####	0.94
Movement PHF		0.84			0.91		-	#DIV/0!			0.96		0.94



Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: A. Morena Blvd: Asher St to W. Morena Blvd

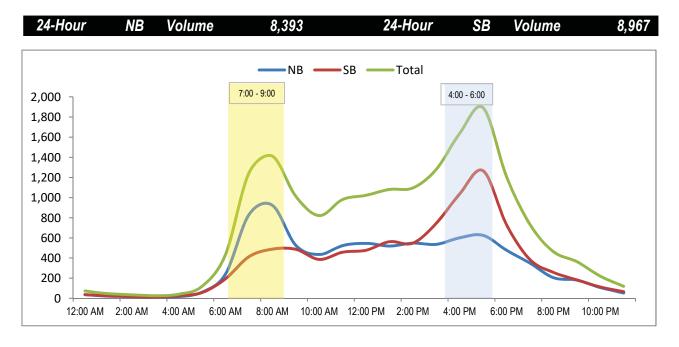
Orientation: North-South

Date of Count: Wednesday, October 26, 2016

Analysts: DASH

Weather: Sunny

				24 Hour	Segmer	it Volume					17,	360
١ ,	im	•	Но	urly Vol	ume		-	Γim	2	Но	urly Vol	ume
'	11111	E	NB	SB	Total			11111	E	NB	SB	Total
12:00 AM	-	1:00 AM	36	37	73		12:00 PM	-	1:00 PM	546	477	1,023
1:00 AM	-	2:00 AM	21	25	46		1:00 PM	-	2:00 PM	519	562	1,081
2:00 AM	-	3:00 AM	18	17	35		2:00 PM	-	3:00 PM	548	548	1,096
3:00 AM	-	4:00 AM	14	12	26		3:00 PM	-	4:00 PM	536	745	1,281
4:00 AM	-	5:00 AM	16	25	41		4:00 PM	-	5:00 PM	601	1,037	1,638
5:00 AM	-	6:00 AM	62	57	119		5:00 PM	-	6:00 PM	625	1,266	1,891
6:00 AM	-	7:00 AM	240	193	433		6:00 PM	-	7:00 PM	477	730	1,207
7:00 AM	-	8:00 AM	830	413	1,243		7:00 PM	-	8:00 PM	349	384	733
8:00 AM	-	9:00 AM	924	488	1,412		8:00 PM	-	9:00 PM	205	258	463
9:00 AM	-	10:00 AM	527	487	1,014		9:00 PM	-	10:00 PM	181	183	364
10:00 AM	-	11:00 AM	435	386	821		10:00 PM	-	11:00 PM	107	113	220
11:00 AM	-	12:00 PM	523	458	981		11:00 PM	-	12:00 AM	53	66	119
	Γota	ı	3,646	2,598	6,244			Tota	I	4,747	6,369	11,116





Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: B. Morena Blvd: Frankfort St to Knoxville St

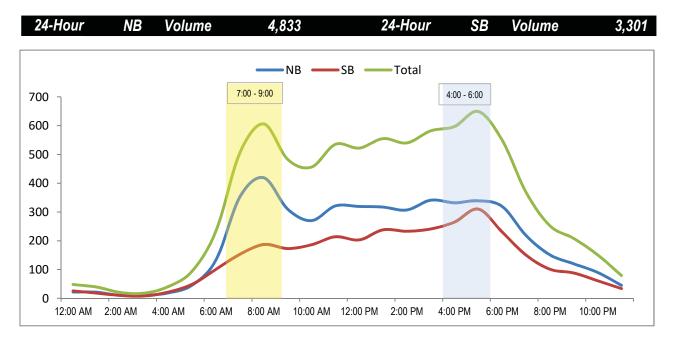
Orientation: North-South

Date of Count: Wednesday, October 26, 2016

Analysts: DASH

Weather: Sunny

				24 Hour	Segmer	it Volume					8,1	34
,	im	•	Но	urly Vol	ume		,	īim	•	Но	urly Vol	ume
'	11111	E	NB	SB	Total			11111	E	NB	SB	Total
12:00 AM	-	1:00 AM	22	26	48		12:00 PM	-	1:00 PM	319	203	522
1:00 AM	-	2:00 AM	21	18	39		1:00 PM	-	2:00 PM	317	238	555
2:00 AM	-	3:00 AM	10	10	20		2:00 PM	-	3:00 PM	307	233	540
3:00 AM	-	4:00 AM	10	8	18		3:00 PM	-	4:00 PM	341	241	582
4:00 AM	-	5:00 AM	19	22	41		4:00 PM	-	5:00 PM	332	265	597
5:00 AM	-	6:00 AM	46	49	95		5:00 PM	-	6:00 PM	339	310	649
6:00 AM	-	7:00 AM	134	101	235		6:00 PM	-	7:00 PM	319	230	549
7:00 AM	-	8:00 AM	353	153	506		7:00 PM	-	8:00 PM	218	150	368
8:00 AM	-	9:00 AM	419	187	606		8:00 PM	-	9:00 PM	151	101	252
9:00 AM	-	10:00 AM	310	173	483		9:00 PM	-	10:00 PM	120	88	208
10:00 AM	-	11:00 AM	270	186	456		10:00 PM	-	11:00 PM	90	61	151
11:00 AM	-	12:00 PM	321	214	535		11:00 PM	-	12:00 AM	45	34	79
	Γota	I	1,935	1,147	3,082		•	Γota	I	2,898	2,154	5,052





Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: C. Morena Blvd: Knoxville St to Tecolote Rd

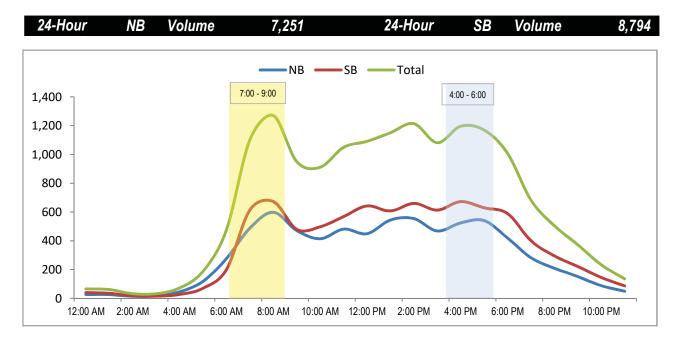
Orientation: North-South

Date of Count: Wednesday, October 26, 2016

Analysts: DASH

Weather: Sunny

				24 Hour	Segmer	nt Volume					16,	045
_	im	•	Но	urly Vol	ume		,	Γim	•	Но	urly Vol	ume
•	11111	е	NB	SB	Total		1	11111	e	NB	SB	Total
12:00 AM	-	1:00 AM	26	40	66		12:00 PM	-	1:00 PM	449	642	1,091
1:00 AM	-	2:00 AM	26	35	61		1:00 PM	-	2:00 PM	544	607	1,151
2:00 AM	-	3:00 AM	14	18	32		2:00 PM	-	3:00 PM	554	660	1,214
3:00 AM	-	4:00 AM	17	15	32		3:00 PM	-	4:00 PM	468	613	1,081
4:00 AM	-	5:00 AM	45	27	72		4:00 PM	-	5:00 PM	524	672	1,196
5:00 AM	-	6:00 AM	118	70	188		5:00 PM	-	6:00 PM	540	629	1,169
6:00 AM	-	7:00 AM	276	200	476		6:00 PM	-	7:00 PM	419	589	1,008
7:00 AM	-	8:00 AM	488	614	1,102		7:00 PM	-	8:00 PM	282	400	682
8:00 AM	-	9:00 AM	598	672	1,270		8:00 PM	-	9:00 PM	209	295	504
9:00 AM	-	10:00 AM	471	479	950		9:00 PM	-	10:00 PM	151	221	372
10:00 AM	-	11:00 AM	414	497	911		10:00 PM	-	11:00 PM	88	145	233
11:00 AM	-	12:00 PM	481	568	1049		11:00 PM	-	12:00 AM	49	86	135
	Γota	I	2,974	3,235	6,209		•	Tota	ı	4,277	5,559	9,836





Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: D. Morena Blvd: Tecolote Rd to Viola St

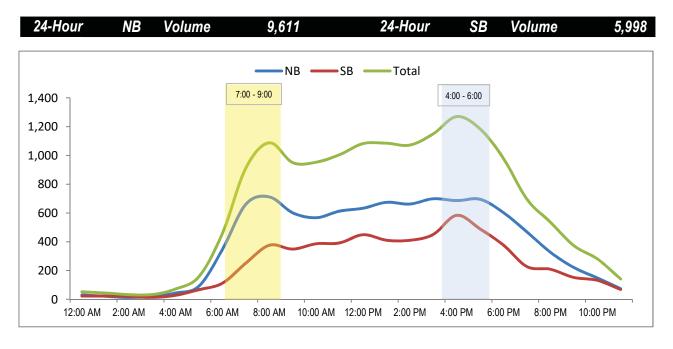
Orientation: North-South

Date of Count: Wednesday, October 26, 2016

Analysts: DASH

Weather: Sunny

				24 Hour	Segmer	it Volume					15,	609
,	īm	•	Но	urly Vol	ume		,	Γim	•	Но	urly Vol	ume
'		E	NB	SB	Total			11111	E	NB	SB	Total
12:00 AM	-	1:00 AM	31	22	53		12:00 PM	-	1:00 PM	633	449	1,082
1:00 AM	-	2:00 AM	21	23	44		1:00 PM	-	2:00 PM	674	411	1,085
2:00 AM	-	3:00 AM	13	20	33		2:00 PM	-	3:00 PM	662	410	1,072
3:00 AM	-	4:00 AM	20	13	33		3:00 PM	-	4:00 PM	699	451	1,150
4:00 AM	-	5:00 AM	44	28	72		4:00 PM	-	5:00 PM	686	584	1,270
5:00 AM	-	6:00 AM	92	67	159		5:00 PM	-	6:00 PM	695	489	1,184
6:00 AM	-	7:00 AM	347	112	459		6:00 PM	-	7:00 PM	602	376	978
7:00 AM	-	8:00 AM	661	252	913		7:00 PM	-	8:00 PM	468	227	695
8:00 AM	-	9:00 AM	712	376	1,088		8:00 PM	-	9:00 PM	327	209	536
9:00 AM	-	10:00 AM	601	349	950		9:00 PM	-	10:00 PM	221	152	373
10:00 AM	-	11:00 AM	567	386	953		10:00 PM	-	11:00 PM	149	132	281
11:00 AM	-	12:00 PM	613	392	1005		11:00 PM	-	12:00 AM	73	68	141
	Γota	ı	3,722	2,040	5,762			Tota		5,889	3,958	9,847





Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: E. W. Morena Blvd: Morena Blvd to Savannah St

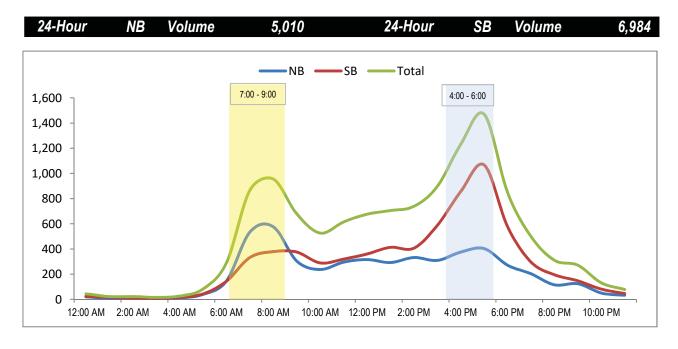
Orientation: North-South

Date of Count: Wednesday, October 26, 2016

Analysts: DASH

Weather: Sunny

				24 Hour	Segmer	it Volume					11,	994
,	im	•	Но	urly Vol	ume		,	Γim	•	Но	urly Vol	ume
	11111	E	NB	SB	Total				E	NB	SB	Total
12:00 AM	-	1:00 AM	20	24	44		12:00 PM	-	1:00 PM	316	360	676
1:00 AM	-	2:00 AM	7	15	22		1:00 PM	-	2:00 PM	292	413	705
2:00 AM	-	3:00 AM	12	10	22		2:00 PM	-	3:00 PM	332	406	738
3:00 AM	-	4:00 AM	7	8	15		3:00 PM	-	4:00 PM	309	587	896
4:00 AM	-	5:00 AM	11	15	26		4:00 PM	-	5:00 PM	375	856	1,231
5:00 AM	-	6:00 AM	39	43	82		5:00 PM	-	6:00 PM	403	1,067	1,470
6:00 AM	-	7:00 AM	146	144	290		6:00 PM	-	7:00 PM	271	577	848
7:00 AM	-	8:00 AM	534	332	866		7:00 PM	-	8:00 PM	203	296	499
8:00 AM	-	9:00 AM	576	379	955		8:00 PM	-	9:00 PM	115	195	310
9:00 AM	-	10:00 AM	304	375	679		9:00 PM	-	10:00 PM	124	147	271
10:00 AM	-	11:00 AM	237	289	526		10:00 PM	-	11:00 PM	50	81	131
11:00 AM	-	12:00 PM	295	319	614		11:00 PM	-	12:00 AM	32	46	78
	Γota	I	2,188	1,953	4,141		•	Tota	I	2,822	5,031	7,853



MACHINE COUNT TRAFFIC VOLUMES

Citizational Citate Could have an Called	C	5 - 03/15/2018		diagonal	14.50	2	1
TAYIOR ST	PACIFIC HY - CONGRESS ST	ALL NORTHBOOND SOUTHBOOND EAS	EAST BOOND W	WEST BOOMD	101AL 27 110	0648-02	06/20/02
TAYLOR ST	PACIFIC HY - CONGRESS ST		11.780	10.230	22,010	0315-05	06/15/05
TAYLOR ST	PACIFIC HY - CONGRESS ST		11,990	10,060	22,050	0336-08	08/20/08
TAYLOR ST	PACIFIC HY - CONGRESS ST		10,035	10,160	20,195	0831-11	08/17/11
TAYLOR ST	PACIFIC HY - CONGRESS ST		10,071	9,408	19,479	1059-14	11/25/14
TAYLOR ST	SD 008 EB RAMPS - MORENA BL	6,295 6,845			13,140	0994-11	05/26/11
TAYLOR ST	SD 008 EB RAMPS - MORENA BL		7,542	7,379	14,921	1060-14	11/25/14
TECH WY	KEARNY VILLA RD - PARAMOUNT DR		1,440	1,520	2,960	0624-15	04/14/15
TECOLOTE RD	MORENA BL - E END		1,127	1,111	2,238	0637-15	04/28/15
TECOLOTE RD	SD 005 - MORENA BL		11,078	11,232	22,310	0515-16	11/09/16
TECOLOTE RD	SD 005 - MORENA BL		12,390	12,420	24,810	0857-03	11/04/03
TECOLOTE RD	SD 005 - MORENA BL		11,130	11,490	22,620	0488-06	11/14/06
TECOLOTE RD	SD 005 - MORENA BL		11,295	11,450	22,745	0722-09	11/19/09
TECOLOTE RD	SD 005 - MORENA BL		10,726	11,090	21,816	0866-12	10/30/12
TECOLOTE RD	SD 005 - MORENA BL		809'6	11,488	21,096	0611-15	03/26/15
TED WILLIAMS PY	SABRE SPRINGS PY - SHOAL CREEK DR		16,047	15,360	31,407	0037-17	03/01/17
TED WILLIAMS PY	SABRE SPRINGS PY - SHOAL CRK DR		13,650	12,020	25,670	0074-07	02/22/07
TED WILLIAMS PY	SABRE SPRINGS PY - SHOAL CRK DR		15,770	14,330	30,100	0069-10	03/02/10
TED WILLIAMS PY	SABRE SPRINGS PY - SHOAL CRK DR		15,800	14,127	729,927	0161-13	02/21/13
TED WILLIAMS PY	SD 015 R-B - SABRE SPRINGS PY		15,480	16,625	32,105	0830-11	08/31/11
TED WILLIAMS PY	SD 015 R-B - SABRE SPRINGS PY	얼마를 가게 하는 것이 되었다.	19,146	16,158	35,304	1056-14	12/03/14
TENNYSON ST	NIMITZ BL - WABASKA DR		1,370	1,040	2,410	0646-02	06/20/02
TENNYSON ST	NIMITZ BL - WABASKA DR	마음 기계 등 본 기업을 본 경우를 받아 되었다.	1,170	1,050	2,220	0365-05	06/14/05
TENNYSON ST	WABASAKA DR - NIMITZ BL	1,043 951			1,994	0020-16	02/03/16
TENNYSON ST	WABASKA DR - NIMITZ BL	1,027 840			1,867	0496-16	09/13/16
TEXAS ST	CAMINO DEL RIO S - SD08	13,012 11,700			24,712	0170-16	06/09/16
TEXAS ST	CAMINO DEL RIO S - SD 008	23,530 17,580			41,110	0459-03	04/17/03
TEXAS ST	CAMINO DEL RIO S - SD 008	18,390 17,820			36,210	0590-03	05/20/03
TEXAS ST	CAMINO RIO S - ADAMS AV	13,695 12,390			26,085	0525-10	06/24/10
TEXAS ST	CAMINO RIO S - SD 008	19,480 18,550			38,030	90-8500	90/80/90
TEXAS ST	CAMINO RIO S - SD 008				29,625	0419-09	06/23/09
TEXAS ST	CAMINO RIO S - SD 008				30,065	0458-12	05/10/12
TEXAS ST	CAMINO RIO S - SD 008		of sometimes of		33,204	0428-15	06/10/15
TEXAS ST	EL CAJON BL - MEADE AV				15,720	60-6800	03/04/09
TEXAS ST	EL CAJON BL - MEADE AV	7,560 8,000			15,560	0171-12	02/23/12
TEXAS ST	EL CAJON BL - MEADE AV				15,727	0171-15	04/08/15
TEXAS ST	HOWARD AV - EL CAJON BL	5,220 7,160			12,380	0224-02	03/01/02
TEXAS ST	HOWARD AV - EL CAJON BL	5,430 5,720			11,150	0118-05	04/05/05
TEXAS ST	HOWARD AV - EL CAJON BL	6,880 5,820			12,700	0160-08	03/26/08
TEXAS ST	HOWARD AV - EL CAJON BL	8,040 7,245			15,285	60-8800	03/04/09
TEXAS ST	HOWARD AV - EL CAJON BL	5,755 5,270			11,025	0170-12	02/23/12
TEXAS ST	HOWARD AV - EL CAJON BL	6,330 5,634			11,964	0172-15	04/08/15
TEXAS ST	LANDIS ST - WIGHTMAN ST					0485-03	04/24/03
TEXAS ST	LANDIS ST - WIGHTMAN ST	2,040 1,650			3,690	0186-06	03/15/06
TEXAS ST	LANDIS ST - WIGHTMAN ST	1,940 1,770			3,710	0159-09	03/26/09



Accurate Video Counts Inc info@accuratevideocounts.com (619) 987-5136



Location: G. Seaworld Dr: E. Mission Bay Dr / Fiesta Island Rd to I-5 SB Ramps

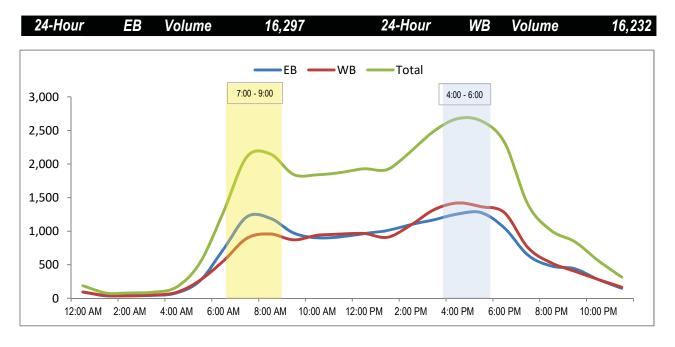
Orientation: East-West

Date of Count: Wednesday, October 26, 2016

Analysts: DASH

Weather: Sunny

24 Hour Segment Volume										32,529		
Time			Hourly Volume				Time			Hourly Volume		
			EB	WB	Total		Time		e	EB	WB	Total
12:00 AM	-	1:00 AM	95	93	188		12:00 PM	-	1:00 PM	964	965	1,929
1:00 AM	-	2:00 AM	36	42	78		1:00 PM	-	2:00 PM	1,010	909	1,919
2:00 AM	-	3:00 AM	43	37	80		2:00 PM	-	3:00 PM	1,098	1,091	2,189
3:00 AM	-	4:00 AM	43	48	91		3:00 PM	-	4:00 PM	1,171	1,322	2,493
4:00 AM	-	5:00 AM	80	89	169		4:00 PM	-	5:00 PM	1,256	1,420	2,676
5:00 AM	-	6:00 AM	262	269	531		5:00 PM	-	6:00 PM	1,276	1,365	2,641
6:00 AM	-	7:00 AM	730	557	1,287		6:00 PM	-	7:00 PM	1,046	1,274	2,320
7:00 AM	-	8:00 AM	1,214	894	2,108		7:00 PM	-	8:00 PM	643	754	1,397
8:00 AM	-	9:00 AM	1,192	958	2,150		8:00 PM	-	9:00 PM	480	527	1,007
9:00 AM	-	10:00 AM	972	871	1,843		9:00 PM	-	10:00 PM	440	403	843
10:00 AM	-	11:00 AM	901	939	1,840		10:00 PM	-	11:00 PM	280	281	561
11:00 AM	-	12:00 PM	916	957	1873		11:00 PM	-	12:00 AM	149	167	316
Total			6,484	5,754	12,238		Total			9,813	10,478	20,291





APPENDIX B CITY OF SAN DIEGO ROADWAY CLASSIFICATION TABLE, COMMUNITY PLAN / MORENA BOULEVARD STATION AREA PLAN EXCERPTS

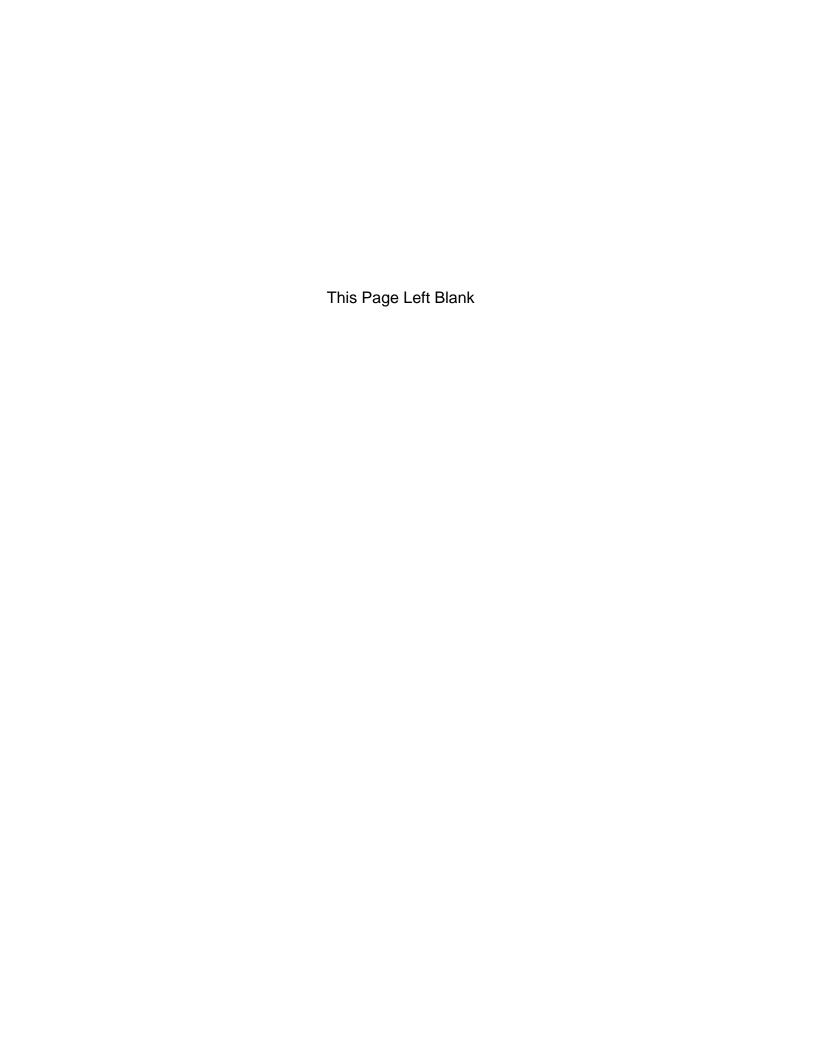


TABLE 2
Roadway Classifications, Levels of Service (LOS) and Average Daily Traffic (ADT)

			LEVEL OF SERVICE									
STREET CLASSIFICATION	LANES	CROSS SECTIONS	А	В	С	D	E					
Freeway	8 lanes		60,000	84,000	120,000	140,000	150,000					
Freeway	6 lanes		45,000	63,000	90,000	110,000	120,000					
Freeway	4 lanes		30,000	42,000	60,000	70,000	80,000					
Expressway	6 lanes	102/122	30,000	42,000	60,000	70,000	80,000					
Primary Arterial	6 lanes	102/122	25,000	35,000	50,000	55,000	60,000					
Major Arterial	6 lanes	102/122	20,000	28,000	40,000	45,000	50,000					
Major Arterial	4 lanes	78/98	15,000	21,000	30,000	35,000	40,000					
Collector	4 lanes	72/92	10,000	14,000	20,000	25,000	30,000					
Collector (no center lane) continuous left-turn lane)	4 lanes 2 lanes	64/84 50/70	5,000	7,000	10,000	13,000	15,000					
Collector (no fronting property)	2 lanes	40/60	4,000	5,500	7,500	9,000	10,000					
Collector (commercial-industrial fronting)	2 lanes	50/70	2,500	3,500	5,000	6,500	8,000					
Collector (multifamily)	2 lanes	40/60	2,500	3,500	5,000	6,500	8,000					
Sub-Collector (single-family)	2 lanes	36/56	_	_	2,200	_	_					

LEGEND:

XXX/XXX = Curb to curb width (feet)/right-of-way width (feet): based on the City of San Diego Street Design. Manual

XX/XXX = Approximate recommended ADT based on the City of San Diego Street Design Manual.

NOTES:

- 1. The volumes and the average daily level of service listed above are only intended as a general planning guideline.
- 2. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

TRANSPORTATION

The transportation network in Clairemont Mesa consists of automobile and public transportation systems, the bicycle system and pedestrian circulation.

OBJECTIVES FOR TRANSPORTATION

- 1. Improve the street system as necessary to accommodate the community's growth, while minimizing adverse effects on existing residential, industrial and commercial uses and the open space system.
- 2. Develop a bicycle system that will join parks and recreational areas, schools, and commercial activity centers in the community and the City.
- 3. Provide an efficient and high level of public transit within and surrounding the community. Design and plan land uses that will support and make use of the future light rail transit.
- 4. Enhance pedestrian circulation, particularly between higher density residential and commercial areas and to active and passive recreational facilities.
- 5. Enhance the community's image through streetscape improvements and community identification signs along major streets.
- 6. Minimize adverse noise impacts on major streets.

RECOMMENDATIONS FOR STREET IMPROVEMENTS

A series of street improvements should take place in Clairemont Mesa to accommodate the increase in traffic volumes projected for the year 2005 (**Figures 22** and **23**). (The recommendation numbers below correspond to numbers on **Figure 22**.)

1. Balboa Avenue

Balboa Avenue should be widened from a four-lane major to a six-lane major from Clairemont Drive to the community's western boundary at I-5. The six-lane major should continue just east of the intersection at Clairemont Drive to provide a transition to the four-lane major.

2. Genesee Avenue

- a. Standard curb, gutter, and sidewalk should be constructed on Genesee Avenue from Sauk Avenue to north of Derrick Drive.
- b. Genesee Avenue should be widened from five to six lanes between Derrick Drive and Mt. Alifan Drive as adjacent property develops or redevelops.
- c. Genesee Avenue should be widened to four lanes with bike lanes from Boyd Avenue south to the community boundary.

3. Mt. Abernathy Avenue

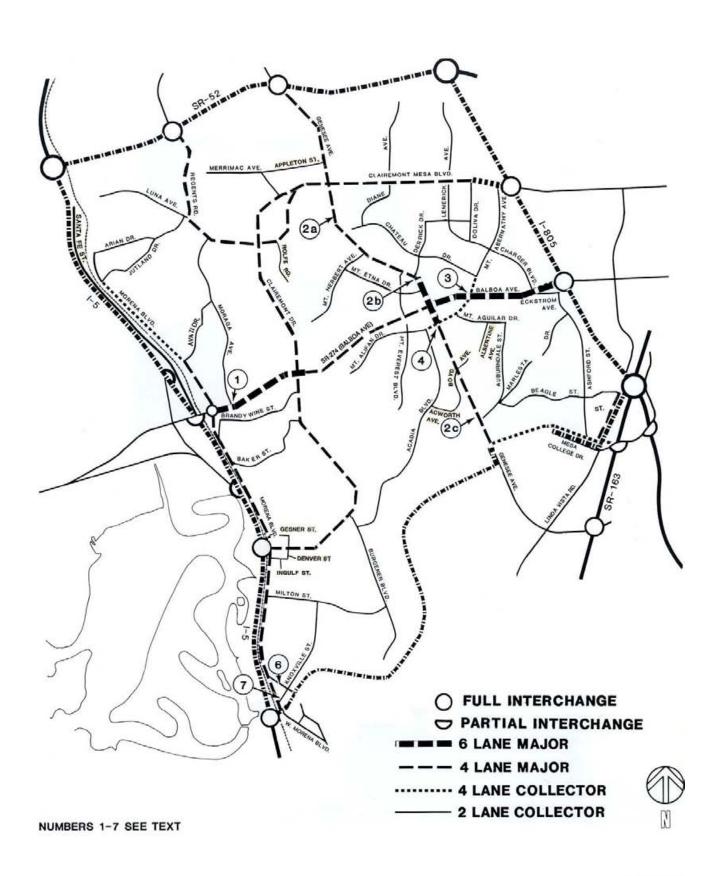
The operating level of service at the intersection of Mt. Abernathy Avenue, Mt. Alifan Drive and Balboa Avenue should be improved by providing dual left-turn lanes for southbound to eastbound traffic. This will require reconstruction of the median on the north side of the intersection (Mt. Abernathy Avenue), modification of the traffic signal, and some restriping.

4. Mt. Alifan Drive

Mount Alifan Drive should be widened to a four-lane collector street between Mt. Acadia Boulevard and Genesee Avenue. This will require the acquisition of additional right-of-way as development or redevelopment occurs.

5. Morena Boulevard

Morena Boulevard should be restriped to three lanes (two through lanes and a center, two-way turn lane) between West Morena Boulevard (north intersection) and Tecolote Road. Access from Morena Boulevard to I-5 should be improved. The current access route takes motorists from Morena to Clairemont Drive via Ingulf Street, impacting residential neighborhoods. Direct freeway access from Morena Boulevard to I-5 should be provided. A direct ramp from Morena Boulevard to Clairemont Drive should be developed to provide direct access to I-5. This would reduce the through traffic on adjacent residential streets attempting to access the freeway.



6. Knoxville Street

Knoxville Street should be a through street connecting Morena Boulevard to West Morena Boulevard. This connection will improve circulation by providing a connection between the community and a major street while bypassing the Morena Boulevard-Tecolote Road intersection. The Knoxville connection will also require the widening of Morena Boulevard from Knoxville Street to Tecolote Road, including the bridge over Tecolote Creek, to provide two northbound turn lanes, one southbound left-turn lane, one southbound through/right-turn lane, and an exclusive southbound right-turn lane.

RECOMMENDATIONS FOR DESIGN OF MAJOR AND COLLECTOR STREETS

1. Street Design

Streets should be designed to physically incorporate all transportation modes, including automobile, pedestrian, bicycles and public transit.

2. Landscaping

Streets in Clairemont Mesa should be enhanced by providing landscaping that would serve as a buffer between the street and adjacent land use in accordance with the Citywide Landscaping Ordinance. Landscaping in the public right-of-way should be incorporated along portions of Clairemont Mesa Boulevard, Clairemont Drive, Genesee Avenue and Balboa Avenue (Entryways and Streetscapes/Pedestrian Circulation (**Figures 28-30**).

3. Street Signals

The following intersections should be signalized:

- a. Clairemont Drive and Merrimac Avenue
- b. Morena Boulevard and West Morena Boulevard (northern intersection)
- c. Linda Vista Road and Stalmer Street
- d. Mount Aguilar Drive and Mount Alifan Drive





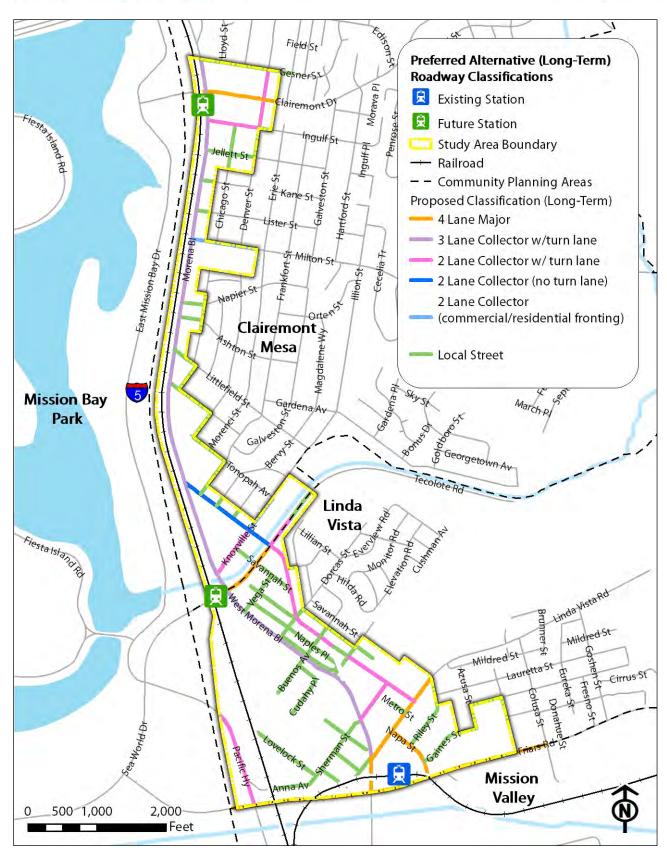


Figure 4-54: Preferred Alternative (Long-term) Roadway Classification

148 February 2014

Appendix C	`
Existing Intersection Analysis Worksheets	3
ISCOTT, LAW & GREENSPAN, <i>engineers</i> LLG Ref. 3-16-266	-)



	•	•	†	~	-	↓		
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	ሻ	7	↑ ↑	· · · ·	ሻ	^		
Traffic Volume (veh/h)	18	351	592	30	103	370		
Future Volume (veh/h)	18	351	592	30	103	370		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	20	394	665	34	116	416		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	480	567	1227	63	155	1874		
Arrive On Green	0.27	0.27	0.36	0.36	0.09	0.53		
Sat Flow, veh/h	1774	1583	3520	175	1774	3632		
Grp Volume(v), veh/h	20	394	343	356	116	416		
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1832	1774	1770		
Q Serve(g_s), s	0.4	11.2	8.1	8.1	3.4	3.3		
Cycle Q Clear(g_c), s	0.4	11.2	8.1	8.1	3.4	3.3		
Prop In Lane	1.00	1.00		0.10	1.00			
Lane Grp Cap(c), veh/h	480	567	634	656	155	1874		
V/C Ratio(X)	0.04	0.69	0.54	0.54	0.75	0.22		
Avail Cap(c_a), veh/h	780	834	1495	1548	932	5145		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	14.1	14.4	13.4	13.4	23.4	6.6		
Incr Delay (d2), s/veh	0.0	1.5	0.7	0.7	7.0	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.2	5.0	4.0	4.2	1.9	1.6		
LnGrp Delay(d),s/veh	14.2	15.9	14.1	14.1	30.4	6.7		
LnGrp LOS	В	В	B (00	В	С	A		
Approach Vol, veh/h	414		699			532		
Approach Delay, s/veh	15.9		14.1			11.8		
Approach LOS	В		В			В		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.0	24.2				33.2		19.3
Change Period (Y+Rc), s	4.4	5.4				5.4		5.1
Max Green Setting (Gmax), s	27.6	44.4				76.4		23.1
Max Q Clear Time (g_c+l1), s	5.4	10.1				5.3		13.2
Green Ext Time (p_c), s	0.3	8.7				9.4		1.1
Intersection Summary								
HCM 2010 Ctrl Delay			13.8					
HCM 2010 LOS			В					

Intersection														
Int Delay, s/veh	2.6													
Movement	EBL	EBT	EBR	V	NBL	WBT	WBR		NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4				4				4			44	
Traffic Vol, veh/h	5	5	18		47	3	31		9	336	18	11	121	19
Future Vol, veh/h	5	5	18		47	3	31		9	336	18	11	121	19
Conflicting Peds, #/hr	0	0	0		0	0	0		0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	(Stop	Stop	Stop		Free	Free	Free	Free	Free	Free
RT Channelized	-		None		-	-	None		-	-	None	-	-	None
Storage Length	-	-	-		-	-	-		-	-	-	-	-	-
Veh in Median Storage, #		0	-		-	0	-		-	0	-	-	0	-
Grade, %	-	0	-		-	0	-		-	0	-	-	0	-
Peak Hour Factor	93	93	93		93	93	93		93	93	93	93	93	93
Heavy Vehicles, %	2	2	2		2	2	2		2	2	2	2	2	2
Mvmt Flow	5	5	19		51	3	33		10	361	19	12	130	20
Major/Minor	Minor2			Mir	nor1			Ma	ajor1			Major2		
Conflicting Flow All	573	564	140		566	564	371		151	0	0	381	0	0
Stage 1	164	164	-		390	390	-		-	-	-	-	-	-
Stage 2	409	400	-		176	174	-		-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	-	7.12	6.52	6.22		4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	(6.12	5.52	-		-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	(6.12	5.52	-		-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.	.518	4.018	3.318	2	.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	430	435	908		435	435	675	•	1430	-	-	1177	-	-
Stage 1	838	762	-		634	608	-		-	-	-	-	-	-
Stage 2	619	602	-		826	755	-		-	-	-	-	-	-
Platoon blocked, %										-	-		-	-
Mov Cap-1 Maneuver	400	426	908		415	426	675	•	1430	-	-	1177	-	-
Mov Cap-2 Maneuver	400	426	-		415	426	-		-	-	-	-	-	-
Stage 1	830	754	-		628	603	-		-	-	-	-	-	-
Stage 2	580	597	-		794	747	-		-	-	-	-	-	-
Approach	EB				WB				NB			SB		
HCM Control Delay, s	11				14				0.2			0.6		
HCM LOS	В				В									
Minor Lane/Major Mvmt	NBL	NBT	NBR I	EBLn1WB	BLn1	SBL	SBT	SBR						
Capacity (veh/h)	1430	-	-	635	487	1177	-	-						
HCM Lane V/C Ratio	0.007	-	-	0.047 0.	.179	0.01	-	-						
HCM Control Delay (s)	7.5	0	-	11	14	8.1	0	-						
HCM Lane LOS	А	А	-	В	В	Α	Α	-						
HCM 95th %tile Q(veh)	0	-	-	0.1	0.6	0	-	-						
,														

HCM 2010 TWSC N:\2660\Analysis\Synchro\Existing AM.syn Synchro 9 Report

	۶	→	•	•	←	•	•	†	~	\	+	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			ર્ન	7		4	
Traffic Volume (veh/h)	2	4	10	400	0	19	29	425	258	7	191	7
Future Volume (veh/h)	2	4	10	400	0	19	29	425	258	7	191	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	2	5	12	465	0	22	34	494	300	8	222	8
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	227	447	695	0	26	97	724	649	78	714	25
Arrive On Green	0.42	0.42	0.42	0.42	0.00	0.42	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	82	543	1071	1341	0	63	58	1768	1583	17	1744	61
Grp Volume(v), veh/h	19	0	0	487	0	0	528	0	300	238	0	0
Grp Sat Flow(s), veh/h/ln	1696	0	0	1404	0	0	1826	0	1583	1822	0	0
Q Serve(g_s), s	0.0	0.0	0.0	15.7	0.0	0.0	1.7	0.0	7.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	16.1	0.0	0.0	12.3	0.0	7.2	4.5	0.0	0.0
Prop In Lane	0.11		0.63	0.95		0.05	0.06		1.00	0.03		0.03
Lane Grp Cap(c), veh/h	784	0	0	721	0	0	822	0	649	818	0	0
V/C Ratio(X)	0.02	0.00	0.00	0.68	0.00	0.00	0.64	0.00	0.46	0.29	0.00	0.00
Avail Cap(c_a), veh/h	1774	0	0	1574	0	0	1721	0	1444	1697	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	13.5	0.0	0.0	12.7	0.0	11.2	10.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	0.0	8.0	0.0	0.5	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	6.3	0.0	0.0	6.4	0.0	3.2	2.4	0.0	0.0
LnGrp Delay(d),s/veh	8.9	0.0	0.0	14.6	0.0	0.0	13.5	0.0	11.7	10.6	0.0	0.0
LnGrp LOS	Α			В			В		В	В		
Approach Vol, veh/h		19			487			828			238	
Approach Delay, s/veh		8.9			14.6			12.9			10.6	
Approach LOS		А			В			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.8		26.2		25.8		26.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		47.5		53.5		47.5		53.5				
Max Q Clear Time (g_c+I1), s		14.3		2.3		6.5		18.1				
Green Ext Time (p_c), s		7.1		3.8		7.3		3.7				
Intersection Summary												
HCM 2010 Ctrl Delay			13.0									
HCM 2010 LOS			В									

	•		_	_	←	•	•	+	*	_	1	1
		-	*	*			,		7	_	*	•
	BL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	ነኘ		7		Φ₽		ী	€î₽			4	7
` ,	39	53	306	6	19	18	395	228	19	17	114	461
` '	39	53	306	6	19	18	395	228	19	17	114	461
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
, · -, ·	.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
,	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
,	363	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
	12	60	348	7	22	20	495	195	22	19	411	336
Adj No. of Lanes	2	1	1	1	2	0	2	1	0	0	1	1
	.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
	391	482	708	100	106	84	668	309	35	22	473	422
	.26	0.26	0.26	0.06	0.06	0.06	0.19	0.19	0.19	0.27	0.27	0.27
	42	1863	1583	1774	1874	1495	3548	1644	186	82	1777	1583
. , ,	12	60	348	7	21	21	495	0	217	430	0	336
Grp Sat Flow(s), veh/h/ln17		1863	1583	1774	1770	1599	1774	0	1830	1859	0	1583
Q Serve(g_s), s 13	3.7	2.1	13.3	0.3	0.9	1.1	11.2	0.0	9.3	18.8	0.0	16.8
	3.7	2.1	13.3	0.3	0.9	1.1	11.2	0.0	9.3	18.8	0.0	16.8
Prop In Lane 1.	.00		1.00	1.00		0.93	1.00		0.10	0.04		1.00
Lane Grp Cap(c), veh/h 8	391	482	708	100	100	90	668	0	344	495	0	422
V/C Ratio(X) 0.	.69	0.12	0.49	0.07	0.21	0.24	0.74	0.00	0.63	0.87	0.00	0.80
Avail Cap(c_a), veh/h 11	75	636	839	354	353	319	1174	0	606	569	0	485
HCM Platoon Ratio 1.	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I) 1.	.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 28	8.5	24.2	16.7	38.1	38.4	38.4	32.6	0.0	31.9	29.8	0.0	29.1
Incr Delay (d2), s/veh	1.9	0.2	1.0	0.3	1.0	1.3	1.6	0.0	1.9	12.2	0.0	8.0
Initial Q Delay(d3),s/veh (0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	1.1	7.9	0.2	0.5	0.5	5.7	0.0	4.9	11.4	0.0	8.3
LnGrp Delay(d),s/veh 30	0.4	24.4	17.7	38.4	39.4	39.8	34.3	0.0	33.8	42.0	0.0	37.1
LnGrp LOS	С	С	В	D	D	D	С		С	D		D
Approach Vol, veh/h		1020			49			712			766	
Approach Delay, s/veh		25.7			39.4			34.1			39.9	
Approach LOS		С			D			С			D	
Timer	1	2	3	4	5	6	7	8				
			3		Ü		1					
Assigned Phs Phs Duration (C. V. Ps) c		27.0		27.4		6		8				
Phs Duration (G+Y+Rc), s		27.0		27.6		9.7		20.9				
Change Period (Y+Rc), s	١ ،	4.9		4.9		4.9		4.9				
Max Green Setting (Gmax)		29.1		26.1		17.0		28.2				
Max Q Clear Time (g_c+l1)	J, S	15.7		20.8		3.1		13.2				
Green Ext Time (p_c), s		6.4		1.9		0.1		2.8				
Intersection Summary			00.									
HCM 2010 Ctrl Delay			32.6									
HCM 2010 LOS			С									
Notes												

•	→	<u></u>	•	•	•	•	†	<u></u>	\	Ţ	4
Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations 3	^			ħβ			सी	7			
Traffic Volume (veh/h) 895	540	0	0	512	363	130	9	358	0	0	0
Future Volume (veh/h) 895	540	0	0	512	363	130	9	358	0	0	0
Number 5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh 0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln 1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h 962	581	0	0	551	390	140	10	385			
Adj No. of Lanes 2	2	0	0	2	0	0	1	1			
Peak Hour Factor 0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, % 2	2	0	0	2	2	2	2	2			
Cap, veh/h 1023	2213	0	0	540	382	399	28	380			
Arrive On Green 0.50	1.00	0.00	0.00	0.27	0.27	0.24	0.24	0.24			
Sat Flow, veh/h 3442	3632	0	0	2075	1403	1661	119	1583			
Grp Volume(v), veh/h 962	581	0	0	492	449	150	0	385			
Grp Sat Flow(s), veh/h/ln1721	1770	0	0	1770	1615	1780	0	1583			
Q Serve(g_s), s 19.8	0.0	0.0	0.0	20.4	20.4	5.2	0.0	18.0			
Cycle Q Clear(g_c), s 19.8	0.0	0.0	0.0	20.4	20.4	5.2	0.0	18.0			
Prop In Lane 1.00		0.00	0.00		0.87	0.93		1.00			
Lane Grp Cap(c), veh/h 1023	2213	0	0	482	440	427	0	380			
V/C Ratio(X) 0.94	0.26	0.00	0.00	1.02	1.02	0.35	0.00	1.01			
Avail Cap(c_a), veh/h 1046	2213	0	0	482	440	427	0	380			
HCM Platoon Ratio 1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I) 0.50	0.50	0.00	0.00	0.83	0.83	1.00	0.00	1.00			
Uniform Delay (d), s/veh 18.3	0.0	0.0	0.0	27.3	27.3	23.7	0.0	28.5			
Incr Delay (d2), s/veh 9.1	0.1	0.0	0.0	42.9	44.7	0.5	0.0	49.5			
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1			
%ile BackOfQ(50%),veh/1n0.4	0.0	0.0	0.0	15.6	14.5	2.6	0.0	19.1			
LnGrp Delay(d),s/veh 27.4	0.1	0.0	0.0	70.2	71.9	24.1	0.0	78.1			
LnGrp LOS C	<u>A</u>			F	F	С		F			
Approach Vol, veh/h	1543			941			535				
Approach Delay, s/veh	17.1			71.0			63.0				
Approach LOS	В			Ε			Е				
Timer 1	2	3	4	5	6	7	8				
Assigned Phs	2		4	5	6						
Phs Duration (G+Y+Rc), s	52.4		22.6	26.5	25.9						
Change Period (Y+Rc), s	5.5		4.6	* 4.2	5.5						
Max Green Setting (Gmax), s	46.9		18.0	* 23	19.9						
Max Q Clear Time (g_c+I1), s	2.0		20.0	21.8	22.4						
Green Ext Time (p_c), s	15.0		0.0	0.5	0.0						
Intersection Summary											
HCM 2010 Ctrl Delay		42.0									
HCM 2010 LOS		D									
Notes											

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations 1 <t< th=""></t<>
Lane Configurations †† * † * † * † *
Traffic Volume (veh/h) 0 1184 77 354 271 0 0 0 260 0 699 Future Volume (veh/h) 0 1184 77 354 271 0 0 0 260 0 699 Number 5 2 12 1 6 16 7 4 14 Initial Q (Qb), veh 0 0 0 0 0 0 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Future Volume (veh/h) 0 1184 77 354 271 0 0 0 260 0 699 Number 5 2 12 1 6 16 7 4 14 Initial Q (Qb), veh 0 0 0 0 0 0 0 0 0 Ped-Bike Adj(A_pbT) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Number 5 2 12 1 6 16 7 4 14 Initial Q (Qb), veh 0<
Initial Q (Qb), veh 0
Ped-Bike Adj(A_pbT) 1.00
Parking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
J , ,
Adj Flow Rate, veh/h 0 1246 81 373 285 0 274 0 0
Adj No. of Lanes 0 2 1 2 2 0 0 1 1
Peak Hour Factor 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
Percent Heavy Veh, % 0 2 2 2 2 0 2 2 2 2
Cap, veh/h 0 1792 802 450 2452 0 332 0 296
Arrive On Green 0.00 0.51 0.51 0.04 0.23 0.00 0.19 0.00 0.00
Sat Flow, veh/h 0 3632 1583 3442 3632 0 1774 0 1583
Grp Volume(v), veh/h 0 1246 81 373 285 0 274 0 0
Grp Sat Flow(s), veh/h/ln 0 1770 1583 1721 1770 0 1774 0 1583
Q Serve(q_s), s 0.0 20.1 2.0 8.1 4.8 0.0 11.1 0.0 0.0
Cycle Q Clear(g_c), s 0.0 20.1 2.0 8.1 4.8 0.0 11.1 0.0 0.0
Prop In Lane 0.00 1.00 0.00 1.00 1.00 1.00 1.00
Lane Grp Cap(c), veh/h 0 1792 802 450 2452 0 332 0 296
V/C Ratio(X) 0.00 0.70 0.10 0.83 0.12 0.00 0.83 0.00 0.00
Avail Cap(c_a), veh/h 0 1792 802 450 2452 0 497 0 443
HCM Platoon Ratio 1.00 1.00 0.33 0.33 1.00 1.00 1.00 1.00
Upstream Filter(I) 0.00 1.00 1.00 0.53 0.53 0.00 1.00 0.00 0.00
Uniform Delay (d), s/veh 0.0 14.1 9.6 35.1 10.7 0.0 29.3 0.0 0.0
Incr Delay (d2), s/veh 0.0 2.3 0.3 6.9 0.1 0.0 7.0 0.0 0.0
Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
%ile BackOfQ(50%),veh/lr0.0 10.3 0.9 4.3 2.4 0.0 6.0 0.0 0.0
LnGrp Delay(d),s/veh 0.0 16.4 9.9 42.0 10.8 0.0 36.3 0.0 0.0
LnGrp LOS B A D B D
Approach Vol, veh/h 1327 658 274
Approach Delay, s/veh 16.0 28.5 36.3
Approach LOS B C D
Timer 1 2 3 4 5 6 7 8
Assigned Phs 1 2 4 6
Phs Duration (G+Y+Rc), \$4.0 43.0 18.0 57.0
Change Period (Y+Rc), \$ 4.2 5.0 4.0 5.0
Max Green Setting (Gmax), 8 31.0 21.0 45.0
Max Q Clear Time (g_c+iff), is 22.1 13.1 6.8
Green Ext Time (p_c), s 0.0 6.4 0.9 16.2
Intersection Summary
HCM 2010 Ctrl Delay 22.1
HCM 2010 LOS C
Notes

	•	•	†	<i>></i>	\	Ţ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	,	7	↑ ↑		,	^	
Traffic Volume (veh/h)	29	185	444	44	279	1004	
Future Volume (veh/h)	29	185	444	44	279	1004	
Number	3	18	2	12	1	6	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	
Adj Flow Rate, veh/h	31	195	467	46	294	1057	
Adj No. of Lanes	1	1	2	0	1	2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	241	543	1254	123	368	2381	
Arrive On Green	0.14	0.14	0.39	0.39	0.21	0.67	
Sat Flow, veh/h	1774	1583	3350	320	1774	3632	
Grp Volume(v), veh/h	31	195	253	260	294	1057	
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1806	1774	1770	
Q Serve(g_s), s	0.8	5.1	5.6	5.7	8.6	7.6	
Cycle Q Clear(g_c), s	0.8	5.1	5.6	5.7	8.6	7.6	
Prop In Lane	1.00	1.00		0.18	1.00		
Lane Grp Cap(c), veh/h	241	543	682	696	368	2381	
V/C Ratio(X)	0.13	0.36	0.37	0.37	0.80	0.44	
Avail Cap(c_a), veh/h	773	1018	1181	1206	1119	4880	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	20.8	13.5	12.1	12.1	20.7	4.2	
Incr Delay (d2), s/veh	0.2	0.4	0.3	0.3	4.0	0.1	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.4	2.2	2.8	2.9	4.6	3.7	
LnGrp Delay(d),s/veh	21.1	13.9	12.4	12.4	24.7	4.3	
LnGrp LOS	C 224	В	BB	В	С	A 1251	
Approach Vol, veh/h	226		513			1351	
Approach Delay, s/veh	14.9		12.4			8.7	
Approach LOS	В		В			А	
Timer	1	2	3	4	5	6	7 8
Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.8	26.5				42.3	12.5
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1
Max Green Setting (Gmax), s	34.6	36.6				75.6	23.9
Max Q Clear Time (g_c+l1), s	10.6	7.7				9.6	7.1
Green Ext Time (p_c), s	0.9	13.5				17.3	0.6
Intersection Summary							
HCM 2010 Ctrl Delay			10.3				
HCM 2010 LOS			В				

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			44			4	
Traffic Vol, veh/h	7	2	16	58	2	33	12	261	44	24	224	15
Future Vol, veh/h	7	2	16	58	2	33	12	261	44	24	224	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	·-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	! _	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	2	17	61	2	35	13	275	46	25	236	16
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	636	640	244	627	625	298	252	0	0	321	0	0
Stage 1	294	294	-	323	323	-	-	-	-	-	-	-
Stage 2	342	346	-	304	302	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	391	393	795	396	401	741	1313	-	-	1239	-	-
Stage 1	714	670	-	689	650	-	-	-	-	-	-	-
Stage 2	673	635	-	705	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	361	379	795	375	387	741	1313	-	-	1239	-	-
Mov Cap-2 Maneuver	361	379	-	375	387	-	-	-	-	-	-	-
Stage 1	705	654	-	681	642	-	-	-	-	-	-	-
Stage 2	632	627	-	671	648	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.8			15.1			0.3			0.7		
HCM LOS	В			С								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1313	-	-	558 455	1239	-	-					
HCM Lane V/C Ratio	0.01	-	-	0.047 0.215	0.02	-	-					
HCM Control Delay (s)	7.8	0	-	11.8 15.1	8	0	-					
HCM Lane LOS	А	Α	-	В С	Α	Α	-					
HCM 95th %tile Q(veh)	0	-	-	0.1 0.8	0.1	-	-					

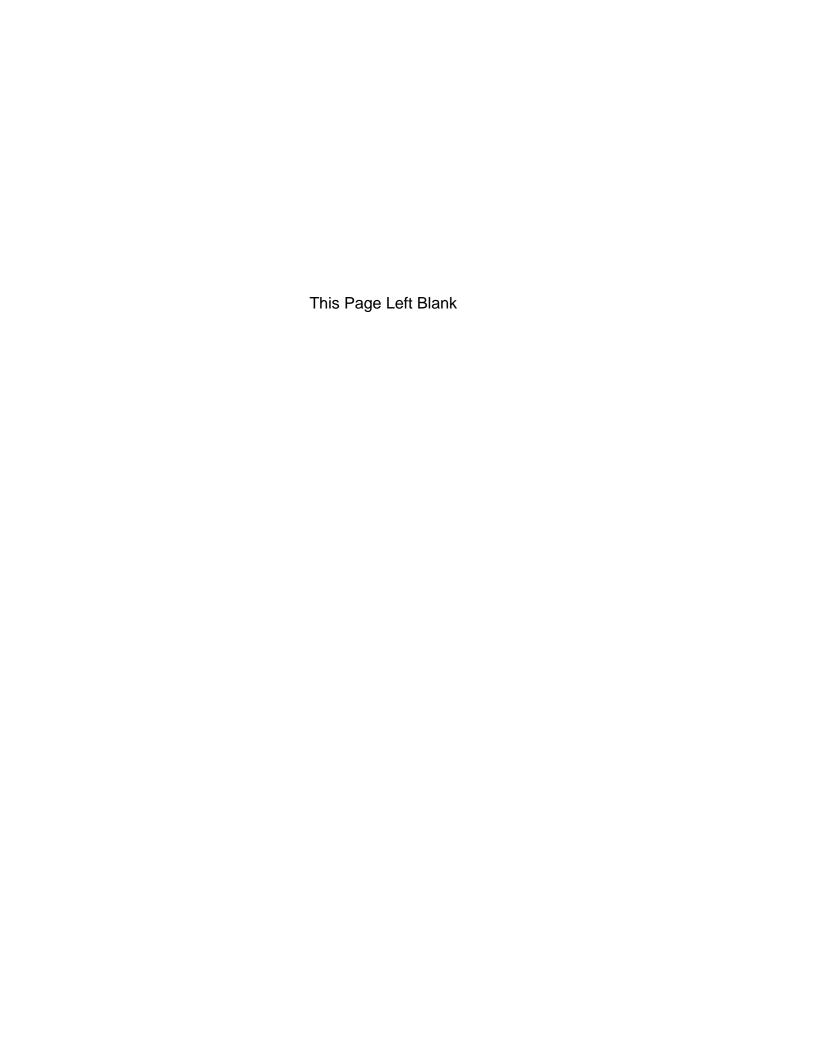
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4	7		4	
Traffic Volume (veh/h)	13	3	32	242	2	24	38	336	280	19	297	12
Future Volume (veh/h)	13	3	32	242	2	24	38	336	280	19	297	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	14	3	34	255	2	25	40	354	295	20	313	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	86	317	573	13	36	159	740	684	135	730	29
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	250	297	1094	1245	46	126	86	1711	1583	39	1689	67
Grp Volume(v), veh/h	51	0	0	282	0	0	394	0	295	346	0	0
Grp Sat Flow(s),veh/h/ln	1640	0	0	1417	0	0	1796	0	1583	1796	0	0
Q Serve(g_s), s	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	5.6	0.0	0.0	4.9	0.0	4.2	4.2	0.0	0.0
Prop In Lane	0.27		0.67	0.90		0.09	0.10		1.00	0.06		0.04
Lane Grp Cap(c), veh/h	617	0	0	622	0	0	899	0	684	894	0	0
V/C Ratio(X)	0.08	0.00	0.00	0.45	0.00	0.00	0.44	0.00	0.43	0.39	0.00	0.00
Avail Cap(c_a), veh/h	2658	0	0	2465	0	0	3271	0	2859	3247	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.4	0.0	0.0	10.1	0.0	0.0	6.6	0.0	6.4	6.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.4	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	2.3	0.0	0.0	2.6	0.0	1.9	2.2	0.0	0.0
LnGrp Delay(d),s/veh	8.5	0.0	0.0	10.6	0.0	0.0	7.0	0.0	6.8	6.7	0.0	0.0
LnGrp LOS	Α			В			Α		Α	Α		
Approach Vol, veh/h		51			282			689			346	
Approach Delay, s/veh		8.5			10.6			6.9			6.7	
Approach LOS		А			В			А			А	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.5		13.9		18.5		13.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		58.5		52.5		58.5		52.5				
Max Q Clear Time (g_c+I1), s		6.9		2.7		6.2		7.6				
Green Ext Time (p_c), s		7.1		2.3		7.1		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			7.7									
HCM 2010 LOS			А									

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Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations 🏋	↑	- 7		∱ ∱		- ሽ	414			4	- 7
Traffic Volume (veh/h) 502	54	410	16	38	20	421	181	17	25	185	385
Future Volume (veh/h) 502	54	410	16	38	20	421	181	17	25	185	385
Number 5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h 528	57	432	17	40	21	443	191	18	26	333	313
Adj No. of Lanes 2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, % 2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h 936	507	707	127	165	81	620	293	28	32	411	378
Arrive On Green 0.27	0.27	0.27	0.07	0.07	0.07	0.17	0.17	0.17	0.24	0.24	0.24
Sat Flow, veh/h 3442	1863	1583	1774	2309	1125	3548	1677	158	134	1722	1583
Grp Volume(v), veh/h 528	57	432	17	30	31	443	0	209	359	0	313
Grp Sat Flow(s),veh/h/ln1721	1863	1583	1774	1770	1664	1774	0	1835	1856	0	1583
Q Serve(g_s), s 10.7	1.9	16.8	0.7	1.3	1.4	9.5	0.0	8.6	14.7	0.0	15.1
Cycle Q Clear(g_c), s 10.7	1.9	16.8	0.7	1.3	1.4	9.5	0.0	8.6	14.7	0.0	15.1
Prop In Lane 1.00		1.00	1.00	4	0.68	1.00		0.09	0.07		1.00
Lane Grp Cap(c), veh/h 936	507	707	127	127	119	620	0	321	443	0	378
V/C Ratio(X) 0.56	0.11	0.61	0.13	0.24	0.26	0.71	0.00	0.65	0.81	0.00	0.83
Avail Cap(c_a), veh/h 1270	687	861	400	399	375	1200	0	620	577	0	492
HCM Platoon Ratio 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I) 1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 25.3	22.1	17.0	35.1	35.4	35.5	31.4	0.0	31.0	29.0	0.0	29.2
Incr Delay (d2), s/veh 0.5	0.1	0.9	0.5	0.9	1.1	1.5	0.0	2.2	6.5	0.0	8.8
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr5.1	1.0	9.7	0.4	0.7	0.7	4.8	0.0	4.6	8.4	0.0	7.5
LnGrp Delay(d),s/veh 25.8	22.2	17.9	35.6	36.3	36.6	33.0	0.0	33.3	35.5	0.0	38.0
LnGrp LOS C	C	В	D	D	D	С	(50	С	D	/70	D
Approach Vol, veh/h	1017			78			652			672	
Approach LOS	22.2			36.3			33.1			36.7	
Approach LOS	С			D			С			D	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8				
Phs Duration (G+Y+Rc), s	26.9		24.2		10.7		19.0				
Change Period (Y+Rc), s	4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s	29.8		25.1		18.2		27.3				
Max Q Clear Time (g_c+l1), s			17.1		3.4		11.5				
Green Ext Time (p_c), s	3.2		2.1		0.2		2.6				
Intersection Summary											
HCM 2010 Ctrl Delay		29.6									
HCM 2010 CIT Delay		29.0 C									
		C									
Notes											

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riaffic Volume (veh/h) 800 463 0 0 0 441 403 239 0 503 0 0 0 0 Ultimore volume (veh/h) 800 463 0 0 441 403 239 0 503 0 0 0 Ultimore volume (veh/h) 800 463 0 0 441 403 239 0 503 0 0 0 Ultimore volume (veh/h) 800 463 0 0 441 403 239 0 503 0 0 0 Ultimore volume (veh/h) 800 463 0 0 441 403 239 0 503 0 0 0 Ultimore volume (veh/h) 800 463 0 0 0 441 403 239 0 503 0 0 0 Ultimore volume (veh/h) 800 463 0 0 0 441 403 239 0 503 0 0 0 Ultimore volume (veh/h) 800 400 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				EBR	WBL		WBR	NBL			SBL	SBT	SBR	
uture Volume (veh/h) 800 463 0 0 441 403 239 0 50 0 0 Jed-Bike Adj(A_pbT) 1.00 1 0 0 0 1 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0									- €					
Jumber 5 2 12 1 1 6 16 7 4 14 Initial O (Ob), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0	0				0		0	0		
nitial Q (Ob), veh					0	441		239	0		0	0	0	
Ped-Bikk Adj(A pbT) 1.00			2		1	6	16		4	14				
Parking Bus, Adj	· /·		0			0			0					
dig Sal Flow, veh/hn/ln 1863 1863 0 0 1863 1900 1900 1863 1863 did ydif Flow Rate, veh/h 482 487 0 0 464 424 252 0 529 did No. of Lanes 2 2 0 0 2 0 0 1 1 ceach Hour Factor 0.95		0		1.00	1.00			1.00		1.00				
Adj Flow Rate, veh/h	Parking Bus, Adj 1.0	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
vol jNo. of Lanes 2 2 0 0 2 0 0 1 1 reak Hour Factor 0.95	Adj Sat Flow, veh/h/ln 186	3 1	1863	0	0	1863	1900	1900	1863					
Peak Hour Factor 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95	Adj Flow Rate, veh/h 84	2	487	0	0	464	424	252	0	529				
Percent Heavy Veh, % 2 2 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
Cap, veh/h 915 2177 0 0 0 543 486 504 0 450 wrive On Green 0.44 1.00 0.00 0.00 0.31 0.28 0.00 0.28 star Flow, veh/h 3442 3632 0 0 1863 1583 1774 0 1583 Stp Volume(v), veh/h 842 487 0 0 464 424 252 0 529 Stp Sat Flow(s), veh/h/ln1721 1770 0 0 1770 1583 1774 0 1583 Szerve(g_s), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Prop In Lane 1.00 0.00 0.00 1.00 1.00 1.00 1.00 ane Grp Cap(c), veh/h 915 2177 0 0 543 486 504 0 450 Wail Cap(c_a), veh/h 1026 2177 0 0 543 486 504 0 45	Peak Hour Factor 0.9	5	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
Varive On Green 0.44 1.00 0.00 0.00 0.31 0.31 0.31 0.28 0.00 0.28 ata Flow, veh/h 3442 3632 0 0 1863 1583 1774 0 1583 5779 Volume(v), veh/h 842 487 0 0 464 424 252 0 529 579 Staf Flow(s), veh/hrl/hrl721 1770 0 0 1770 1583 1774 0 1583 0 529 579 Flow(s), veh/hrl/hrl721 1770 0 0 1770 1583 1774 0 1583 0 529 579 Flow(s), veh/hrl/hrl721 1770 0 0 1770 1583 1774 0 1583 0 529 579 Flow(s), veh/hrl/hrl721 1770 0 0 1770 1583 1774 0 1583 0 529 579 Flow(s), veh/hrl/hrl721 1770 0 0 0.00 0.00 0.00 0.00 0.00 0.00			2	0	0	2	2	2	2	2				
Sat Flow, veh/h 3442 3632 0 0 1863 1583 1774 0 1583 Sipy Volume(v), veh/h 842 487 0 0 464 424 252 0 529 Gry Sat Flow(s), veh/h/ln1721 1770 0 0 1770 1583 Serve(g_S), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Sycle Q Clear(g_c), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Sycle Q Clear(g_c), s 23.0 0.0 0.0 0.0 1.00 1.00 1.00 1.00 Group I ane 1.00 0.00 0.00 1.00 1.00 1.00 1.00 Group I ane 2.00 0.00 0.00 0.85 0.87 0.50 0.00 1.18 Wail Cap(c_a), veh/h 102 2177 0 0 543 486 504 0 450 Group I and 1.67 1.67 1.00 1.00 1.00 1.00 1.00 Juliform Delay (d), s/veh 26.8 0.0 0.0 0.0 0.85 0.87 0.50 0.00 1.00 Juliform Delay (d), s/veh 26.8 0.0 0.0 0.0 0.3 25 32.8 29.9 0.0 35.8 Incr Delay (d2), s/veh 1.4 0.0 0.0 0.0 0.3 32.5 32.8 29.9 0.0 35.8 Incr Delay (d2), s/veh 1.4 0.0 0.0 0.0 0.0 1.4.1 13.3 5.9 0.0 33.9 InGrp Delay(d), s/veh 28.2 0.0 0.0 0.0 0.0 0.46.4 49.7 30.6 0.0 136.3 InGrp LOS C A D D C F Approach Vol, veh/h 17.9 47.9 102.2 Sysigned Phs 2 47.9 102.2 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Abax Green Settling (Gmax), s 61.5 28.4 *30 27.5 Abax Green Settling (Gmax), s 61.5 28.4 *30 27.5 Abax Green Settling (Gmax), s 61.5 28.4 *30 27.5 Abax Green Settling (g_cat), s 13.6 0.0 1.6 0.1 Intersection Summary ICM 2010 CIrl Delay 48.7 ICM 2010 CIrl Delay 48.7 ICM 2010 CIrl Delay	Cap, veh/h 91	5 2	2177	0	0	543	486	504	0	450				
Sirp Volume(v), veh/h 842 487 0 0 464 424 252 0 529 Sirp Sat Flow(s), veh/h/ln1721 1770 0 0 1770 1583 1774 0 1583 2 Serve(g_s), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Sycle Q Clear(g_c), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Sycle Q Clear(g_c), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Sycle Q Clear(g_c), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Sycle Q Clear(g_c), s 23.0 0.0 0.0 0.0 0.0 1.00 1.00 1.00 1.00		4	1.00	0.00	0.00	0.31	0.31	0.28	0.00	0.28				
Srp Volume(v), veh/h 842 487 0 0 464 424 252 0 529 srp Sat Flow(s), veh/h/ln1721 1770 0 0 1770 1583 1774 0 1583 2 Serve(g_s), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 2 Serve(g_s), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 2 Serve(g_s), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 2 Serve(g_s), s 23.0 0.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 2 Serve(g_s), s 23.0 0.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 2 Serve(g_s), s 23.0 0.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 2 Serve(g_s), s 23.0 0.0 0.0 0.0 0.0 1.00 1.00 1.00 1.00	Sat Flow, veh/h 344	2 3	3632	0	0	1863	1583	1774	0	1583				
Gry Sat Flow(s), veh/h/In1721 1770 0 0 1770 1583 1774 0 1583 2 Serve(g_s), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 Cycle Q Colear(g_c), s 23.0 0.0 0.0 0.00 24.6 25.3 11.9 0.0 28.4 Prop In Lane 1.00 0.00 0.00 1.00 1.00 1.00 1.00 Arc Roll (Ca), veh/h 915 2177 0 0 543 486 504 0 450 V/C Ratio(X) 0.92 0.22 0.00 0.00 0.85 0.87 0.50 0.00 1.18 Wail Cap(c_a), veh/h 1026 2177 0 0 543 486 504 0 450 ICM Platon Ratio 1.67 1.67 1.00	Grp Volume(v), veh/h 84	2	487	0	0	464	424	252	0	529				
2 Serve(g_s), s														
Cycle Q Clear(g_c), s 23.0 0.0 0.0 0.0 24.6 25.3 11.9 0.0 28.4 close														
Trop In Lane	10- /													
arine Grp Cap(c), veh/h 915 2177 0 0 543 486 504 0 450 ///C Ratio(X) 0.92 0.22 0.00 0.00 0.85 0.87 0.50 0.00 1.18 ///C Ratio(X) 0.92 0.22 0.00 0.00 0.85 0.87 0.50 0.00 1.18 ///C Ratio(X) 0.92 0.22 0.00 0.00 0.85 0.87 0.50 0.00 1.18 ///C Ratio(X) 0.94 0.00 0.00 0.85 0.87 0.50 0.00 1.18 ///C Ratio(X) 0.99 0.09 0.00 0.00 0.00 0.00 0.00 0.0	, , ,													
//C Ratio(X)			2177			543			0					
Avail Cap(c_a), veh/h 1026 2177 0 0 543 486 504 0 450 dCM Platoon Ratio 1.67 1.67 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
## Action Ratio 1.67 1.67 1.00														
Upstream Filter(I) 0.09 0.09 0.00 0.00 0.86 0.86 1.00 0.00 1.00 Uniform Delay (d), s/veh 26.8 0.0 0.0 0.0 32.5 32.8 29.9 0.0 35.8 ncr Delay (d2), s/veh 1.4 0.0 0.0 0.0 13.8 16.9 0.8 0.0 100.5 nitial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 itial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 itial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 itial Q Delay(d3),s/veh 28.2 0.0 0.0 0.0 0.0 14.1 13.3 5.9 0.0 33.9 inGrp Delay(d),s/veh 28.2 0.0 0.0 0.0 46.4 49.7 30.6 0.0 136.3 inGrp LOS C A D D D C F inter 1 32 3 4 5 6 7 8 inter 1 2 3 4 5 6 inter 1 5 6 inter 1 5 6 inter 1 6 7 8 inter 1 7 8 inter 1 7 8 inter 1 8 9														
Iniform Delay (d), s/veh 26.8														
ncr Delay (d2), s/veh	1 1/													
Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	3													
6file BackOfÓ(50%),veh/10.9 0.0 0.0 0.0 14.1 13.3 5.9 0.0 33.9 cnGrp Delay(d),s/veh 28.2 0.0 0.0 0.0 46.4 49.7 30.6 0.0 136.3 cnGrp LOS C A D D C F Approach Vol, veh/h 1329 888 781 Approach Delay, s/veh 17.9 47.9 102.2 Approach LOS B D F Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Assigned Phs 2 4 5 6 Assigned Phs 2 4 5 6 Assigned Price (G+Y+Rc), s 67.0 33.0 30.8 36.2 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Alax Green Setting (Gmax), s 61.5 28.4 *30 27.5 Alax Q Clear Time (g_c+I1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary ACM 2010 Ctrl Delay 48.7 ACM 2010 LOS D														
InGrp Delay(d),s/veh 28.2 0.0 0.0 0.0 46.4 49.7 30.6 0.0 136.3 InGrp LOS C A D D D C F Improach Vol, veh/h 1329 888 781 Improach Delay, s/veh 17.9 47.9 102.2 Improach LOS B D F Immer 1 2 3 4 5 6 7 8 Insigned Phs 2 4 5 6 Insigned Phs 2 5 5 Insigned Phs 3 5 6 Insigned Phs 3 5 6 Insigned Phs 4 5 6 Ins														
InGrp LOS C A D D C F Improach Vol, veh/h 1329 888 781 Improach Delay, s/veh 17.9 47.9 102.2 Improach LOS B D F Immer 1 2 3 4 5 6 7 8 Insigned Phs 2 4 5 6 Insigned Phs 2 4 5 6 Insigned Phs Change Period (Y+Rc), s 67.0 33.0 30.8 36.2 India Green Setting (Gmax), s 61.5 28.4 * 30 27.5 Imax Green Setting (Gmax), s 61.5 28.4 * 30 27.5 Imax Q Clear Time (g_c+I1), s 2.0 30.4 25.0 27.3 Intersection Summary ICM 2010 Ctrl Delay 48.7 ICM 2010 LOS D	• ,													
Approach Vol, veh/h Approach Delay, s/veh Approach LOS B D F Imer 1 2 3 4 5 6 Assigned Phs Assigned Phs Change Period (Y+Rc), s 67.0 Alax Green Setting (Gmax), s 61.5 Alax Q Clear Time (g_c+I1), s 2.0 Alax Q Clear Time (p_c), s 13.6 Chen 2010 Ctrl Delay ARA O Clear Under the Arabical Setting (Arabical Setting Control of the Arabical Setting Contr	1 3 1 7			0.0	0.0				0.0					
Approach Delay, s/veh 17.9 47.9 102.2 Approach LOS B D F Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 67.0 33.0 30.8 36.2 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 61.5 28.4 * 30 27.5 Max Q Clear Time (g_c+l1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	<u> </u>	_							701					
Approach LOS B D F Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 67.0 33.0 30.8 36.2 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 61.5 28.4 * 30 27.5 Max Q Clear Time (g_c+I1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 LOS D														
Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 67.0 33.0 30.8 36.2 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Max Green Setting (Gmax), s 61.5 28.4 *30 27.5 Max Q Clear Time (g_c+l1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D														
Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 67.0 33.0 30.8 36.2 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Max Green Setting (Gmax), s 61.5 28.4 *30 27.5 Max Q Clear Time (g_c+l1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Арргиасті 103		Ь			D								
Phs Duration (G+Y+Rc), s 67.0 33.0 30.8 36.2 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 61.5 28.4 * 30 27.5 Max Q Clear Time (g_c+I1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Timer	1		3	4			7	8					
Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 61.5 28.4 * 30 27.5 Max Q Clear Time (g_c+I1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Assigned Phs				4									
Max Green Setting (Gmax), s 61.5 28.4 * 30 27.5 Max Q Clear Time (g_c+l1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Phs Duration (G+Y+Rc), s				33.0	30.8	36.2							
Max Q Clear Time (g_c+I1), s 2.0 30.4 25.0 27.3 Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Change Period (Y+Rc), s		5.5		4.6	* 4.2	5.5							
Green Ext Time (p_c), s 13.6 0.0 1.6 0.1 Intersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Max Green Setting (Gmax),	S	61.5		28.4	* 30	27.5							
htersection Summary HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Max Q Clear Time (g_c+l1),	S	2.0		30.4	25.0	27.3							
HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Green Ext Time (p_c), s		13.6		0.0	1.6	0.1							
HCM 2010 Ctrl Delay 48.7 HCM 2010 LOS D	Intersection Summary													
ICM 2010 LOS D				48 7										
latao	HCM 2010 LOS													
voies	Notes													

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	-	*	₩			7	ı	7	*	*	₹
Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	^	7	77	^						सी	7
Traffic Volume (veh/h) 0	1068	222	216	414	0	0	0	0	201	7	1000
Future Volume (veh/h) 0	1068	222	216	414	0	0	0	0	201	7	1000
Number 5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h 0	1136	236	230	440	0				214	7	0
Adj No. of Lanes 0	2	1	2	2	0				0	1	1
Peak Hour Factor 0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, % 0	2	2	2	2	0				2	2	2
Cap, veh/h 0	2251	1007	268	2676	0				265	9	244
Arrive On Green 0.00	0.64	0.64	0.03	0.25	0.00				0.15	0.15	0.00
Sat Flow, veh/h 0	3632	1583	3442	3632	0				1720	56	1583
Grp Volume(v), veh/h 0	1136	236	230	440	0				221	0	0
Grp Sat Flow(s), veh/h/ln 0	1770	1583	1721	1770	0				1777	0	1583
Q Serve(g_s), s 0.0	17.2	6.4	6.7	9.7	0.0				12.0	0.0	0.0
Cycle Q Clear(g_c), s 0.0	17.2	6.4	6.7	9.7	0.0				12.0	0.0	0.0
Prop In Lane 0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h 0	2251	1007	268	2676	0				274	0	244
V/C Ratio(X) 0.00	0.50	0.23	0.86	0.16	0.00				0.81	0.00	0.00
Avail Cap(c_a), veh/h 0	2251	1007	268	2676	0				906	0	807
HCM Platoon Ratio 1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I) 0.00	1.00	1.00	0.68	0.68	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh 0.0	9.8	7.8	48.2	12.8	0.0				40.9	0.0	0.0
Incr Delay (d2), s/veh 0.0	0.8	0.5	16.7	0.1	0.0				5.6	0.0	0.0
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	8.6	2.9	3.8	4.8	0.0				6.3	0.0	0.0
LnGrp Delay(d),s/veh 0.0	10.6	8.3	64.8	12.9	0.0				46.5	0.0	0.0
LnGrp LOS	В	Α	Е	В					D		
Approach Vol, veh/h	1372			670						221	
Approach Delay, s/veh	10.2			30.7						46.5	
Approach LOS	В			С						D	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs 1	2		4		6						
Phs Duration (G+Y+Rc), \$2.0	68.6		19.4		80.6						
Change Period (Y+Rc), \$ 4.2	5.0		4.0		5.0						
Max Green Setting (Gmax), 8	28.0		51.0		40.0						
Max Q Clear Time (g_c+l18,75	19.2		14.0		11.7						
Green Ext Time (p_c), s 0.0	6.6		1.4		15.1						
	3.0										
Intersection Summary		10.0									
HCM 2010 Ctrl Delay		19.8									
HCM 2010 LOS		В									
Notes											

	A D
	APPENDIX D
	Existing + Project Intersection Analysis Worksheets
LINSCOTT, LAW & GREENSPAN, engineers	LLG Ref. 3-16-2660 Morena Apartment Homes



	<u> </u>	•	<u>†</u>	<u></u>	<u> </u>	1		
Movement	₩BL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	ሻ	7	†	NDIX	N N	↑ ↑		
Traffic Volume (veh/h)	23	355	593	30	104	370		
Future Volume (veh/h)	23	355	593	30	104	370		
Number	3	18	2	12	1	6		
nitial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	U	1.00	1.00	U		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	26	399	666	34	117	416		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	485	572	1224	62	156	1870		
Arrive On Green	0.27	0.27	0.36	0.36	0.09	0.53		
Sat Flow, veh/h	1774	1583	3520	175	1774	3632		
Grp Volume(v), veh/h	26	399	344	356	117	416		
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1832	1774	1770		
2 Serve(g_s), s	0.6	11.4	8.2	8.2	3.4	3.3		
Cycle Q Clear(g_c), s	0.6	11.4	8.2	8.2	3.4	3.3		
Prop In Lane	1.00	1.00	0.2	0.10	1.00	0.0		
_ane Grp Cap(c), veh/h	485	572	632	654	156	1870		
//C Ratio(X)	0.05	0.70	0.54	0.54	0.75	0.22		
Avail Cap(c_a), veh/h	774	830	1483	1535	924	5104		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Jpstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Jniform Delay (d), s/veh	14.2	14.4	13.6	13.6	23.6	6.7		
ncr Delay (d2), s/veh	0.0	1.5	0.7	0.7	6.9	0.1		
nitial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.3	5.2	4.1	4.3	2.0	1.6		
_nGrp Delay(d),s/veh	14.2	16.0	14.3	14.3	30.5	6.7		
inGrp LOS	В	В	В	В	С	A		
Approach Vol, veh/h	425		700			533		
Approach Delay, s/veh	15.9		14.3			12.0		
Approach LOS	В		В			В		
Fimer	1	2	3	4	5	6	7 8	
	1		3	4	3			
Assigned Phs Phys Duration (C V Ps) s	1	2				6	10.4	
Phs Duration (G+Y+Rc), s	9.1	24.3				33.4	19.6	
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1	
Max Green Setting (Gmax), s	27.6	44.4				76.4	23.1	
Max Q Clear Time (g_c+l1), s	5.4	10.2				5.3	13.4	
Green Ext Time (p_c), s	0.3	8.7				9.4	1.1	
ntersection Summary			14.0					
HCM 2010 Ctrl Delay			14.0					
HCM 2010 LOS			В					

Intersection														
Int Delay, s/veh	3.7													
Movement	EBL	EBT	EBR		WBL	WBT	WBR		NBL	NBT	NBR	SBL	. SBT	SBR
Lane Configurations		44				4				4			4	
Traffic Vol, veh/h	5	5	18		88	3	37		9	339	24	12		19
Future Vol, veh/h	5	5	18		88	3	37		9	339	24	12	121	19
Conflicting Peds, #/hr	0	0	0		0	0	0		0	0	0	(0	0
Sign Control	Stop	Stop	Stop		Stop	Stop	Stop		Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None		-		None		-	-	None		-	None
Storage Length	-	-	-		-	-	-		-	-	-		-	-
Veh in Median Storage, #	‡ -	0	-		-	0	-		-	0	-		. 0	-
Grade, %	-	0	-		-	0	-		-	0	-		. 0	-
Peak Hour Factor	93	93	93		93	93	93		93	93	93	93	93	93
Heavy Vehicles, %	2	2	2		2	2	2		2	2	2	2	. 2	2
Mvmt Flow	5	5	19		95	3	40		10	365	26	13	130	20
Major/Minor	Minor2			N	/linor1			M	ajor1			Major2		
Conflicting Flow All	584	576	140		575	573	377		151	0	0	390	0	0
Stage 1	166	166	-		397	397	-		-	-	-		-	-
Stage 2	418	410	-		178	176	-		-	-	-			-
Critical Hdwy	7.12	6.52	6.22		7.12	6.52	6.22		4.12	-	-	4.12		-
Critical Hdwy Stg 1	6.12	5.52	-		6.12	5.52	-		-	-	-		-	-
Critical Hdwy Stg 2	6.12	5.52	-		6.12	5.52	-		-	-	-		-	-
Follow-up Hdwy	3.518	4.018	3.318		3.518	4.018	3.318	2	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	423	428	908		429	430	670		1430	-	-	1169	-	-
Stage 1	836	761	-		629	603	-		-	-	-		-	-
Stage 2	612	595	-		824	753	-		-	-	-			-
Platoon blocked, %										-	-		-	-
Mov Cap-1 Maneuver	389	419	908		409	421	670		1430	-	-	1169	-	-
Mov Cap-2 Maneuver	389	419	-		409	421	-		-	-	-			-
Stage 1	828	752	-		623	598	-		-	-	-		-	-
Stage 2	567	590	-		791	744	-		-	-	-		-	-
Approach	EB				WB				NB			SE		
HCM Control Delay, s	11				16.1				0.2			0.6)	
HCM LOS	В				С									
Minor Lane/Major Mvmt	NBL	NBT	NBR I	EBLn1W	/BLn1	SBL	SBT	SBR						
Capacity (veh/h)	1430	-	-	400	461	1169	-	-						
HCM Lane V/C Ratio	0.007	-	_	0.048			-	-						
HCM Control Delay (s)	7.5	0	-	11	16.1	8.1	0	-						
HCM Lane LOS	A	A	-	В	С	A	A	-						
HCM 95th %tile Q(veh)														

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			ર્ન	7		4	
Traffic Volume (veh/h)	2	4	10	400	0	19	29	434	258	9	230	7
Future Volume (veh/h)	2	4	10	400	0	19	29	434	258	9	230	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	2	5	12	465	0	22	34	505	300	10	267	8
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	225	445	687	0	26	95	738	662	77	731	21
Arrive On Green	0.42	0.42	0.42	0.42	0.00	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	83	543	1073	1341	0	63	57	1766	1583	19	1749	51
Grp Volume(v), veh/h	19	0	0	487	0	0	539	0	300	285	0	0
Grp Sat Flow(s), veh/h/ln	1699	0	0	1404	0	0	1823	0	1583	1819	0	0
Q Serve(g_s), s	0.0	0.0	0.0	16.3	0.0	0.0	1.8	0.0	7.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	16.7	0.0	0.0	12.9	0.0	7.3	5.7	0.0	0.0
Prop In Lane	0.11		0.63	0.95		0.05	0.06		1.00	0.04		0.03
Lane Grp Cap(c), veh/h	779	0	0	713	0	0	833	0	662	830	0	0
V/C Ratio(X)	0.02	0.00	0.00	0.68	0.00	0.00	0.65	0.00	0.45	0.34	0.00	0.00
Avail Cap(c_a), veh/h	1716	0	0	1521	0	0	1660	0	1395	1639	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.3	0.0	0.0	14.1	0.0	0.0	12.9	0.0	11.3	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.9	0.0	0.5	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	6.6	0.0	0.0	6.6	0.0	3.3	2.9	0.0	0.0
LnGrp Delay(d),s/veh	9.3	0.0	0.0	15.2	0.0	0.0	13.7	0.0	11.7	11.0	0.0	0.0
LnGrp LOS	Α			В			В		В	В		
Approach Vol, veh/h		19			487			839			285	
Approach Delay, s/veh		9.3			15.2			13.0			11.0	
Approach LOS		А			В			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.0		26.9		27.0		26.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		47.5		53.5		47.5		53.5				
Max Q Clear Time (g_c+I1), s		14.9		2.4		7.7		18.7				
Green Ext Time (p_c), s		7.6		3.8		7.9		3.7				
Intersection Summary												
HCM 2010 Ctrl Delay			13.3									
HCM 2010 LOS			В									

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,	•	→	•	\checkmark	•	•	1	Ť		-	¥	4
Movement EE	BL.	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations 3	iħ.	†	7	ሻ	↑ ↑		ሻ	414			4	7
	47	53	306	6	19	18	395	229	19	17	117	497
Future Volume (veh/h) 54	47	53	306	6	19	18	395	229	19	17	117	497
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT) 1.0	00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj 1.0		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 186		1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
	22	60	348	7	22	20	496	194	22	19	443	358
Adj No. of Lanes	2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.8		0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
	87	480	703	99	104	83	662	307	35	21	494	439
Arrive On Green 0.2		0.26	0.26	0.06	0.06	0.06	0.19	0.19	0.19	0.28	0.28	0.28
Sat Flow, veh/h 344		1863	1583	1774	1874	1495	3548	1643	186	76	1782	1583
	22	60	348	7	21	21	496	0	216	462	0	358
Grp Sat Flow(s), veh/h/ln172		1863	1583	1774	1770	1599	1774	0	1830	1859	0	1583
Q Serve(g_s), s 14		2.2	13.8	0.3	1.0	1.1	11.6	0.0	9.6	21.0	0.0	18.6
Cycle Q Clear(g_c), s 14		2.2	13.8	0.3	1.0	1.1	11.6	0.0	9.6	21.0	0.0	18.6
Prop In Lane 1.0		۷.۷	1.00	1.00	1.0	0.93	1.00	0.0	0.10	0.04	0.0	1.00
Lane Grp Cap(c), veh/h 88		480	703	99	98	89	662	0	342	515	0	439
V/C Ratio(X) 0.7		0.13	0.49	0.07	0.21	0.24	0.75	0.00	0.63	0.90	0.00	0.82
Avail Cap(c_a), veh/h 114		617	820	343	342	309	1139	0.00	587	552	0.00	470
HCM Platoon Ratio 1.0		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I) 1.0		1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 29		25.0	17.4	39.3	39.6	39.7	33.8	0.00	32.9	30.5	0.00	29.7
	2.2	0.2	17.4	0.3	1.0	1.4	1.7	0.0	1.9	16.7	0.0	10.1
J 1 /:	2.2).0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln7		1.1	8.2	0.0	0.0	0.5	5.8	0.0	5.0	13.2	0.0	9.3
LnGrp Delay(d),s/veh 31		25.2	18.4	39.6	40.7	41.1	35.5	0.0	34.9	47.2	0.0	39.8
1 3,7	.o C	25.2 C	18.4 B	39.0 D	40.7 D	41.1 D	33.3 D	0.0	34.9 C	47.2 D	0.0	39.8 D
	U		D	U	49	U	U	710	C	U	020	U
Approach Vol, veh/h		1030						712			820	
Approach LOS		26.9 C			40.7			35.3			44.0	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.5		29.2		9.8		21.3				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax),	, S	29.1		26.1		17.0		28.2				
Max Q Clear Time (g_c+I1)		16.4		23.0		3.1		13.6				
Green Ext Time (p_c), s		6.2		1.3		0.1		2.8				
Intersection Summary												
			240									
HCM 2010 Ctrl Delay			34.8									
HCM 2010 LOS			С									
Notes												

	•	→	`*	√	←	•	•	†	<u> </u>	/	 	✓	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻሻ	^			∱ ∱			4	7				
Traffic Volume (veh/h)	895	545	0	0	530	381	130	9	361	0	0	0	
Future Volume (veh/h)	895	545	0	0	530	381	130	9	361	0	0	0	
Number	5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0				
` '	1.00		1.00	1.00		1.00	1.00		1.00				
J, -, ,	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
J . J	1863	1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h	962	586	0	0	570	410	140	10	388				
Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93				
Percent Heavy Veh, %	2	2	0.75	0.73	2	2	2	2	2				
	1023	2213	0	0	536	385	399	28	380				
1 1	0.50	1.00	0.00	0.00	0.27	0.27	0.24	0.24	0.24				
	3442	3632	0.00	0.00	2061	1415	1661	119	1583				
Grp Volume(v), veh/h	962	586	0	0	513	467	150	0	388				
Grp Sat Flow(s), veh/h/ln1					1770	1613			1583				
		1770	0	0			1780	0					
	19.8	0.0	0.0	0.0	20.4	20.4	5.2	0.0	18.0				
J 10_ /	19.8	0.0	0.0	0.0	20.4	20.4	5.2	0.0	18.0				
	1.00	2212	0.00	0.00	400	0.88	0.93	^	1.00				
Lane Grp Cap(c), veh/h 1		2213	0	0	482	439	427	0	380				
` '	0.94	0.26	0.00	0.00	1.06	1.06	0.35	0.00	1.02				
	1046	2213	0	0	482	439	427	0	380				
	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
	0.49	0.49	0.00	0.00	0.82	0.82	1.00	0.00	1.00				
Uniform Delay (d), s/veh		0.0	0.0	0.0	27.3	27.3	23.7	0.0	28.5				
Incr Delay (d2), s/veh	9.0	0.1	0.0	0.0	55.4	57.1	0.5	0.0	51.6				
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/		0.0	0.0	0.0	17.3	16.0	2.6	0.0	19.3				
J , ,	27.2	0.1	0.0	0.0	82.7	84.4	24.1	0.0	80.1				
LnGrp LOS	С	Α			F	F	С		F				
Approach Vol, veh/h		1548			980			538					
Approach Delay, s/veh		17.0			83.5			64.5					
Approach LOS		В			F			Е					
Timer	1	2	3	4	5	6	7	8					
Assigned Phs		2		4	5	6							
Phs Duration (G+Y+Rc),	S	52.4		22.6	26.5	25.9							
Change Period (Y+Rc), s		5.5		4.6	* 4.2	5.5							
Max Green Setting (Gma		46.9		18.0	* 23	19.9							
Max Q Clear Time (g_c+		2.0		20.0	21.8	22.4							
Green Ext Time (p_c), s	11), 3	15.7		0.0	0.5	0.0							
Intersection Summary						0							
			14.4										
HCM 2010 Ctrl Delay HCM 2010 LOS			46.6 D										
			D										
Notes													

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Movement	EDT.	▼	▼	WDT	WDD	NDI.	NDT	/ NDD	CDI	CDT	CDD
Movement EBL Lane Configurations	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (veh/h) 0	†† 1185	77	367	↑↑ 276	0	0	0	0	264	લી 0	699
Future Volume (veh/h) 0	1185	77	367	276	0	0	0	0	264	0	699
Number 5	2	12	1	6	16	U	U	U	7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT) 1.00	U	1.00	1.00	U	1.00				1.00	U	1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h 0	1247	81	386	291	0				278	0	0
Adj No. of Lanes 0	2	1	2	271	0				0	1	1
Peak Hour Factor 0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, % 0	2	2	2	2	0.73				2	2	2
Cap, veh/h 0	1784	798	450	2444	0				336	0	300
Arrive On Green 0.00	0.50	0.50	0.04	0.23	0.00				0.19	0.00	0.00
Sat Flow, veh/h 0	3632	1583	3442	3632	0.00				1774	0.00	1583
Grp Volume(v), veh/h 0	1247	81	386	291	0				278	0	0
Grp Sat Flow(s), veh/h/ln 0	1770	1583	1721	1770	0				1774	0	1583
Q Serve(g_s), s 0.0	20.2	2.0	8.4	4.9	0.0				11.3	0.0	0.0
Cycle Q Clear(q_c), s 0.0	20.2	2.0	8.4	4.9	0.0				11.3	0.0	0.0
Prop In Lane 0.00	20.2	1.00	1.00	7.7	0.00				1.00	0.0	1.00
Lane Grp Cap(c), veh/h 0	1784	798	450	2444	0.00				336	0	300
V/C Ratio(X) 0.00	0.70	0.10	0.86	0.12	0.00				0.83	0.00	0.00
Avail Cap(c_a), veh/h 0	1784	798	450	2444	0.00				497	0.00	443
HCM Platoon Ratio 1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I) 0.00	1.00	1.00	0.47	0.47	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh 0.0	14.2	9.7	35.2	10.8	0.0				29.2	0.0	0.0
Incr Delay (d2), s/veh 0.0	2.3	0.3	8.0	0.0	0.0				7.3	0.0	0.0
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	10.4	0.9	4.5	2.4	0.0				6.2	0.0	0.0
LnGrp Delay(d),s/veh 0.0	16.5	10.0	43.2	10.9	0.0				36.5	0.0	0.0
LnGrp LOS	В	A	D	В	3.0				D	3.0	3.0
Approach Vol, veh/h	1328			677						278	
Approach Delay, s/veh	16.1			29.3						36.5	
Approach LOS	В			C C						D	
		_				_	_				
Timer 1	2	3	4	5	6	7	8				
Assigned Phs 1	2		4		6						
Phs Duration (G+Y+Rc), \$4.0	42.8		18.2		56.8						
Change Period (Y+Rc), \$ 4.2	5.0		4.0		5.0						
Max Green Setting (Gmax), &	31.0		21.0		45.0						
Max Q Clear Time (g_c+fff),4s	22.2		13.3		6.9						
Green Ext Time (p_c), s 0.0	6.3		0.9		16.3						
Intersection Summary											
HCM 2010 Ctrl Delay		22.5									
HCM 2010 LOS		С									
Notes											

	•	4	†	<i>></i>	\	Ţ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	ሻ	7	↑ ⊅		ሻ	^	
Traffic Volume (veh/h)	31	197	448	45	284	1004	
Future Volume (veh/h)	31	197	448	45	284	1004	
Number	3	18	2	12	1	6	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	
Adj Flow Rate, veh/h	33	207	472	47	299	1057	
Adj No. of Lanes	1	1	2	0	1	2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	252	557	1242	123	372	2372	
Arrive On Green	0.14	0.14	0.38	0.38	0.21	0.67	
Sat Flow, veh/h	1774	1583	3346	323	1774	3632	
Grp Volume(v), veh/h	33	207	256	263	299	1057	
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1806	1774	1770	
Q Serve(g_s), s	0.9	5.5	5.8	5.9	9.0	7.8	
Cycle Q Clear(g_c), s	0.9	5.5	5.8	5.9	9.0	7.8	
Prop In Lane	1.00	1.00	0.0	0.18	1.00	7.0	
Lane Grp Cap(c), veh/h	252	557	676	690	372	2372	
V/C Ratio(X)	0.13	0.37	0.38	0.38	0.80	0.45	
Avail Cap(c_a), veh/h	758	1009	1159	1182	1098	4786	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	21.0	13.5	12.5	12.5	21.0	4.3	
Incr Delay (d2), s/veh	0.2	0.4	0.4	0.3	4.1	0.1	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.5	2.4	2.9	3.0	4.7	3.7	
LnGrp Delay(d),s/veh	21.2	13.9	12.8	12.8	25.1	4.5	
LnGrp LOS	С	В	В	В	С	A	
Approach Vol, veh/h	240		519		<u> </u>	1356	
Approach Vol, ven/n Approach Delay, s/veh	14.9		12.8			9.0	
Approach LOS	В		12.0 B			7.0 A	
Timer	1	2	3	4	5	6	7 8
Assigned Phs	1	2	3	4	- 0		8
						42.0	
Phs Duration (G+Y+Rc), s	16.1	26.7				42.9	13.0
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1
Max Green Setting (Gmax), s	34.6	36.6				75.6	23.9
Max Q Clear Time (g_c+l1), s	11.0	7.9				9.8	7.5
Green Ext Time (p_c), s	0.9	13.5				17.4	0.7
ntersection Summary			10 (
HCM 2010 Ctrl Delay			10.6				
HCM 2010 LOS			В				

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			44			4	
Traffic Vol, veh/h	7	2	16	74		35	12	273	70	30	224	15
Future Vol, veh/h	7	2	16	74	2	35	12	273	70	30	224	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	2	17	78	2	37	13	287	74	32	236	16
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	676	693	244	665	664	324	252	0	0	361	0	0
Stage 1	307	307	-	349	349	-	-	-	-	-	-	-
Stage 2	369	386	-	316	315	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	367	367	795	374	381	717	1313	-	-	1198	-	-
Stage 1	703	661	-	667	633	-	-	-	-	-	-	-
Stage 2	651	610	-	695	656	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	335	351	795	352	364	717	1313	-	-	1198	-	-
Mov Cap-2 Maneuver	335	351	-	352	364	-	-	-	-	-	-	-
Stage 1	694	641	-	658	625	-	-	-	-	-	-	-
Stage 2	607	602	-	657	636	-	-	-	-	-	-	-
Ü												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.1			16.8			0.3			0.9		
HCM LOS	В			С								
Minor Lane/Major Mvmt	NBL	NBT	NBR I	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1313	-	-	535 420	1198	-	-					
HCM Lane V/C Ratio	0.01	-	-	0.049 0.278		-	-					
HCM Control Delay (s)	7.8	0	-	12.1 16.8		0	-					
HCM Lane LOS	A	Α	-	ВС		A	-					
HCM 95th %tile Q(veh)	0	-	-	0.2 1.1		-	-					

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4	7		4	
Traffic Volume (veh/h)	13	3	32	242	2	26	38	372	280	20	312	12
Future Volume (veh/h)	13	3	32	242	2	26	38	372	280	20	312	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	14	3	34	255	2	27	40	392	295	21	328	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	84	316	557	12	39	150	774	711	129	759	29
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	257	292	1097	1240	43	135	78	1722	1583	39	1689	64
Grp Volume(v), veh/h	51	0	0	284	0	0	432	0	295	362	0	0
Grp Sat Flow(s), veh/h/ln	1646	0	0	1418	0	0	1800	0	1583	1793	0	0
Q Serve(g_s), s	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	6.0	0.0	0.0	5.7	0.0	4.3	4.6	0.0	0.0
Prop In Lane	0.27		0.67	0.90		0.10	0.09		1.00	0.06		0.04
Lane Grp Cap(c), veh/h	608	0	0	608	0	0	924	0	711	917	0	0
V/C Ratio(X)	0.08	0.00	0.00	0.47	0.00	0.00	0.47	0.00	0.41	0.39	0.00	0.00
Avail Cap(c_a), veh/h	2516	0	0	2333	0	0	3106	0	2704	3063	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.0	0.0	0.0	10.7	0.0	0.0	6.8	0.0	6.4	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.6	0.0	0.0	0.4	0.0	0.4	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.5	0.0	0.0	3.0	0.0	1.9	2.4	0.0	0.0
LnGrp Delay(d),s/veh	9.0	0.0	0.0	11.3	0.0	0.0	7.1	0.0	6.8	6.7	0.0	0.0
LnGrp LOS	Α			В			Α		А	А		
Approach Vol, veh/h		51			284			727			362	
Approach Delay, s/veh		9.0			11.3			7.0			6.7	
Approach LOS		А			В			Α			А	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.9		14.4		19.9		14.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		58.5		52.5		58.5		52.5				
Max Q Clear Time (g_c+I1), s		7.7		2.8		6.6		8.0				
Green Ext Time (p_c), s		7.7		2.3		7.7		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			7.9									
HCM 2010 LOS			Α									

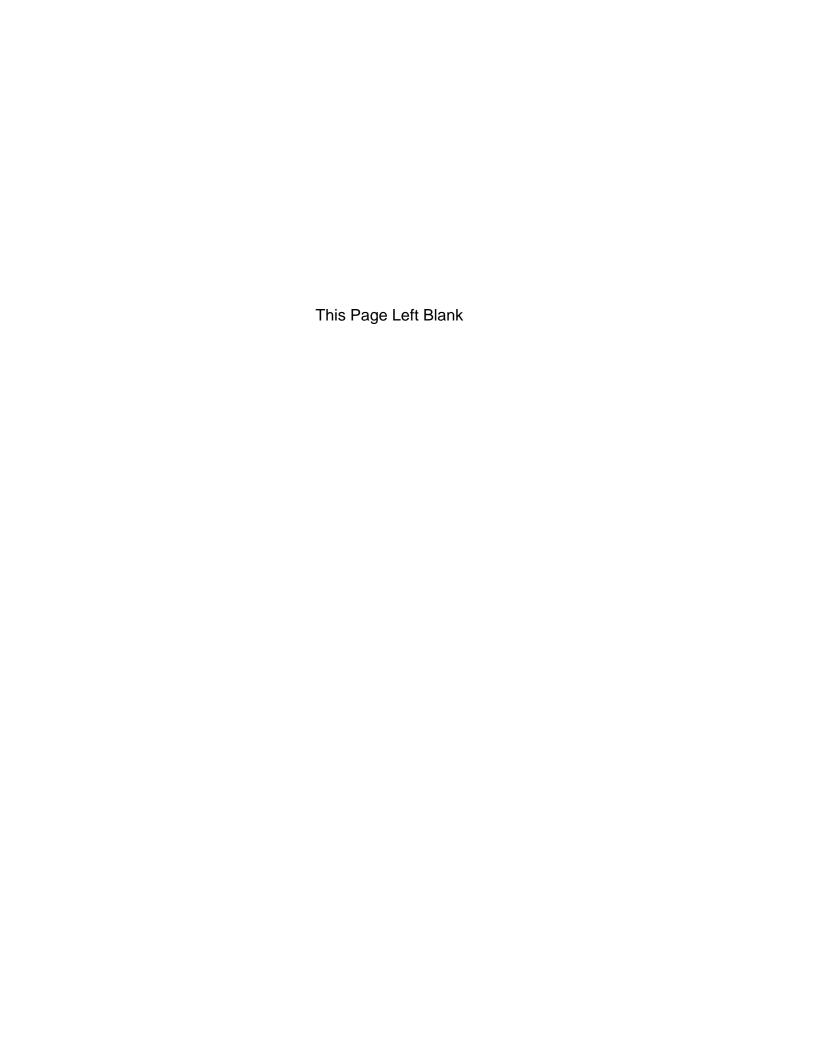
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Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations ************************************	†	7	7	∱ ∱		ነ	4î			4	7
Traffic Volume (veh/h) 536	54	410	16	38	20	421	183	17	25	186	399
Future Volume (veh/h) 536	54	410	16	38	20	421	183	17	25	186	399
Number 5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h 564	57	432	17	40	21	443	193	18	26	344	321
Adj No. of Lanes 2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, % 2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h 937	507	707	126	164	80	618	293	27	32	419	384
Arrive On Green 0.27	0.27	0.27	0.07	0.07	0.07	0.17	0.17	0.17	0.24	0.24	0.24
Sat Flow, veh/h 3442	1863	1583	1774	2309	1125	3548	1679	157	130	1726	1583
Grp Volume(v), veh/h 564	57	432	17	30	31	443	0	211	370	0	321
Grp Sat Flow(s),veh/h/ln1721	1863	1583	1774	1770	1664	1774	0	1835	1856	0	1583
Q Serve(g_s), s 11.7	1.9	17.0	0.7	1.3	1.4	9.6	0.0	8.8	15.4	0.0	15.7
Cycle Q Clear(g_c), s 11.7	1.9	17.0	0.7	1.3	1.4	9.6	0.0	8.8	15.4	0.0	15.7
Prop In Lane 1.00		1.00	1.00		0.68	1.00		0.09	0.07	_	1.00
Lane Grp Cap(c), veh/h 937	507	707	126	126	118	618	0	320	451	0	384
V/C Ratio(X) 0.60	0.11	0.61	0.13	0.24	0.26	0.72	0.00	0.66	0.82	0.00	0.84
Avail Cap(c_a), veh/h 1254	679	853	395	394	370	1184	0	613	570	0	486
HCM Platoon Ratio 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I) 1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 25.9	22.3	17.2	35.6	35.9	36.0	31.9	0.0	31.5	29.3	0.0	29.4
Incr Delay (d2), s/veh 0.6	0.1	0.9	0.5	1.0	1.2	1.6	0.0	2.3	7.6	0.0	9.8
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr5.6	1.0	9.8	0.4	0.7	0.7	4.9	0.0	4.7	8.9	0.0	7.9
LnGrp Delay(d),s/veh 26.5	22.4	18.1	36.1	36.9	37.1	33.4	0.0	33.8	36.8	0.0	39.2
LnGrp LOS C	C	В	D	D	D	С	,	С	D	101	D
Approach Vol, veh/h	1053			78			654			691	
Approach Delay, s/veh	22.9			36.8			33.6			37.9	
Approach LOS	С			D			С			D	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8				
Phs Duration (G+Y+Rc), s	27.2		24.8		10.7		19.2				
Change Period (Y+Rc), s	4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s	29.8		25.1		18.2		27.3				
Max Q Clear Time (g_c+I1), s	19.0		17.7		3.4		11.6				
Green Ext Time (p_c), s	3.3		2.1		0.2		2.6				
Intersection Summary											
HCM 2010 Ctrl Delay		30.3									
HCM 2010 LOS		C									
Notes											

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Movement E	BL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻሻ	^			∱ ∱			र्स	7				
	300	485	0	0	448	410	239	0	515	0	0	0	
	300	485	0	0	448	410	239	0	515	0	0	0	
Number	5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0				
` ,	.00		1.00	1.00		1.00	1.00		1.00				
J ,	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
	363	1863	0	0	1863	1900	1900	1863	1863				
•	342	511	0	0	472	432	252	0	542				
Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
	.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	0.70	0.70	2	2	2	2	2				
	915	2141	0	0	526	470	522	0	465				
I '	.44	1.00	0.00	0.00	0.30	0.30	0.29	0.00	0.29				
	142	3632	0.00	0.00	1863	1583	1774	0.00	1583				
	342	511	0	0	472	432	252	0	542				
Grp Sat Flow(s), veh/h/ln17		1770	0	0	1770	1583	1774	0	1583				
	3.0	0.0	0.0	0.0	25.6	26.4	11.7	0.0	29.4				
	3.0	0.0	0.0	0.0	25.6	26.4	11.7	0.0	29.4				
, ,	.00	0.0	0.00	0.00	23.0			0.0	1.00				
		21 / 1			E24	1.00	1.00	٥					
	915	2141	0	0	526	470	522	0	465				
` ,	.92	0.24	0.00	0.00	0.90	0.92	0.48	0.00	1.16				
	026	2141	0	0	526	470	522	0	465				
	.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
1 17	.09	0.09	0.00	0.00	0.86	0.86	1.00	0.00	1.00				
Uniform Delay (d), s/veh 20		0.0	0.0	0.0	33.7	34.0	29.0	0.0	35.3				
J \ /·	1.4	0.0	0.0	0.0	18.4	22.8	0.7	0.0	95.2				
J ():	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/lin		0.0	0.0	0.0	15.1	14.5	5.8	0.0	34.2				
1 3 , ,	8.2	0.0	0.0	0.0	52.1	56.8	29.7	0.0	130.5				
LnGrp LOS	С	Α			<u>D</u>	E	С		F				
Approach Vol, veh/h		1353			904			794					
Approach Delay, s/veh		17.6			54.4			98.5					
Approach LOS		В			D			F					
Timer	1	2	3	4	5	6	7	8					
Assigned Phs		2		4	5	6							
Phs Duration (G+Y+Rc), s	;	66.0		34.0	30.8	35.2							
Change Period (Y+Rc), s		5.5		4.6	* 4.2	5.5							
Max Green Setting (Gmax)	(), S	60.5		29.4	* 30	26.5							
Max Q Clear Time (q_c+l1		2.0		31.4	25.0	28.4							
Green Ext Time (p_c), s	,, -	14.2		0.0	1.6	0.0							
Intersection Summary													
HCM 2010 Ctrl Delay			49.5										
HCM 2010 Clir Delay			49.3 D										
			D										
Notes													

		_		—	4	•	•		_	1	J
501	→	*	▼	WDT	WDD	,)	NDT	NDD.	CDI	†	CDD
Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	^	7	77	^	•		•		010	र्	7
Traffic Volume (veh/h) 0	1073	222	221	416	0	0	0	0	218	7	1000
Future Volume (veh/h) 0	1073	222	221	416	0	0	0	0	218	7	1000
Number 5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h 0	1141	236	235	443	0				232	7	0
Adj No. of Lanes 0	2	1	2	2	0				0	1	1
Peak Hour Factor 0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, % 0	2	2	2	2	0				2	2	2
Cap, veh/h 0	2212	990	268	2637	0				284	9	261
Arrive On Green 0.00	0.63	0.63	0.03	0.25	0.00				0.16	0.16	0.00
Sat Flow, veh/h 0	3632	1583	3442	3632	0				1724	52	1583
Grp Volume(v), veh/h 0	1141	236	235	443	0				239	0	0
Grp Sat Flow(s), veh/h/ln 0	1770	1583	1721	1770	0				1777	0	1583
Q Serve(g_s), s 0.0	17.8	6.6	6.8	9.8	0.0				13.0	0.0	0.0
Cycle Q Clear(g_c), s 0.0	17.8	6.6	6.8	9.8	0.0				13.0	0.0	0.0
Prop In Lane 0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h 0	2212	990	268	2637	0				293	0	261
V/C Ratio(X) 0.00	0.52	0.24	0.88	0.17	0.00				0.82	0.00	0.00
Avail Cap(c_a), veh/h 0	2212	990	268	2637	0				906	0	807
HCM Platoon Ratio 1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I) 0.00	1.00	1.00	0.65	0.65	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh 0.0	10.4	8.3	48.2	13.3	0.0				40.3	0.0	0.0
Incr Delay (d2), s/veh 0.0	0.9	0.6	18.5	0.1	0.0				5.5	0.0	0.0
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	8.8	3.0	3.9	4.9	0.0				6.8	0.0	0.0
LnGrp Delay(d),s/veh 0.0	11.2	8.8	66.7	13.4	0.0				45.8	0.0	0.0
LnGrp LOS	В	Α	E	В					D		
Approach Vol, veh/h	1377			678						239	
Approach Delay, s/veh	10.8			31.9						45.8	
Approach LOS	В			С						D	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs 1	2	J	4	J	6		U				
Phs Duration (G+Y+Rc), \$2.0	67.5		20.5		79.5						
Change Period (Y+Rc), \$ 4.2	5.0		4.0		5.0						
Max Green Setting (Gmax), 8	28.0		51.0		40.0						
Max Q Clear Time (g_c+l18,8	19.8		15.0		11.8						
Green Ext Time (p_c), s 0.0	6.2		1.5		15.2						
	0.2		1.0		10.2						
Intersection Summary		20.7									
HCM 2010 Ctrl Delay		20.7									
HCM 2010 LOS		С									
Notes											

APPENDIX **E**

NEAR-TERM INTERSECTION ANALYSIS WORKSHEETS



	•	4	†	<i>></i>	\	Ţ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	ř	7	↑ ↑		,	^	
Traffic Volume (veh/h)	18	358	602	31	105	376	
Future Volume (veh/h)	18	358	602	31	105	376	
Number	3	18	2	12	1	6	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	
Adj Flow Rate, veh/h	20	402	676	35	118	422	
Adj No. of Lanes	1	1	2	0	1	2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	486	574	1232	64	158	1878	
Arrive On Green	0.27	0.27	0.36	0.36	0.09	0.53	
Sat Flow, veh/h	1774	1583	3517	177	1774	3632	
Grp Volume(v), veh/h	20	402	349	362	118	422	
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1831	1774	1770	
Q Serve(g_s), s	0.4	11.6	8.5	8.5	3.5	3.4	
Cycle Q Clear(g_c), s	0.4	11.6	8.5	8.5	3.5	3.4	
Prop In Lane	1.00	1.00		0.10	1.00		
Lane Grp Cap(c), veh/h	486	574	637	659	158	1878	
V/C Ratio(X)	0.04	0.70	0.55	0.55	0.75	0.22	
Avail Cap(c_a), veh/h	763	822	1462	1514	911	5033	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	14.3	14.6	13.7	13.7	23.9	6.7	
Incr Delay (d2), s/veh	0.0	1.6	0.7	0.7	6.9	0.1	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.2	5.3	4.2	4.4	2.0	1.7	
LnGrp Delay(d),s/veh	14.4	16.2	14.5	14.4	30.8	6.8	
LnGrp LOS	В	В	В	В	С	А	
Approach Vol, veh/h	422		711			540	
Approach Delay, s/veh	16.1		14.4			12.0	
Approach LOS	В		В			В	
Timer	1	2	3	4	5	6	7 8
Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.2	24.7				33.9	19.8
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1
Max Green Setting (Gmax), s	27.6	44.4				76.4	23.1
Max Q Clear Time (g_c+l1), s	5.5	10.5				5.4	13.6
Green Ext Time (p_c), s	0.3	8.9				9.6	1.1
Intersection Summary							
HCM 2010 Ctrl Delay			14.1				
HCM 2010 LOS			В				
HOW ZUTU LUS			D				

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	5	18	47	3	31	9	339	18	11	122	19
Future Vol, veh/h	5	5	18	47	3	31	9	339	18	11	122	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	5	19	51	3	33	10	365	19	12	131	20
Major/Minor	Minor2			Minor1			Major1		ľ	Major2		
Conflicting Flow All	577	568	141	571	569	374	152	0	0	384	0	0
Stage 1	165	165	-	394	394	-	-	-	-	-	-	-
Stage 2	412	403	_	177	175	_	_	_	_	-	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	_	_	-	-	_
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318		4.018	3.318	2.218	_	-	2.218	-	-
Pot Cap-1 Maneuver	428	432	907	432	432	672	1429	-	-	1174	-	-
Stage 1	837	762	-	631	605	-	-	-	-	-	-	-
Stage 2	617	600	-	825	754	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	398	423	907	412	423	672	1429	-	-	1174	-	-
Mov Cap-2 Maneuver	398	423	-	412	423	-	-	-	-	-	-	-
Stage 1	829	754	-	625	600	-	-	-	-	-	-	-
Stage 2	578	595	-	793	746	-	-	-	-	-	-	-
-												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11			14.1			0.2			0.6		
HCM LOS	В			В			J.Z			3.0		
				5								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBL n1	SBL	SBT	SBR			
Capacity (veh/h)		1429	-		633	484	1174		-			
HCM Lane V/C Ratio		0.007	_	_	0.048	0.18	0.01	_	_			
HCM Control Delay (s)		7.5	0	_	11	14.1	8.1	0	_			
HCM Lane LOS		7.5 A	A	_	В	В	Α	A	_			
HCM 95th %tile Q(veh)	0	-	_	0.1	0.7	0	-	_			
1101VI 70til 70tile Q(Vell	7	0			0.1	0.7	U					

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			र्स	7		4	
Traffic Volume (veh/h)	2	4	10	410	0	19	29	439	265	7	197	7
Future Volume (veh/h)	2	4	10	410	0	19	29	439	265	7	197	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	2	5	12	477	0	22	34	510	308	8	229	8
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	229	454	695	0	26	93	732	655	75	722	25
Arrive On Green	0.42	0.42	0.42	0.42	0.00	0.42	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	86	541	1075	1342	0	62	57	1769	1583	17	1746	59
Grp Volume(v), veh/h	19	0	0	499	0	0	544	0	308	245	0	0
Grp Sat Flow(s), veh/h/ln	1702	0	0	1404	0	0	1826	0	1583	1822	0	0
Q Serve(g_s), s	0.0	0.0	0.0	17.1	0.0	0.0	2.3	0.0	7.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	17.5	0.0	0.0	13.4	0.0	7.8	4.9	0.0	0.0
Prop In Lane	0.11		0.63	0.96		0.04	0.06		1.00	0.03		0.03
Lane Grp Cap(c), veh/h	792	0	0	721	0	0	825	0	655	821	0	0
V/C Ratio(X)	0.02	0.00	0.00	0.69	0.00	0.00	0.66	0.00	0.47	0.30	0.00	0.00
Avail Cap(c_a), veh/h	1684	0	0	1490	0	0	1631	0	1367	1609	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.3	0.0	0.0	14.2	0.0	0.0	13.4	0.0	11.7	10.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0	0.9	0.0	0.5	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	6.9	0.0	0.0	7.0	0.0	3.4	2.6	0.0	0.0
LnGrp Delay(d),s/veh	9.3	0.0	0.0	15.4	0.0	0.0	14.3	0.0	12.3	11.1	0.0	0.0
LnGrp LOS	Α			В			В		В	В		
Approach Vol, veh/h		19			499			852			245	
Approach Delay, s/veh		9.3			15.4			13.5			11.1	
Approach LOS		А			В			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.3		27.7		27.3		27.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		47.5		53.5		47.5		53.5				
Max Q Clear Time (g_c+I1), s		15.4		2.4		6.9		19.5				
Green Ext Time (p_c), s		7.3		3.9		7.6		3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			13.7									
HCM 2010 LOS			В									

	<u> </u>	_	_	_	←	•	•	†	<u></u>	_	1	1
Movement	EBL	EBT	₹ EBR	▼ WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	<u></u>	LDK.	VVDL	↑	WDK	NDL 7	4 1	NDK	SDL	3B1 ↔	JDK 7
Traffic Volume (veh/h)	574	T 55	315	6	20	19	407	235	20	18	118	491
Future Volume (veh/h)	574	55	315	6	20	19	407	235	20	18	118	491
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	U	1.00	1.00	U	1.00	1.00	U	1.00	1.00	U	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	652	62	358	7	23	22	510	200	23	20	437	356
Adj No. of Lanes	2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	904	489	716	100	104	87	673	311	36	22	485	432
Arrive On Green	0.26	0.26	0.26	0.06	0.06	0.06	0.19	0.19	0.19	0.27	0.27	0.27
	3442	1863	1583	1774	1833	1530	3548	1641	189	81	1777	1583
Grp Volume(v), veh/h	652	62	358	7	22	23	510	0	223	457	0	356
Grp Sat Flow(s), veh/h/lr		1863	1583	1774	1770	1593	1774	0	1829	1859	0	1583
Q Serve(g_s), s	15.5	2.3	14.4	0.3	1.1	1.2	12.2	0.0	10.1	21.3	0.0	18.9
Cycle Q Clear(g_c), s	15.5	2.3	14.4	0.3	1.1	1.2	12.2	0.0	10.1	21.3	0.0	18.9
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.10	0.04		1.00
Lane Grp Cap(c), veh/h	904	489	716	100	100	90	673	0	347	507	0	432
V/C Ratio(X)	0.72	0.13	0.50	0.07	0.22	0.25	0.76	0.00	0.64	0.90	0.00	0.82
	1115	603	813	336	335	301	1114	0	574	540	0	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	า 30.1	25.3	17.4	40.1	40.5	40.6	34.4	0.0	33.6	31.5	0.0	30.6
Incr Delay (d2), s/veh	2.6	0.2	1.1	0.3	1.1	1.5	1.8	0.0	2.0	17.6	0.0	11.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh		1.2	8.7	0.2	0.6	0.6	6.1	0.0	5.3	13.4	0.0	9.6
LnGrp Delay(d),s/veh	32.8	25.5	18.5	40.4	41.6	42.0	36.2	0.0	35.6	49.1	0.0	41.7
LnGrp LOS	С	С	В	D	D	D	D		D	D		D
Approach Vol, veh/h		1072			52			733			813	
Approach Delay, s/veh		27.6			41.6			36.0			45.9	
Approach LOS		С			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc)	, S	28.5		29.4		10.0		22.0				
Change Period (Y+Rc),		4.9		4.9		4.9		4.9				
Max Green Setting (Gm		29.1		26.1		17.0		28.2				
Max Q Clear Time (g_c-		17.5		23.3		3.2		14.2				
Green Ext Time (p_c), s		6.1		1.2		0.1		2.8				
Intersection Summary												
HCM 2010 Ctrl Delay			35.7									
HCM 2010 LOS			D									
Notes												

Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR	•	→	`	_	←	•	•	†	<u></u>	<u> </u>	Ţ	4
Lane Configurations Traffic Volume (vehyh) 922 570 0 0 541 378 136 9 376 0 0 0 0 0 0 0 0 0	Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (veh/h) 922 570 0 0 541 378 136 9 376 0 0 0 0 Traffic Volume (veh/h) 922 570 0 0 541 378 136 9 376 0 0 0 0 Number 5 2 12 12 1 6 6 16 7 4 14 Initial Q (Ob), veh 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ped-Bike Adj(A-pbT) 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0												
Future Volume (veh/h) 922 570 0 0 0 541 378 136 9 376 0 0 0 Number 5 2 12 1 6 16 7 4 14 14 16 16 7 4 14 14 16 16 16 7 4 14 14 16 16 7 4 14 14 16 16 16 16 7 4 14 14 17 16 16 16 7 4 14 14 17 16 16 16 7 4 14 14 17 16 16 16 7 4 14 14 17 16 16 16 16 7 1 10 10 10 10 10 10 10 10 10 10 10 10 1			0	0		378	136			0	0	0
Number	` ,											
Initial Q (Qb), veh	` ,											
Ped-Bike Adj(A_pbT)												
Parking Bus, Adj	· /·							-				
Adj Sal Flow, veh/h/ln 1863 1863 0 0 1863 1900 1900 1863 1863 Adj Roo Gl Lanes 2 2 0 0 582 395 146 10 393 Adj No. of Lanes 2 2 0 0 2 0 0 1 1 Peak Hour Factor 0.93<	, -, ·				1.00			1.00				
Adj Flow Rate, veh/h 991 613 0 0 582 395 146 10 393 Adj No. of Lanes 2 2 0 0 0 2 0 0 1 1 Peak Hour Factor 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93	,											
Adj No. of Lanes 2 2 2 0 0 2 0 0 1 1 Peak Hour Factor 0.93 0.	•											
Peak Hour Factor 0.93 0.94 0.20 0.05 0.05 0.00 0.00 0.00 0.00 0.00	•											
Cap, veh/h Arrive On Green O.51 I.00 O.00 O.00 O.27 O.27 O.24 O.24 O.24 O.24 O.24 O.24 Sat Flow, veh/h 3442 3632 O O O D.113 I371 I665 I14 I583 Grp Volume(v), veh/h 991 Grp Sat Flow(s), veh/h/ln1721 I770 O O O T770 I621 I779 O D Serve(g_s), s Serve(g_s), s D Serve(g_s), s Septemble S S S S S S S S S S S S S S S S S S S			0.93	0.93				0.93	0.93			
Cap, veh/h 1041 2213 0 0 0 539 366 400 27 380 Arrive On Green 0.51 1.00 0.00 0.00 0.27 0.27 0.24 0.24 0.24 0.24 0.24 Sat Flow, veh/h 3442 3632 0 0 21113 1371 1665 114 1583 Grp Volume(v), veh/h 991 613 0 0 510 467 156 0 393 Grp Sat Flow(s), veh/h/ln1721 1770 0 0 0 1770 1621 1779 0 1583 0 Serve(g_s), s 20.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Percent Heavy Veh, % 2	2	0	0	2	2	2	2	2			
Arrive On Green 0.51 1.00 0.00 0.00 0.27 0.27 0.24 0.24 0.24 Sat Flow, yeh/h 3442 3632 0 0 2113 1371 1665 114 1583 Grp Volume(v), yeh/h 991 613 0 0 510 467 156 0 393 Grp Sat Flow(s), yeh/h/shr1721 1770 0 0 1770 1621 1779 0 1583 Q Serve(g_s), s 20.6 0.0 0.0 0.0 20.0 25.5 0.0 18.0 Prop In Lane 1.00 0.00 0.00 20.0 25.5 0.0 18.0 ViC Ratio(X) 0.95 2.28 0.00 0.00 1.88 0.94 1.00 Lane Grp Cap(c), veh/h 1041 2213 0 0 472 432 427 0 380 ViC Ratio(X) 0.95 2.28 0.00 0.00 1.08 1.08 0.37 0.00 1.03 Avail Cap(c_a), veh/h 1046 2213 0 0	3	2213	0	0	539	366	400	27	380			
Grp Volume(v), veh/h 991 613 0 0 510 467 156 0 393 Grp Sat Flow(s),veh/h/ln1721 1770 0 0 1770 1621 1779 0 1583 Q Serve(g_s), s 20.6 0.0 0.0 0.0 20.0 20.0 5.5 0.0 18.0 Cycle Q Clear(g_c), s 20.6 0.0 0.0 0.0 0.0 20.0 20.0 5.5 0.0 18.0 Prop In Lane 1.00 0.00 0.00 0.00 885 0.94 1.00 Lane Grp Cap(c), veh/h 1041 2213 0 0 472 432 427 0 380 V/C Ratio(X) 0.95 0.28 0.00 0.00 1.08 1.08 0.37 0.00 1.03 Avail Cap(c_a), veh/h 1046 2213 0 0 472 432 427 0 380 HCM Platoon Ratio 1.67 1.67 1.00 1.00 1.00 1.00 1.00 1.00 Upstream Filter(I) 0.43 0.43 0.00 0.00 0.81 0.81 0.81 0.00 0.00 1.00 Uniform Delay (d), s/veh 18.0 0.0 0.0 0.0 27.5 27.5 23.7 0.0 28.5 Incr Delay (d2), s/veh 9.3 0.1 0.0 0.0 0.0 27.5 27.5 23.7 0.0 28.5 Incr Delay (d2), s/veh 9.3 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		1.00	0.00	0.00	0.27	0.27	0.24	0.24	0.24			
Grp Volume(v), veh/h 991 613 0 0 510 467 156 0 393 Grp Sat Flow(s), veh/h/In1721 1770 0 0 1770 1621 1779 0 1583 Q Serve(g_s), s 20.6 0.0 0.0 0.0 20.0 20.0 5.5 0.0 18.0 Prop In Lane 1.00 0.00 0.0 0.0 20.0 25.5 0.0 18.0 Prop In Lane 1.00 0.00 0.00 0.85 0.94 1.00 Lane Grp Cap(c), veh/h 1041 2213 0 0 472 432 427 0 380 V/C Ratio(X) 0.95 0.28 0.00 0.00 1.08 1.08 0.37 0.00 1.03 Avail Cap(c_a), veh/h 1046 2213 0 0 472 432 427 0 380 HCM Platon Ratio 1.67 1.67 1.00 1.00 1.00 1.00 1.00 <												
Grp Sat Flow(s),veh/h/ln1721 1770 0 0 1770 1621 1779 0 1583 Q Serve(g_s), s 20.6 0.0 0.0 0.0 20.0 20.0 5.5 0.0 18.0 Cycle Q Clear(g_c), s 20.6 0.0 0.0 0.0 0.0 20.0 20.0 5.5 0.0 18.0 Prop In Lane 1.00 0.00 0.00 0.85 0.94 1.00 Lane Grp Cap(c), veh/h 1041 2213 0 0 472 432 427 0 380 V/C Ratio(X) 0.95 0.28 0.00 0.00 1.08 1.08 0.37 0.00 1.03 Avail Cap(c_a), veh/h 1046 2213 0 0 472 432 427 0 380 HCM Platoon Ratio 1.67 1.67 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0	0	510	467	156	0	393			
Q Serve(g_s), s	1 7											
Cycle Q Clear(g_c), s												
Lane Grp Cap(c), veh/h 1041		0.0	0.0	0.0	20.0	20.0	5.5	0.0	18.0			
V/C Ratio(X) 0.95 0.28 0.00 0.00 1.08 1.08 0.37 0.00 1.03 Avail Cap(c_a), veh/h 1046 2213 0 0 472 432 427 0 380 HCM Platoon Ratio 1.67 1.67 1.00 1.00 1.00 1.00 1.00 1.00 Upstream Filter(I) 0.43 0.43 0.00 0.00 0.81 0.81 1.00 0.00 1.00 Uniform Delay (d), s/veh 18.0 0.0 0.0 0.0 27.5 27.5 23.7 0.0 28.5 Incr Delay (d2), s/veh 9.3 0.1 0.0 0.0 60.8 62.4 0.5 0.0 55.3 Initial Q Delay(d3), s/veh 0.0 19.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 <t< td=""><td>Prop In Lane 1.00</td><td></td><td>0.00</td><td>0.00</td><td></td><td>0.85</td><td>0.94</td><td></td><td>1.00</td><td></td><td></td><td></td></t<>	Prop In Lane 1.00		0.00	0.00		0.85	0.94		1.00			
Avail Cap(c_a), veh/h 1046 2213 0 0 472 432 427 0 380 HCM Platoon Ratio 1.67 1.67 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Upstream Filter(I) 0.43 0.43 0.00 0.00 0.81 0.81 1.00 0.00 1.00 Uniform Delay (d), s/veh 18.0 0.0 0.0 0.0 27.5 27.5 23.7 0.0 28.5 Incr Delay (d2), s/veh 9.3 0.1 0.0 0.0 60.8 62.4 0.5 0.0 55.3 Initial O Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Lane Grp Cap(c), veh/h 1041	2213	0	0	472	432	427	0	380			
HCM Platoon Ratio	V/C Ratio(X) 0.95	0.28	0.00	0.00	1.08	1.08	0.37	0.00	1.03			
Upstream Filter(I) 0.43 0.43 0.00 0.00 0.81 0.81 1.00 0.00 1.00 Uniform Delay (d), s/veh 18.0 0.0 0.0 0.0 27.5 27.5 23.7 0.0 28.5 Incr Delay (d2), s/veh 9.3 0.1 0.0 0.0 60.8 62.4 0.5 0.0 55.3 Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 %ile BackOfQ(50%),veh/ln1.0 0.0 0.0 0.0 17.7 16.4 2.7 0.0 19.7 LnGrp Delay(d),s/veh 27.3 0.1 0.0 0.0 88.3 89.9 24.3 0.0 83.8 LnGrp LOS C A F F C F Approach Vol, veh/h 16.9 89.1 66.9 Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 *23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Avail Cap(c_a), veh/h 1046	2213	0	0	472	432	427	0	380			
Uniform Delay (d), s/veh 18.0	HCM Platoon Ratio 1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Incr Delay (d2), s/veh 9.3 0.1 0.0 0.0 60.8 62.4 0.5 0.0 55.3 Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 %ile BackOfQ(50%),veh/In1.0 0.0 0.0 0.0 17.7 16.4 2.7 0.0 19.7 LnGrp Delay(d),s/veh 27.3 0.1 0.0 0.0 88.3 89.9 24.3 0.0 83.8 LnGrp LOS C A F F C F Approach Vol, veh/h 16.9 89.1 66.9 Approach Delay, s/veh 16.9 89.1 66.9 Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 *23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Upstream Filter(I) 0.43	0.43	0.00	0.00	0.81	0.81		0.00				
Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	3	0.0										
%ile BackOrO(50%),veh/ln1.0 0.0 0.0 0.0 17.7 16.4 2.7 0.0 19.7 LnGrp Delay(d),s/veh 27.3 0.1 0.0 0.0 88.3 89.9 24.3 0.0 83.8 LnGrp LOS C A F F C F Approach Vol, veh/h 1604 977 549 Approach Delay, s/veh 16.9 89.1 66.9 Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 7 8 Assigned Phs 2 4 5 6 7 8 Assigned Phs 2 4 5 6 7 8 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 5 Max Q Clear Time (g_c+l1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1												
LnGrp Delay(d),s/veh 27.3 0.1 0.0 0.0 88.3 89.9 24.3 0.0 83.8 LnGrp LOS C A F F C F Approach Vol, veh/h 1604 977 549 Approach Delay, s/veh 16.9 89.1 66.9 Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 7 8 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c, s												
LnGrp LOS C A F F C F Approach Vol, veh/h 1604 977 549 Approach Delay, s/veh 16.9 89.1 66.9 Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 7 8 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c+l1), s 2.0 20.0 22.6	` '											
Approach Vol, veh/h Approach Delay, s/veh Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	1 3.7		0.0	0.0				0.0				
Approach Delay, s/veh Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay HCM 2010 LOS D						F	С		F			
Approach LOS B F E Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 *23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D												
Timer 1 2 3 4 5 6 7 8 Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c+l1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D												
Assigned Phs 2 4 5 6 Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Approach LOS	В			F			E				
Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Timer 1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s 52.4 22.6 26.9 25.5 Change Period (Y+Rc), s 5.5 4.6 *4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 *23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Assigned Phs	2		4	5	6						
Change Period (Y+Rc), s 5.5 4.6 * 4.2 5.5 Max Green Setting (Gmax), s 46.9 18.0 * 23 19.9 Max Q Clear Time (g_c+I1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D		52.4		22.6	26.9	25.5						
Max Q Clear Time (g_c+l1), s 2.0 20.0 22.6 22.0 Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D					* 4.2							
Green Ext Time (p_c), s 16.0 0.0 0.1 0.0 Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Max Green Setting (Gmax), s	46.9		18.0	* 23	19.9						
Intersection Summary HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D						22.0						
HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Green Ext Time (p_c), s	16.0		0.0	0.1	0.0						
HCM 2010 Ctrl Delay 48.2 HCM 2010 LOS D	Intersection Summary											
HCM 2010 LOS D			48.2									
Notos												
NUICO	Notes											

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Movement El	BL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		^	7	ሻሻ	^						र्स	7	
Traffic Volume (veh/h)	0	1225	81	375	280	0	0	0	0	268	0	716	
Future Volume (veh/h)	0	1225	81	375	280	0	0	0	0	268	0	716	
Number	5	2	12	1	6	16				7	4	14	
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0	
Ped-Bike Adj(A_pbT) 1.0	00		1.00	1.00		1.00				1.00		1.00	
·	00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1900	1863	1863	
Adj Flow Rate, veh/h	0	1289	85	395	295	0				282	0	0	
Adj No. of Lanes	0	2	1	2	2	0				0	1	1	
,	95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95	
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2	
Cap, veh/h	0	1776	794	450	2436	0				340	0	303	
•	00	0.50	0.50	0.04	0.23	0.00				0.19	0.00	0.00	
Sat Flow, veh/h	0	3632	1583	3442	3632	0.00				1774	0.00	1583	
Grp Volume(v), veh/h	0	1289	85	395	295	0				282	0	0	
Grp Sat Flow(s), veh/h/ln	0	1770	1583	1721	1770	0				1774	0	1583	
	0.0	21.4	2.1	8.6	5.0	0.0				11.5	0.0	0.0	
	0.0	21.4	2.1	8.6	5.0	0.0				11.5	0.0	0.0	
J 10— 7:	00	21.7	1.00	1.00	5.0	0.00				1.00	0.0	1.00	
Lane Grp Cap(c), veh/h	0	1776	794	450	2436	0.00				340	0	303	
	00	0.73	0.11	0.88	0.12	0.00				0.83	0.00	0.00	
Avail Cap(c_a), veh/h	0	1776	794	450	2436	0.00				497	0.00	443	
	00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00	
	00	1.00	1.00	0.41	0.33	0.00				1.00	0.00	0.00	
Uniform Delay (d), s/veh C		14.6	9.8	35.3	10.9	0.00				29.1	0.00	0.00	
3	0.0	2.6	0.3	8.4	0.0	0.0				7.6	0.0	0.0	
Initial Q Delay(d3),s/veh C		0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	
%ile BackOfQ(50%),veh/Ir0		11.0	1.0	4.6	2.5	0.0				6.3	0.0	0.0	
· /·	0.0	17.3	10.1	43.7	11.0	0.0				36.7	0.0	0.0	
LnGrp LOS	J. U	17.3 B	В	43.7 D	В	0.0				30.7 D	0.0	0.0	
Approach Vol, veh/h		1374	D	U	690					U	282		
Approach Delay, s/veh		16.8			29.7						36.7		
Approach LOS		10.6 B			29.7 C						30.7 D		
•		ט			C						D		
Timer	1	2	3	4	5	6	7	8					
Assigned Phs	1	2		4		6							
Phs Duration (G+Y+Rc), \$4	4.0	42.6		18.4		56.6							
Change Period (Y+Rc), \$ 4	1.2	5.0		4.0		5.0							
Max Green Setting (Gmax)	9,.8	31.0		21.0		45.0							
Max Q Clear Time (g_c+lf10)),6s	23.4		13.5		7.0							
Green Ext Time (p_c), s C		5.7		0.9		17.0							
Intersection Summary													
HCM 2010 Ctrl Delay			23.0										
HCM 2010 LOS			23.0 C										
Notes													

	•	•	†	<i>></i>	\	+		
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	*	7	†		ች	^		
Traffic Volume (veh/h)	30	189	451	45	284	1021		
Future Volume (veh/h)	30	189	451	45	284	1021		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	-	1.00	1.00	-		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	32	199	475	47	299	1075		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	244	549	1257	124	372	2388		
Arrive On Green	0.14	0.14	0.39	0.39	0.21	0.67		
Sat Flow, veh/h	1774	1583	3348	321	1774	3632		
Grp Volume(v), veh/h	32	199	257	265	299	1075		
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1806	1774	1770		
2 Serve(g_s), s	0.9	5.2	5.8	5.9	8.9	7.9		
Cycle Q Clear(g_c), s	0.9	5.2	5.8	5.9	8.9	7.9		
Prop In Lane	1.00	1.00	0.0	0.18	1.00	7.7		
_ane Grp Cap(c), veh/h	244	549	684	698	372	2388		
V/C Ratio(X)	0.13	0.36	0.38	0.38	0.80	0.45		
Avail Cap(c_a), veh/h	759	1009	1159	1183	1099	4789		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Jpstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	21.2	13.6	12.3	12.3	21.0	4.2		
Incr Delay (d2), s/veh	0.2	0.4	0.3	0.3	4.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.5	2.4	2.9	3.0	4.7	3.8		
LnGrp Delay(d),s/veh	21.4	14.0	12.7	12.7	25.1	4.4		
_nGrp LOS	С	В	В	В	С	Α		
Approach Vol, veh/h	231		522			1374		
Approach Delay, s/veh	15.0		12.7			8.9		
Approach LOS	В		В			Α		
· ·	1	2		4	г		7 0	
Timer	1	2	3	4	5	6	7 8	
Assigned Phs	1/1	2				6	8	
Phs Duration (G+Y+Rc), s	16.1	27.0				43.1	12.8	
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1	
Max Green Setting (Gmax), s	34.6	36.6				75.6	23.9	
Max Q Clear Time (g_c+l1), s	10.9	7.9				9.9	7.2	
Green Ext Time (p_c), s	0.9	13.7				17.8	0.6	
ntersection Summary								
ICM 2010 Ctrl Delay			10.5					
HCM 2010 LOS			В					

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	7	2	16	58	2	33	12	263	44	24	226	15
Future Vol, veh/h	7	2	16	58	2	33	12	263	44	24	226	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-		None		-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	2	17	61	2	35	13	277	46	25	238	16
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	640	644	246	631	629	300	254	0	0	323	0	0
Stage 1	296	296	-	325	325	-	-	-	-	-	-	-
Stage 2	344	348	-	306	304	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	388	391	793	394	399	740	1311	-	-	1237	-	-
Stage 1	712	668	-	687	649	-	-	-	-	-	-	-
Stage 2	671	634	-	704	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	358	377	793	374	385	740	1311	-	-	1237	-	-
Mov Cap-2 Maneuver	358	377	-	374	385	-	-	-	-	-	-	-
Stage 1	703	652	-	679	641	-	-	-	-	-	-	-
Stage 2	630	626	-	670	647	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.8			15.1			0.3			0.7		
HCM LOS	В			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V		SBL	SBT	SBR			
Capacity (veh/h)		1311	-	-	555	454	1237	-	-			
HCM Lane V/C Ratio		0.01	-	-	0.047		0.02	-	-			
HCM Control Delay (s)		7.8	0	-	11.8	15.1	8	0	-			
HCM Lane LOS	,	Α	Α	-	В	С	Α	Α	-			
HCM 95th %tile Q(veh))	0	-	-	0.1	8.0	0.1	-	-			

HCM 2010 TWSC N:\2660\Analysis\Synchro\Existing + Cuml PM.syn Synchro 9 Report

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4	7		4	
Traffic Volume (veh/h)	13	3	32	248	2	24	38	347	287	19	307	12
Future Volume (veh/h)	13	3	32	248	2	24	38	347	287	19	307	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	14	3	34	261	2	25	40	365	302	20	323	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	86	322	573	12	36	155	748	692	131	739	29
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	256	292	1096	1251	42	123	83	1713	1583	38	1693	66
Grp Volume(v), veh/h	51	0	0	288	0	0	405	0	302	356	0	0
Grp Sat Flow(s), veh/h/ln	1644	0	0	1416	0	0	1797	0	1583	1797	0	0
Q Serve(g_s), s	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0
Cycle Q Clear(q_c), s	0.7	0.0	0.0	5.9	0.0	0.0	5.2	0.0	4.4	4.5	0.0	0.0
Prop In Lane	0.27		0.67	0.91		0.09	0.10		1.00	0.06		0.04
Lane Grp Cap(c), veh/h	620	0	0	621	0	0	903	0	692	899	0	0
V/C Ratio(X)	0.08	0.00	0.00	0.46	0.00	0.00	0.45	0.00	0.44	0.40	0.00	0.00
Avail Cap(c_a), veh/h	2584	0	0	2393	0	0	3178	0	2776	3155	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.6	0.0	0.0	10.3	0.0	0.0	6.8	0.0	6.5	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.4	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	2.4	0.0	0.0	2.7	0.0	1.9	2.3	0.0	0.0
LnGrp Delay(d),s/veh	8.6	0.0	0.0	10.9	0.0	0.0	7.1	0.0	7.0	6.8	0.0	0.0
LnGrp LOS	Α			В			Α		А	А		
Approach Vol, veh/h		51			288			707			356	
Approach Delay, s/veh		8.6			10.9			7.1			6.8	
Approach LOS		А			В			Α			А	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.1		14.3		19.1		14.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		58.5		52.5		58.5		52.5				
Max Q Clear Time (g_c+I1), s		7.2		2.7		6.5		7.9				
Green Ext Time (p_c), s		7.4		2.3		7.4		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			7.8									
HCM 2010 LOS			Α									

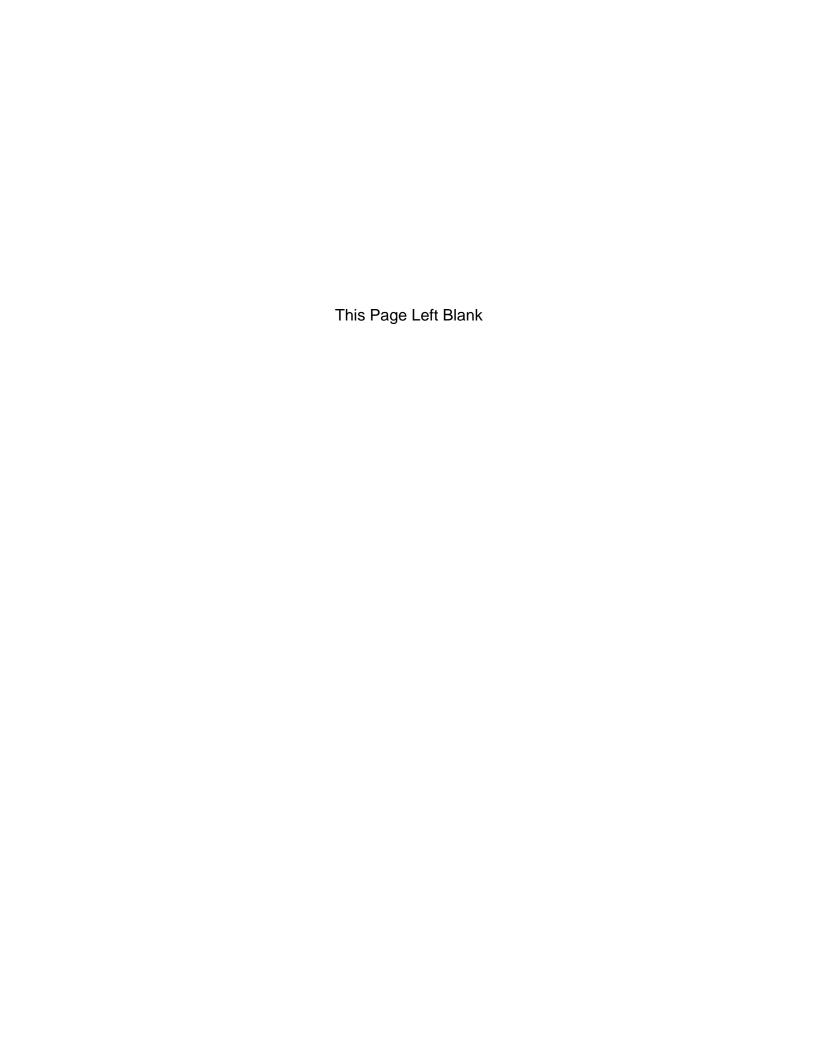
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	†	7	ሻ	†		*	414		002	4	7
Traffic Volume (veh/h)	534	56	422	17	40	21	433	187	18	26	191	410
Future Volume (veh/h)	534	56	422	17	40	21	433	187	18	26	191	410
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00	U	1.00	1.00	· ·	1.00	1.00	U	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	562	59	444	18	42	22	456	197	19	27	354	330
Adj No. of Lanes	2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	946	512	715	126	164	80	627	295	28	32	424	389
Arrive On Green	0.27	0.27	0.27	0.07	0.07	0.07	0.18	0.18	0.18	0.25	0.25	0.25
Sat Flow, veh/h	3442	1863	1583	1774	2310	1124	3548	1673	161	132	1725	1583
Grp Volume(v), veh/h	562	59	444	18	31	33	456	0	216	381	0	330
Grp Sat Flow(s), veh/h/lr		1863	1583	1774	1770	1664	1774	0	1834	1856	0	1583
Q Serve(g_s), s	11.9	2.0	18.0	0.8	1.4	1.6	10.3	0.0	9.3	16.5	0.0	16.8
Cycle Q Clear(g_c), s	11.9	2.0	18.0	0.8	1.4	1.6	10.3	0.0	9.3	16.5	0.0	16.8
Prop In Lane	1.00		1.00	1.00		0.68	1.00	0.0	0.09	0.07	0.0	1.00
Lane Grp Cap(c), veh/h		512	715	126	125	118	627	0	324	456	0	389
V/C Ratio(X)	0.59	0.12	0.62	0.14	0.25	0.28	0.73	0.00	0.67	0.84	0.00	0.85
Avail Cap(c_a), veh/h	1215	657	838	382	381	359	1147	0	593	552	0	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/vel		22.9	17.7	36.8	37.1	37.2	32.8	0.0	32.4	30.2	0.0	30.4
Incr Delay (d2), s/veh	0.6	0.1	1.1	0.5	1.0	1.3	1.6	0.0	2.4	9.2	0.0	11.8
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),vel		1.0	10.5	0.4	0.7	0.8	5.1	0.0	4.9	9.5	0.0	8.6
LnGrp Delay(d),s/veh	27.1	23.0	18.7	37.3	38.1	38.4	34.5	0.0	34.8	39.4	0.0	42.1
LnGrp LOS	С	С	В	D	D	D	С		С	D		D
Approach Vol, veh/h		1065			82			672			711	
Approach Delay, s/veh		23.4			38.1			34.6			40.7	
Approach LOS		C			D			C			D	
	1		2	4		,	7					
Timer Assigned Phs	I	2	3	4	5	6	I	8				
Phs Duration (G+Y+Rc)	C	28.1		25.6		10.9		19.8				
Change Period (Y+Rc),		4.9		4.9		4.9		4.9				
Max Green Setting (Gm		29.8		25.1		18.2		27.3				
Max Q Clear Time (q_c				18.8		3.6		12.3				
Green Ext Time (p_c), s		3.2		2.0		0.2		2.7				
	· 	٥.۷		2.0		0.2		۷.۱				
Intersection Summary			24.7									
HCM 2010 Ctrl Delay			31.7									
HCM 2010 LOS			С									
Notes												

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Movement EBL	. EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations ***	*			ħβ			र्स	7				
Traffic Volume (veh/h) 824		0	0	466	419	249	0	528	0	0	0	
Future Volume (veh/h) 824	489	0	0	466	419	249	0	528	0	0	0	
Number 5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln 1863	1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h 867	515	0	0	491	430	262	0	545				
Adj No. of Lanes 2	2	0	0	2	0	0	1	1				
Peak Hour Factor 0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
Percent Heavy Veh, % 2	2	0	0	2	2	2	2	2				
Cap, veh/h 936	2177	0	0	539	472	504	0	450				
Arrive On Green 0.45	1.00	0.00	0.00	0.30	0.30	0.28	0.00	0.28				
Sat Flow, veh/h 3442	3632	0	0	1883	1566	1774	0	1583				
Grp Volume(v), veh/h 867	515	0	0	486	435	262	0	545				
Grp Sat Flow(s), veh/h/ln1721	1770	0	0	1770	1586	1774	0	1583				
Q Serve(g_s), s 23.7	0.0	0.0	0.0	26.4	26.4	12.4	0.0	28.4				
Cycle Q Clear(g_c), s 23.7	0.0	0.0	0.0	26.4	26.4	12.4	0.0	28.4				
Prop In Lane 1.00		0.00	0.00		0.99	1.00		1.00				
Lane Grp Cap(c), veh/h 936	2177	0	0	533	478	504	0	450				
V/C Ratio(X) 0.93	0.24	0.00	0.00	0.91	0.91	0.52	0.00	1.21				
Avail Cap(c_a), veh/h 1026	2177	0	0	533	478	504	0	450				
HCM Platoon Ratio 1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I) 0.09	0.09	0.00	0.00	0.85	0.85	1.00	0.00	1.00				
Uniform Delay (d), s/veh 26.3	0.0	0.0	0.0	33.7	33.7	30.1	0.0	35.8				
Incr Delay (d2), s/veh 1.6	0.0	0.0	0.0	19.8	21.5	1.0	0.0	114.5				
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/11/1.2	0.0	0.0	0.0	15.7	14.3	6.2	0.0	35.6				
LnGrp Delay(d),s/veh 27.9	0.0	0.0	0.0	53.5	55.2	31.0	0.0	150.3				
LnGrp LOS C	: A			D	Ε	С		F				
Approach Vol, veh/h	1382			921			807					
Approach Delay, s/veh	17.5			54.3			111.6					
Approach LOS	В			D			F					
Timer 1	2	3	4	5	6	7	8					
Assigned Phs	2		4	5	6							
Phs Duration (G+Y+Rc), s	67.0		33.0	31.4	35.6							
Change Period (Y+Rc), s	5.5		4.6	* 4.2	5.5							
Max Green Setting (Gmax),			28.4	* 30	27.5							
Max Q Clear Time (g_c+I1),			30.4	25.7	28.4							
Green Ext Time (p_c), s	14.6		0.0	1.5	0.0							
Intersection Summary												
HCM 2010 Ctrl Delay		52.8										
HCM 2010 LOS		D										
Notes												

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	→	*	•	•		7	ı		*	+	*
Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	^	7	ሻሻ	^						सी	7
Traffic Volume (veh/h) 0	1105	234	229	428	0	0	0	0	207	7	1024
Future Volume (veh/h) 0	1105	234	229	428	0	0	0	0	207	7	1024
Number 5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h 0	1176	249	244	455	0				220	7	0
Adj No. of Lanes 0	2	1	2	2	0				0	1	1
Peak Hour Factor 0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, % 0	2	2	2	2	0				2	2	2
Cap, veh/h 0	2238	1001	268	2663	0				271	9	250
Arrive On Green 0.00	0.63	0.63	0.03	0.25	0.00				0.16	0.16	0.00
Sat Flow, veh/h 0	3632	1583	3442	3632	0				1722	55	1583
Grp Volume(v), veh/h 0	1176	249	244	455	0				227	0	0
Grp Sat Flow(s), veh/h/ln 0	1770	1583	1721	1770	0				1777	0	1583
Q Serve(g_s), s 0.0	18.3	6.9	7.1	10.1	0.0				12.3	0.0	0.0
Cycle Q Clear(g_c), s 0.0	18.3	6.9	7.1	10.1	0.0				12.3	0.0	0.0
Prop In Lane 0.00		1.00	1.00		0.00				0.97		1.00
Lane Grp Cap(c), veh/h 0	2238	1001	268	2663	0				280	0	250
V/C Ratio(X) 0.00	0.53	0.25	0.91	0.17	0.00				0.81	0.00	0.00
Avail Cap(c_a), veh/h 0	2238	1001	268	2663	0				906	0	807
HCM Platoon Ratio 1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I) 0.00	1.00	1.00	0.60	0.60	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh 0.0	10.1	8.0	48.4	13.1	0.0				40.7	0.0	0.0
Incr Delay (d2), s/veh 0.0	0.9	0.6	22.4	0.1	0.0				5.6	0.0	0.0
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	9.1	3.1	4.2	5.0	0.0				6.5	0.0	0.0
LnGrp Delay(d),s/veh 0.0	11.0	8.6	70.8	13.2	0.0				46.2	0.0	0.0
LnGrp LOS	B	A	E	B					D	007	
Approach Vol, veh/h	1425			699						227	
Approach LOS	10.6			33.3						46.2	
Approach LOS	В			С						D	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs 1	2		4		6						
Phs Duration (G+Y+Rc), \$2.0	68.2		19.8		80.2						
Change Period (Y+Rc), \$ 4.2	5.0		4.0		5.0						
Max Green Setting (Gmax), &	28.0		51.0		40.0						
Max Q Clear Time (g_c+l19,1s			14.3		12.1						
Green Ext Time (p_c), s 0.0	6.0		1.5		15.7						
Intersection Summary											
HCM 2010 Ctrl Delay		20.8									
HCM 2010 LOS		20.0 C									
Notes											

APPENDIX F

NEAR-TERM + PROJECT
INTERSECTION ANALYSIS WORKSHEETS



	√	•	<u></u>	<i>></i>	\	+	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	, A	7	↑ ↑		,	^	
Traffic Volume (veh/h)	23	362	603	31	106	376	
Future Volume (veh/h)	23	362	603	31	106	376	
Number	3	18	2	12	1	6	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	
Adj Flow Rate, veh/h	26	407	678	35	119	422	
Adj No. of Lanes	1	1	2	0	1	2	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	490	579	1230	63	159	1876	
Arrive On Green	0.28	0.28	0.36	0.36	0.09	0.53	
Sat Flow, veh/h	1774	1583	3518	177	1774	3632	
Grp Volume(v), veh/h	26	407	350	363	119	422	
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1832	1774	1770	
2 Serve(g_s), s	0.6	11.9	8.6	8.6	3.5	3.4	
Cycle Q Clear(g_c), s	0.6	11.9	8.6	8.6	3.5	3.4	
Prop In Lane	1.00	1.00	0.0	0.10	1.00	5.4	
Lane Grp Cap(c), veh/h	490	579	635	658	159	1876	
V/C Ratio(X)	0.05	0.70	0.55	0.55	0.75	0.22	
Avail Cap(c_a), veh/h	756	817	1450	1501	903	4989	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	14.4	14.7	13.9	13.9	24.1	6.8	
Incr Delay (d2), s/veh	0.0	1.6	0.7	0.7	6.8	0.1	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.3	5.4	4.3	4.5	2.0	1.7	
LnGrp Delay(d),s/veh	14.4	16.2	14.6	14.6	30.9	6.9	
LnGrp LOS	В	В	В	В	C	Α	
Approach Vol, veh/h	433		713			541	
Approach Vol, verim	16.1		14.6			12.1	
Approach LOS	В		14.0 B			12.1 B	
• •	D					D	
Timer	1	2	3	4	5	6	7 8
Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	9.3	24.9				34.1	20.1
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1
Max Green Setting (Gmax), s	27.6	44.4				76.4	23.1
Max Q Clear Time (g_c+I1), s	5.5	10.6				5.4	13.9
Green Ext Time (p_c), s	0.3	8.9				9.7	1.1
ntersection Summary							
HCM 2010 Ctrl Delay			14.2				
HCM 2010 LOS			В				

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	5	18	88	3	37	9	342	24	12	122	19
Future Vol, veh/h	5	5	18	88	3	37	9	342	24	12	122	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	5	19	95	3	40	10	368	26	13	131	20
Major/Minor N	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	589	580	141	580	577	381	152	0	0	394	0	0
Stage 1	167	167	-	400	400	-	-	-	-	-	-	-
Stage 2	422	413	-	180	177	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	420	426	907	426	427	666	1429	-	-	1165	-	-
Stage 1	835	760	-	626	602	-	-	-	-	-	-	-
Stage 2	609	594	-	822	753	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	386	417	907	406	418	666	1429	-	-	1165	-	-
Mov Cap-2 Maneuver	386	417	-	406	418	-	-	-	-	-	-	-
Stage 1	827	751	-	620	597	-	-	-	-	-	-	-
Stage 2	564	589	-	789	744	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.1			16.2			0.2			0.6		
HCM LOS	В			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR I	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1429	-	-	625	458	1165	-	-			
HCM Lane V/C Ratio		0.007	-	-		0.301		-	-			
HCM Control Delay (s)		7.5	0	-	11.1	16.2	8.1	0	-			
HCM Lane LOS		Α	Α	-	В	С	Α	Α	-			
HCM 95th %tile Q(veh))	0	-	-	0.2	1.2	0	-	-			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			ર્ન	7		4	
Traffic Volume (veh/h)	2	4	10	410	0	19	29	448	265	9	236	7
Future Volume (veh/h)	2	4	10	410	0	19	29	448	265	9	236	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	2	5	12	477	0	22	34	521	308	10	274	8
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	227	453	688	0	26	91	745	668	73	738	21
Arrive On Green	0.42	0.42	0.42	0.42	0.00	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	87	541	1077	1342	0	62	56	1767	1583	19	1750	50
Grp Volume(v), veh/h	19	0	0	499	0	0	555	0	308	292	0	0
Grp Sat Flow(s),veh/h/ln	1705	0	0	1404	0	0	1823	0	1583	1819	0	0
Q Serve(g_s), s	0.0	0.0	0.0	17.8	0.0	0.0	2.5	0.0	8.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	18.2	0.0	0.0	14.1	0.0	8.0	6.2	0.0	0.0
Prop In Lane	0.11		0.63	0.96		0.04	0.06		1.00	0.03		0.03
Lane Grp Cap(c), veh/h	786	0	0	714	0	0	836	0	668	832	0	0
V/C Ratio(X)	0.02	0.00	0.00	0.70	0.00	0.00	0.66	0.00	0.46	0.35	0.00	0.00
Avail Cap(c_a), veh/h	1629	0	0	1440	0	0	1573	0	1321	1553	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.7	0.0	0.0	14.8	0.0	0.0	13.6	0.0	11.8	11.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.0	0.9	0.0	0.5	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	7.2	0.0	0.0	7.3	0.0	3.5	3.1	0.0	0.0
LnGrp Delay(d),s/veh	9.7	0.0	0.0	16.0	0.0	0.0	14.5	0.0	12.3	11.6	0.0	0.0
LnGrp LOS	Α			В			В		В	В		
Approach Vol, veh/h		19			499			863			292	
Approach Delay, s/veh		9.7			16.0			13.7			11.6	
Approach LOS		Α			В			В			В	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		28.5		28.4		28.5		28.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		47.5		53.5		47.5		53.5				
Max Q Clear Time (q_c+I1), s		16.1		2.4		8.2		20.2				
Green Ext Time (p_c), s		7.9		3.9		8.2		3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			14.0									
HCM 2010 LOS			В									

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Manager	- -	*	▼	WDT	- WDD	ND.	I NDT	NDD	CDI	♥	CDD
Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations 77	<u></u>	215		↑ }	10	1 07	€Î	20	10	4	7
Traffic Volume (veh/h) 582	55	315	6	20	19	407	236	20	18	121	527
Future Volume (veh/h) 582	55	315	6	20	19	407	236	20	18	121	527
Number 5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh 0	0	0	0	0	1.00	0	0	0	0	0	1.00
Ped-Bike Adj(A_pbT) 1.00	1 00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h 661	62	358	7	23	22	511	200	23	20	469	378
Adj No. of Lanes 2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, % 2	2	2	2	102	2	2	2	2	2	2	2
Cap, veh/h 899	487	713	99	102	86	670	310	36	21	501	445
Arrive On Green 0.26	0.26	0.26	0.06	0.06	0.06	0.19	0.19	0.19	0.28	0.28	0.28
Sat Flow, veh/h 3442	1863	1583	1774	1833	1530	3548	1641	189	76	1783	1583
Grp Volume(v), veh/h 661	62	358	7	22	23	511	0	223	489	0	378
Grp Sat Flow(s), veh/h/ln1721	1863	1583	1774	1770	1593	1774	0	1829	1859	0	1583
Q Serve(g_s), s 16.2	2.3	14.8	0.3	1.1	1.3	12.6	0.0	10.4	23.6	0.0	20.8
Cycle Q Clear(g_c), s 16.2	2.3	14.8	0.3	1.1	1.3	12.6	0.0	10.4	23.6	0.0	20.8
Prop In Lane 1.00	407	1.00	1.00	00	0.96	1.00	0	0.10	0.04	0	1.00
Lane Grp Cap(c), veh/h 899	487	713	99	99	89	670	0	345	522	0	445
V/C Ratio(X) 0.73	0.13	0.50	0.07	0.22	0.26	0.76	0.00	0.65	0.94 527	0.00	0.85 449
Avail Cap(c_a), veh/h 1088 HCM Platoon Ratio 1.00	589	799	328	327 1.00	294	1087	1.00	560	1.00	1.00	1.00
	1.00	1.00	1.00		1.00	1.00		1.00			
Upstream Filter(I) 1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 31.1 Incr Delay (d2), s/veh 3.0	26.0	18.0	41.2	41.5	41.6	35.4	0.0	34.5	32.3 24.3	0.0	14.2
J , ,.	0.2	1.1	0.3	1.1	1.5	1.8	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh 0.0	1.2	8.9	0.0	0.6	0.6	6.3	0.0	5.4	15.6	0.0	10.8
%ile BackOfQ(50%),veh/lr8.0 LnGrp Delay(d),s/veh 34.0	26.2	19.1	41.5	42.7	43.1	37.2	0.0	36.5	56.5	0.0	45.4
LnGrp Delay(d),s/veh 34.0 LnGrp LOS C	20.2 C	19.1 B	41.5 D	42.7 D	43.1 D	37.2 D	0.0	30.3 D	50.5 E	0.0	43.4 D
	1081	D	U	52	U	U	734	U		867	U
Approach Polay, shiph				42.7			37.0				
Approach LOS	28.6 C			42.7 D			37.0 D			51.7 D	
Approach LOS	C			D			D			D	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8				
Phs Duration (G+Y+Rc), s	29.0		30.8		10.0		22.3				
Change Period (Y+Rc), s	4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s	29.1		26.1		17.0		28.2				
Max Q Clear Time (g_c+I1), s	18.2		25.6		3.3		14.6				
Green Ext Time (p_c), s	5.9		0.2		0.1		2.8				
Intersection Summary											
HCM 2010 Ctrl Delay		38.5									
 j											
HCM 2010 LOS		D									

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Movement EE	3L	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	Ť	^			ħβ			4	7				
	22	575	0	0	559	396	136	9	379	0	0	0	
	22	575	0	0	559	396	136	9	379	0	0	0	
Number	5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT) 1.0	00		1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj 1.0		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln 186		1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h 99		618	0	0	601	413	146	10	395				
Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
Peak Hour Factor 0.9		0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93				
Percent Heavy Veh, %	2	2	0.75	0.73	2	2	2	2	2				
Cap, veh/h 104		2213	0	0	536	368	400	27	380				
Arrive On Green 0.5		1.00	0.00	0.00	0.27	0.27	0.24	0.24	0.24				
Sat Flow, veh/h 344		3632	0.00	0.00	2102	1380	1665	114	1583				
<u></u>													
Grp Volume(v), veh/h 99		618	0	0	529	485	156	0	395				
Grp Sat Flow(s), veh/h/ln172		1770	0	0	1770	1619	1779	0	1583				
Q Serve(g_s), s 20		0.0	0.0	0.0	20.0	20.0	5.5	0.0	18.0				
Cycle Q Clear(g_c), s 20		0.0	0.0	0.0	20.0	20.0	5.5	0.0	18.0				
Prop In Lane 1.0			0.00	0.00		0.85	0.94		1.00				
Lane Grp Cap(c), veh/h 104		2213	0	0	472	432	427	0	380				
V/C Ratio(X) 0.9		0.28	0.00	0.00	1.12	1.12	0.37	0.00	1.04				
Avail Cap(c_a), veh/h 104		2213	0	0	472	432	427	0	380				
HCM Platoon Ratio 1.6		1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I) 0.4	41	0.41	0.00	0.00	0.80	0.80	1.00	0.00	1.00				
Uniform Delay (d), s/veh 18	3.0	0.0	0.0	0.0	27.5	27.5	23.7	0.0	28.5				
Incr Delay (d2), s/veh 9	0.1	0.1	0.0	0.0	75.1	76.7	0.5	0.0	56.8				
3 1 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/11/0).9	0.0	0.0	0.0	19.6	18.1	2.7	0.0	19.8				
LnGrp Delay(d),s/veh 27		0.1	0.0	0.0	102.6	104.2	24.3	0.0	85.3				
LnGrp LOS	С	Α			F	F	С		F				
Approach Vol, veh/h		1609			1014			551					
Approach Delay, s/veh		16.8			103.4			68.0					
Approach LOS		В			F			E					
• •													
Timer	1	2	3	4	5	6	7	8					
Assigned Phs		2		4	5	6							
Phs Duration (G+Y+Rc), s		52.4		22.6	26.9	25.5							
Change Period (Y+Rc), s		5.5		4.6	* 4.2	5.5							
Max Green Setting (Gmax)		46.9		18.0	* 23	19.9							
Max Q Clear Time (g_c+l1)	l, S	2.0		20.0	22.6	22.0							
Green Ext Time (p_c), s		16.7		0.0	0.1	0.0							
Intersection Summary													
Intersection Summary			F0.0										
HCM 2010 Ctrl Delay			53.3										
HCM 2010 LOS			D										

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Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	^	7	ሻሻ	^						4	7	
Traffic Volume (veh/h) 0	1226	81	388	285	0	0	0	0	272	0	716	
Future Volume (veh/h) 0	1226	81	388	285	0	0	0	0	272	0	716	
Number 5	2	12	1	6	16				7	4	14	
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0	
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00				1.00		1.00	
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863	
Adj Flow Rate, veh/h 0	1291	85	408	300	0				286	0	0	
Adj No. of Lanes 0	2	1	2	2	0				0	1	1	
Peak Hour Factor 0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95	
Percent Heavy Veh, % 0	2	2	2	2	0.75				2	2	2	
Cap, veh/h 0	1768	791	450	2429	0				344	0	307	
Arrive On Green 0.00	0.50	0.50	0.04	0.23	0.00				0.19	0.00	0.00	
Sat Flow, veh/h 0.00	3632	1583	3442	3632	0.00				1774	0.00	1583	
Grp Volume(v), veh/h	1291	85	408	3002	0				286	0	0	
1 7	1770	1583	1721	1770					1774		1583	
Grp Sat Flow(s), veh/h/ln 0	21.6	2.1	8.9	5.1	0.0					0.0	0.0	
2 Serve(g_s), s 0.0									11.6			
Cycle Q Clear(g_c), s 0.0	21.6	2.1	8.9	5.1	0.0				11.6	0.0	0.0	
Prop In Lane 0.00	17/0	1.00	1.00	2420	0.00				1.00	0	1.00	
Lane Grp Cap(c), veh/h 0	1768	791	450	2429	0				344	0	307	
//C Ratio(X) 0.00	0.73	0.11	0.91	0.12	0.00				0.83	0.00	0.00	
Avail Cap(c_a), veh/h 0	1768	791	450	2429	0				497	0	443	
HCM Platoon Ratio 1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00	
Upstream Filter(I) 0.00	1.00	1.00	0.35	0.35	0.00				1.00	0.00	0.00	
Uniform Delay (d), s/veh 0.0	14.8	9.9	35.4	11.1	0.0				29.1	0.0	0.0	
Incr Delay (d2), s/veh 0.0	2.7	0.3	9.6	0.0	0.0				7.9	0.0	0.0	
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	
%ile BackOfQ(50%),veh/lr0.0	11.1	1.0	4.8	2.5	0.0				6.4	0.0	0.0	
LnGrp Delay(d),s/veh 0.0	17.5	10.2	45.0	11.1	0.0				36.9	0.0	0.0	
LnGrp LOS	В	В	D	В					D			
Approach Vol, veh/h	1376			708						286		
Approach Delay, s/veh	17.0			30.6						36.9		
Approach LOS	В			С						D		
Timer 1	2	3	4	5	6	7	8					
Assigned Phs 1	2		4		6							
Phs Duration (G+Y+Rc), 1\$4.0	42.5		18.5		56.5							
Change Period (Y+Rc), \$ 4.2	5.0		4.0		5.0							
Max Green Setting (Gmax), &	31.0		21.0		45.0							
Max Q Clear Time (g_c+1110),9s	23.6		13.6		7.1							
Green Ext Time (p_c), s 0.0	5.6		1.0		17.1							
Intersection Summary												
HCM 2010 Ctrl Delay		23.5										
HCM 2010 LOS		С										
Notes												

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Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	ሻ	₩	†	NDIX) j	^		
Traffic Volume (veh/h)	32	201	455	46	289	1021		
Future Volume (veh/h)	32	201	455	46	289	1021		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	U	1.00	1.00	U		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	34	212	479	48	304	1075		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	0.73	2	0.73	0.73	2	0.73		
Cap, veh/h	255	563	1244	124	376	2378		
Arrive On Green	0.14	0.14	0.38	0.38	0.21	0.67		
Sat Flow, veh/h	1774	1583	3344	325	1774	3632		
Grp Volume(v), veh/h	34	212	260	267	304	1075		
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1805	304 1774	1770		
Q Serve(g_s), s	1.0	5.7	6.1	6.1	9.3	8.2		
Cycle Q Clear(g_c), s	1.0	5.7	6.1	6.1	9.3	8.2		
Prop In Lane	1.00	1.00	0.1	0.18	1.00	0.2		
Lane Grp Cap(c), veh/h	255	563	677	691	376	2378		
V/C Ratio(X)	0.13	0.38	0.38	0.39	0.81	0.45		
Avail Cap(c_a), veh/h	744	1000	1137	1160	1077	4697		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	21.3	13.6	12.7	12.7	21.3	4.4		
Incr Delay (d2), s/veh	0.2	0.4	0.4	0.4	4.2	0.1		
Initial Q Delay(d3),s/veh	0.2	0.4	0.4	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.5	2.5	3.0	3.1	4.9	3.9		
LnGrp Delay(d),s/veh	21.5	14.1	13.1	13.1	25.5	4.5		
LnGrp LOS	21.5 C	14.1 B	13.1 B	13.1 B	23.5 C	4.5 A		
Approach Vol, veh/h	246	D	527	D	C	1379		
	246 15.1		13.1			9.2		
Approach Delay, s/veh Approach LOS	15.1 B		13.1 B			9.2 A		
•					_		7	
Timer	1	2	3	4	5	6	7 8	
Assigned Phs	1	2				6	8	
Phs Duration (G+Y+Rc), s	16.5	27.2				43.7	13.3	
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1	
Max Green Setting (Gmax), s	34.6	36.6				75.6	23.9	
Max Q Clear Time (g_c+l1), s	11.3	8.1				10.2	7.7	
Green Ext Time (p_c), s	0.9	13.7				17.9	0.7	
Intersection Summary								
HCM 2010 Ctrl Delay			10.8					
HCM 2010 LOS			В					

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol., veh/h	7	2	16	74	2	35	12	275	70	30	226	15
Future Vol, veh/h	7	2	16	74	2	35	12	275	70	30	226	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized			None	-	-	None	-	-	None	-		None
Storage Length	_	_	-	_	_	-	_	_	-	_	_	-
Veh in Median Storage	2.# -	0	-	-	0	-	_	0	-	_	0	-
Grade, %	-	0			0		_	0		_	0	_
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	2	17	78	2	37	13	289	74	32	238	16
Major/Minor	Minor2			Minor1			Major1		1	Major2		
Conflicting Flow All	680	697	246	670	669	326	254	0	0	363	0	0
Stage 1	309	309	-	352	352	-	-	-	-	-	-	-
Stage 2	371	388	-	318	317	_	-	-	-	_	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52		-	-	-	-		-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	_	-	-	_	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518		3.318	2.218	_	_	2.218	-	-
Pot Cap-1 Maneuver	365	365	793	371	379	715	1311	-	-	1196	-	-
Stage 1	701	660	-	665	632	_	-	-	-	-	-	-
Stage 2	649	609	-	693	654	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	333	349	793	349	362	715	1311	-	-	1196	-	-
Mov Cap-2 Maneuver	333	349	-	349	362	-	-	-	-	-	-	-
Stage 1	692	640	-	656	624	-	-	-	-	-	-	-
Stage 2	606	601	-	655	634	-	-	-	-	-	-	-
Ŭ												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.1			17			0.3			0.9		
HCM LOS	В			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1311			533	416	1196	-	-			
HCM Lane V/C Ratio		0.01	-	-	0.049			-	-			
HCM Control Delay (s)		7.8	0	-	12.1	17	8.1	0	-			
HCM Lane LOS		Α	A	-	В	С	Α	A	-			
HCM 95th %tile Q(veh)	0	-	-	0.2	1.1	0.1	-	-			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			ર્ન	7		4	
Traffic Volume (veh/h)	13	3	32	248	2	26	38	383	287	20	322	12
Future Volume (veh/h)	13	3	32	248	2	26	38	383	287	20	322	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	14	3	34	261	2	27	40	403	302	21	339	13
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	84	320	557	11	38	146	782	718	125	768	28
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	263	287	1100	1247	38	132	76	1724	1583	38	1693	63
Grp Volume(v), veh/h	51	0	0	290	0	0	443	0	302	373	0	0
Grp Sat Flow(s),veh/h/ln	1649	0	0	1417	0	0	1800	0	1583	1794	0	0
Q Serve(g_s), s	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.0	0.0	0.0	6.3	0.0	0.0	6.0	0.0	4.5	4.9	0.0	0.0
Prop In Lane	0.27		0.67	0.90		0.09	0.09		1.00	0.06		0.03
Lane Grp Cap(c), veh/h	611	0	0	607	0	0	928	0	718	922	0	0
V/C Ratio(X)	0.08	0.00	0.00	0.48	0.00	0.00	0.48	0.00	0.42	0.40	0.00	0.00
Avail Cap(c_a), veh/h	2443	0	0	2263	0	0	3015	0	2623	2974	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.1	0.0	0.0	11.0	0.0	0.0	6.9	0.0	6.5	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.6	0.0	0.0	0.4	0.0	0.4	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.6	0.0	0.0	3.2	0.0	2.0	2.5	0.0	0.0
LnGrp Delay(d),s/veh	9.2	0.0	0.0	11.6	0.0	0.0	7.3	0.0	6.9	6.9	0.0	0.0
LnGrp LOS	A			В			А		А	Α		
Approach Vol, veh/h		51			290			745			373	
Approach Delay, s/veh		9.2			11.6			7.1			6.9	
Approach LOS		А			В			А			А	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.5		14.8		20.5		14.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		58.5		52.5		58.5		52.5				
Max Q Clear Time (g_c+I1), s		8.0		2.8		6.9		8.3				
Green Ext Time (p_c), s		8.0		2.4		8.0		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			8.0									
HCM 2010 LOS			Α									

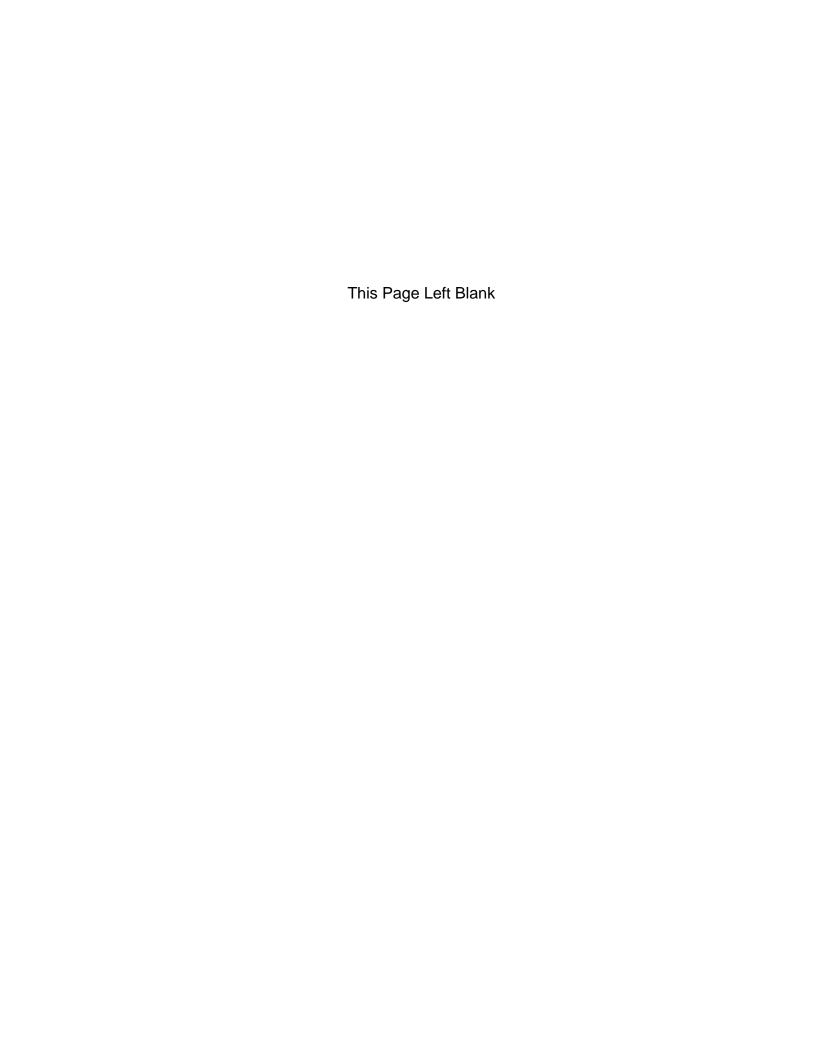
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Movement EB	L E	EBT	EBR	▼ WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations 3		†	7		∱ }		*	414			4	7
Traffic Volume (veh/h) 56		56	422	17	40	21	433	189	18	26	192	424
Future Volume (veh/h) 56		56	422	17	40	21	433	189	18	26	192	424
	5	2	12	1	6	16	3	8	18	7	4	14
	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT) 1.0		· ·	1.00	1.00		1.00	1.00		1.00	1.00	0	1.00
Parking Bus, Adj 1.0		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 186		863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h 59		59	444	18	42	22	456	199	19	27	365	338
	2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.9		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h 94		512	714	125	162	79	625	295	28	32	431	395
Arrive On Green 0.2		0.28	0.28	0.07	0.07	0.07	0.18	0.18	0.18	0.25	0.25	0.25
Sat Flow, veh/h 344.		863	1583	1774	2310	1124	3548	1675	160	128	1728	1583
Grp Volume(v), veh/h 59		59	444	18	31	33	456	0	218	392	0	338
Grp Sat Flow(s), veh/h/ln172		863	1583	1774	1770	1664	1774	0	1835	1856	0	1583
Q Serve(g_s), s 13.		2.0	18.3	0.8	1.4	1.6	10.4	0.0	9.5	17.2	0.0	17.4
Cycle Q Clear(g_c), s 13.		2.0	18.3	0.8	1.4	1.6	10.4	0.0	9.5	17.2	0.0	17.4
Prop In Lane 1.0		2.0	1.00	1.00	1.7	0.68	1.00	0.0	0.09	0.07	0.0	1.00
Lane Grp Cap(c), veh/h 94		512	714	125	124	117	625	0	323	463	0	395
V/C Ratio(X) 0.6		0.12	0.62	0.14	0.25	0.28	0.73	0.00	0.67	0.85	0.00	0.86
Avail Cap(c_a), veh/h 120		650	831	378	377	355	1134	0.00	586	545	0.00	465
HCM Platoon Ratio 1.0		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I) 1.0		1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 27.		23.2	17.9	37.3	37.6	37.7	33.3	0.0	32.9	30.5	0.0	30.6
Incr Delay (d2), s/veh 0.		0.1	1.1	0.5	1.1	1.3	1.7	0.0	2.5	10.5	0.0	13.0
Initial Q Delay(d3),s/veh 0.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr6.		1.0	10.6	0.4	0.7	0.8	5.2	0.0	5.0	10.2	0.0	9.0
LnGrp Delay(d),s/veh 27.		23.3	19.0	37.8	38.7	38.9	34.9	0.0	35.4	41.0	0.0	43.6
	2	C	В	D	D	D	C	0.0	D	D	3.0	D
Approach Vol, veh/h		101			82			674			730	
Approach Delay, s/veh		24.0			38.6			35.1			42.2	
Approach LOS		24.0 C			D			D			42.2 D	
• •											- 0	
	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		28.4		26.2		10.9		19.9				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax),		29.8		25.1		18.2		27.3				
Max Q Clear Time (g_c+I1),	S 2	20.3		19.4		3.6		12.4				
Green Ext Time (p_c), s		3.2		1.9		0.2		2.7				
Intersection Summary												
HCM 2010 Ctrl Delay			32.5									
HCM 2010 LOS			С									
Notes												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻሻ	^			∱ Љ			र्स	7				
Traffic Volume (veh/h)	824	511	0	0	473	426	249	0	540	0	0	0	
Future Volume (veh/h)	824	511	0	0	473	426	249	0	540	0	0	0	
Number	5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h	867	538	0	0	498	437	262	0	557				
Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2				
Cap, veh/h	929	2141	0	0	524	459	522	0	465				
Arrive On Green	0.45	1.00	0.00	0.00	0.29	0.29	0.29	0.00	0.29				
Sat Flow, veh/h	3442	3632	0	0	1881	1568	1774	0	1583				
Grp Volume(v), veh/h	867	538	0	0	493	442	262	0	557				
Grp Sat Flow(s),veh/h/lr		1770	0	0	1770	1586	1774	0	1583				
Q Serve(g_s), s	23.9	0.0	0.0	0.0	27.3	27.3	12.2	0.0	29.4				
Cycle Q Clear(g_c), s	23.9	0.0	0.0	0.0	27.3	27.3	12.2	0.0	29.4				
Prop In Lane	1.00	0.0	0.00	0.00	27.0	0.99	1.00	0.0	1.00				
Lane Grp Cap(c), veh/h		2141	0.00	0.00	518	465	522	0	465				
V/C Ratio(X)	0.93	0.25	0.00	0.00	0.95	0.95	0.50	0.00	1.20				
Avail Cap(c_a), veh/h	991	2141	0.00	0.00	518	465	522	0.00	465				
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.85	0.85	1.00	0.00	1.00				
Uniform Delay (d), s/vel		0.0	0.0	0.0	34.6	34.6	29.2	0.0	35.3				
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.0	26.1	28.0	0.8	0.0	107.8				
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),vel		0.0	0.0	0.0	17.0	15.5	6.1	0.0	35.9				
LnGrp Delay(d),s/veh	28.4	0.0	0.0	0.0	60.7	62.7	30.0	0.0	143.1				
LnGrp LOS	C	A	3.0	3.0	E	E	C	3.0	F				
Approach Vol, veh/h		1405			935	_		819					
Approach Delay, s/veh		17.6			61.7			106.9					
Approach LOS		В			E			F					
Timer	1	2	3	4	5	6	7	8					
Assigned Phs		2		4	5	6							
Phs Duration (G+Y+Rc)	۱ ۲	66.0		34.0	31.2	34.8							
Change Period (Y+Rc),		5.5		4.6	* 4.2	5.5							
Max Green Setting (Gm		60.5		29.4	* 29	27.5							
Max Q Clear Time (g_c		2.0		31.4	25.9	29.3							
Green Ext Time (p_c), s		15.1		0.0	1.1	0.0							
ntersection Summary													
HCM 2010 Ctrl Delay			53.8										
HCM 2010 LOS			D										
Notes													

•	→	•	√	←	•	•	†	<u> </u>	\	Ţ	√
Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	^	7	ሻሻ	^						4	7
Traffic Volume (veh/h) 0		234	234	430	0	0	0	0	224	7	1024
Future Volume (veh/h) 0	1110	234	234	430	0	0	0	0	224	7	1024
Number 5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h 0	1181	249	249	457	0				238	7	0
Adj No. of Lanes 0	2	1	2	2	0				0	1	1
Peak Hour Factor 0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, % 0	2	2	2	2	0.71				2	2	2
Cap, veh/h 0	2199	984	268	2624	0				291	9	267
Arrive On Green 0.00	0.62	0.62	0.03	0.24	0.00				0.17	0.17	0.00
Sat Flow, veh/h 0	3632	1583	3442	3632	0.00				1726	51	1583
Grp Volume(v), veh/h 0	1181	249	249	457	0				245	0	0
Grp Sat Flow(s), veh/h/ln 0	1770	1583	1721	1770	0				1776	0	1583
Q Serve(g_s), s 0.0	19.0	7.1	7.2	10.2	0.0				13.3	0.0	0.0
Cycle Q Clear(g_c), s 0.0	19.0	7.1	7.2	10.2	0.0				13.3	0.0	0.0
Prop In Lane 0.00	17.0	1.00	1.00	10.2	0.00				0.97	0.0	1.00
Lane Grp Cap(c), veh/h 0	2199	984	268	2624	0.00				300	0	267
V/C Ratio(X) 0.00	0.54	0.25	0.93	0.17	0.00				0.82	0.00	0.00
Avail Cap(c_a), veh/h 0	2199	984	268	2624	0.00				906	0.00	807
HCM Platoon Ratio 1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I) 0.00	1.00	1.00	0.53	0.57	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh 0.0	10.8	8.5	48.4	13.6	0.00				40.1	0.00	0.00
Incr Delay (d2), s/veh 0.0	0.9	0.6	24.6	0.1	0.0				5.5	0.0	0.0
Initial Q Delay(d3),s/veh 0.0	0.9	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr0.0	9.5	3.2	4.4	5.0	0.0				7.0	0.0	0.0
LnGrp Delay(d),s/veh 0.0	11.7	9.1	73.0	13.7	0.0				45.6	0.0	0.0
LnGrp LOS	11.7 B	9.1 A	73.0 E	13.7 B	0.0				43.0 D	0.0	0.0
	1430	Α.		706					D	245	
Approach Vol, veh/h Approach Delay, s/veh	11.3			34.6						45.6	
Approach LOS	11.3 B			34.0 C						45.0 D	
• •	Ď			C						U	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs 1	2		4		6						
Phs Duration (G+Y+Rc), \$2.0	67.1		20.9		79.1						
Change Period (Y+Rc), \$ 4.2	5.0		4.0		5.0						
Max Green Setting (Gmax), 8			51.0		40.0						
Max Q Clear Time (g_c+l19,2s	21.0		15.3		12.2						
Green Ext Time (p_c), s 0.0	5.6		1.6		15.7						
Intersection Summary											
		21.7									
HCM 2010 Ctrl Delay		21.7									
HCM 2010 LOS		С									
Notes											

APPENDIX G

MBAP LAND USE EXCERPTS AND HORIZON YEAR 2035 TRAFFIC VOLUME FORECASTS



Morena Blvd Station Area Planning Study

Final Report













February 2014



































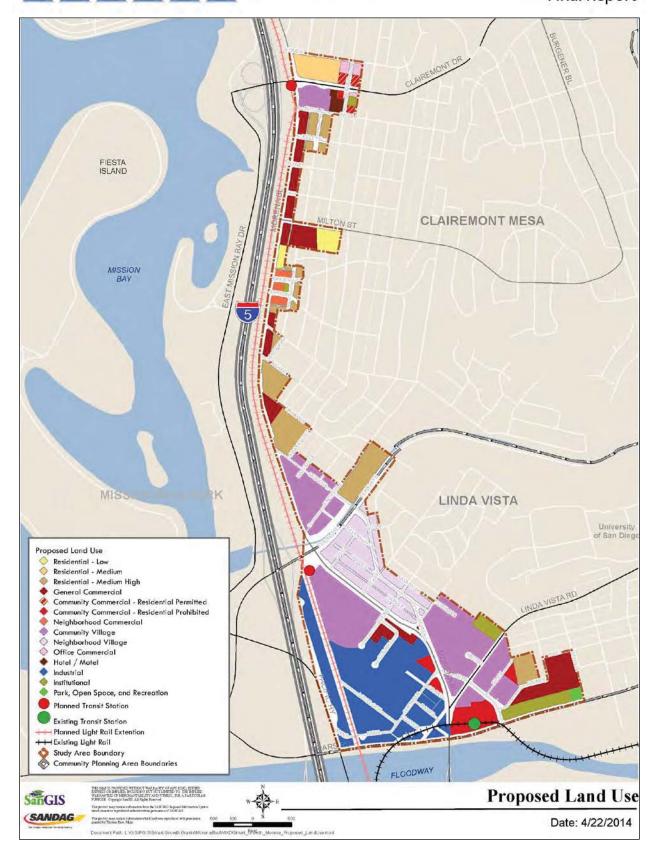


Figure ES-5: Proposed Land Use Scenario

ES-10 February 2014 **Final Report**



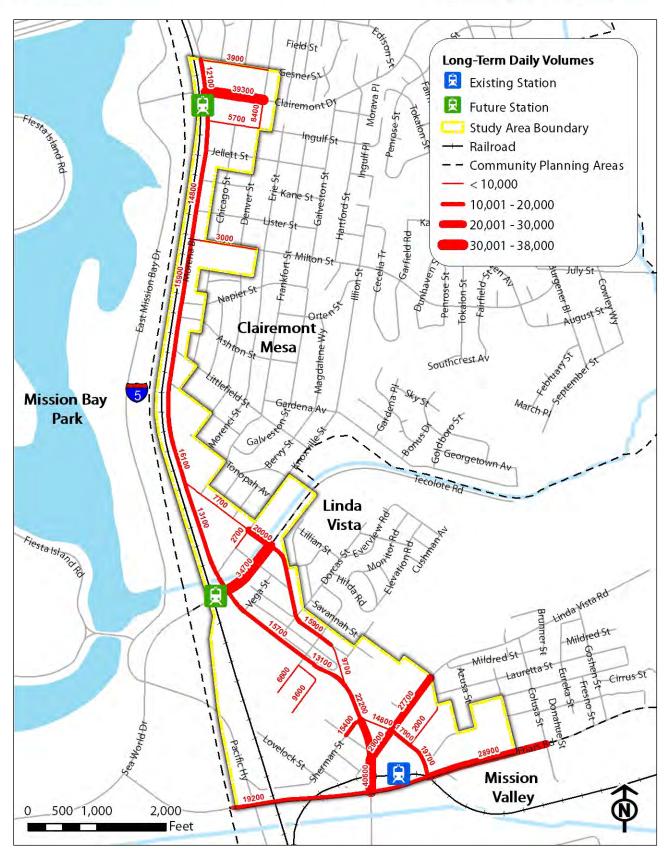
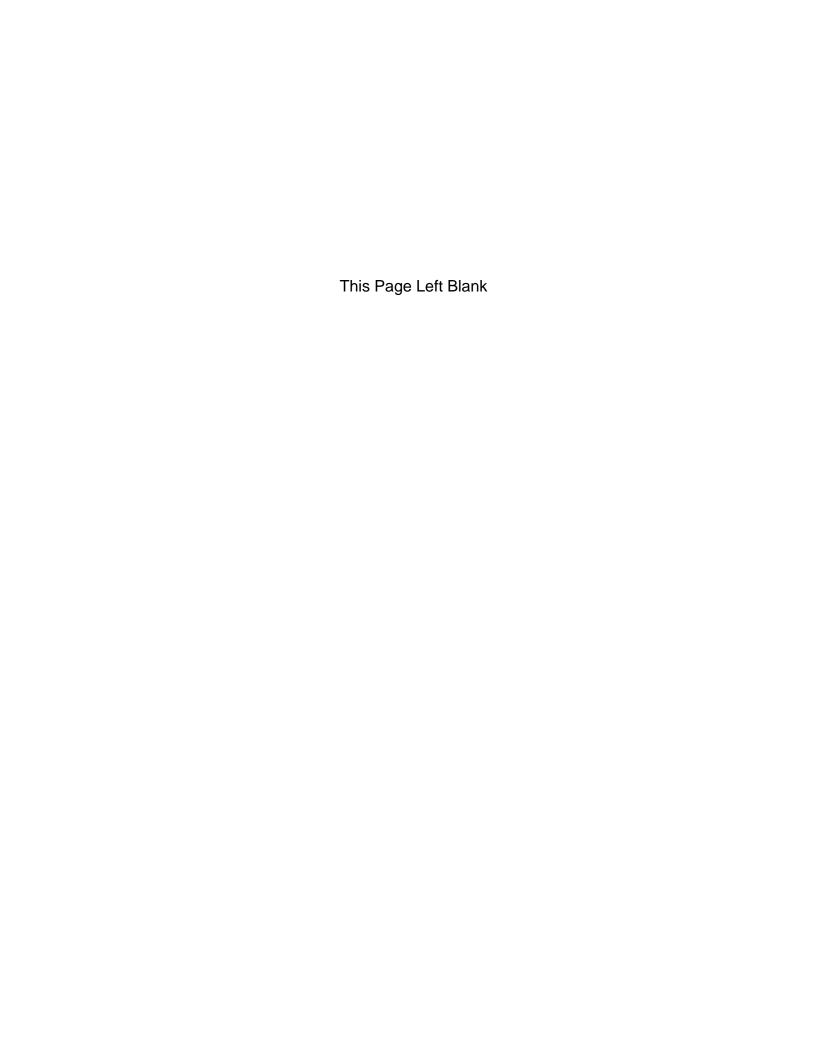


Figure 4-55: Preferred Alternative (Long-term) Daily Volumes

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	Appendix I
	Horizon Year 2035 Intersection Analysis Worksheet
LINSCOTT, LAW & GREENSPAN, engineers	LLG Ref. 3-16-26



	•	•	†	<i>></i>	\	+	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	ች	7	† %		7	^	
Traffic Volume (veh/h)	10	309	386	26	190	501	
Future Volume (veh/h)	10	309	386	26	190	501	
Number	3	18	2	12	1	6	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	
Adj Flow Rate, veh/h	11	336	420	28	207	545	
Adj No. of Lanes	1	1	2	0	1	1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	404	606	1014	67	275	1023	
Arrive On Green	0.23	0.23	0.30	0.30	0.16	0.55	
Sat Flow, veh/h	1774	1583	3462	224	1774	1863	
Grp Volume(v), veh/h	11	336	220	228	207	545	
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1823	1774	1863	
Q Serve(g_s), s	0.2	7.8	4.7	4.7	5.3	8.8	
Cycle Q Clear(g_c), s	0.2	7.8	4.7	4.7	5.3	8.8	
Prop In Lane	1.00	1.00		0.12	1.00		
Lane Grp Cap(c), veh/h	404	606	533	549	275	1023	
V/C Ratio(X)	0.03	0.55	0.41	0.42	0.75	0.53	
Avail Cap(c_a), veh/h	899	1048	1523	1570	1151	2986	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh	14.1	11.4	13.2	13.2	19.1	6.8	
Incr Delay (d2), s/veh	0.0	0.8	0.5	0.5	4.1	0.4	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.1	3.5	2.3	2.4	2.9	4.5	
LnGrp Delay(d),s/veh	14.2	12.2	13.7	13.7	23.2	7.2	
LnGrp LOS	В	В	В	В	С	Α	
Approach Vol, veh/h	347		448			752	
Approach Delay, s/veh	12.3		13.7			11.6	
Approach LOS	В		В			В	
Timer	1	2	3	4	5	6	7 8
Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	11.7	19.6				31.3	15.9
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1
Max Green Setting (Gmax), s	30.6	40.6				75.6	23.9
Max Q Clear Time (g_c+l1), s	7.3	6.7				10.8	9.8
Green Ext Time (p_c), s	0.6	7.5				8.0	1.0
Intersection Summary	3.0	7.0				5.0	
HCM 2010 Ctrl Delay			12.3				
HCM 2010 CIT Delay			12.3 B				
I ICIVI ZUTU LUS			D				

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	10	20	9	0	34	10	367	14	9	190	20
Future Vol, veh/h	10	10	20	9	0	34	10	367	14	9	190	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	11	22	10	0	37	11	395	15	10	204	22
Major/Minor 1	Minor2			Minor1			Major1		1	Major2		
Conflicting Flow All	676	665	215	675	669	402	226	0	0	410	0	0
Stage 1	234	234	-	424	424	-	-	-	-	-	-	-
Stage 2	442	431	-	251	245	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	367	381	825	368	379	648	1342	-	-	1149	-	-
Stage 1	769	711	-	608	587	-	-	-	-	-	-	-
Stage 2	594	583	-	753	703	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	341	373	825	345	371	648	1342	-	-	1149	-	-
Mov Cap-2 Maneuver	341	373	-	345	371	-	-	-	-	-	-	-
Stage 1	761	704	-	601	581	-	-	-	-	-	-	-
Stage 2	554	577	-	715	696	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.9			12.2			0.2			0.3		
HCM LOS	В			В								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR I	EBLn1V	VBL n1	SBL	SBT	SBR			
Capacity (veh/h)		1342	-	-	498	547	1149	-	-			
HCM Lane V/C Ratio		0.008	_			0.085		_	_			
HCM Control Delay (s)		7.7	0	_	12.9	12.2	8.2	0	_			
HCM Lane LOS		Α.,	A	_	В	В	Α	A	_			
HCM 95th %tile Q(veh))	0	-	-	0.3	0.3	0	-	_			
/ 5 / 5 2 (1011)					0.0	0.0						

	۶	→	•	√	←	•	1	†	_	/	↓	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			र्स	7		4	
Traffic Volume (veh/h)	50	50	100	125	100	25	25	381	240	8	236	50
Future Volume (veh/h)	50	50	100	125	100	25	25	381	240	8	236	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	54	54	109	136	109	27	27	414	261	9	257	54
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	164	239	347	229	46	133	787	698	116	649	133
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	248	561	817	641	785	157	45	1784	1583	15	1472	302
Grp Volume(v), veh/h	217	0	0	272	0	0	441	0	261	320	0	0
Grp Sat Flow(s), veh/h/ln	1626	0	0	1583	0	0	1829	0	1583	1788	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.5	0.0	0.0	4.4	0.0	0.0	5.8	0.0	3.7	4.1	0.0	0.0
Prop In Lane	0.25		0.50	0.50		0.10	0.06		1.00	0.03		0.17
Lane Grp Cap(c), veh/h	608	0	0	623	0	0	920	0	698	898	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.44	0.00	0.00	0.48	0.00	0.37	0.36	0.00	0.00
Avail Cap(c_a), veh/h	2234	0	0	2158	0	0	3065	0	2605	2994	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.7	0.0	0.0	9.9	0.0	0.0	6.9	0.0	6.3	6.4	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.5	0.0	0.0	0.4	0.0	0.3	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	2.2	0.0	0.0	3.0	0.0	1.7	2.0	0.0	0.0
LnGrp Delay(d),s/veh	10.0	0.0	0.0	10.4	0.0	0.0	7.3	0.0	6.6	6.6	0.0	0.0
LnGrp LOS	В			В			Α		Α	Α		
Approach Vol, veh/h		217			272			702			320	
Approach Delay, s/veh		10.0			10.4			7.1			6.6	
Approach LOS		В			В			А			А	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.4		14.4		19.4		14.4				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		55.5		45.5		55.5		45.5				
Max Q Clear Time (g_c+I1), s		7.8		5.5		6.1		6.4				
Green Ext Time (p_c), s		7.0		3.6		7.0		3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			8.0									
HCM 2010 LOS			Α									

		→	`	√	←	•	•	†	<u> </u>	\		4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	†	7	ች	† \$		ች	414			4	7
Traffic Volume (veh/h)	412	70	450	25	70	30	490	204	25	20	147	294
Future Volume (veh/h)	412	70	450	25	70	30	490	204	25	20	147	294
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
• · · · ·	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	448	76	489	27	76	33	533	222	27	22	264	251
Adj No. of Lanes	2	1	1	1	2	0	2	1	0	0	1	1
	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
	1036	561	795	142	196	80	713	328	40	26	316	292
1 '	0.30	0.30	0.30	0.08	0.08	0.08	0.20	0.20	0.20	0.18	0.18	0.18
	3442	1863	1583	1774	2449	1006	3548	1630	198	143	1713	1583
Grp Volume(v), veh/h	448	76	489	27	54	55	533	0	249	286	0	251
Grp Sat Flow(s), veh/h/ln		1863	1583	1774	1770	1685	1774	0	1828	1856	0	1583
Q Serve(g_s), s	8.8	2.5	18.7	1.2	2.4	2.6	11.9	0.0	10.6	12.5	0.0	12.9
Cycle Q Clear(g_c), s	8.8	2.5	18.7	1.2	2.4	2.6	11.9	0.0	10.6	12.5	0.0	12.9
	1.00	2.5	1.00	1.00	2.4	0.60	1.00	0.0	0.11	0.08	0.0	1.00
Lane Grp Cap(c), veh/h		561	795	142	141	135	713	0	367	343	0	292
	0.43	0.14	0.62	0.19	0.38	0.41	0.75	0.00	0.68	0.83	0.00	0.86
\	1188	643	865	359	358	341	1153	0.00	594	378	0.00	322
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh		21.4	15.1	36.1	36.7	36.8	31.6	0.00	31.0	33.0	0.00	33.2
Incr Delay (d2), s/veh	0.6	0.2	1.8	0.6	1.7	2.0	1.6	0.0	2.2	13.8	0.0	18.8
Initial Q Delay(d3),s/veh		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh		1.3	11.7	0.6	1.2	1.3	5.9	0.0	5.5	7.7	0.0	7.2
	24.1	21.6	16.8	36.8	38.4	38.8	33.1	0.0	33.2	46.8	0.0	52.0
LnGrp LOS	C C	C C	В	D	D	J0.0	C	0.0	33.2 C	40.0 D	0.0	D
Approach Vol, veh/h	<u> </u>	1013	<u> </u>	<u> </u>	136	<u> </u>		782		<u> </u>	537	<u> </u>
Approach Delay, s/veh		20.4			38.2			33.2			49.2	
Approach LOS		20.4 C			30.2 D			33.2 C			49.2 D	
											U	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc),		30.2		20.4		11.6		21.8				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gma		29.0		17.1		17.0		27.3				
Max Q Clear Time (g_c+	-11), s			14.9		4.6		13.9				
Green Ext Time (p_c), s		4.6		0.6		0.4		3.0				
Intersection Summary												
HCM 2010 Ctrl Delay			31.7									
HCM 2010 LOS			С									
Notes												

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Movement EBL EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations 🎢 👫			↑ ↑			4	7				
Traffic Volume (veh/h) 980 625	0	0	552	372	140	10	377	0	0	0	
Future Volume (veh/h) 980 625	0	0	552	372	140	10	377	0	0	0	
Number 5 2	12	1	6	16	7	4	14				
Initial Q (Qb), veh 0 0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT) 1.00	1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj 1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln 1863 1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h 1054 672	0	0	594	400	151	11	405				
Adj No. of Lanes 2 2	0	0	2	0	0	1	1				
Peak Hour Factor 0.93 0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93				
Percent Heavy Veh, % 2 2	0	0	2	2	2	2	2				
Cap, veh/h 1122 2481	0	0	675	454	328	24	313				
Arrive On Green 0.54 1.00	0.00	0.00	0.33	0.33	0.20	0.20	0.20				
Sat Flow, veh/h 3442 3632	0	0	2120	1365	1659	121	1583				
Grp Volume(v), veh/h 1054 672	0	0	519	475	162	0	405				
Grp Sat Flow(s), veh/h/ln1721 1770	0	0	1770	1622	1780	0	1583				
Q Serve(g_s), s 28.6 0.0	0.0	0.0	27.7	27.7	8.0	0.0	19.8				
Cycle Q Clear(g_c), s 28.6 0.0	0.0	0.0	27.7	27.7	8.0	0.0	19.8				
Prop In Lane 1.00	0.00	0.00		0.84	0.93		1.00				
Lane Grp Cap(c), veh/h 1122 2481	0	0	589	540	352	0	313				
V/C Ratio(X) 0.94 0.27	0.00	0.00	0.88	0.88	0.46	0.00	1.29				
Avail Cap(c_a), veh/h 1218 2481	0	0	589	540	352	0	313				
HCM Platoon Ratio 1.67 1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I) 0.41 0.41	0.00	0.00	0.85	0.85	1.00	0.00	1.00				
Uniform Delay (d), s/veh 21.8 0.0	0.0	0.0	31.5	31.5	35.4	0.0	40.1				
Incr Delay (d2), s/veh 6.4 0.1	0.0	0.0	15.0	16.1	0.9	0.0	153.1				
Initial Q Delay(d3),s/veh 0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln4.2 0.0	0.0	0.0	16.0	14.8	4.1	0.0	28.9				
LnGrp Delay(d),s/veh 28.3 0.1	0.0	0.0	46.5	47.6	36.3	0.0	193.2				
LnGrp LOS C A			D	D	D		F				
Approach Vol, veh/h 1726			994			567					
Approach Delay, s/veh 17.3			47.0			148.4					
Approach LOS B			D			F					
Timer 1 2	3	4	5	6	7	8					
Assigned Phs 2		4	5	6							
Phs Duration (G+Y+Rc), s 75.6		24.4	36.8	38.8							
Change Period (Y+Rc), s 5.5		4.6	* 4.2	5.5							
Max Green Setting (Gmax), s 70.1		19.8	* 35	30.5							
Max Q Clear Time (g_c+I1), s 2.0		21.8	30.6	29.7							
Green Ext Time (p_c) , s 19.1		0.0	2.1	0.7							
Intersection Summary											
HCM 2010 Ctrl Delay	48.9										
HCM 2010 CIT Delay	48.9 D										
Notes											

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LUL	^	T.	ሻሻ	↑ ↑	VVDIX	INDL	וטוו	NUN	JUL	<u>उठा</u>	JDIK T
Traffic Volume (veh/h)	0	1309	90	387	305	0	0	0	0	296	0	750
Future Volume (veh/h)	0	1307	90	387	305	0	0	0	0	296	0	750
Number	5	2	12	1	6	16	U	U	U	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00	U	1.00	1.00	U	1.00				1.00	U	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1900	1863	1863
Adj Flow Rate, veh/h	0	1378	95	407	321	0				312	0	0
Adj No. of Lanes	0	2	1	2	2	0				0	1	1
	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0.95	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
	0	1869	836	469	2500	0				361	0	323
Cap, veh/h Arrive On Green	0.00	0.53	0.53	0.14	0.71	0.00				0.20	0.00	0.00
				3442						1774		
Sat Flow, veh/h	0	3632	1583		3632	0					0	1583
Grp Volume(v), veh/h	0	1378	95	407	321	0				312	0	1500
Grp Sat Flow(s), veh/h/ln		1770	1583	1721	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	30.1	3.0	11.6	2.9	0.0				17.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	30.1	3.0	11.6	2.9	0.0				17.0	0.0	0.0
	0.00	10/0	1.00	1.00	2500	0.00				1.00	^	1.00
Lane Grp Cap(c), veh/h	0	1869	836	469	2500	0				361	0	323
` '	0.00	0.74	0.11	0.87	0.13	0.00				0.86	0.00	0.00
Avail Cap(c_a), veh/h	0	1869	836	475	2500	0				532	0	475
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
1 17	0.00	1.00	1.00	0.56	0.56	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh		18.2	11.8	42.3	4.7	0.0				38.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	0.3	9.5	0.1	0.0				9.6	0.0	0.0
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh		15.2	1.4	6.1	1.4	0.0				9.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	20.9	12.1	51.8	4.8	0.0				48.0	0.0	0.0
LnGrp LOS		C	В	D	720					D	212	
Approach Vol, veh/h		1473			728						312	
Approach LOS		20.3			31.1						48.0	
Approach LOS		С			С						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc),		57.8		24.4		75.6						
Change Period (Y+Rc),		5.0		4.0		5.0						
Max Green Setting (Gma		43.0		30.0		61.0						
Max Q Clear Time (g_c+		32.1		19.0		4.9						
Green Ext Time (p_c), s	0.0	8.1		1.4		21.9						
Intersection Summary												
HCM 2010 Ctrl Delay			26.9									
HCM 2010 LOS			C C									
Notes												

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WBL	WBR	NBT	NBR	SBL	SBT	
ሻ	7	∱ 1≽		ሻ		
28	313	561	24	205	570	
28	313	561	24	205	570	
3	18	2	12	1	6	
0	0	0	0	0	0	
1.00	1.00		1.00	1.00		
1.00	1.00	1.00	1.00	1.00	1.00	
1863	1863	1863	1900	1863	1863	
1		2		1	1	
	0.95	0.95		0.95	0.95	
2	2	2	2	2	2	
387		1205		281	1095	
		7.5			10.0	
		616			1095	
	U		D	<u> </u>		
В					Б	
1	2	3	4	5	6	7 8
1					6	8
13.0	24.2				37.2	16.9
4.4	5.4				5.4	5.1
30.6	40.6				75.6	23.9
8.3	9.3				12.6	10.8
0.6	9.6				10.7	1.0
		13.4				
		В				
	28 28 28 3 0 1.00 1.00 1863 29 1 0.95 2 387 0.22 1774 29 1774 0.7 0.7 1.00 387 0.07 784 1.00 1.00 16.8 0.1 0.0 0.3 16.9 B 358 14.3 B 1 13.0 4.4 30.6 8.3	28 313 28 313 3 18 0 0 1.00 1.00 1.00 1.00 1863 1863 29 329 1 1 0.95 0.95 2 2 387 596 0.22 0.22 1774 1583 29 329 1774 1583 0.7 8.8 0.7 8.8 0.7 8.8 1.00 1.00 387 596 0.07 0.55 784 950 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00 1.02 1.00 1.03 3.9 16.9 14.1 B B 358 14.3 B 1 2 1 2 1 3.0 24.2 4.4 5.4 30.6 40.6 8.3 9.3	28 313 561 28 313 561 3 18 2 0 0 0 0 1.00 1.00 1.00 1.00 1.00 1863 1863 1863 29 329 591 1 1 2 0.95 0.95 0.95 2 2 2 387 596 1205 0.22 0.22 0.35 1774 1583 3553 29 329 302 1774 1583 1770 0.7 8.8 7.3 0.7 8.8 7.3 1.00 1.00 387 596 616 0.07 0.55 0.49 784 950 1328 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1 1 28 313 561 24 28 313 561 24 3 18 2 12 0 0 0 0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1863 1863 1900 29 329 591 25 1 1 2 0 0.95	1 1 28 313 561 24 205 28 313 561 24 205 3 18 2 12 1 0 0 0 0 0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1 1 1 28 313 561 24 205 570 28 313 561 24 205 570 3 18 2 12 1 6 0 0 0 0 0 0 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1863 1863 1863 1900 1863 1863 1863 29 329 591 25 216 600 1 1 1 2 0 1 1 1 0.00 1 1 1 0.00 0.95

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	25.1		4		1102	4		001	4	0511
Traffic Vol, veh/h	10	0	20	54	0	38	10	308	24	24	240	20
Future Vol, veh/h	10	0	20	54	0	38	10	308	24	24	240	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	<u>.</u>	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	2,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	21	57	0	40	11	324	25	25	253	21
Major/Minor N	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	692	685	263	682	682	337	274	0	0	349	0	0
Stage 1	314	314	-	358	358	-	-	-	-	-	-	-
Stage 2	378	371	-	324	324	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	358	371	776	364	372	705	1289	-	-	1210	-	-
Stage 1	697	656	-	660	628	-	-	-	-	-	-	-
Stage 2	644	620	-	688	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	329	358	776	345	359	705	1289	-	-	1210	-	-
Mov Cap-2 Maneuver	329	358	-	345	359	-	-	-	-	-	-	-
Stage 1	689	640	-	653	621	-	-	-	-	-	-	-
Stage 2	601	613	-	653	634	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.2			15.6			0.2			0.7		
HCM LOS	В			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1289	-	-	534	437	1210	-	-			
HCM Lane V/C Ratio		0.008	-	-		0.222		-	-			
HCM Control Delay (s)		7.8	0	-	12.2	15.6	8	0	-			
HCM Lane LOS		A	A	-	В	С	A	A	-			
HCM 95th %tile Q(veh))	0	-	-	0.2	0.8	0.1	-	-			

HCM 2010 TWSC N:\2660\Analysis\Synchro\Year 2035 PM.syn Synchro 9 Report

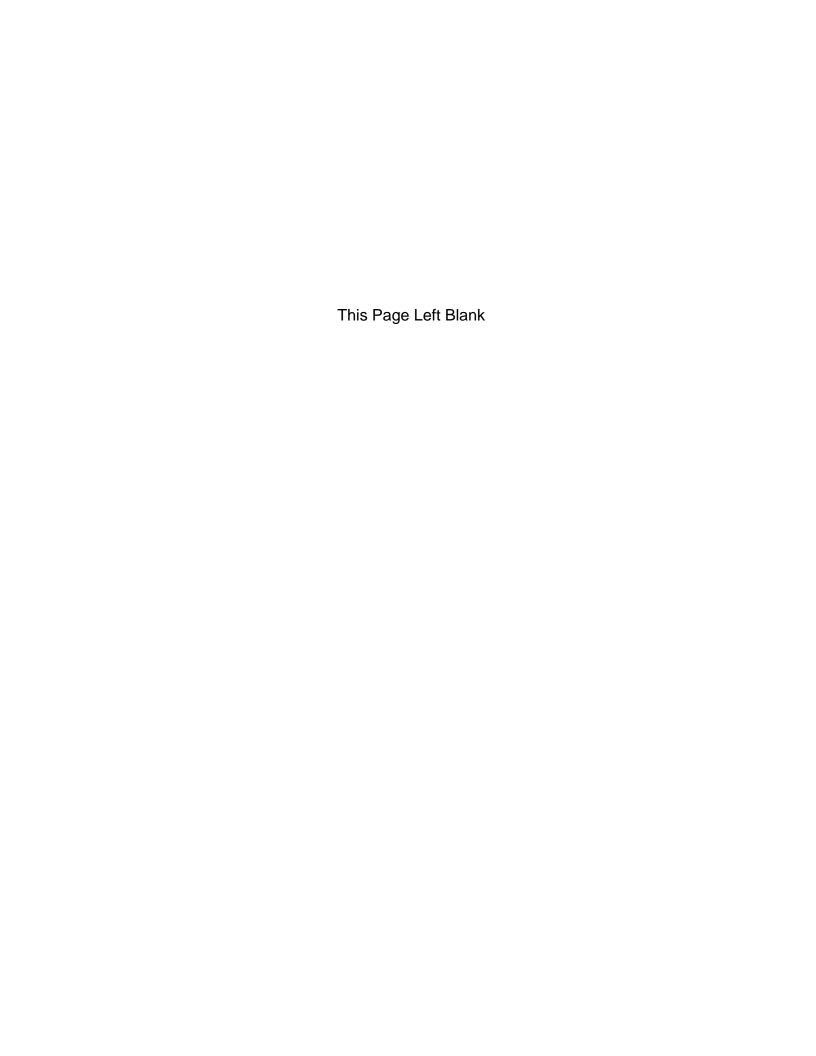
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4	7		4	
Traffic Volume (veh/h)	10	50	70	200	100	48	50	364	300	14	235	50
Future Volume (veh/h)	10	50	70	200	100	48	50	364	300	14	235	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	53	74	211	105	51	53	383	316	15	247	53
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	257	315	414	182	73	153	694	663	109	603	124
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	46	734	901	766	521	208	118	1658	1583	29	1440	297
Grp Volume(v), veh/h	138	0	0	367	0	0	436	0	316	315	0	0
Grp Sat Flow(s),veh/h/ln	1680	0	0	1495	0	0	1776	0	1583	1766	0	0
Q Serve(g_s), s	0.0	0.0	0.0	5.7	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.0	7.9	0.0	0.0	6.9	0.0	5.6	4.8	0.0	0.0
Prop In Lane	0.08		0.54	0.57		0.14	0.12		1.00	0.05		0.17
Lane Grp Cap(c), veh/h	688	0	0	669	0	0	847	0	663	836	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.55	0.00	0.00	0.51	0.00	0.48	0.38	0.00	0.00
Avail Cap(c_a), veh/h	2371	0	0	2139	0	0	2661	0	2342	2630	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.9	0.0	0.0	10.6	0.0	0.0	8.6	0.0	8.2	8.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.7	0.0	0.0	0.5	0.0	0.5	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	3.4	0.0	0.0	3.6	0.0	2.6	2.4	0.0	0.0
LnGrp Delay(d),s/veh	9.1	0.0	0.0	11.3	0.0	0.0	9.1	0.0	8.7	8.2	0.0	0.0
LnGrp LOS	Α			В			Α		А	А		
Approach Vol, veh/h		138			367			752			315	
Approach Delay, s/veh		9.1			11.3			8.9			8.2	
Approach LOS		А			В			А			А	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.8		18.1		20.8		18.1				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		57.5		53.5		57.5		53.5				
Max Q Clear Time (g_c+I1), s		8.9		4.2		6.8		9.9				
Green Ext Time (p_c), s		7.4		3.8		7.4		3.8				
Intersection Summary			<i>-</i> .									
HCM 2010 Ctrl Delay			9.4									
HCM 2010 LOS			Α									

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Movement EI	BL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	ነካ	↑	7	ች	ΦÞ		ች	414			4	7
	156	75	720	90	90	30	550	223	25	20	149	396
, ,	156	75	720	90	90	30	550	223	25	20	149	396
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT) 1.	.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 18	363	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h 4	180	79	758	95	95	32	579	235	26	21	336	298
Adj No. of Lanes	2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.	.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
•)46	566	804	140	207	67	723	336	37	24	380	345
	.30	0.30	0.30	0.08	0.08	0.08	0.20	0.20	0.20	0.22	0.22	0.22
Sat Flow, veh/h 34	142	1863	1583	1774	2632	850	3548	1648	182	109	1748	1583
	180	79	758	95	63	64	579	0	261	357	0	298
Grp Sat Flow(s), veh/h/ln17		1863	1583	1774	1770	1713	1774	0	1831	1857	0	1583
	1.3	3.1	30.4	5.2	3.4	3.6	15.5	0.0	13.2	18.6	0.0	18.1
·0— /	1.3	3.1	30.4	5.2	3.4	3.6	15.5	0.0	13.2	18.6	0.0	18.1
	.00		1.00	1.00		0.50	1.00		0.10	0.06		1.00
Lane Grp Cap(c), veh/h 10		566	804	140	139	135	723	0	373	404	0	345
	.46	0.14	0.94	0.68	0.45	0.48	0.80	0.00	0.70	0.88	0.00	0.86
Avail Cap(c_a), veh/h 10		566	804	323	322	312	983	0	507	448	0	382
	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 28	8.2	25.3	19.6	44.9	44.0	44.1	37.9	0.0	37.0	37.9	0.0	37.7
3	0.3	0.1	19.2	5.7	2.3	2.6	3.4	0.0	2.6	17.3	0.0	17.1
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr	5.4	1.6	25.1	2.8	1.7	1.8	8.0	0.0	6.9	11.5	0.0	9.6
	8.5	25.4	38.8	50.6	46.3	46.7	41.3	0.0	39.6	55.2	0.0	54.8
LnGrp LOS	С	С	D	D	D	D	D		D	Ε		D
Approach Vol, veh/h		1317			222			840			655	
Approach Delay, s/veh		34.2			48.2			40.8			55.0	
Approach LOS		С			D			D			Е	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.3		26.7		12.8		25.3				
Change Period (Y+Rc), s		4.9		4.9		4.9		4.9				
Max Green Setting (Gmax)), s	30.4		24.1		18.2		27.7				
Max Q Clear Time (g_c+l1)		32.4		20.6		7.2		17.5				
Green Ext Time (p_c), s	,, -	0.0		1.1		0.7		2.9				
Intersection Summary												
HCM 2010 Ctrl Delay			41.6									
HCM 2010 LOS			D									
Notes												
110163												

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻሻ	^			ħβ			4	7				
Traffic Volume (veh/h)	870	598	0	0	573	463	270	0	548	0	0	0	
Future Volume (veh/h)	870	598	0	0	573	463	270	0	548	0	0	0	
Number	5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h	916	629	0	0	603	487	284	0	577				
Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	0.70	0.70	2	2	2	2	2				
Cap, veh/h	964	2300	0	0	618	498	458	0	409				
Arrive On Green	0.47	1.00	0.00	0.00	0.33	0.33	0.26	0.00	0.26				
Sat Flow, veh/h	3442	3632	0.00	0.00	1958	1503	1774	0.00	1583				
· · · · · · · · · · · · · · · · · · ·		629			572	518	284		577				
Grp Volume(v), veh/h	916		0	0				0					
Grp Sat Flow(s), veh/h/li		1770	0	0	1770	1598	1774	0	1583				
Q Serve(g_s), s	28.0	0.0	0.0	0.0	35.1	35.2	15.6	0.0	28.4				
Cycle Q Clear(g_c), s	28.0	0.0	0.0	0.0	35.1	35.2	15.6	0.0	28.4				
Prop In Lane	1.00	0000	0.00	0.00	F07	0.94	1.00	0	1.00				
Lane Grp Cap(c), veh/h		2300	0	0	587	530	458	0	409				
V/C Ratio(X)	0.95	0.27	0.00	0.00	0.97	0.98	0.62	0.00	1.41				
Avail Cap(c_a), veh/h	995	2300	0	0	587	530	458	0	409				
HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.82	0.82	1.00	0.00	1.00				
Uniform Delay (d), s/vel		0.0	0.0	0.0	36.3	36.3	36.0	0.0	40.8				
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.0	28.0	30.2	2.6		199.2				
Initial Q Delay(d3),s/vel		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),vel		0.0	0.0	0.0	21.7	20.0	7.9	0.0	44.3				
LnGrp Delay(d),s/veh	31.1	0.0	0.0	0.0	64.3	66.5	38.6	0.0	240.0				
LnGrp LOS	С	Α			E	E	D		F				
Approach Vol, veh/h		1545			1090			861					
Approach Delay, s/veh		18.4			65.4			173.6					
Approach LOS		В			Е			F					
Timer	1	2	3	4	5	6	7	8					
Assigned Phs		2		4	5	6							
Phs Duration (G+Y+Rc)), S	77.0		33.0	35.0	42.0							
Change Period (Y+Rc),		5.5		4.6	* 4.2	5.5							
Max Green Setting (Gm		71.5		28.4	* 32	35.5							
Max Q Clear Time (g_c		2.0		30.4	30.0	37.2							
Green Ext Time (p_c), s		20.5		0.0	0.8	0.0							
Intersection Summary													
HCM 2010 Ctrl Delay			71.3										
HCM 2010 LOS			E										
Notes													

	•	→	•	•	←	•	1	†	/	/	ţ	4	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		^	7	ሻሻ	^						र्स	7	
Traffic Volume (veh/h)	0	1255	270	285	558	0	0	0	0	213	10	1080	
Future Volume (veh/h)	0	1255	270	285	558	0	0	0	0	213	10	1080	
Number	5	2	12	1	6	16				7	4	14	
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0	
• • • • • • • • • • • • • • • • • • • •	1.00		1.00	1.00		1.00				1.00		1.00	
· · ·	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1900	1863	1863	
Adj Flow Rate, veh/h	0	1335	287	303	594	0				227	11	0	
Adj No. of Lanes	0	2	1	2	2	0				0	1	1	
•	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94	
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2	
Cap, veh/h	0	2259	1011	275	2678	0				274	13	256	
	0.00	0.64	0.64	0.11	1.00	0.00				0.16	0.16	0.00	
Sat Flow, veh/h	0.00	3632	1583	3442	3632	0.00				1696	82	1583	
Grp Volume(v), veh/h	0	1335	287	303	594	0				238	0	0	
Grp Sat Flow(s), veh/h/ln		1770	1583	1721	1770	0				1778	0	1583	
Q Serve(g_s), s	0.0	24.1	8.8	8.8	0.0	0.0				14.3	0.0	0.0	
Cycle Q Clear(q_c), s	0.0	24.1	8.8	8.8	0.0	0.0				14.3	0.0	0.0	
,	0.00	24.1	1.00	1.00	0.0	0.00				0.95	0.0	1.00	
Lane Grp Cap(c), veh/h	0.00	2259	1011	275	2678	0.00				287	0	256	
	0.00	0.59	0.28	1.10	0.22	0.00				0.83	0.00	0.00	
Avail Cap(c_a), veh/h	0.00	2259	1011	275	2678	0.00				857	0.00	763	
	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00	
	0.00	1.00	1.00	0.40	0.40	0.00				1.00	0.00	0.00	
•		11.5	8.8	49.1	0.40	0.00				44.6	0.00	0.00	
Uniform Delay (d), s/veh	0.0	1.1	0.7	65.2		0.0				6.1	0.0	0.0	
Incr Delay (d2), s/veh		0.0	0.7	0.0	0.1	0.0				0.0	0.0	0.0	
Initial Q Delay(d3),s/veh %ile BackOfQ(50%),veh/						0.0				7.5		0.0	
LnGrp Delay(d),s/veh	0.0	12.0 12.7	4.0 9.5	6.6 114.3	0.0	0.0				50.7	0.0	0.0	
J , ,	0.0					0.0					0.0	0.0	
LnGrp LOS		B	A	F	A					D	220		
Approach Vol, veh/h		1622			897						238		
Approach LOS		12.1			38.7						50.7		
Approach LOS		В			D						D		
Timer	1	2	3	4	5	6	7	8					
Assigned Phs	1	2		4		6							
Phs Duration (G+Y+Rc),	1 3.0	75.2		21.8		88.2							
Change Period (Y+Rc), s		5.0		4.0		5.0							
Max Green Setting (Gma		35.0		53.0		48.0							
Max Q Clear Time (g_c+		26.1		16.3		2.0							
Green Ext Time (p_c), s		7.5		1.5		25.5							
Intersection Summary						,							
			24.1										
HCM 2010 Ctrl Delay HCM 2010 LOS			24.1 C										
			C										
Notes													

Appendi
Horizon Year 2035 + Project Intersection Analysis Workshee
LINSCOTT, LAW & GREENSPAN, engineers LLG Ref. 3-16-2 Morena Apartment Ho



	•	•	<u>†</u>	<u></u>	<u> </u>	Ţ		
Movement	₩BL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	ሻ	7	†		ሻ	†		
Traffic Volume (veh/h)	15	313	387	26	191	501		
Future Volume (veh/h)	15	313	387	26	191	501		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	16	340	421	28	208	545		
Adj No. of Lanes	1	1	2	0	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	408	611	1012	67	276	1022		
Arrive On Green	0.23	0.23	0.30	0.30	0.16	0.55		
Sat Flow, veh/h	1774	1583	3463	223	1774	1863		
Grp Volume(v), veh/h	16	340	220	229	208	545		
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1823	1774	1863		
2 Serve(g_s), s	0.3	8.0	4.7	4.8	5.3	8.9		
Cycle Q Clear(g_c), s	0.3	8.0	4.7	4.8	5.3	8.9		
Prop In Lane	1.00	1.00		0.12	1.00			
ane Grp Cap(c), veh/h	408	611	531	548	276	1022		
V/C Ratio(X)	0.04	0.56	0.41	0.42	0.75	0.53		
Avail Cap(c_a), veh/h	893	1044	1514	1560	1144	2967		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Jpstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Jniform Delay (d), s/veh	14.2	11.4	13.3	13.3	19.2	6.8		
ncr Delay (d2), s/veh	0.0	0.8	0.5	0.5	4.2	0.4		
nitial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.2	3.5	2.3	2.4	2.9	4.5		
LnGrp Delay(d),s/veh	14.2	12.2	13.8	13.8	23.3	7.3		
_nGrp LOS	В	В	В	В	С	Α		
Approach Vol, veh/h	356		449			753		
Approach Delay, s/veh	12.3		13.8			11.7		
Approach LOS	В		В			В		
- Timer	1	2	3	4	5	6	7 8	
Assigned Phs	1	2				6	8	
Phs Duration (G+Y+Rc), s	11.8	19.7				31.4	16.0	
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1	
Max Green Setting (Gmax), s	30.6	40.6				75.6	23.9	
Max Q Clear Time (g_c+l1), s	7.3	6.8				10.9	10.0	
Green Ext Time (p_c), s	0.6	7.5				8.0	1.1	
Intersection Summary								
HCM 2010 Ctrl Delay			12.4					
HCM 2010 LOS			В					

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	10	20	50	0	40	10	370	20	10	190	20
Future Vol, veh/h	10	10	20	50	0	40	10	370	20	10	190	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized			None	-	-	None	-	-	None	-		None
Storage Length	-	-	-	-		-	-	-	-	_		-
Veh in Median Storage	2,# -	0	-	-	0	-	_	0	_	_	0	_
Grade, %	-	0		-	0	-	_	0		_	0	_
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	11	22	54	0	43	11	398	22	11	204	22
Major/Minor	Minor2			Minor1			Major1		ľ	Major2		
Conflicting Flow All	689	678	215	683	677	409	226	0	0	419	0	0
Stage 1	237	237	213	430	430	407	-	-	-	417	-	-
Stage 2	452	441	-	253	247	_	_	_	_	_	_	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	_	_	4.12	_	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	- 1.12	_	_	-	_	_
Critical Hdwy Stg 2	6.12	5.52	_	6.12	5.52	_	_	_	_	_	_	_
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	_	_	2.218	_	-
Pot Cap-1 Maneuver	360	374	825	363	375	642	1342	-	_	1140	_	_
Stage 1	766	709		603	583	-	-	-	-	-		_
Stage 2	587	577	-	751	702	-	_	-	-	_	-	_
Platoon blocked, %								-	_		-	-
Mov Cap-1 Maneuver	330	366	825	340	367	642	1342	-	-	1140	-	-
Mov Cap-2 Maneuver	330	366	-	340	367	-	-	-	-	-	-	-
Stage 1	758	701	-	596	577	-	-	-	-	-	-	-
Stage 2	542	571	-	712	694	-	-	-	-	-	-	-
, and the second												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	13.1			15.8			0.2			0.4		
HCM LOS	В			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	VBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1342	_	_	489	430	1140	-	_			
HCM Lane V/C Ratio		0.008	_	_		0.225		_	_			
HCM Control Delay (s)		7.7	0	-	13.1	15.8	8.2	0	-			
HCM Lane LOS		Α.,	A	_	В	C	Α	A	_			
HCM 95th %tile Q(veh)	0	-	-	0.3	0.9	0	-	_			
	,				0.0	0.7	- 0					

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			र्स	7		4	
Traffic Volume (veh/h)	50	50	100	125	100	25	25	390	240	10	275	50
Future Volume (veh/h)	50	50	100	125	100	25	25	390	240	10	275	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	54	54	109	136	109	27	27	424	261	11	299	54
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	162	236	342	226	45	130	807	716	114	683	120
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	250	561	818	645	783	157	44	1783	1583	17	1509	266
Grp Volume(v), veh/h	217	0	0	272	0	0	451	0	261	364	0	0
Grp Sat Flow(s), veh/h/ln	1628	0	0	1585	0	0	1827	0	1583	1791	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	0.0	4.6	0.0	0.0	6.1	0.0	3.8	4.8	0.0	0.0
Prop In Lane	0.25		0.50	0.50		0.10	0.06		1.00	0.03		0.15
Lane Grp Cap(c), veh/h	599	0	0	613	0	0	936	0	716	917	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.44	0.00	0.00	0.48	0.00	0.36	0.40	0.00	0.00
Avail Cap(c_a), veh/h	2170	0	0	2097	0	0	2971	0	2530	2910	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.1	0.0	0.0	10.3	0.0	0.0	6.9	0.0	6.2	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.5	0.0	0.0	0.4	0.0	0.3	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	2.3	0.0	0.0	3.1	0.0	1.7	2.4	0.0	0.0
LnGrp Delay(d),s/veh	10.4	0.0	0.0	10.8	0.0	0.0	7.3	0.0	6.5	6.8	0.0	0.0
LnGrp LOS	В			В			Α		Α	Α		
Approach Vol, veh/h		217			272			712			364	
Approach Delay, s/veh		10.4			10.8			7.0			6.8	
Approach LOS		В			В			Α			Α	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.2		14.5		20.2		14.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		55.5		45.5		55.5		45.5				
Max Q Clear Time (g_c+I1), s		8.1		5.6		6.8		6.6				
Green Ext Time (p_c), s		7.6		3.6		7.6		3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			8.1									
HCM 2010 LOS			Α									

<u> </u>		_	_	←	•	•	†	<u></u>	_	1	7
Movement EBL	EBT	€BR	▼ WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations 77	<u></u>	LDIX 7	VVDL	↑	WDIN	NDL	47	NDI	JUL	- 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3DK
Traffic Volume (veh/h) 420	T 70	450	25	70	30	490	205	25	20	150	330
Future Volume (veh/h) 420	70	450	25	70	30	490	205	25	20	150	330
Number 5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT) 1.00	U	1.00	1.00	U	1.00	1.00	U	1.00	1.00	U	1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h 457	76	489	27	76	33	533	223	27	22	294	272
Adj No. of Lanes 2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, % 2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h 1029	557	790	139	192	79	709	326	39	25	334	307
Arrive On Green 0.30	0.30	0.30	0.08	0.08	0.08	0.20	0.20	0.20	0.19	0.19	0.19
Sat Flow, veh/h 3442	1863	1583	1774	2449	1006	3548	1630	197	129	1727	1583
Grp Volume(v), veh/h 457	76	489	27	54	55	533	0	250	316	0	272
Grp Sat Flow(s), veh/h/ln1721	1863	1583	1774	1770	1685	1774	0	1828	1856	0	1583
Q Serve(g_s), s 9.2	2.6	19.2	1.2	2.5	2.7	12.1	0.0	10.9	14.2	0.0	14.3
Cycle Q Clear(g_c), s 9.2	2.6	19.2	1.2	2.5	2.7	12.1	0.0	10.7	14.2	0.0	14.3
Prop In Lane 1.00	2.0	1.00	1.00	2.0	0.60	1.00	0.0	0.11	0.07	0.0	1.00
Lane Grp Cap(c), veh/h 1029	557	790	139	139	132	709	0	365	359	0	307
V/C Ratio(X) 0.44	0.14	0.62	0.19	0.39	0.42	0.75	0.00	0.68	0.88	0.00	0.89
Avail Cap(c_a), veh/h 1166	631	853	352	351	335	1131	0.00	583	371	0.00	316
HCM Platoon Ratio 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I) 1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 24.3	21.9	15.6	36.9	37.5	37.6	32.3	0.0	31.8	33.5	0.0	33.6
Incr Delay (d2), s/veh 0.6	0.2	1.9	0.7	1.8	2.1	1.6	0.0	2.3	20.4	0.0	24.3
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr4.5	1.3	11.8	0.6	1.3	1.3	6.1	0.0	5.7	9.3	0.0	8.3
LnGrp Delay(d),s/veh 24.8	22.1	17.4	37.6	39.2	39.7	33.9	0.0	34.0	53.9	0.0	58.0
LnGrp LOS C	С	В	D	D	D	С		С	D		E
Approach Vol, veh/h	1022			136			783			588	
Approach Delay, s/veh	21.1			39.1			33.9			55.8	
Approach LOS	C			D			C			E	
		2			,	-					
Timer 1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8				
Phs Duration (G+Y+Rc), s	30.5		21.5		11.6		22.0				
Change Period (Y+Rc), s	4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s			17.1		17.0		27.3				
Max Q Clear Time (g_c+I1), s			16.3		4.7		14.1				
Green Ext Time (p_c), s	4.4		0.3		0.4		3.0				
Intersection Summary											
HCM 2010 Ctrl Delay		34.1									
HCM 2010 LOS		С									
Notes											

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Movement EI	BL	EBT	₽ EBR	v WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
			EDK	WDL		WDK	INDL			SDL	SDI	SDK	
	ነ ሻ	^	0	0	↑ ↑	200	140	र्न	700	0	0	0	
` '	080	630	0	0	570	390	140	10	380	0	0	0	
` '	80	630	0	0	570	390	140	10	380	0	0	0	
Number	5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0				
3 · =1 ·	.00		1.00	1.00		1.00	1.00		1.00				
J , ,		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln 18		1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h 10		677	0	0	613	419	151	11	409				
Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
		0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93				
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2				
Cap, veh/h 11:		2481	0	0	670	458	328	24	313				
Arrive On Green 0.	54	1.00	0.00	0.00	0.33	0.33	0.20	0.20	0.20				
Sat Flow, veh/h 34	42	3632	0	0	2107	1376	1659	121	1583				
Grp Volume(v), veh/h 109	54	677	0	0	539	493	162	0	409				
Grp Sat Flow(s), veh/h/ln17:		1770	0	0	1770	1620	1780	0	1583				
	3.6	0.0	0.0	0.0	29.2	29.2	8.0	0.0	19.8				
10- /	3.6	0.0	0.0	0.0	29.2	29.2	8.0	0.0	19.8				
	.00		0.00	0.00	_ /	0.85	0.93	3.0	1.00				
Lane Grp Cap(c), veh/h 11:		2481	0.00	0.00	589	539	352	0	313				
		0.27	0.00	0.00	0.91	0.91	0.46	0.00	1.30				
Avail Cap(c_a), veh/h 12		2481	0.00	0.00	589	539	352	0.00	313				
		1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
		0.40	0.00	0.00	0.85	0.85	1.00	0.00	1.00				
Uniform Delay (d), s/veh 21		0.0	0.00	0.00	32.0	32.0	35.4	0.0	40.1				
3	5.3	0.0	0.0	0.0	18.6	19.9	0.9	0.0	158.4				
3	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0				
%ile BackOfQ(50%),veh/ln4		0.0	0.0	0.0	17.3	16.0	4.1	0.0	29.4				
	#.2 3.2	0.0	0.0	0.0	50.6	51.9	36.3	0.0	198.5				
, ,,,	C C	Ο.1	0.0	0.0	50.6 D	51.9 D	30.3 D	0.0	198.5 F				
LnGrp LOS						D	D	F 74	Г				
Approach Vol, veh/h		1731			1032			571					
Approach LOS		17.2			51.2			152.5					
Approach LOS		В			D			F					
Timer	1	2	3	4	5	6	7	8					
Assigned Phs		2		4	5	6							
Phs Duration (G+Y+Rc), s		75.6		24.4	36.8	38.8							
Change Period (Y+Rc), s		5.5		4.6	* 4.2	5.5							
Max Green Setting (Gmax)), S	70.1		19.8	* 35	30.5							
Max Q Clear Time (g_c+l1)		2.0		21.8	30.6	31.2							
Green Ext Time (p_c), s		20.0		0.0	2.1	0.0							
		20.0		0.0	۷. ۱	0.0							
Intersection Summary													
HCM 2010 Ctrl Delay			50.9										
LICM 2010 LOC			D										
HCM 2010 LOS													

•	→	•	•	←	•	1	†	/	/	↓	4	
Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	^	7	ሻሻ	^						सी	7	
Traffic Volume (veh/h) 0	1310	90	400	310	0	0	0	0	300	0	750	
Future Volume (veh/h) 0	1310	90	400	310	0	0	0	0	300	0	750	
Number 5	2	12	1	6	16				7	4	14	
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0	
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00	-	1.00				1.00		1.00	
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863	
Adj Flow Rate, veh/h 0	1379	95	421	326	0				316	0	0	
Adj No. of Lanes 0	2	1	2	2	0				0	1	1	
Peak Hour Factor 0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95	
Percent Heavy Veh, % 0	2	2	2	2	0.73				2	2	2	
,	1855	830	475	2492	0				365	0	326	
		0.52	0.14		0.00				0.21	0.00		
	0.52			0.70 3632							0.00	
Sat Flow, veh/h 0	3632	1583	3442		0				1774	0	1583	
Grp Volume(v), veh/h 0	1379	95	421	326	0				316	0	0	
Grp Sat Flow(s), veh/h/ln 0	1770	1583	1721	1770	0				1774	0	1583	
Q Serve(g_s), s 0.0	30.4	3.0	12.0	3.0	0.0				17.2	0.0	0.0	
Cycle Q Clear(g_c), s 0.0	30.4	3.0	12.0	3.0	0.0				17.2	0.0	0.0	
Prop In Lane 0.00		1.00	1.00		0.00				1.00		1.00	
Lane Grp Cap(c), veh/h 0	1855	830	475	2492	0				365	0	326	
V/C Ratio(X) 0.00	0.74	0.11	0.89	0.13	0.00				0.87	0.00	0.00	
Avail Cap(c_a), veh/h 0	1855	830	475	2492	0				532	0	475	
HCM Platoon Ratio 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00	
Upstream Filter(I) 0.00	1.00	1.00	0.52	0.52	0.00				1.00	0.00	0.00	
Uniform Delay (d), s/veh 0.0	18.6	12.0	42.3	4.8	0.0				38.4	0.0	0.0	
Incr Delay (d2), s/veh 0.0	2.7	0.3	10.5	0.1	0.0				9.9	0.0	0.0	
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	
%ile BackOfQ(50%),veh/lr0.0	15.5	1.4	6.4	1.5	0.0				9.4	0.0	0.0	
LnGrp Delay(d),s/veh 0.0	21.3	12.3	52.8	4.9	0.0				48.2	0.0	0.0	
LnGrp LOS	Z 1.3	12.3 B	J2.0	Α. 9	0.0				40.2 D	0.0	0.0	
Approach Vol, veh/h	1474	D	U	747					U	316		
Approach LOS	20.7			31.9						48.2		
Approach LOS	С			С						D		
Timer 1	2	3	4	5	6	7	8					
Assigned Phs 1	2		4		6							
Phs Duration (G+Y+Rc), \$8.0	57.4		24.6		75.4							
Change Period (Y+Rc), \$ 4.2	5.0		4.0		5.0							
Max Green Setting (Gmax)1 &	43.0		30.0		61.0							
Max Q Clear Time (g_c+ff14),0s			19.2		5.0							
Green Ext Time (p_c), s 0.0	8.0		1.4		22.0							
	8.0		1.4		22.0							
Intersection Summary		67 :										
HCM 2010 Ctrl Delay		27.4										
HCM 2010 LOS		С										
Notes												

	√	•	†	<u></u>	<u> </u>	1		
Movement	▼ WBL	WBR	NBT	NBR	SBL	SBT		
				NDK				
Lane Configurations	\	225	† })E	210	†		
Traffic Volume (veh/h)	30	325 325	565 565	25 25	210 210	570 570		
Future Volume (veh/h) Number	30	18	2	12	1			
	0	0	0	0	0	6 0		
Initial Q (Qb), veh	1.00	1.00	U	1.00	1.00	U		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00		
Parking Bus, Adj		1863	1.00 1863	1900	1863	1863		
Adj Sat Flow, veh/h/ln	1863		595			600		
Adj Flow Rate, veh/h	32	342		26	221			
Adj No. of Lanes	1	0.05	2 0.95	0	1 0.95	1 0.95		
Peak Hour Factor	0.95	0.95		0.95				
Percent Heavy Veh, %	2 397	2	2 1195	2 52	2 285	2 1092		
Cap, veh/h		609						
Arrive On Green	0.22	0.22	0.35	0.35	0.16	0.59		
Sat Flow, veh/h	1774	1583	3548	151	1774	1863		
Grp Volume(v), veh/h	32	342	304	317	221	600		
Grp Sat Flow(s), veh/h/ln	1774	1583	1770	1836	1774	1863		
2 Serve(g_s), s	0.8	9.4	7.5	7.5	6.6	10.9		
Cycle Q Clear(g_c), s	0.8	9.4	7.5	7.5	6.6	10.9		
Prop In Lane	1.00	1.00	(10	0.08	1.00	1000		
_ane Grp Cap(c), veh/h	397	609	612	635	285	1092		
//C Ratio(X)	0.08	0.56	0.50	0.50	0.77	0.55		
Avail Cap(c_a), veh/h	766	939	1299	1347	981	2545		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Jpstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Jniform Delay (d), s/veh	17.0	13.3	14.3	14.3	22.2	7.0		
ncr Delay (d2), s/veh	0.1	0.8	0.6	0.6	4.5	0.4		
nitial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.4	4.2	3.7	3.9	3.5	5.6		
LnGrp Delay(d),s/veh	17.0	14.2	14.9	14.9	26.7	7.4		
LnGrp LOS	В	В	B (21	В	С	Α		
Approach Vol, veh/h	374		621			821		
Approach Delay, s/veh	14.4		14.9			12.6		
Approach LOS	В		В			В		
Timer	1	2	3	4	5	6	7 8	
Assigned Phs	1	2				6	8	
Phs Duration (G+Y+Rc), s	13.3	24.5				37.8	17.5	
Change Period (Y+Rc), s	4.4	5.4				5.4	5.1	
Max Green Setting (Gmax), s	30.6	40.6				75.6	23.9	
Max Q Clear Time (g_c+I1), s	8.6	9.5				12.9	11.4	
Green Ext Time (p_c), s	0.6	9.6				10.8	1.1	
Intersection Summary								
HCM 2010 Ctrl Delay			13.8					
HCM 2010 LOS			В					
			_					

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	10	0	20	70	0	40	10	320	50	30	240	20
Future Vol, veh/h	10	0	20	70	0	40	10	320	50	30	240	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized			None			None	-	-	None	-		None
Storage Length	-	_	-			-	-	-	-	-		-
Veh in Median Storage	2.# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	21	74	0	42	11	337	53	32	253	21
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	731	737	263	721	721	363	274	0	0	389	0	0
Stage 1	326	326	-	384	384	-		-	-	-	-	-
Stage 2	405	411	_	337	337	_	_	_	_	_	-	_
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	_	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	_	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	337	346	776	343	353	682	1289	-	-	1170	-	-
Stage 1	687	648	-	639	611	-	-	-	-	-	-	-
Stage 2	622	595	-	677	641	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	306	331	776	323	338	682	1289	-	-	1170	-	-
Mov Cap-2 Maneuver	306	331	-	323	338	-	-	-	-	-	-	-
Stage 1	679	627	-	632	604	-	-	-	-	-	-	-
Stage 2	577	588	-	638	620	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.5			17.7			0.2			0.8		
HCM LOS	В			С								
Minor Lane/Major Mvm	nt	NBL	NBT	NBR	EBLn1V	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)		1289	-	-	513	399	1170	-	-			
HCM Lane V/C Ratio		0.008	-	-	0.062		0.027	-	-			
HCM Control Delay (s)		7.8	0	-	12.5	17.7	8.2	0	-			
HCM Lane LOS		Α	A	-	В	С	Α	A	-			
HCM 95th %tile Q(veh)	0	-	-	0.2	1.2	0.1	-	-			
, ,												

	۶	→	•	•	←	•	1	†	/	/		4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			र्स	7		44	
Traffic Volume (veh/h)	10	50	70	200	100	50	50	400	300	15	250	50
Future Volume (veh/h)	10	50	70	200	100	50	50	400	300	15	250	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	53	74	211	105	53	53	421	316	16	263	53
Adj No. of Lanes	0	1	0	0	1	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	253	311	403	177	74	145	728	691	105	634	123
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	46	734	901	769	512	215	110	1670	1583	30	1454	282
Grp Volume(v), veh/h	138	0	0	369	0	0	474	0	316	332	0	0
Grp Sat Flow(s), veh/h/ln	1680	0	0	1497	0	0	1780	0	1583	1765	0	0
Q Serve(g_s), s	0.0	0.0	0.0	6.1	0.0	0.0	0.3	0.0	5.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	8.5	0.0	0.0	8.0	0.0	5.8	5.2	0.0	0.0
Prop In Lane	0.08		0.54	0.57		0.14	0.11		1.00	0.05		0.16
Lane Grp Cap(c), veh/h	675	0	0	654	0	0	873	0	691	862	0	0
V/C Ratio(X)	0.20	0.00	0.00	0.56	0.00	0.00	0.54	0.00	0.46	0.39	0.00	0.00
Avail Cap(c_a), veh/h	2237	0	0	2020	0	0	2521	0	2210	2479	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.6	0.0	0.0	11.4	0.0	0.0	8.8	0.0	8.2	8.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	8.0	0.0	0.0	0.5	0.0	0.5	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	3.7	0.0	0.0	4.1	0.0	2.5	2.6	0.0	0.0
LnGrp Delay(d),s/veh	9.8	0.0	0.0	12.2	0.0	0.0	9.3	0.0	8.7	8.3	0.0	0.0
LnGrp LOS	Α			В			Α		Α	Α		
Approach Vol, veh/h		138			369			790			332	
Approach Delay, s/veh		9.8			12.2			9.0			8.3	
Approach LOS		А			В			А			А	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		22.5		18.7		22.5		18.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		57.5		53.5		57.5		53.5				
Max Q Clear Time (g_c+I1), s		10.0		4.4		7.2		10.5				
Green Ext Time (p_c), s		8.0		3.8		8.0		3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			9.7									
HCM 2010 LOS			Α									

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Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations 3	†	7	ሻ	ħβ		ሻ	414			4	7
Traffic Volume (veh/h) 490	75	720	90	90	30	550	225	25	20	150	410
Future Volume (veh/h) 490	75	720	90	90	30	550	225	25	20	150	410
Number 5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh 0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 1863	1863	1863	1863	1863	1900	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h 516	79	758	95	95	32	579	237	26	21	348	306
Adj No. of Lanes 2	1	1	1	2	0	2	1	0	0	1	1
Peak Hour Factor 0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, % 2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h 1038	562	800	139	206	67	722	336	37	23	389	352
Arrive On Green 0.30	0.30	0.30	0.08	0.08	0.08	0.20	0.20	0.20	0.22	0.22	0.22
Sat Flow, veh/h 3442	1863	1583	1774	2632	850	3548	1650	181	106	1752	1583
Grp Volume(v), veh/h 516	79	758	95	63	64	579	0	263	369	0	306
Grp Sat Flow(s), veh/h/ln1721	1863	1583	1774	1770	1713	1774	0	1831	1857	0	1583
Q Serve(g_s), s 12.4	3.1	30.4	5.3	3.4	3.6	15.7	0.0	13.5	19.4	0.0	18.8
Cycle Q Clear(g_c), s 12.4	3.1	30.4	5.3	3.4	3.6	15.7	0.0	13.5	19.4	0.0	18.8
Prop In Lane 1.00		1.00	1.00		0.50	1.00		0.10	0.06		1.00
Lane Grp Cap(c), veh/h 1038	562	800	139	139	134	722	0	372	412	0	352
V/C Ratio(X) 0.50	0.14	0.95	0.68	0.45	0.48	0.80	0.00	0.71	0.89	0.00	0.87
Avail Cap(c_a), veh/h 1038	562	800	320	320	309	975	0	503	444	0	379
HCM Platoon Ratio 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I) 1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh 28.9	25.7	19.9	45.2	44.4	44.5	38.2	0.0	37.3	38.1	0.0	37.8
Incr Delay (d2), s/veh 0.4	0.1	20.2	5.8	2.3	2.6	3.5	0.0	2.9	19.3	0.0	18.3
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/lr5.9	1.6	25.3	2.8	1.8	1.8	8.0	0.0	7.1	12.2	0.0	10.0
LnGrp Delay(d),s/veh 29.3	25.8	40.1	51.0	46.6	47.1	41.7	0.0	40.2	57.4	0.0	56.1
LnGrp LOS C	С	D	D	D	D	D		D	Ε		Е
Approach Vol, veh/h	1353			222			842			675	
Approach Delay, s/veh	35.1			48.6			41.3			56.8	
Approach LOS	D			D			D			Ε	
Timer 1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8				
Phs Duration (G+Y+Rc), s	35.3		27.3		12.8		25.4				
Change Period (Y+Rc), s	4.9		4.9		4.9		4.9				
Max Green Setting (Gmax), s	30.4		24.1		18.2		27.7				
Max Q Clear Time (g_c+I1), s			21.4		7.3		17.7				
Green Ext Time (p_c), s	0.0		0.9		0.7		2.8				
Intersection Summary											
HCM 2010 Ctrl Delay		42.5									
HCM 2010 LOS		42.5 D									
		D									
Notes											

	<u> </u>	→	•	•	←	•	•	†	<u> </u>	\	↓	✓	
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻሻ	^			∱ ∱			सी	7				
Traffic Volume (veh/h)	870	620	0	0	580	470	270	0	560	0	0	0	
Future Volume (veh/h)	870	620	0	0	580	470	270	0	560	0	0	0	
Number	5	2	12	1	6	16	7	4	14				
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
	1863	1863	0	0	1863	1900	1900	1863	1863				
Adj Flow Rate, veh/h	916	653	0	0	611	495	284	0	589				
Adj No. of Lanes	2	2	0	0	2	0	0	1	1				
	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	0.70	0.70	2	2	2	2	2				
Cap, veh/h	955	2268	0	0	606	489	474	0	423				
Arrive On Green	0.46	1.00	0.00	0.00	0.33	0.33	0.27	0.00	0.27				
	3442	3632	0.00	0.00	1955	1505	1774	0.00	1583				
Grp Volume(v), veh/h	916	653	0	0	581	525	284	0	589				
Grp Sat Flow(s), veh/h/ln		1770	0	0	1770	1597	1774	0	1583				
	28.3	0.0	0.0	0.0	35.8	35.8	15.4	0.0	29.4				
Cycle Q Clear(g_c), s	28.3	0.0	0.0	0.0	35.8	35.8	15.4	0.0	29.4				
	1.00	0.0	0.00	0.00	33.0	0.94	1.00	0.0	1.00				
Prop In Lane		2268	0.00	0.00	576	519	474	0	423				
Lane Grp Cap(c), veh/h V/C Ratio(X)	0.96	0.29	0.00	0.00	1.01	1.01	0.60	0.00	1.39				
	964	2268			576	519	474		423				
Avail Cap(c_a), veh/h HCM Platoon Ratio	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
	0.09	0.09	0.00	0.00	0.81	0.81	1.00	0.00	1.00				
Upstream Filter(I)						37.1	35.2		40.3				
Uniform Delay (d), s/veh		0.0	0.0	0.0	37.1			0.0					
Incr Delay (d2), s/veh	3.1	0.0	0.0	0.0	36.0	38.4	2.1	0.0	190.3				
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh		0.0	0.0	0.0	23.2	21.3	7.8	0.0	44.7				
LnGrp Delay(d),s/veh	32.0	0.0	0.0	0.0	73.1	75.6	37.2	0.0	230.6				
LnGrp LOS	С	A 15(0			F	<u> </u>	D	070	F				
Approach Vol, veh/h		1569			1106			873					
Approach Delay, s/veh		18.7			74.3			167.7					
Approach LOS		В			Е			F					
Timer	1	2	3	4	5	6	7	8					
Assigned Phs		2		4	5	6							
Phs Duration (G+Y+Rc),	S	76.0		34.0	34.7	41.3							
Change Period (Y+Rc),		5.5		4.6	* 4.2	5.5							
Max Green Setting (Gma	ax), s	70.5		29.4	* 31	35.5							
Max Q Clear Time (g_c+		2.0		31.4	30.3	37.8							
Green Ext Time (p_c), s		21.4		0.0	0.2	0.0							
Intersection Summary													
HCM 2010 Ctrl Delay			72.7										
HCM 2010 Cm Delay			72.7 E										
			E										
Notes													

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Movement EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	^	T T	ሻሻ	↑ ↑	VVDIX	INDL	וטוו	NUN	JUL	<u>3₽1</u>	7	
Traffic Volume (veh/h) 0		270	290	560	0	0	0	0	230	10	1080	
Future Volume (veh/h) 0	1260	270	290	560	0	0	0	0	230	10	1080	
Number 5	2	12	1	6	16				7	4	14	
Initial Q (Qb), veh 0	0	0	0	0	0				0	0	0	
Ped-Bike Adj(A_pbT) 1.00		1.00	1.00		1.00				1.00		1.00	
Parking Bus, Adj 1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln 0	1863	1863	1863	1863	0				1900	1863	1863	
Adj Flow Rate, veh/h 0	1340	287	309	596	0				245	11	0	
Adj No. of Lanes 0	2	1	2	2	0				0	1	1	
Peak Hour Factor 0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94	
Percent Heavy Veh, % 0	2	2	2	2	0				2	2	2	
Cap, veh/h 0	2221	994	275	2639	0				293	13	273	
Arrive On Green 0.00	0.63	0.63	0.16	1.00	0.00				0.17	0.17	0.00	
Sat Flow, veh/h 0	3632	1583	3442	3632	0				1701	76	1583	
Grp Volume(v), veh/h 0	1340	287	309	596	0				256	0	0	
Grp Sat Flow(s), veh/h/ln 0	1770	1583	1721	1770	0				1778	0	1583	
Q Serve(g_s), s 0.0	25.0	9.1	8.8	0.0	0.0				15.3	0.0	0.0	
Cycle Q Clear(g_c), s 0.0	25.0	9.1	8.8	0.0	0.0				15.3	0.0	0.0	
Prop In Lane 0.00		1.00	1.00		0.00				0.96		1.00	
Lane Grp Cap(c), veh/h 0	2221	994	275	2639	0				307	0	273	
V/C Ratio(X) 0.00	0.60	0.29	1.12	0.23	0.00				0.84	0.00	0.00	
Avail Cap(c_a), veh/h 0	2221	994	275	2639	0				857	0	763	
HCM Platoon Ratio 1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00	
Upstream Filter(I) 0.00	1.00	1.00	0.34	0.34	0.00				1.00	0.00	0.00	
Uniform Delay (d), s/veh 0.0	12.3	9.3	46.2	0.0	0.0				44.0	0.0	0.0	
Incr Delay (d2), s/veh 0.0	1.2	0.7	70.9	0.1	0.0				5.9	0.0	0.0	
Initial Q Delay(d3),s/veh 0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	
%ile BackOfQ(50%),veh/lr0.0	12.5	4.1	6.8	0.0	0.0				8.0	0.0	0.0	
LnGrp Delay(d),s/veh 0.0	13.5	10.1	117.1	0.1	0.0				50.0	0.0	0.0	
LnGrp LOS	В	В	F	A					D			_
Approach Vol, veh/h	1627			905						256		
Approach Delay, s/veh	12.9			40.0						50.0		
Approach LOS	В			D						D		
Timer 1	2	3	4	5	6	7	8					
Assigned Phs 1	2		4		6							
Phs Duration (G+Y+Rc), \$3.0	74.0		23.0		87.0							
Change Period (Y+Rc), \$ 4.2			4.0		5.0							
Max Green Setting (Gmax), &			53.0		48.0							
Max Q Clear Time (g_c+fff),&			17.3		2.0							
Green Ext Time (p_c), s 0.0	6.8		1.7		25.6							
Intersection Summary												
HCM 2010 Ctrl Delay		25.1										
HCM 2010 LOS		С										
Notes												
INUICS												



PHASE I ENVIRONMENTAL SITE ASSESSMENT

1579 and 1623 Morena Boulevard San Diego, CA 92110

AEC Project No. 15-167SD September 18, 2015

Prepared for.

FF Realty III LLC 5510 Morehouse Drive, Suite 200 San Diego, CA 92121

Prepared by:

Advantage Environmental Consultants, LLC 145 Vallecitos De Oro, Suite 201 San Marcos, California 92069 Phone (760) 744-3363 • FAX (760) 744-3383



September 18, 2015

Mr. Shon Finch
FF Realty III LLC
5510 Morehouse Drive, Suite 200
San Diego, CA 92121

Subject: Phase I Environmental Site Assessment

1579 and 1623 Morena Boulevard San Diego, California 92110 AEC Project Number P15-205SD

Dear Mr. Finch:

Advantage Environmental Consultants, LLC (AEC) has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of American Society for Testing and Materials Practice E 1527-13 and 40 Code of Federal Regulations Part 312, of the above-referenced property. This ESA included public environmental agency and historical record reviews, interviews, site observations, and report preparation. This report includes AEC's findings, conclusions, recommendations, and supporting documentation.

We appreciate the opportunity to be of service on this project. If you should have any questions regarding this report, or if we can be of further assistance, please contact us at (760) 744-3363.

Sincerely,

ADVANTAGE ENVIRONMENTAL CONSULTANTS, LLC

Scott Schiffer

Environmental Scientist

Daniel Weis, R.E.H.S.

O Weis

Branch Manager

Western Regional Office

145 Vallecitos De Oro Suite 201 San Marcos, CA 92069 Phone: 760-744-3363 Fax: 760-744-3383 Email: dweis@aec-env.com

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1.0 Introduction

1.1 Purpose

The purpose of this Phase I Environmental Site Assessment (ESA) prepared by Advantage Environmental Consultants, LLC (AEC) is to provide a professional opinion on the presence of recognized environmental conditions and other suspect environmental conditions in connection with the Site, as they existed on the date of the site inspection, and to recommend whether further investigation is required. American Society for Testing and Materials (ASTM) Standard Practice E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, defines good commercial and customary practice for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants pertinent to the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as well as petroleum products. As such, this ESA is intended to satisfy one of the threshold criteria for satisfying the landowner liability protections to CERCLA liability assuming compliance with other elements of the defense. In other words, this ESA represents one of the practices that constitute "all appropriate inquiry" into the previous ownership and uses of the property consistent with good commercial or customary practice, as defined in 42 USC Section 9601(35)(B) and 40 CFR Part 312.

The goal of the process is to identify RECs, which are defined by the Practice as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment. The term recognized environmental condition includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The term "environment" is defined in CERCLA 42 USC 9601(8) as "(A) the navigable waters, the water of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Magnuson-Stevens Fishery conservation and Management Act, and (B) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.

The term "release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes (A) any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons, (B) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station engine, (C) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954 [42 U.S.C. 2011 et seq.], if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of such Act [42 U.S.C. 2210], or, for the purposes of 42 USC 9604 or any other response action, any release of source byproduct, or special nuclear material from any processing

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site designated under section 7912(a)(1) or 7942(a) of this title, and (D) the normal application of fertilizer.

1.2 Detailed Scope of Services

The Phase I ESA was conducted in accordance with generally accepted Phase I industry standards using ASTM Standard Practice E 1527-13, 40 Code of Federal Regulations (CFR) Part 312, and the Scope of Work proposed by AEC (Proposal Number P15-205SD) dated August 14, 2015. The following services were provided for this assessment:

- A review of title information pertaining to the Site.
- Review and summary of prior environmental documents pertaining to the Site.
- An evaluation of standard environmental record sources contained within Federal, State and local environmental databases within specific search distances.
- An evaluation of additional environmental record sources obtained from local regulatory departments/agencies.
- A qualitative evaluation of the physical characteristics of the Site through a review of published topographic, geologic, and hydrogeologic maps; published groundwater data; and area observations to characterize surface water flow in the Site area.
- An evaluation of past Site and adjacent/nearby property uses through a review of historical resources.
- A physical inspection of the Site (interior and exterior) conducted to search for conditions indicative of potential environmental concerns including underground storage tanks (USTs), aboveground storage tanks (ASTs), associated tank piping; stained soil or pavement; equipment that may contain or have historically contained polychlorinated biphenyls (PCBs); and other potential environmental concerns as defined in the ASTM E 1527-13 standard.
- A physical assessment of indications of past uses and visual observations of adjacent and surrounding properties (from curbside or public spaces) to assess potential impacts to the Site.
- Interviews completed with the client, a representative of the Site owner and a local regulatory official.
- The preparation of this Phase I ESA report, which includes the findings of the study and our opinion regarding their level of significance. Conclusions have been drawn based on the significance levels of the findings with subsequent recommendations provided.

1.3 Significant Assumptions

This Phase I ESA was conducted in accordance with ASTM guidelines, CFR Part 312, and the Scope of Work proposed by AEC (Proposal Number P15-205SD) dated August 14, 2015, for the performance of such assessment. No other warranties either express or implied, are made by

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AEC. AEC's evaluations, analyses, and opinions should not be taken as representations regarding subsurface conditions or the actual value of the Site. Subsurface conditions may differ from the conditions implied by the surficial observations, and can only be reliably evaluated through intrusive techniques.

Documentation and data provided by the client, designated representatives, other interested third parties, or from the public domain, and referred to in the preparation of this assessment, are assumed to be complete and correct and have been used and referenced with the understanding that AEC assumes no responsibility or liability for their accuracy. AEC's conclusions are based upon such information and documentation and on our observations of Site conditions, as they existed on the date of the site inspection. Because Site conditions may change significantly over a short period of time and additional data may become available, data reported and conclusions drawn in this report are limited to current conditions and may not be relied upon on a significantly later date.

1.4 Limitations and Exceptions

Reasonable efforts have been made during this assessment to uncover evidence of USTs, ASTs and ancillary equipment associated with such features. "Reasonable efforts" are limited to information gained from visual observation of unobstructed areas, recorded database information held in public record, and available information gathered from interviews. Such methods may not identify subsurface equipment that may have been hidden from view due to paving, construction or debris pile storage, or incorrect information from sources.

This investigation was not an environmental compliance audit. While some observations and discussion in this report may address conditions and/or operations that may be regulated, the regulatory compliance of those conditions and/or operations is outside the scope of this investigation. Nothing in this report constitutes a legal opinion or legal advice. For information regarding specific individual or organizational liability, AEC recommends consultation with independent legal counsel.

According to 40 CFR Part 312, Standards and Practices for All Appropriate Inquiry: Final Rule, CERCLA liability rests with the owner or operator of a property and not with an environmental professional hired by the prospective landowner and who is not involved with the ownership or operation of the property. This report meets the requirements set forth in 40 CFR Part 312 Standards and Practices for All Appropriate Inquiries; Final Rule. However, in order to qualify for certain landowner liability protections under CERCLA. Bona Fide Prospective Purchasers, Contiguous Property Owners, and/or Innocent Landowners must meet additional requirements of CERCLA (42 U.S.C. 9601 (35)(B)).

This ESA does not address non-scope ASTM considerations including asbestos, lead-based paint, radon gas, mold, lead in drinking water, wetlands, protected environments and habitat, industrial hygiene concerns, indoor air quality (unrelated to releases of hazardous substances and petroleum products) and high voltage power lines.

1.5 Special Terms and Conditions

No special terms and conditions between AEC and the client pertinent to the findings of this ESA or methodology used to complete this assessment are noted. In addition, AEC does not have a financial interest in the Site.

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1.6 User Reliance

This report was prepared for use solely and exclusively by the client and is not for the use or benefit of, nor may it be relied upon by, any other person or entity for any purpose without the advance written consent of AEC. AEC makes no representation to any third party except that it has used the degree of care and skill ordinarily exercised by a reasonable prudent environmental professional in the same community and in the same time frame given the same or similar facts and circumstances. No other use or disclosure is intended or authorized by AEC. In the preparation of this ESA, AEC has used the degree of care and skill ordinarily exercised by a reasonably prudent environmental professional in the same community and in the same time frame given the same or similar facts and circumstances. No other warranties are made to any third party, either express or implied.

2.0 Site Description

2.1 Location and Legal Description

The Site is located at 1579 and 1623 Morena Boulevard in the City of San Diego, California. The Site is a reported 6.2 acres (gross) in size, is situated generally north and east of Morena Boulevard, south of Tonopah Avenue and west of Frankfort Street and is further identified by San Diego County Assessor's Parcel Numbers 436-020-40-00 and -41-00. A Vicinity Map depicting the general location of the Site is included in Section 11.1.

2.2 Site and Vicinity General Characteristics

The Site and its adjacent/nearby properties are situated within the Bay Park area of San Diego, California. This area is comprised of a mixture of commercial and residential development.

2.3 Current Use of the Site

The Site is currently developed with seven single-story buildings, four of which were reportedly constructed in 1944, and three reportedly constructed in 1947. The Site building with the address of 1579 Morena Boulevard totals a reported 1,080 square feet in size, and is currently used as a residence. The Site building with the address of 1623 Morena Boulevard totals a reported 2,206 square feet, and is also currently used as a residence. The other buildings on-Site are used as garages/storage space, laundry area/storage facility and offices. There are also several concrete block structures throughout the Site which were previously used as restrooms, but are now boarded up and no longer in use. The remainder of the Site is used as a recreational vehicle (RV) park, and includes asphalt paving, concrete flatwork and landscaping.

2.4 Description of Structures, Roads, Other Improvements on the Site

As stated previously, the Site is currently developed with seven single-story buildings, and used as an RV park. The Site buildings were reportedly constructed in 1944 and 1947, respectively, and are of CMU (laundry area/storage facility) and wood-frame (residential home, garages and office) construction. Asphalt-paved parking areas, concrete flatwork and landscaping are located throughout the Site. Access to the Site is provided by Morena Boulevard to the southwest and by Frankfort Street to the southeast. Potable water and sanitary sewer service is provided to the area by the City of San Diego. Electricity and natural gas are supplied to the area by San Diego Gas and Electric. A Site Plan is included in Section 11.2. Photographs taken of the Site are included in Section 11.3.

2.5 Current Uses of the Adjoining Properties

The area surrounding the Site consists generally of residential and commercial/retail properties. AEC performed a visual inspection of adjoining properties from adjacent sidewalks and other access points. The following table identifies the adjacent property uses:

Direction	Adjoining Property Use
Northeast	Tonopah Avenue, then residential housing
Northwest	Commercial businesses, then Morena Boulevard
Southeast	Frankfort Street, then residential housing and commercial businesses
Southwest	Morena Boulevard and West Morena Boulevard, then commercial businesses
Southwest	(including an ARCO gasoline service station)

The southwestern adjacent ARCO gasoline service station (southwest of Morena Boulevard), located at 1550 Morena Boulevard, has a closed leaking underground storage tank (LUST) case regarding a gasoline leak to the groundwater (further described in section 4.1 of this report), and appears to be hydrologically cross-gradient from the Site. Therefore, the ARCO gasoline service station is not considered to be of significant environmental concern to the Site. No other potential environmental concerns to the Site relative to the adjacent properties were noted.

3.0 User Provided Information

3.1 Title Records

No environmentally related liens, deed restrictions or activity and use limitations pertaining to the Site were noted during research completed with the County of San Diego Tax Assessor. In addition, the client is unaware of such encumbrances recorded against the Site.

3.2 Environmental Liens or Activity and Use Limitations

The client is unaware of environmental related liens or activity use limitations (i.e. engineering or institutional controls) that are related to potential environmental issues at the Site.

3.3 Specialized Knowledge

The client is unaware of specialized knowledge pertinent to potential recognized environmental conditions at the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

The client is unaware of commonly known or reasonably ascertainable information pertinent to potential recognized environmental conditions at the Site.

3.5 Valuation Reduction for Environmental Issues

The client is unaware of information pertaining to the relationship of the purchase price to the estimated fair market value of the Site that might indicate that significant contamination exists.

3.6 Owner, Property Manager, and Occupant Information

The Site is currently owned and managed by the Donald J Metzler Revocable Trust. Bonnie McGregor of Coastal Trailer Villa is considered to be the on-Site property manager. The Site is currently occupied by Coastal Trailer Villa and its tenants that reside in RVs at the Site.

3.7 Reason for Performing Phase I ESA

AEC has been retained to conduct this Phase I ESA to identify environmental issues which may be present and in connection with the planned purchase and development of the Site.

3.8 Other

Two prior environmental reports pertaining to the Site were provided to AEC by the Site owner. The documents provided are as follows:

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Environmental Assessment Report For Trailer Park (Parcel 1) Adjacent to 1579 Morena Boulevard, San Diego, California, prepared by Ike Yen Associates and dated June 12, 1992.

Environmental Assessment Report For Trailer Park (Parcel 2) Located at 1579 Morena Boulevard, San Diego, California, prepared by Ike Yen Associates and dated June 12, 1992.

No significant environmental concerns were noted during the completion of the above referenced assessments. The document did note that asbestos containing materials are present within select structures at the Site. Asbestos is not considered to be a recognized environmental condition, but will require surveying and abatement prior to future building demolition.

The environmental assessment report for the Parcel 2 property also references a review of a prior geotechnical study completed at the Site. In the geotechnical report, a water well is referenced as being present at the property. No water supply wells were noted on-Site by AEC during the completion of this assessment.

4.0 Records Review

4.1 Standard Environmental Record Sources

AEC reviewed Federal and State environmental databases provided by EDR of Shelton, Connecticut for information pertaining to documented and/or suspected releases of regulated hazardous substances and/or petroleum products within specified search distances. A copy of the EDR report is included in Section 11.4.

AEC also reviewed unmappable sites listed in the environmental database report by cross-referencing addresses and site names. Unmappable sites are sites that cannot be plotted with confidence, but can be located by zip code or city name. In general, a site cannot be mapped because of inaccurate or missing location information in the record provided by the regulatory agency. Any unmappable sites that AEC identifies within the specified search radii were evaluated as part of the preparation of this report.

The following Federal databases related to potential on-site and off-site sources of contamination were reviewed and interpreted by AEC:

Federal Databases	Search Distance From Site
National Priorities List (NPL)	One mile
Delisted NPL	One mile
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)	One-half mile
CERCLIS No Further Remedial Action Planned (NFRAP)	One-half mile
Resource Conservation and Recovery Act (RCRA) CORRACTS Hazardous Waste Treatment, Storage and Disposal (TSD) Facilities	One mile
RCRA non-CORRACTS Hazardous Waste TSD Facilities	One-half mile
RCRA Hazardous Waste Generators (RCRA GEN)	One-eighth mile
Emergency Response Notification System (ERNS)	One-eighth mile
Federal Institutional/Engineering Control Registries (IC/EC)	One-half mile

The following State/local databases related to potential on-site and off-site sources of contamination were also searched and reviewed:

State/Local Databases	Search Distance From Site
State-equivalent NPL and CERCLIS (RESPONSE and Envirostor)	One mile
State Voluntary Cleanup Sites (VCP)	One-half mile
State Landfill and/or Solid Waste Disposal Sites (SWF/LF)	One-half mile
State Leaking Storage Tank (LUST, SLIC, SAM)	One-half mile
State Registered Storage Tank (UST, AST)	One-eighth mile

Descriptions/sources of each of the above referenced regulatory databases and the dates these databases were last updated by the applicable regulatory agencies are included in the EDR report.

Subject Site

The Site was not identified in the standard regulatory databases reviewed in the EDR Radius Map Report.

Adjoining and Nearby Properties

Several listings were mapped in the standard regulatory databases within 1/4-mile of the Site. The table below presents a summary of the listed facilities and an opinion regarding their potential impact to the Site.

Listed Property and Address	Database(s)	Mapped Distance and Direction From Site	Details	Likely Concer n To Site?
Arco #5141/ Golden Bear Fuel 1550 Morena Blvd	LUST SLIC UST SAM ERNS	0.004- mile SSW	Referenced on the LUST database for a gasoline leak to the groundwater. Case closed as of October 11, 2005. Referenced on the SLIC database for a waste / motor / hydraulic oil leak to the groundwater. Case closed as of June 28, 2005. Referenced on the UST database with multiple UST's of gasoline and diesel. Referenced on the SAM database with no details provided. Case closed as of June 28, 2005. Referenced on the ERNS database for a release of hydraulic oil to the soil.	No
Rock Engineering 1434 Morena Blvd	RCRA-GEN	0.118-mile SSE	Referenced on the RCRA-SQG database as a small quantity generator of hazardous waste with no violations found.	No
Blue Porpoise Marine 1244 Knoxville St	LUST SAM	0.170-mile SSE	Referenced on the LUST database for a gasoline leak to the groundwater. Case closed as of March 12, 1991. Referenced on the SAM database with no details provided. Case closed as of March 12, 1991.	No

The properties listed in the table above are not considered to be environmental concerns to the Site. Several properties mapped between one-quarter to one-mile from the Site also appear on various regulatory databases (one CERCLIS-NFRAP, five ENVIROSTOR, three LUST, one SLIC and three San Diego County SAM). These properties are also not expected to have adversely impacted the Site. These opinions are based on several factors including the nature of the regulatory database listings, distance of the off-Site listed properties from the Site, orientation of the listed properties relative to the Site, interpreted direction of groundwater flow, and/or regulatory case status information for the various properties as described in the database.

Non-ASTM Database Reviews

Below is a list of non-ASTM databases searched by EDR and reviewed by AEC during the preparation of this assessment. The descriptions of each database and their data release frequency are included in the EDR report, included in Section 11.4.

Local Brownfield Lists

US BROWNFIELDS - A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations

ODI - Open Dump Inventory

WMUDS/SWAT - Waste Management Unit Database

SWRCY - Recycler Database

HAULERS - Registered Waste Tire Haulers Listing

Local Lists of Hazardous Waste / Contaminated Sites

US CDL - Clandestine Drug Labs

HIST Cal-Sites - Historical Calsites Database

SCH - School Property Evaluation Program

Toxic Pits - Toxic Pits Cleanup Act Sites

CDL - Clandestine Drug Labs

US HIST CDL - National Clandestine Laboratory Register

SD HMMD - San Diego County DEH Hazardous Materials Management Division

Local Land Records

LIENS 2 - CERCLA Lien Information

LIENS - Environmental Liens Listing

DEED - Deed Restriction Listing

Records of Emergency Release Reports

HMIRS - Hazardous Materials Information Reporting System

CHMIRS - California Hazardous Material Incident Report System

LDS - Land Disposal Sites Listing

MCS - Military Cleanup Sites Listing

Other Ascertainable Records

RCRA-NonGen - RCRA - Non Generators

DOT OPS - Incident and Accident Data

DOD - Department of Defense Sites

FUDS - Formerly Used Defense Sites

CONSENT - Superfund (CERCLA) Consent Decrees

ROD - Records Of Decision

UMTRA - Uranium Mill Tailings Sites

MINES - Mines Master Index File

TRIS - Toxic Chemical Release Inventory System

TSCA - Toxic Substances Control Act

FTTSFIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

HIST FTTS - FIFRA/TSCA Tracking System Administrative Case Listing

SSTS - Section 7 Tracking Systems

ICIS - Integrated Compliance Information System

PADS - PCB Activity Database System

MLTS - Material Licensing Tracking System

RADINFO - Radiation Information Database

FINDS - Facility Index System/Facility Registry System

RAATS - RCRA Administrative Action Tracking System

RMP - Risk Management Plans

CA BOND EXP. PLAN - Bond Expenditure Plan

UIC - UIC Listing

NPDES - NPDES Permits Listing

Cortese - "Cortese" Hazardous Waste & Substances Sites List

HIST CORTESE - Hazardous Waste & Substance Site List

CUPA Listings - CUPA Resources List

Notify 65 - Proposition 65 Records

DRYCLEANERS - Cleaner Facilities

WIP - Well Investigation Program Case List

ENF - Enforcement Action List

HAZNET - Facility and Manifest Data

EMI - Emissions Inventory Data

INDIAN RESERV - Indian Reservations

SCRD DRYCLEANERS - State Coalition for Remediation of Drycleaners Listing

MWMP - Medical Waste Management Program Listing

COAL ASDH DOE - Sleam Electric Plan Operation Data Listing

COAL ASH EPA – Coal Combustion Residues Surface Impoundments List

HWT - Registered Hazardous Waste Transporter Database

HWP - Envirostor Permitted Facilities List

FINANCIAL ASSURANCE - Financial Assurance Information Listing

LEAD SMELTERS - Lead Smelter Sites

2020 COR ACTION - 2020 Corrective Action Program List

US AIRS - Aerometric Information Retrieval System Facility Subsystem

PRP - Potentially Responsible Parties

WDS - Waste Discharge System

EPA WATCH LIST - EPA WATCH LIST

US FIN ASSUR - Financial Assurance Information

PCB TRANSFORMER - PCB Transformer Registration Database

PROC - Certified Processors Database

Non-ASTM Database Listings

The Site was not identified on the non-ASTM database listings in the database report. Several off-Site facilities were listed on the non-ASTM databases searched by EDR. Such listings are not expected to have adversely impacted the Site. This opinion is based on several factors including the distance of the off-Site listed properties from the Site, orientation of the listed properties relative to the Site, interpreted direction of groundwater flow, and/or regulatory case status information for the various properties as described in the database report.

4.2 Additional Environmental Record Sources

County of San Diego Department of Environmental Health (DEH)

AEC requested regulatory records for the Site from the County of San Diego DEH. Copies of permits for the drilling of prior geotechnical soil borings drilled at the Site are included in DEH

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files. In addition, there is a permit for the drilling of environmental soil borings at the Site in 2014. AEC inquired with the Site owner representative regarding such environmental soil borings and was informed that the best of the owner's knowledge, such borings were not drilled on-Site. However, the DEH informed AEC that they believe the borings were drilled as a soil boring completion report was submitted to the County. AEC has requested a copy of the referenced report be provided. If the report is provided to AEC at a later date, any pertinent information will be provided to the client in an addendum to this report.

City of San Diego Fire Department (SDFD)

AEC requested regulatory records for the Site from the SDFD. One record pertaining to a fire lane inspection was provided for the Site. There were no records pertaining to USTs and hazardous materials in the SDFD files.

California State Water Resources Control Board (Geotracker)

AEC searched for information regarding a possible release at the Site on the Geotracker database maintained by the California Water Resources Control Board. No release cases were identified during the Geotracker search of the Site.

4.3 Physical Setting Sources

The following physical setting sources were reviewed to provide information about the topographic, hydrologic, geologic and/or hydrogeologic characteristics of the Site.

4.3.1 Topography and Hydrology

USGS Topographic Quadrangle

The Site is depicted on the USGS topographic map for the La Jolla, California 7.5 minute quadrangle (2015). The Site is shown on the map as being relatively level and located at an elevation of approximately 20 feet above mean sea level. Regional topography is shown as sloping to the west-southwest towards San Diego Bay. Structures are not depicted on-Site on the map. However, the Site is situated in an area of dense development. Streets/roadways bordering the Site are shown in their current configuration.

Hydrology/Storm Water Management

Surface drainage at the Site is facilitated by nearby municipal storm drains along public roadways and maintained by the City of San Diego. The Site does not appear to receive significant drainage from off-site properties.

4.3.2 Geology

The Site lies within the Peninsular Ranges Geologic Province of California. This geomorphic province is traversed by a group of northwest trending sub-parallel fault zones and encompasses an area that extends 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican Border and beyond another 775 miles to the tip of Baja California. Rocks within the Peninsular Range Province were emplaced during Cretaceous age orogenic events and uplifted into the present mountain ranges during the late Tertiary and Quaternary. Igneous, metamorphic

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and sedimentary rocks are all found within the Peninsular Ranges. The area is seismically active, with several known active faults crossing the Province. The Site is located in the western coastal plain section of the Peninsular Ranges.

According to geologic map sources, the Site is underlain by alluvium and slope wash deposits from the mid Pleistocene—Holocene period. Alluvium consists primarily of poorly consolidated stream deposits of silt, sand, and cobble-sized particles derived from bedrock sources that lie within or near the area. Slope wash deposits are poorly consolidated surficial materials derived chiefly from nearby soil and decomposed bedrock sources.

4.3.3 Hydrogeology

According to the Water Quality Control Plan for the San Diego Basin, the Site is located within the Tecolote Hydrologic Area of the Penasquitos Hydrologic Unit (SWRCB, 1994). Groundwater in the Tecolote Hydrologic Area has no reported beneficial uses. Groundwater beneath the Site is expected to be present at depths greater than 10 feet below the ground surface with an anticipated flow direction toward the west and southwest.

4.4 Historical Use Information

Historical sources (as described in the following sections) were reviewed to develop a history of the previous uses of the Site and adjacent/nearby properties to help identify the likelihood of past uses having led to recognized environmental conditions in connection with the Site.

4.4.1 Fire Insurance Maps

Sanborn Fire Insurance maps are not available for the Site. A copy of the Sanborn no coverage letter is included in Section 11.5.

4.4.2 Aerial Photographs

AEC reviewed aerial photographs from 1953, 1964, 1966, 1981, 1990, 1994, 1997, 2002, 2005, 2009, 2010 and 2012 via on-line resources. The results of the aerial photograph review are summarized in the following table:

Aerial Review			
Year	Observations		
	SITE: The Site appears to be developed similar to its current configuration.		
1953	SURROUNDING AREA: Tonopah Avenue is visible to the northeast of the Site, followed by residential housing. The area to the northwest appears to be vacant and undeveloped. Frankfort Street is visible to the southeast, followed by residential housing. Morena Boulevard is visible to the southwest of the Site, followed by a single commercial building and vacant, undeveloped land.		
1964, 1966 and 1981	SITE: The Site appears similar to the previous photograph. SURROUNDING AREA: More residential development is visible to the northeast of the Site. The area to the northwest appears to be developed with commercial businesses and residential housing. West Morena Boulevard is		

	Aerial Review				
Year	Observations				
	visible to the west of the Site, and there appear to be several commercial businesses to the south. The area to the southwest (southwest of West Morena Boulevard) appears to be developed as the Interstate-5 freeway. The area to the southeast appears similar to the previous photograph.				
1990, 1994, 1997, 2002, 2005, 2009, 2010 and 2012	SITE: The Site appears similar to the previous photograph. SURROUNDING AREA: The area to the northwest of the Site appears to be further developed with commercial businesses and residential housing. The areas to the northeast, southeast and southwest appear similar to the previous photograph.				

4.4.3 City Directories

AEC reviewed historical city directory listings provided by EDR for the Site and its adjacent properties dating back to 1943. Site listings are presented below.

Morena Boulevard

1579 Morena Boulevard

2013: Coastal Trailer Villa

2008: Coastal Trailer Villa Park, Garage Door Installers, and Sports League

1952-2006: Coastal Trailer Villa Park and Residential Listings

1943-1951: No listings

1623 Morena Boulevard

2006: No listing

1943-2000: Residential listings

Adjacent and nearby properties are primarily residential and commercial in use dating back to 1943 which is consistent with the findings of the aerial photograph review. The city directories are included in Section 11.6.

4.4.4 State of California Division of Oil and Gas Records

According to online resources provided by the California Department of Conservation, Division of Oil, Gas and Geothermal Resources, there are no oil, gas or geothermal wells located on the Site or its adjacent properties.

5.0 Site Reconnaissance

The objective of the Site reconnaissance was to obtain information indicating the likelihood of recognized environmental conditions in connection with the Site. The reconnaissance was conducted on August 21, 2015 by Mr. Scott Schiffer of AEC's Western Regional office. Mr. Schiffer was unescorted during the Site reconnaissance.

5.1 Methodology and Limiting Conditions

The Site reconnaissance consisted of walking the Site and along public sidewalks (for viewing of adjacent/nearby properties). Full access to the Site was provided. As stated previously, a Site Plan is included in 11.2. Photographs of the Site were taken to document existing Site conditions and are included and described in Section 11.3.

5.2 General Site Setting

As stated previously, the Site and its adjacent/nearby properties are situated within the Bay Park area of San Diego, California. This area is comprised of a mixture of commercial and residential development. The Site is currently developed with seven single-story buildings, four of which were reportedly constructed in 1944, and three reportedly constructed in 1947. The Site building with the address of 1579 Morena Boulevard totals a reported 1,080 square feet in size, and is currently used as a residence. The Site building with the address of 1623 Morena Boulevard totals a reported 2,206 square feet, and is also currently used as a residence. The other buildings on-Site are used as garages/storage space, laundry area/storage facility and offices. There are also several concrete block structures throughout the Site which were previously used as restrooms, but are now boarded up and no longer in use. The remainder of the Site is used as a recreational vehicle (RV) park, and includes asphalt paving, concrete flatwork and landscaping. The current uses of the Site and adjoining properties (listed in Section 2.5), are not indicative of the use, treatment, storage, disposal or generation of hazardous substances or petroleum products (based on visual observations and regulatory database review) that have potentially impacted the subject Site.

5.3 Site Observations

AEC examined visible portions of the Site for evidence of the following potential environmental concerns:

Conditions	Not Observed or Noted	Observed or Noted	Environmental Concern?
Hazardous Substances/Petroleum Products		X	No
Waste Generation/Storage/Disposal	X		
ASTs	X		
USTs	X		
PCB Containing Equipment		X	No
Chemical/Petroleum Odors	X		
Pools of Liquid	X		
Floor Drains/Sumps/Wells	X		
Drums	X		
Stains or Corrosion	X	·-	·

Conditions	Not Observed or Noted	Observed or Noted	Environmental Concern?
Unidentified Substance Containers	X		
Stained Soil or Pavement		Χ	No
Stressed Vegetation	X		
Pits, Ponds or Lagoons	X		
Wastewater Discharges/Disposal Systems	X		
Septic Systems/Cesspools	X		
Non-Hazardous Solid Waste Disposal Areas		Χ	No
Drinking Water Systems/Water Wells		X	No
Other Wells	X		

The noted items in the table above are discussed below:

Hazardous Substances/Petroleum Products

Retail sized containers of gasoline and of common maintenance products were observed within the storage building, which is located in the southwestern portion of the Site. There was no evidence of staining or leakage adjacent to or below such containers. AEC also observed several propane tanks which were attached to RV's and trailers at the Site. There was no evidence of staining, corrosion or leakage below or adjacent to the tanks.

PCB Containing Equipment

AEC observed a pad-mounted electrical transformer and a pole mounted electrical transformer in the southwest portion of the Site. The transformers are owned by SDG&E and were not labeled with respect to potential PCB content. The transformers appeared to be in good condition with no evidence of damage, leaks, or staining on or around the units.

Stained Soil/Pavement

AEC observed motor oil stains on the concrete pads where RV's at the Site are parked. However, the stains are considered to be typical of RV parks and considered to be de minimis.

Non-Hazardous Solid Waste Disposal Areas

Four dumpsters were observed in the southwest portion of the Site. No staining was observed in the vicinity of the dumpsters and no evidence of unauthorized waste disposal was observed.

Drinking Water Systems/Water Wells

As stated previously, in a prior geotechnical report pertaining to the Site, a water well is referenced as being present at the property. No water supply wells were noted on-Site by AEC during the completion of this assessment. If a water supply well is present at the Site and is discovered during future grading activities, the well will require proper abandonment in accordance with local and State regulations.

6.0 Interview Information

6.1. Interview With Owner

As stated previously, the Site is currently owned and managed by the Donald J Metzler Revocable Trust. A representative of the Site owner was interviewed during the preparation of this assessment and was unaware of environmental concerns in connection with the Site.

6.2 Interview With Site Manager

The Site owner is considered to be the Site manager. Please refer to Section 6.1 above. In addition, Bonnie McGregor of Coastal Trailer Villa is considered to be the on-Site property manager. Management is unaware of environmental concerns in connection with the Site.

6.3 Interviews With Occupants

No interviews with occupants of the Site were conducted nor deemed warranted during the preparation of this ESA.

6.4 Interview With Local Government Official

During the preparation of this assessment, AEC consulted with various regulatory agency sources regarding potential environmental concerns at the Site.

6.5 Interview With Others

No interviews with other persons knowledgeable of the historical use of the Site were conducted during the preparation of this ESA.

7.0 Findings, Opinions, Conclusions and Recommendations

Advantage Environmental Consultants, LLC has performed a Phase I Environmental Site Assessment, in conformance with the scope and limitations of ASTM Practice E 1527-13 and 40 CFR Part 312 of the property located at 1579 and 1623 Morena Boulevard in San Diego, California (APN 436-020-40-00 and -41-00). Any exceptions to, or deletions from, this practice are described in Section 8.0 of this report.

This Phase I ESA has revealed no evidence of recognized environmental conditions in connection with the Site. Additional assessment at the Site is not considered to be warranted at this time.

8.0 Deviations and Data Gaps

No significant data gaps or deviations as defined in the ASTM E 1527-13 standard are noted.

9.0 References

ASTM, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," ASTM Designation E 1527-13;

"All Appropriate Inquiry" as necessary to satisfy the defenses available under 42 U.S.C. §§ 9607(b)(3), 9607(r)(1), and 9607(q), relying on definitions provided at 42 U.S.C. §§ 9601(35)(B); and as further explained in 40 CFR §§ 312.1 – 312.31;

California Geological Survey (CGS), 2002, California Geomorphic Provinces Note 36, Electronic Copy, Revised December.

California Regional Water Quality Control Board - San Diego Region 9, 1994, Water Quality Control Plan - San Diego Region: California State Water Resources Control Board Publication.

EDR city directory abstract, dated August 25, 2015;

EDR Sanborn fire insurance map package, August 24, 2015;

EDR regulatory database report, dated August 24, 2015;

State of California Department of Conservation, Division of Oil and Gas and Geothermal Resources: http://www.consrv.ca.gov/DOG/maps/index map.htm;

State of California Water Resources Control Board (SWRCB) GeoTracker database: http://geotracker.swrcb.ca.gov/;

USGS topographic map, La Jolla, California Quadrangle (2015).

10.0 Signatures and Qualifications of Environmental Professionals

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR 312.10. I have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject Site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Daniel Weis, R.E.H.S.

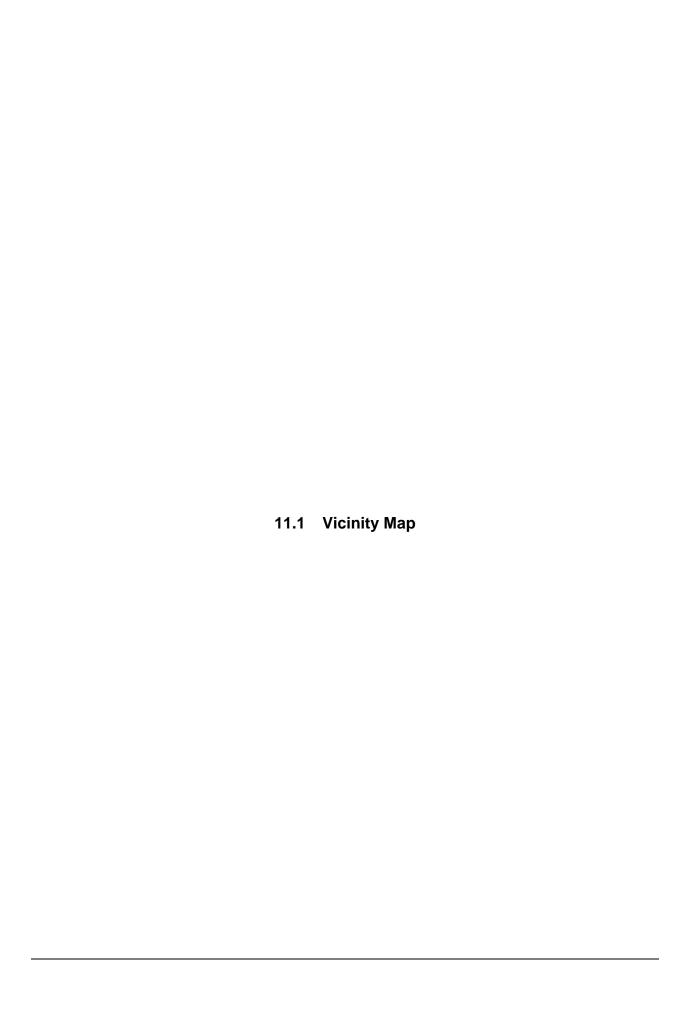
Branch Manager

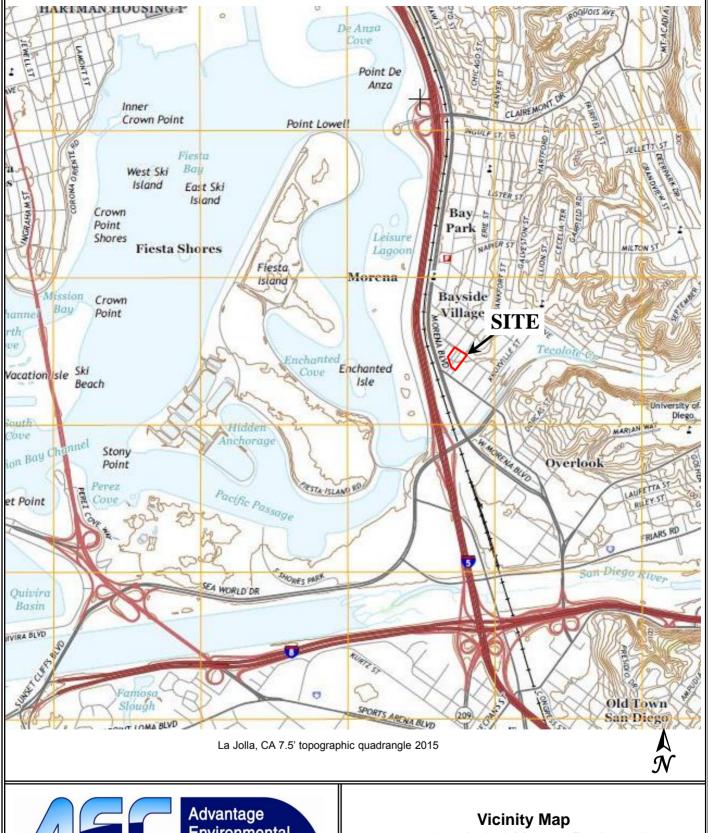
Western Regional Office

? Wes

Qualifications for the environmental professional involved in the performance of the Phase I ESA are included in 11.7.









Fax: 760-744-3383

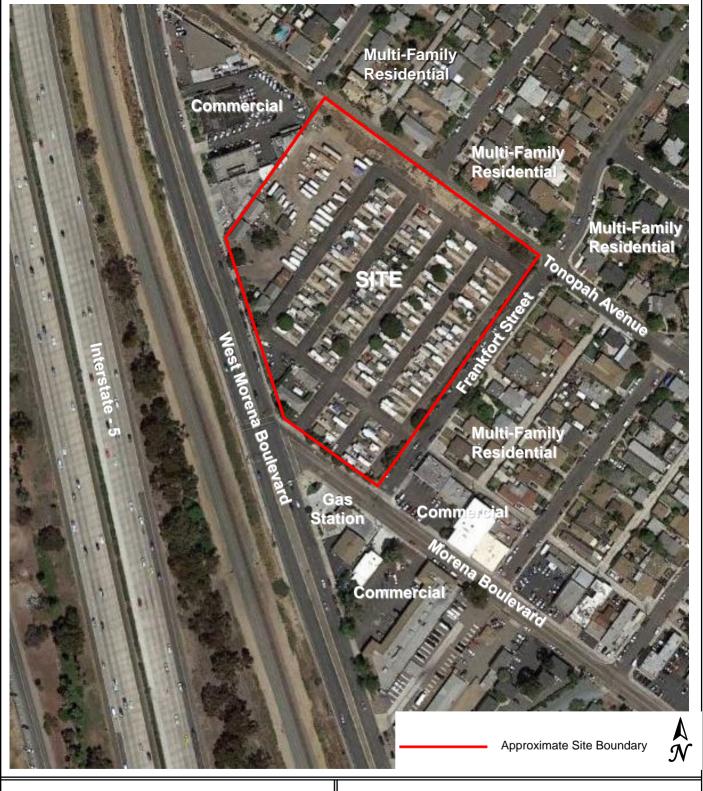
Phone: 760-744-3363

Work Order No.:

1579 and 1623 Morena Boulevard San Diego, California

Report Date: 15-167SD September 2015 Drawn By: SS







145 Vallecitos De Oro, Suite 201 San Marcos, CA 92069

Phone: 760-744-3363 Fax: 760-744-3383

Site Plan

1579 and 1623 Morena Boulevard San Diego, California

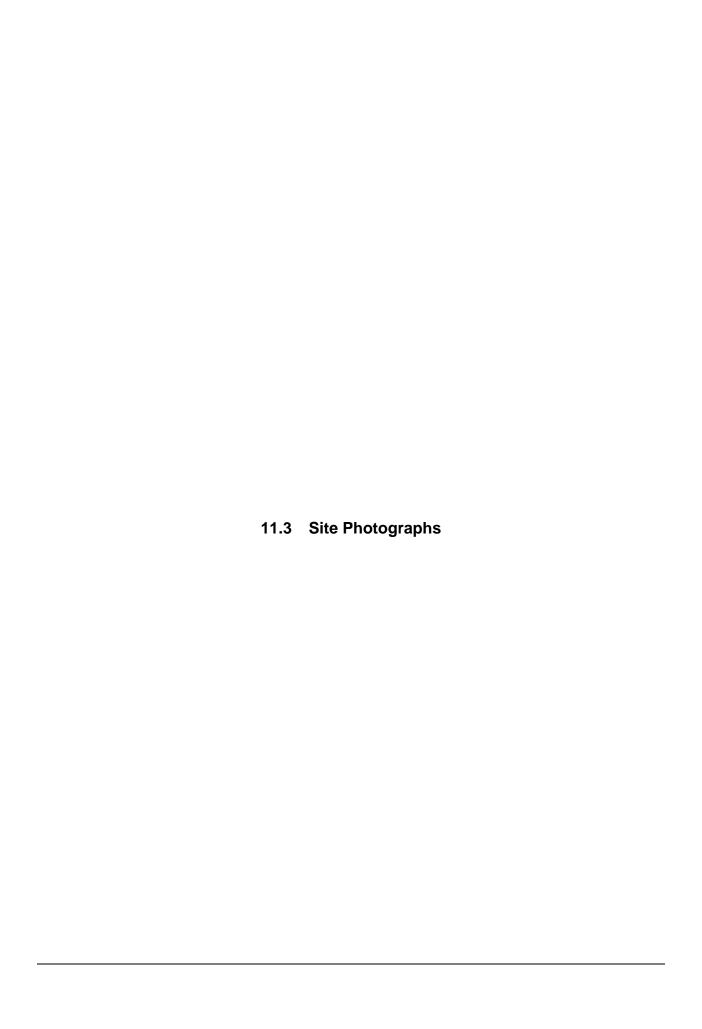
Work Order No.:

15-167SD

Report Date:
September 2015

Drawn By:

SS







1. View of the Site, looking northeast.



View of northwestern Site boundary, looking northeast.



View of northeastern Site boundary, looking southeast.



 View of southeastern Site boundary, looking southwest.



 View of southwestern Site boundary, looking south. View of West Morena Boulevard and southern adjacent properties (including the ARCO service station).



6. Interior view of the Site building used as an office.





 View of retail sized containers of common maintenance products in the Site building used for storage



8. View of retail sized gasoline containers.



9. View of laundry room at the Site.



10. View of dumpsters at the Site.



11. View of pad-mounted transformer at the Site.



12. View of the storage building at the Site, and of the pole mounted transformer at the Site.





 View of RV's at the Site and of a boarded up CMU structure.



 View of propane tanks attached to an RV at the Site.



15. View of staining in an RV stall at the Site.



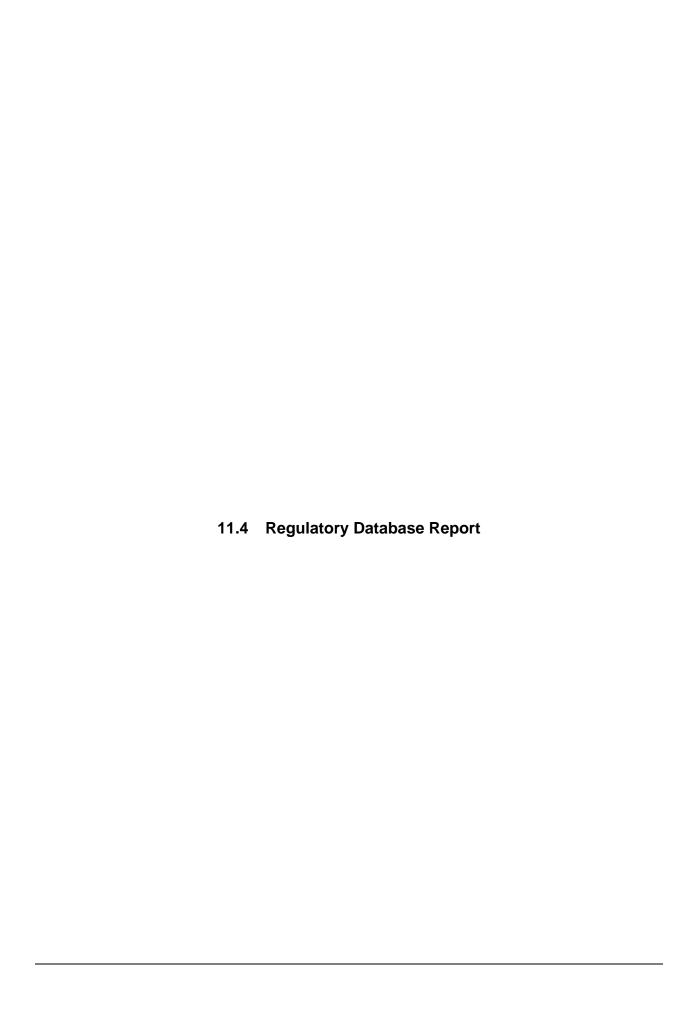
16. View of southeastern adjacent properties.



17. View of northeastern adjacent properties.



18. View of Site, 1623 Morena Boulevard.

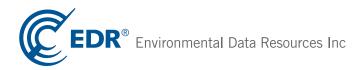


Fairfield - 1579 Morena Blvd 1579 Morena Blvd San Diego, CA 92110

Inquiry Number: 4391457.1s

August 24, 2015

The EDR Radius Map™ Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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GEOCHECK ADDENDUM	

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1579 MORENA BLVD SAN DIEGO, CA 92110

COORDINATES

Latitude (North): 32.7757000 - 32° 46' 32.52" Longitude (West): 117.2061000 - 117° 12' 21.96"

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 480698.0 UTM Y (Meters): 3626250.0

Elevation: 30 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5622824 LA JOLLA, CA

Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20120519 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 1579 MORENA BLVD SAN DIEGO, CA 92110

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1		1550 MORENO BLVD	ERNS	Lower	8, 0.002, South
A2	ARCO #5141	1550 MORENA BL	LUST, SLIC, San Diego Co. HMMD	Lower	23, 0.004, SSW
A3	ARCO # 05141	1550 MORENA BL	RGA LUST	Lower	23, 0.004, SSW
A4	ARCO FACILITY NO. 51	1550 MORENA BLVD	San Diego Co. HMMD	Lower	23, 0.004, SSW
A5	ARCO #5141	1550 MORENA BL	RGA LUST	Lower	23, 0.004, SSW
A6	ARCO 5141	1550 MORENA BL	RGA LUST	Lower	23, 0.004, SSW
A7	ARCO #05141 MOSHAIL	1550 MORENA BL	SAN DIEGO CO. SAM, UST	Lower	23, 0.004, SSW
A8	MORENA ARCO	1550 MORENA BOULEVAR	RGA LUST	Lower	23, 0.004, SSW
A9	GOLDEN BEAR FUEL	1550 MORENA BLVD	LUST, San Diego Co. HMMD, SWEEPS UST	Lower	23, 0.004, SSW
A10	MORENA ARCO	1550 MORENA BLVD	RGA LUST	Lower	23, 0.004, SSW
A11	ZUHAIR H ABU	1550 MORENA BLVD	HIST UST	Lower	23, 0.004, SSW
A12	MORENA PET HOSPITAL	1540 MORENA BLVD	San Diego Co. HMMD	Lower	24, 0.005, South
A13	JOHN SMITH EARTHWORK	1504 MORENA BLVD	San Diego Co. HMMD	Lower	174, 0.033, SSE
A14	DUNN EDWARDS PAINT	1510 MORENA BLVD	San Diego Co. HMMD	Lower	192, 0.036, South
B15	JOE ROPER SURFBOARD	1460 MORENA BLVD	San Diego Co. HMMD	Lower	414, 0.078, SSE
B16	T & L AUTO REPAIR	1471 MORENA BLVD	San Diego Co. HMMD, SWEEPS UST	Lower	464, 0.088, SSE
B17	SEKITO CHIROPRACTIC	1465 MORENA BLVD	San Diego Co. HMMD	Lower	495, 0.094, SSE
B18	AUTOHAVEN	1434 MORENA BL	San Diego Co. HMMD	Lower	621, 0.118, SSE
B19	ROCK ENGINEERING	1434 MORENA BLVD	RCRA-SQG	Lower	621, 0.118, SSE
20	FIRESTONE TIRE & SER	1735 MORENA BLVD	San Diego Co. HMMD	Higher	642, 0.122, NNW
B21	FREDERICK L TOMASCHK	1430 MORENA BLVD	San Diego Co. HMMD	Lower	651, 0.123, SE
B22	AAMCO TRANSMISSIONS	1430 MORENA BLVD	San Diego Co. HMMD	Lower	651, 0.123, SE
B23	MISSION DENTAL CERAM	1430 MORENA BLVD	San Diego Co. HMMD	Lower	651, 0.123, SE
B24	AFFORDABLE MARINE SE	1430 MORENA BLVD	San Diego Co. HMMD	Lower	651, 0.123, SE
C25	BLUE PORPOISE MARINE	1244 KNOXVILLE ST	LUST, SAN DIEGO CO. SAM	Lower	899, 0.170, SSE
C26	DAPPER TIRE SERVICE	1244 KNOXVILLE ST	RGA LUST	Lower	899, 0.170, SSE
C27	DAPPER TIRE SERVICE	1244 KNOXVILLE STREE	RGA LUST	Lower	899, 0.170, SSE
C28	BLUE PORPOISE MARINE	1244 KNOXVILLE ST	RGA LUST	Lower	899, 0.170, SSE
C29	THERMO MATERIALS INC	1244 KNOXVILLE ST	RGA LUST	Lower	899, 0.170, SSE
D30	SHELL	1330 MORENA BL	RGA LUST	Lower	1340, 0.254, SE
D31	SHELL	1330 MORENA BL	LUST, SAN DIEGO CO. SAM	Lower	1340, 0.254, SE
E32	CITY OF SD-FIESTA IS	1000 FIESTA ISLAND R	RGA LUST	Lower	2036, 0.386, WSW
E33	SDCTY-WATER, FIESTA	1000 FIESTA ISLAND R	SAN DIEGO CO. SAM, SLIC	Lower	2036, 0.386, WSW
E34	SDCTY-WATER, FIESTA	1000 FIESTA ISLAND R	RGA LUST	Lower	2036, 0.386, WSW
E35	CITY OF SD-FIESTA IS	1000 FIESTA ISLAND R	RGA LUST	Lower	2036, 0.386, WSW
F36	MISSION CHEMICAL CO	4990 NAPLES	CERC-NFRAP	Higher	2206, 0.418, SSE
F37	MISSION CHEMICAL	4990 NAPLES ST	RGA LUST	Higher	2217, 0.420, SSE
F38	MISSION CHEMICAL	4990 NAPLES ST	LUST, SAN DIEGO CO. SAM	Higher	2217, 0.420, SSE
F39	FORMER MISSION CHEMI	4990 NAPLES ST	RGA LUST	Higher	2217, 0.420, SSE

MAPPED SITES SUMMARY

Target Property Address: 1579 MORENA BLVD SAN DIEGO, CA 92110

Click on Map ID to see full detail.

MAP	OUTE NAME	4DDDE00	DATABASE A OBONIVATO	RELATIVE	DIST (ft. & mi.)
<u>ID</u>	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
F40	IMPORT PARTS DEPO	4990 NAPLES ST	RGA LUST	Higher	2217, 0.420, SSE
F41	SAN DIEGO VESSEL MAI	4990 NAPLES STREET	ENVIROSTOR, LUST	Higher	2217, 0.420, SSE
F42	IMPORT PARTS DEPO	4990 NAPLES STREET	RGA LUST	Higher	2217, 0.420, SSE
G43	CITY CHEVROLET	2111 MORENA BL	RGA LUST	Lower	2617, 0.496, North
G44	CITY CHEVROLET	2111 MORENA BLVD	RGA LUST	Lower	2617, 0.496, North
H45	AAMCO TRANSMISSIONS	5251 LINDA VISTA RD.	ENVIROSTOR	Higher	4362, 0.826, SE
H46	MORENA VISTA REDEVEL	LINDA VISTA ROAD & N	ENVIROSTOR	Lower	4432, 0.839, SE
147	NIKE BATTERY 91, ANG	318 P.O. BOX	ENVIROSTOR	Lower	4700, 0.890, West
I 48	SAN DIEGO RIVER		ENVIROSTOR	Lower	4700, 0.890, West

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Fede	ralA	IDI .	cita	lict

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

EEDEDAI EACILITY	Fodoral Facility Site Information listing
FEDERAL FACILITY	_ Federal Facility Site Information listing
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
OLINOLIO	Comprehensive Environmental Response, Compensation, and Elability information System

Federal RCRA CORRACTS facilities list

CORRACTS...... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF...... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG	RCRA - Large Quan	tity Generators	
RCRA-CESQG	RCRA - Conditional	y Exempt Small	Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS	Land Use Control Information System
US ENG CONTROLS	Engineering Controls Sites List
	Sites with Institutional Controls

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

AST..... Aboveground Petroleum Storage Tank Facilities INDIAN UST...... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP......Voluntary Cleanup Program Properties INDIAN VCP......Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT_____ Waste Management Unit Database

SWRCY..... Recycler Database

HAULERS...... Registered Waste Tire Haulers Listing

ODI_____Open Dump Inventory
DEBRIS REGION 9_____Torres Martinez Reservation Illegal Dump Site Locations

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... National Clandestine Laboratory Register

HIST Cal-Sites_____ Historical Calsites Database

SCH..... School Property Evaluation Program

CDL..... Clandestine Drug Labs Toxic Pits Cleanup Act Sites

US CDL..... Clandestine Drug Labs

Local Lists of Registered Storage Tanks

CA FID UST..... Facility Inventory Database

Local Land Records

LIENS..... Environmental Liens Listing

LIENS 2...... CERCLA Lien Information DEED...... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS______ Hazardous Materials Information Reporting System CHMIRS_____ California Hazardous Material Incident Report System

LDS....... Land Disposal Sites Listing
MCS...... Military Cleanup Sites Listing
SPILLS 90...... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR.......... RCRA - Non Generators / No Longer Regulated

FUDS Formerly Used Defense Sites DOD. Department of Defense Sites

SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR_____ Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

TRIS...... Toxic Chemical Release Inventory System

SSTS______Section 7 Tracking Systems ROD______Records Of Decision

RMP....... Risk Management Plans
RAATS...... RCRA Administrative Action Tracking System

ICIS...... Integrated Compliance Information System

FTTS......FIFŘA/ TSCA Tracking System - FIFŘA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS...... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS..... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File

FINDS......Facility Index System/Facility Registry System

CA BOND EXP. PLAN..... Bond Expenditure Plan

Cortese "Cortese" Hazardous Waste & Substances Sites List
CUPA Listings CUPA Resources List

ENF______Enforcement Action Listing

Financial Assurance Information Listing

HAZNET..... Facility and Manifest Data

HIST CORTESE...... Hazardous Waste & Substance Site List HWP..... EnviroStor Permitted Facilities Listing

HWT...... Registered Hazardous Waste Transporter Database

MINES..... Mines Site Location Listing

MWMP..... Medical Waste Management Program Listing

NPDES Permits Listing

Notify 65..... Proposition 65 Records

UIC_____UIC Listing

WASTEWATER PITS..... Oil Wastewater Pits Listing WDS..... Waste Discharge System

WIP..... Well Investigation Program Case List

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF...... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MISSION CHEMICAL CO	4990 NAPLES	SSE 1/4 - 1/2 (0.418 mi.)	F36	54

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/10/2015 has revealed that there is 1 RCRA-SQG site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ROCK ENGINEERING	1434 MORENA BLVD	SSE 0 - 1/8 (0.118 mi.)	B19	39

Federal ERNS list

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 03/30/2015 has revealed that there is 1 ERNS site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported	1550 MORENO BLVD	S 0 - 1/8 (0.002 mi.)	A1	8

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/04/2015 has revealed that there are 5 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SAN DIEGO VESSEL MAI Facility Id: 37510124 Status: Refer: Other Agency	4990 NAPLES STREET	SSE 1/4 - 1/2 (0.420 mi.)	F41	57
AAMCO TRANSMISSIONS Facility Id: 37750009 Status: Refer: 1248 Local Agency	5251 LINDA VISTA RD.	SE 1/2 - 1 (0.826 mi.)	H45	60
Lower Elevation	Address	Direction / Distance	Map ID	Page
MORENA VISTA REDEVEL	LINDA VISTA ROAD & N	SE 1/2 - 1 (0.839 mi.)	H46	61

Facility Id: 60000567

Status: Inactive - Action Required

NIKE BATTERY 91, ANG 318 P.O. BOX W 1/2 - 1 (0.890 mi.) 147 62

Facility Id: 71000052 Status: Inactive - Action Required

SAN DIEGO RIVER W 1/2 - 1 (0.890 mi.) 148

Facility Id: 80000459

Status: Inactive - Needs Evaluation

State and tribal leaking storage tank lists

SAN DIEGO CO. SAM: The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

A review of the SAN DIEGO CO. SAM list, as provided by EDR, and dated 03/23/2010 has revealed that there are 5 SAN DIEGO CO. SAM sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MISSION CHEMICAL Case Number: H22857-001 Facility Status: Closed Case	4990 NAPLES ST	SSE 1/4 - 1/2 (0.420 mi.)	F38	55
Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO #05141 MOSHAIL Case Number: H05204-001 Case Number: H05204-002 Facility Status: Closed Case	1550 MORENA BL	SSW 0 - 1/8 (0.004 mi.)	A7	18
BLUE PORPOISE MARINE Case Number: H26424-001 Facility Status: Closed Case	1244 KNOXVILLE ST	SSE 1/8 - 1/4 (0.170 mi.)	C25	45
SHELL Case Number: H03190-001 Facility Status: Remedial Investigation	1330 MORENA BL	SE 1/4 - 1/2 (0.254 mi.)	D31	48
SDCTY-WATER, FIESTA Case Number: H26089-001 Facility Status: Closed Case	1000 FIESTA ISLAND R	WSW 1/4 - 1/2 (0.386 mi.)	E33	53

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 06/15/2015 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MISSION CHEMICAL	4990 NAPLES ST	SSE 1/4 - 1/2 (0.420 mi.)	F38	55

63

Status: Preliminary site assessment underway

Case Number: 9UT2181

SAN DIEGO VESSEL MAI 4990 NAPLES STREET SSE 1/4 - 1/2 (0.420 mi.) F41 57
Status: Completed - Case Closed

Global Id: T0607300951

Global Id: T0607326769

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO #5141 Status: Completed - Case Closed Global Id: T0607300961	1550 MORENA BL	SSW 0 - 1/8 (0.004 mi.)	A2	8
GOLDEN BEAR FUEL Status: Remediation Plan Case Number: 9UT2191	1550 MORENA BLVD	SSW 0 - 1/8 (0.004 mi.)	A9	19
BLUE PORPOISE MARINE Status: Completed - Case Closed Closed Date: 2/5/91 Status: Case Closed Global Id: T0607300376 Case Number: 9UT1557	1244 KNOXVILLE ST	SSE 1/8 - 1/4 (0.170 mi.)	C25	45
SHELL Status: Completed - Case Closed	1330 MORENA BL	SE 1/4 - 1/2 (0.254 mi.)	D31	48

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 06/15/2015 has revealed that there are 2 SLIC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO #5141 Facility Status: Completed - Case Closed Global Id: T0608145162	1550 MORENA BL	SSW 0 - 1/8 (0.004 mi.)	A2	8
SDCTY-WATER, FIESTA Facility Status: Completed - Case Closed Global Id: T0608155033	1000 FIESTA ISLAND R	WSW 1/4 - 1/2 (0.386 mi.)	E33	53

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 06/15/2015 has revealed that there is 1 UST site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO #05141 MOSHAIL	1550 MORENA BL	SSW 0 - 1/8 (0.004 mi.)	A7	18

Facility Id: H05204

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

San Diego Co. HMMD: The Hazardous Materials Management Division Database comes from the Hazardous Materials Management Division.

A review of the San Diego Co. HMMD list, as provided by EDR, and dated 09/23/2013 has revealed that there are 15 San Diego Co. HMMD sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FIRESTONE TIRE & SER Facility ID: 116118	1735 MORENA BLVD	NNW 0 - 1/8 (0.122 mi.)	20	40
Lower Elevation	Address	Direction / Distance	Map ID	Page
ARCO #5141 Facility ID: 216997	1550 MORENA BL	SSW 0 - 1/8 (0.004 mi.)	A2	8
ARCO FACILITY NO. 51 Facility ID: 105204	1550 MORENA BLVD	SSW 0 - 1/8 (0.004 mi.)	A4	14
GOLDEN BEAR FUEL Facility ID: 210208	1550 MORENA BLVD	SSW 0 - 1/8 (0.004 mi.)	A9	19
MORENA PET HOSPITAL Facility ID: 153079 Facility ID: 153076	1540 MORENA BLVD	S 0 - 1/8 (0.005 mi.)	A12	28
JOHN SMITH EARTHWORK Facility ID: 136748	1504 MORENA BLVD	SSE 0 - 1/8 (0.033 mi.)	A13	30
DUNN EDWARDS PAINT Facility ID: 201062 Facility ID: 131996	1510 MORENA BLVD	S 0 - 1/8 (0.036 mi.)	A14	30
JOE ROPER SURFBOARD Facility ID: 110910	1460 MORENA BLVD	SSE 0 - 1/8 (0.078 mi.)	B15	31
T & L AUTO REPAIR Facility ID: 209177 Facility ID: 210990 Facility ID: 103625	1471 MORENA BLVD	SSE 0 - 1/8 (0.088 mi.)	B16	33
SEKITO CHIROPRACTIC Facility ID: 139234	1465 MORENA BLVD	SSE 0 - 1/8 (0.094 mi.)	B17	36
AUTOHAVEN Facility ID: 206728	1434 MORENA BL	SSE 0 - 1/8 (0.118 mi.)	B18	37
FREDERICK L TOMASCHK Facility ID: 126445	1430 MORENA BLVD	SE 0 - 1/8 (0.123 mi.)	B21	41
AAMCO TRANSMISSIONS Facility ID: 132500 Facility ID: 212018	1430 MORENA BLVD	SE 0 - 1/8 (0.123 mi.)	B22	41
MISSION DENTAL CERAM	1430 MORENA BLVD	SE 0 - 1/8 (0.123 mi.)	B23	44

Facility ID: 101263

AFFORDABLE MARINE SE 1430 MORENA BLVD SE 0 - 1/8 (0.123 mi.) B24 45

Facility ID: 132700

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GOLDEN BEAR FUEL Status: A Tank Status: A Comp Number: 5204	1550 MORENA BLVD	SSW 0 - 1/8 (0.004 mi.)	A9	19
T & L AUTO REPAIR Status: A Comp Number: 3625	1471 MORENA BLVD	SSE 0 - 1/8 (0.088 mi.)	B16	33

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ZUHAIR H ABU	1550 MORENA BLVD	SSW 0 - 1/8 (0.004 mi.)	A11	27
Facility Id: 00000026798				

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LUST: The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

A review of the RGA LUST list, as provided by EDR, has revealed that there are 19 RGA LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MISSION CHEMICAL	4990 NAPLES ST	SSE 1/4 - 1/2 (0.420 mi.)		55
FORMER MISSION CHEMI	4990 NAPLES ST	SSE 1/4 - 1/2 (0.420 mi.)		56

IMPORT PARTS DEPO	Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ARCO # 05141			,		
ARCO #5141 1550 MORENA BL SSW 0 - 1/8 (0.004 mi.) A5 17 ARCO 5141 1550 MORENA BL SSW 0 - 1/8 (0.004 mi.) A6 18 MORENA ARCO 1550 MORENA BOULEVAR SSW 0 - 1/8 (0.004 mi.) A8 18 MORENA ARCO 1550 MORENA BLVD SSW 0 - 1/8 (0.004 mi.) A10 27 DAPPER TIRE SERVICE 1244 KNOXVILLE ST SSE 1/8 - 1/4 (0.170 mi.) C26 47 DAPPER TIRE SERVICE 1244 KNOXVILLE STREE SSE 1/8 - 1/4 (0.170 mi.) C27 47 BLUE PORPOISE MARINE 1244 KNOXVILLE ST SSE 1/8 - 1/4 (0.170 mi.) C28 47 THERMO MATERIALS INC 1244 KNOXVILLE ST SSE 1/8 - 1/4 (0.170 mi.) C29 48 SHELL 1330 MORENA BL SE 1/4 - 1/2 (0.254 mi.) D30 48	Lower Elevation	Address	Direction / Distance	Map ID	Page
SDCTY-WATER, FIESTA 1000 FIESTA ISLAND R WSW 1/4 - 1/2 (0.386 mi.) E34 54 CITY OF SD-FIESTA IS 1000 FIESTA ISLAND R WSW 1/4 - 1/2 (0.386 mi.) E35 54 CITY CHEVROLET 2111 MORENA BL N 1/4 - 1/2 (0.496 mi.) G43 60	ARCO #5141 ARCO 5141 MORENA ARCO MORENA ARCO DAPPER TIRE SERVICE DAPPER TIRE SERVICE BLUE PORPOISE MARINE THERMO MATERIALS INC SHELL CITY OF SD-FIESTA IS SDCTY-WATER, FIESTA CITY OF SD-FIESTA IS	1550 MORENA BL 1550 MORENA BL 1550 MORENA BOULEVAR 1550 MORENA BLVD 1244 KNOXVILLE ST 1244 KNOXVILLE ST 1244 KNOXVILLE ST 1244 KNOXVILLE ST 1330 MORENA BL 1000 FIESTA ISLAND R 1000 FIESTA ISLAND R	SSW 0 - 1/8 (0.004 mi.) SSW 0 - 1/8 (0.004 mi.) SSW 0 - 1/8 (0.004 mi.) SSW 0 - 1/8 (0.004 mi.) SSE 1/8 - 1/4 (0.170 mi.) SE 1/4 - 1/2 (0.254 mi.) WSW 1/4 - 1/2 (0.386 mi.) WSW 1/4 - 1/2 (0.386 mi.) WSW 1/4 - 1/2 (0.386 mi.)	A5 A6 A8 A10 C26 C27 C28 C29 D30 E32 E34 E35	17 18 18 27 47 47 47 48 48 53 54

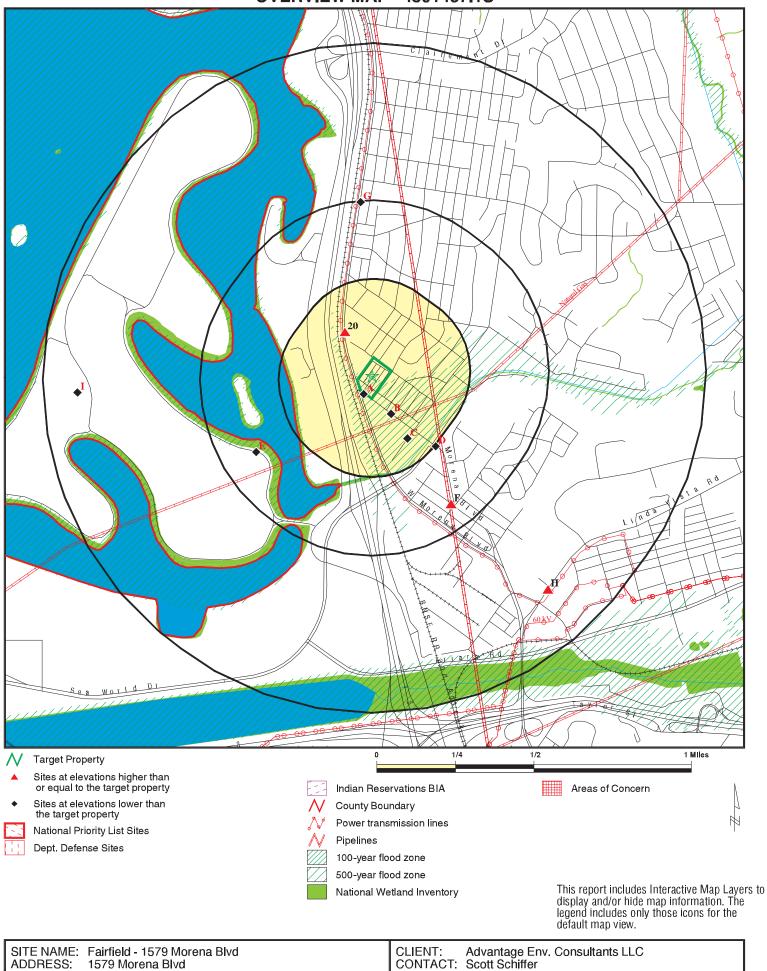
Due to poor or inadequate address information, the following sites were not mapped. Count: 5 records.

Site Name

MISSION BAY (MZB VOR) MV WEST LIGHT RAIL EXTENSION METROPOLITAN TRANSIT DEVELOPMENT B MV WEST LIGHT RAIL EXTENSION PUBLIC AUTO SERVICE Database(s

San Diego Co. HMMD, SWEEPS UST San Diego Co. HMMD SLIC SAN DIEGO CO. SAM SAN DIEGO CO. SAM

OVERVIEW MAP - 4391457.1S



San Diego CA 92110

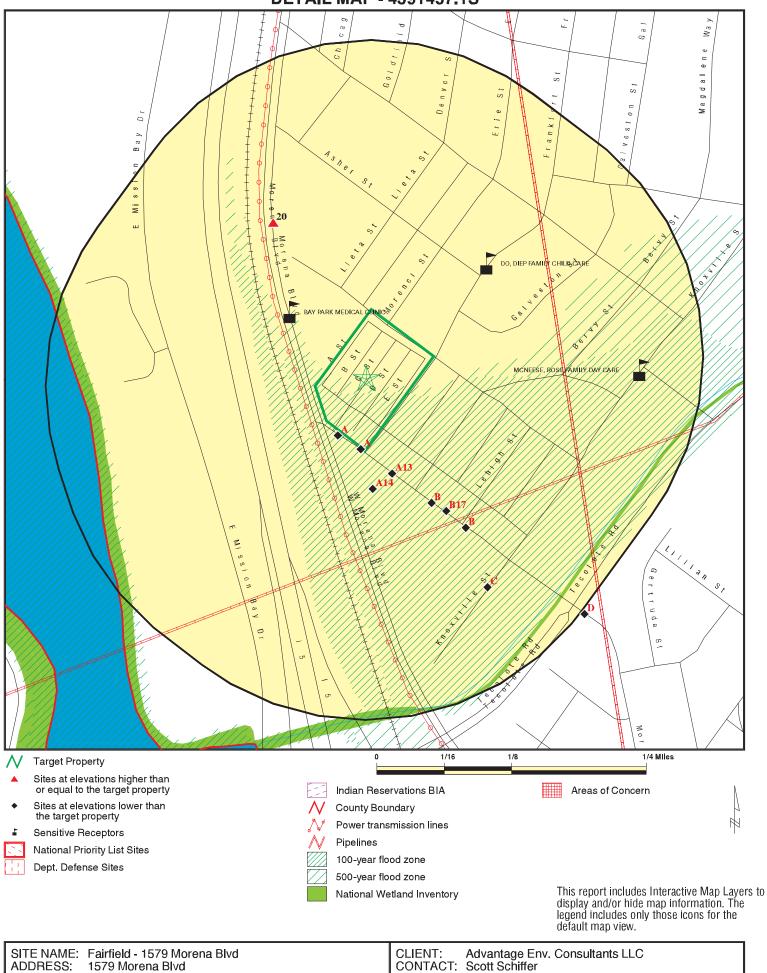
ADDRESS: 1579 Morena Blvd

LAT/LONG: 32.7757 / 117.2061 INQUIRY#: 4391457.1s

August 24, 2015 12:36 pm DATE:

Copyright © 2015 EDR, Inc. © 2010 Tele Atlas Rel. 07/2009.

DETAIL MAP - 4391457.1S



SITE NAME: Fairfield - 1579 Morena Blvd

ADDRESS: 1579 Morena Blvd

San Diego CA 92110 LAT/LONG: 32.7757 / 117.2061

INQUIRY#: 4391457.1s August 24, 2015 12:37 pm DATE:

Copyright © 2015 EDR, Inc. © 2010 Tele Atlas Rel. 07/2009.

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENT	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY CERCLIS	TP 0.500		NR 0	NR 0	NR 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site List							
CERC-NFRAP	0.500		0	0	1	NR	NR	1
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COR	RACTS TSD f	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG RCRA-SQG RCRA-CESQG	0.125 0.125 0.125		0 1 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 1 0
Federal institutional controls / engineering controls registries								
LUCIS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS US INST CONTROL	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal ERNS list								
ERNS	0.125		1	NR	NR	NR	NR	1
State- and tribal - equiva	lent NPL							
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	1	4	NR	5
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking s	storage tank l	ists						
SAN DIEGO CO. SAM	0.500		1	1	3	NR	NR	5

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LUST INDIAN LUST SLIC	0.500 0.500 0.500		2 0 1	1 0 0	3 0 1	NR NR NR	NR NR NR	6 0 2
State and tribal registere	ed storage tar	nk lists						
FEMA UST UST AST INDIAN UST	TP 0.125 0.125 0.125		NR 1 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 1 0 0
State and tribal voluntar	-	es						
VCP INDIAN VCP	0.500 0.500		0	0	0	NR NR	NR NR	0
State and tribal Brownfie	elds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	NTAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	Solid							
WMUDS/SWAT SWRCY HAULERS ODI DEBRIS REGION 9	TP TP TP TP TP		NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL HIST Cal-Sites SCH CDL San Diego Co. HMMD Toxic Pits US CDL	TP 1.000 TP TP 0.125 TP TP		NR 0 NR NR 15 NR	NR 0 NR NR NR NR	NR 0 NR NR NR NR	NR 0 NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 15 0
Local Lists of Registere	d Storage Tar	nks						
SWEEPS UST HIST UST CA FID UST	0.125 0.125 0.125		2 1 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	2 1 0
Local Land Records								
LIENS LIENS 2 DEED	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Records of Emergency I	Release Repo	rts						
HMIRS	TP		NR	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS LDS MCS SPILLS 90	0.125 TP TP 0.500		0 NR NR 0	NR NR NR 0	NR NR NR 0	NR NR NR NR	NR NR NR NR	0 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV UMTRA LEAD SMELTERS US AIRS US MINES FINDS CA BOND EXP. PLAN Cortese CUPA Listings DRYCLEANERS EMI	0.125 TP		0 R R R R R O R R R R R R R R R R R R R	RRRRR ORRRRRRRRRRRRRRROORRRRRRRRRRRRRR	NN	RK R	N N N N N N N N N N N N N N N N N N N	
ENF Financial Assurance HAZNET HIST CORTESE HWP HWT MINES MWMP NPDES	TP TP TP TP TP TP TP TP TP		NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR NR	NR NR NR NR NR NR NR	NR NR NR NR NR NR NR	0 0 0 0 0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PEST LIC PROC Notify 65 UIC WASTEWATER PITS WDS WIP	TP TP TP TP 0.500 TP		NR NR NR NR O NR	NR NR NR NR 0 NR	NR NR NR NR O NR	NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0 0
EDR RECOVERED GOVER	NMENT ARCHIV	<u>/ES</u>						
Exclusive Recovered G	ovt. Archives							
RGA LF RGA LUST	0.500 0.500		0 5	0 4	0 10	NR NR	NR NR	0 19
- Totals		0	30	6	19	4	0	59

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance Elevation Site Database(s)

1550 MORENO BLVD South < 1/8 SAN DIEGO, CA 92110

0.002 mi.

Α1

8 ft. Site 1 of 14 in cluster A

Relative: Click this hyperlink while viewing on your computer to access

Lower additional ERNS detail in the EDR Site Report.

Actual:

21 ft. A2

ARCO #5141 LUST S104746126 SSW 1550 MORENA BL **SLIC** N/A **SAN DIEGO, CA 92110** < 1/8 San Diego Co. HMMD

0.004 mi.

23 ft. Site 2 of 14 in cluster A

LUST: Relative:

Lower Region: STATE T0607300961 Global Id: Actual: 32.7746175 Latitude: 21 ft. Longitude: -117.2062116

> Case Type: Not reported Status: Completed - Case Closed

Status Date: 10/11/2005 Lead Agency: Not reported Case Worker: Not reported Not reported Local Agency: RB Case Number: 9UT2191 LOC Case Number: Not reported File Location: Local Agency

Potential Media Affect: Other Groundwater (uses other than drinking water)

Potential Contaminants of Concern: Gasoline Not reported Site History:

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id: T0607300961

Status: Completed - Case Closed Status Date: 10/11/2005

Global Id: T0607300961

Status: Open - Case Begin Date

Status Date: 12/10/1991

Regulatory Activities:

Global Id: T0607300961 Action Type: Other Date: 12/10/1991 Action: Leak Discovery

Global Id: T0607300961 Action Type: Other Date: 12/10/1991 Action: Leak Reported

T0607300961 Global Id: Action Type: Other Date: 12/10/1991 Action: Leak Began

EDR ID Number

EPA ID Number

91234927

N/A

ERNS

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ARCO #5141 (Continued) S104746126

Global Id: T0607300961 Action Type: Other Date: 12/10/1991 Action: Leak Stopped

Global Id: T0607300961 **ENFORCEMENT** Action Type: Date: 12/13/1991

Action: Notice of Responsibility

SLIC:

STATE Region:

Facility Status: **Completed - Case Closed**

Status Date: 06/28/2005 Global Id: T0608145162

Lead Agency: SAN DIEGO COUNTY LOP

Lead Agency Case Number: H05204-001 Latitude: 32.774581 -117.206284 Longitude:

Cleanup Program Site Case Type:

Case Worker: Not reported Local Agency: Not reported RB Case Number: Not reported File Location: Local Agency

Potential Media Affected: Other Groundwater (uses other than drinking water)

Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SAN DIEGO CO. HMMD:

Facility Id: 216997 Business Type: 6HK28 EPA Id Number: CAL000336343 APN: 436-020-03-00 Last HMMD Inspection: Not reported

Permit Status: **TEMP** Permit Expiration: 08/31/2013

SAMWI ENTERPRISES INC Facility Owner: Facility Address: 1550 MORENA BLVD

Facility City: SAN DIEGO Facility State: CA Facility Zip: 92110 UST Owner: Not reported

Handle Regulated Hazmat: Υ Own Or Operate UST: Υ

Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

UST:

UST Name: UNDERGROUND TANK 105204 T001

Last Update: 2012-11-02 14:17:38

Permit Number: 216997 Tank Type: SINGLE WALL

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ARCO #5141 (Continued) S104746126

Additional Id: 000000001

4000 Capacity Gallons:

UST Contents: REGULAR UNLEADED Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00 Year Installed: 1967-01-01 00:00:00 Pipe Type: Not reported Delivery System: Not reported

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T002

Last Update: 2012-11-02 14:17:38

Permit Number: 216997 Tank Type: SINGLE WALL 0000000002 Additional Id:

Capacity Gallons: 4000

REGULAR UNLEADED UST Contents: Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00 Year Installed: 1967-01-01 00:00:00 Pipe Type: Not reported Delivery System: Not reported

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T003

Last Update: 2012-11-02 14:17:38

Permit Number: 216997 Tank Type: SINGLE WALL Additional Id: 000000003 Capacity Gallons: 6000 **UST Contents:** LEADED Other Content Info: **LEADED REMOVED** Reg Status:

Remove Close Date: 1991-10-12 00:00:00 Year Installed: 1967-01-01 00:00:00 Pipe Type: Not reported Delivery System: Not reported

Monitor Code: 05

SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY **UST Monitor Method:**

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UNDERGROUND TANK 105204 T004 **UST Name:**

Last Update: 2012-11-02 14:17:38

Permit Number: 216997 SINGLE WALL Tank Type: Additional Id: 000000004 Capacity Gallons: 6000

UST Contents: REGULAR UNLEADED Other Content Info: **REGULAR UNLEADED**

Rea Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00

Direction Distance

Elevation Site Database(s) EPA ID Number

ARCO #5141 (Continued) \$104746126

Year Installed: 1971-01-01 00:00:00
Pipe Type: Not reported
Delivery System: PRESSURE

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T005

Last Update: 2012-11-02 14:17:38

Permit Number: 216997
Tank Type: SINGLE WALL
Additional Id: 0000000005

Capacity Gallons: 280

UST Contents: Not reported Other Content Info: WASTE OIL Reg Status: REMOVED

 Remove Close Date:
 1991-10-12 00:00:00

 Year Installed:
 1967-01-01 00:00:00

 Pipe Type:
 Not reported

 Delivery System:
 GRAVITY

Monitor Code: 10

UST Monitor Method: SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY

GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

UST Name: UNDERGROUND TANK 105204 T006

Last Update: 2012-11-02 14:17:38

Permit Number: 216997 Tank Type: DOUBLE WALL

Additional Id: SYPHON, NT1554, RT4971

Capacity Gallons: 10000

UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED

Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1992-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T007

Last Update: 2012-11-02 14:17:38

Permit Number: 216997

Tank Type: DOUBLE WALL

Additional Id: MASTER, NT1554, RT4971

Capacity Gallons: 10000

UST Contents: REGULAR UNLEADED Other Content Info: REGULAR UNLEADED

Reg Status: ACTIVE
Remove Close Date: Not reported

Year Installed: 1992-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

Direction Distance

Elevation Site Database(s) EPA ID Number

ARCO #5141 (Continued) \$104746126

UST Name: UNDERGROUND TANK 105204 T008

Last Update: 2012-11-02 14:17:38

Permit Number: 216997
Tank Type: DOUBLE WALL

Additional Id: SLAVE, NT1554 RT4408, RT4971

Capacity Gallons: 10000 UST Contents: DIESEL

Other Content Info: REGULAR UNLEADED

Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1992-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T009

Last Update: 2012-11-02 14:17:38

Permit Number: 216997
Tank Type: DOUBLE WALL
Additional Id: NT1554

Capacity Gallons: 10000

UST Contents: PREMIUM UNLEADED
Other Content Info: PREMIUM UNLEADED
Reg Status: ACTIVE

Remove Close Date: Not reported
Year Installed: 1992-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T010

Last Update: 2012-11-02 14:17:38

Permit Number: 216997
Tank Type: DOUBLE WALL
Additional Id: NT1554/AT5206

Capacity Gallons: 500

UST Contents: Not reported Other Content Info: WASTE OIL Reg Status: REMOVED

 Remove Close Date:
 2005-09-19 00:00:00

 Year Installed:
 1992-01-01 00:00:00

 Pipe Type:
 DOUBLE WALL

 Delivery System:
 GRAVITY

Monitor Code: 21

UST Monitor Method: DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL

MONITORS: INTERSTITIAL.

Active Permits:

Facility Id: 216997 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG

Other Information: WASTE GASOLINE-WATER MIX

Direction Distance

Elevation Site Database(s) EPA ID Number

ARCO #5141 (Continued) \$104746126

Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 216997 Update Date: 11/02/2012 Case Number: 8006-61-9

Name: PREMIUM UNLEADED

Other Information: UNDERGROUND TANK 105204

Material Waste: Material Hazardous Categories 1: FIRE Hazardous Categories 2: Not reported

Facility Id: 216997 Update Date: 11/02/2012 Case Number: 8006-61-9

Name: REGULAR UNLEADED

Other Information: UNDERGROUND TANK 105204 T006

Material Waste: Material Hazardous Categories 1: FIRE Hazardous Categories 2: Not reported

Facility Id: 216997 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 352 ORGANIC SOLIDS (OTHER)

Other Information:

Material Waste:

Hazardous Categories 1:

Hazardous Categories 2:

Not reported

Not reported

Facility Id: 216997 Update Date: 11/02/2012 Case Number: 8006-61-9

Name: REGULAR UNLEADED

Other Information: UNDERGROUND TANK 105204 T007

Material Waste: Material Hazardous Categories 1: FIRE Hazardous Categories 2: Not reported

Facility Id: 216997 Update Date: 11/02/2012 Case Number: 8006-61-9

Name: REGULAR UNLEADED

Other Information: UNDERGROUND TANK 105204 T008

Material Waste: Material Hazardous Categories 1: FIRE Hazardous Categories 2: Not reported

Direction Distance

Distance EDR ID Number
Elevation Site EDR ID Number

A3 ARCO # 05141 RGA LUST S114572852

N/A

S106060482

N/A

SSW 1550 MORENA BL < 1/8 SAN DIEGO, CA

0.004 mi.

23 ft. Site 3 of 14 in cluster A

Relative: RGA LUST:

Lower 2003 ARCO # 05141 1550 MORENA BL

Actual:

21 ft.

A4 ARCO FACILITY NO. 5141 San Diego Co. HMMD SSW 1550 MORENA BLVD

< 1/8 SAN DIEGO, CA 92110

0.004 mi.

23 ft. Site 4 of 14 in cluster A

Relative: SAN DIEGO CO. HMMD:

Lower Facility Id: 105204
Business Type: 6HK29

Actual: EPA Id Number: CAL000225465 21 ft. APN: 436-020-03-00

Last HMMD Inspection: 05/23/2007
Permit Status: CHNG
Permit Expiration: 01/31/2009

Facility Owner: BP WEST COAST PRODUCTS LLC

Facility Address: PO BOX 6038
Facility City: ARTESIA
Facility State: CA
Facility Zip: 90702-6038

UST Owner: BP WEST COAST PRODUCTS LLC

Handle Regulated Hazmat: Y
Own Or Operate UST: Y

Subject To APSA: Not reported

Generate Haz Waste: Y

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

UST:

UST Name: UNDERGROUND TANK 105204 T001

Last Update: 2012-11-02 14:17:38

Permit Number: 105204
Tank Type: SINGLE WALL
Additional Id: 0000000001

Capacity Gallons: 4000

UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00
Year Installed: 1967-01-01 00:00:00
Pipe Type: Not reported
Delivery System: Not reported

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T002

Last Update: 2012-11-02 14:17:38

Permit Number: 105204
Tank Type: SINGLE WALL
Additional Id: 0000000002
Capacity Gallons: 4000

Direction Distance

Elevation Site Database(s) EPA ID Number

ARCO FACILITY NO. 5141 (Continued)

S106060482

EDR ID Number

UST Contents: REGULAR UNLEADED Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00
Year Installed: 1967-01-01 00:00:00
Pipe Type: Not reported
Delivery System: Not reported

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T003

Last Update: 2012-11-02 14:17:38

Permit Number: 105204
Tank Type: SINGLE WALL
Additional Id: 000000003
Capacity Gallons: 6000
UST Contents: LEADED

UST Contents: LEADED
Other Content Info: LEADED
Reg Status: REMOVED
Remove Close Date: 1991-10-12 00:00:00

Year Installed: 1967-01-01 00:00:00
Pipe Type: Not reported
Delivery System: Not reported

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T004

Last Update: 2012-11-02 14:17:38

Permit Number: 105204
Tank Type: SINGLE WALL
Additional Id: 0000000004
Capacity Gallons: 6000

UST Contents: REGULAR UNLEADED Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

 Remove Close Date:
 1991-10-12 00:00:00

 Year Installed:
 1971-01-01 00:00:00

 Pipe Type:
 Not reported

Delivery System: PRESSURE

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T005

Last Update: 2012-11-02 14:17:38

Permit Number: 105204
Tank Type: SINGLE WALL
Additional Id: 0000000005
Capacity Gallons: 280

UST Contents:
Other Content Info:
Reg Status:
Not reported
WASTE OIL
REMOVED

Remove Close Date: 1991-10-12 00:00:00
Year Installed: 1967-01-01 00:00:00
Pipe Type: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

ARCO FACILITY NO. 5141 (Continued)

S106060482

Delivery System: **GRAVITY**

Monitor Code: 10

UST Monitor Method: SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY

GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

UST Name: UNDERGROUND TANK 105204 T006

Last Update: 2012-11-02 14:17:38

Permit Number: 105204 **DOUBLE WALL** Tank Type: Additional Id: NT1554 RT4408

10000 Capacity Gallons:

UST Contents: REGULAR UNLEADED REGULAR UNLEADED Other Content Info:

Reg Status: **ACTIVE** Remove Close Date: Not reported Year Installed: 1992-01-01 00:00:00 Pipe Type: DOUBLE WALL **PRESSURE** Delivery System: Monitor Code:

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T007

Last Update: 2012-11-02 14:17:38

Permit Number: 105204 Tank Type: **DOUBLE WALL** Additional Id: NT1554 RT4408

Capacity Gallons: 10000

UST Contents: REGULAR UNLEADED Other Content Info: REGULAR UNLEADED Reg Status: **ACTIVE**

Remove Close Date: Not reported Year Installed: 1992-01-01 00:00:00 Pipe Type: **DOUBLE WALL** Delivery System: **PRESSURE**

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UNDERGROUND TANK 105204 T008 **UST Name:**

Last Update: 2012-11-02 14:17:38

Permit Number: 105204 Tank Type: DOUBLE WALL Additional Id: NT1554 RT4408

Capacity Gallons: 10000

UST Contents: REGULAR UNLEADED Other Content Info: REGULAR UNLEADED

Reg Status: **ACTIVE** Remove Close Date: Not reported

Year Installed: 1992-01-01 00:00:00 **DOUBLE WALL** Pipe Type: Delivery System: **PRESSURE**

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T009

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ARCO FACILITY NO. 5141 (Continued)

S106060482

Last Update: 2012-11-02 14:17:38

105204 Permit Number: Tank Type: DOUBLE WALL Additional Id: NT1554 Capacity Gallons: 10000

PREMIUM UNLEADED **UST Contents:** Other Content Info: PREMIUM UNLEADED

Reg Status: **ACTIVE** Remove Close Date: Not reported Year Installed: 1992-01-01 00:00:00 Pipe Type: DOUBLE WALL Delivery System: **PRESSURE** Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T010

2012-11-02 14:17:38 Last Update:

Permit Number: 105204

DOUBLE WALL Tank Type: Additional Id: NT1554/AT5206

Capacity Gallons: 500

UST Contents: Not reported Other Content Info: WASTE OIL Reg Status: REMOVED

Remove Close Date: 2005-09-19 00:00:00 1992-01-01 00:00:00 Year Installed: Pipe Type: **DOUBLE WALL** Delivery System: **GRAVITY**

Monitor Code: 21

UST Monitor Method: DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL

MONITORS: INTERSTITIAL.

Α5 ARCO #5141 **RGA LUST** S114574184 SSW 1550 MORENA BL N/A

1550 MORENA BL

1550 MORENA BL

SAN DIEGO, CA < 1/8

0.004 mi.

Site 5 of 14 in cluster A 23 ft.

RGA LUST: Relative:

2012 ARCO #5141 1550 MORENA BL Lower 2011 ARCO #5141 1550 MORENA BL Actual: 2010 ARCO #5141 1550 MORENA BL 21 ft. ARCO #5141 1550 MORENA BL 2009 2008 ARCO #5141 1550 MORENA BL 2007 ARCO #5141 1550 MORENA BL 2007 ARCO #5141 1550 MORENA BL 2006 ARCO #5141 1550 MORENA BL

2005

2004

ARCO #5141

ARCO #5141

Direction United Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EDR ID Number

EPA ID Number

A6 ARCO 5141 RGA LUST S114575090

N/A

SSW 1550 MORENA BL < 1/8 SAN DIEGO, CA

0.004 mi.

23 ft. Site 6 of 14 in cluster A

Relative: RGA LUST:

Lower 2004 ARCO 5141 1550 MORENA BL

2003 ARCO 5141 1550 MORENA BL

Actual: 21 ft.

A7 ARCO #05141 MOSHAIL SALEM KAMEL SAN DIEGO CO. SAM 1006823951

SSW 1550 MORENA BL UST N/A

< 1/8 SAN DIEGO, CA 92110

0.004 mi.

23 ft. Site 7 of 14 in cluster A

Relative: Lower SAN DIEGO CO. SAM:

Case Number: H05204-001

Agency: DEH Site Assessment & Mitigation

Actual: Funding: Private - VAP

21 ft. Facility Type: GW With No Beneficial Use Designation

Facility Status: Closed Case
Date: 6/28/2005
Date Began: 10/8/1991

Case Number: H05204-002

Agency: DEH Site Assessment & Mitigation

Funding: POP

Facility Type: GW With No Beneficial Use Designation

Facility Status: Closed Case
Date: 10/11/2005
Date Began: 12/10/1991

UST:

Facility ID: H05204

Permitting Agency: SAN DIEGO COUNTY

Latitude: 32.7759721 Longitude: -117.2050208

A8 MORENA ARCO RGA LUST S114656746

SSW 1550 MORENA BOULEVARD N/A

< 1/8 SAN DIEGO, CA

0.004 mi.

23 ft. Site 8 of 14 in cluster A

Relative: RGA LUST:

Lower 1994 MORENA ARCO 1550 MORENA BOULEVARD

1993 MORENA ARCO 1550 MORENA BOULEVARD

Actual: 21 ft.

TC4391457.1s Page 18

Direction Distance

Distance EDR ID Number
Elevation Site EPA ID Number

A9 GOLDEN BEAR FUEL LUST \$100470921 SSW 1550 MORENA BLVD San Diego Co. HMMD N/A

SSW 1550 MORENA BLVD San Diego Co. HMMD N/A < 1/8 SAN DIEGO, CA 92110 SWEEPS UST

0.004 mi.

23 ft. Site 9 of 14 in cluster A

Relative: LUST REG 9:

Lower Region:

Status: Remediation Plan
ual: Case Number: 9UT2191

 Actual:
 Case Number:
 9UT2191

 21 ft.
 Local Case:
 H05204-002

 Substance:
 Gasoline

Qty Leaked: 0

Abate Method: Excavate and Dispose - remove contaminated soil and dispose in

approved site

Local Agency: San Diego
How Found: Other Means
How Stopped: Other Means
Source: Unknown
Cause: Unknown
Lead Agency: Local Agency

Case Type: Other ground water affected

Date Found: 12/10/1991 Date Stopped: 12/10/1991 Confirm Date: 12/10/1991 Submit Workplan: Not reported Prelim Assess: 12/12/1991 Desc Pollution: Not reported Remed Plan: 12/12/1991 Remed Action: Not reported Began Monitor: Not reported Release Date: 12/10/1991 Enforce Date: Not reported Closed Date: Not reported Enforce Type: Not reported Pilot Program: LOP 906.40 Basin Number:

Beneficial Use: No Beneficial groundwater use

NPDES Number: Not reported

Priority: 2B

GW Depth:

File Dispn: File discarded, case closed Interim Remedial Actions: No

Cleanup and Abatement order Number: Not reported Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. HMMD:

Facility Id: 210208
Business Type: 6HK29
EPA Id Number: CAL000

 EPA Id Number:
 CAL000336343

 APN:
 436-020-03-00

 Last HMMD Inspection:
 11/15/2011

 Permit Status:
 SUSP

 Permit Expiration:
 07/31/2013

 Facility Owner:
 MOSHAIL KAMEL

 Facility Address:
 1550 MORENA BLVD

Facility City: SAN DIEGO
Facility State: CA
Facility Zip: 92110

Direction Distance

Elevation Site Database(s) EPA ID Number

GOLDEN BEAR FUEL (Continued)

S100470921

EDR ID Number

UST Owner: MOSHAIL KAMEL

Handle Regulated Hazmat: Y
Own Or Operate UST: Y

Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

UST:

UST Name: UNDERGROUND TANK 105204 T001

Last Update: 2012-11-02 14:17:38

Permit Number: 210208
Tank Type: SINGLE WALL
Additional Id: 000000001
Capacity Gallons: 4000

UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00
Year Installed: 1967-01-01 00:00:00
Pipe Type: Not reported

Delivery System: Not reported Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T002

Last Update: 2012-11-02 14:17:38

Permit Number: 210208
Tank Type: SINGLE WALL
Additional Id: 000000002

Capacity Gallons: 4000

UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

 Remove Close Date:
 1991-10-12 00:00:00

 Year Installed:
 1967-01-01 00:00:00

 Pipe Type:
 Not reported

Delivery System: Not reported

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T003

Last Update: 2012-11-02 14:17:38

Permit Number: 210208
Tank Type: SINGLE WALL
Additional Id: 0000000003
Capacity Gallons: 6000
UST Contents: LEADED
Other Content Info: LEADED
Reg Status: REMOVED

 Remove Close Date:
 1991-10-12 00:00:00

 Year Installed:
 1967-01-01 00:00:00

 Pipe Type:
 Not reported

 Delivery System:
 Not reported

Delivery System: Not Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

Direction Distance

Elevation Site Database(s) EPA ID Number

GOLDEN BEAR FUEL (Continued)

S100470921

EDR ID Number

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T004

Last Update: 2012-11-02 14:17:38

Permit Number: 210208
Tank Type: SINGLE WALL
Additional Id: 0000000004
Capacity Gallons: 6000

UST Contents: REGULAR UNLEADED
Other Content Info: REGULAR UNLEADED

Reg Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00 Year Installed: 1971-01-01 00:00:00

Pipe Type: Not reported Delivery System: PRESSURE

Monitor Code: 05

UST Monitor Method: SW TANK DW PIPE W/ POS SHUTOFF-ALARM ON LLD W/ SIRS:SIR ANALY

MONTHLY, TANK TEST BIENNIALLY, PIPE TEST ANN 0.1 G/HR OR MO 0.2 G/HR

UST Name: UNDERGROUND TANK 105204 T005

Last Update: 2012-11-02 14:17:38

 Permit Number:
 210208

 Tank Type:
 SINGLE WALL

 Additional Id:
 000000005

 Consoit College
 320

Capacity Gallons: 280
UST Contents: Not reported
Other Content Info: WASTE OIL
Reg Status: REMOVED

Remove Close Date: 1991-10-12 00:00:00
Year Installed: 1967-01-01 00:00:00
Pipe Type: Not reported
Delivery System: GRAVITY
Monitor Code: 10

UST Monitor Method: SW TANK DW PRESSURE PIPE W/POS SHUTOFF LLD W/DAILY RECONCILE OR WEEKLY

GAUGE: TNK TEST ANN, PIPE TEST ANN 0.1 GAL/HR OR MO 0.2 GAL/HR

UST Name: UNDERGROUND TANK 105204 T006

Last Update: 2012-11-02 14:17:38

Permit Number: 210208
Tank Type: DOUBLE WALL

Additional Id: SYPHON, NT1554, RT4971

Capacity Gallons: 10000

UST Contents: REGULAR UNLEADED Other Content Info: REGULAR UNLEADED

Reg Status: ACTIVE
Remove Close Date: Not reported
Year Installed: 1992-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: PRESSURE

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T007

Last Update: 2012-11-02 14:17:38

Permit Number: 210208
Tank Type: DOUBLE WALL

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

GOLDEN BEAR FUEL (Continued)

S100470921

Additional Id: MASTER, NT1554, RT4971

10000 Capacity Gallons:

UST Contents: REGULAR UNLEADED Other Content Info: **REGULAR UNLEADED**

Reg Status: **ACTIVE** Remove Close Date: Not reported Year Installed: 1992-01-01 00:00:00 DOUBLE WALL Pipe Type: Delivery System: **PRESSURE** Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T008

Last Update: 2012-11-02 14:17:38

Permit Number: 210208 **DOUBLE WALL** Tank Type:

Additional Id: SLAVE, NT1554 RT4408, RT4971

Capacity Gallons: 10000 UST Contents: DIESEL

REGULAR UNLEADED Other Content Info: **ACTIVE**

Reg Status: Remove Close Date: Not reported 1992-01-01 00:00:00 Year Installed: DOUBLE WALL Pipe Type: Delivery System: **PRESSURE**

Monitor Code: 31A

UST Monitor Method: DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF &

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UST Name: UNDERGROUND TANK 105204 T009

Last Update: 2012-11-02 14:17:38

Permit Number: 210208 Tank Type: **DOUBLE WALL** Additional Id: NT1554 Capacity Gallons: 10000

UST Contents: PREMIUM UNLEADED Other Content Info: PREMIUM UNLEADED

Reg Status: **ACTIVE** Remove Close Date: Not reported Year Installed: 1992-01-01 00:00:00 Pipe Type: DOUBLE WALL Delivery System: **PRESSURE** Monitor Code: 31A

DW TANK, DW PRESSURIZED PIPE W/ DRY TANK ANNULAR; POSITIVE SHUT-OFF & **UST Monitor Method:**

FAILSAFE, 3.0LLD; UDC W/ POSITIVE SHUT-OFF

UNDERGROUND TANK 105204 T010 **UST Name:**

Last Update: 2012-11-02 14:17:38

Permit Number: 210208 **DOUBLE WALL** Tank Type: Additional Id: NT1554/AT5206

Capacity Gallons: 500 **UST Contents:** Not reported Other Content Info: WASTE OIL

Rea Status: REMOVED Remove Close Date: 2005-09-19 00:00:00

Direction Distance

Elevation Site Database(s) EPA ID Number

GOLDEN BEAR FUEL (Continued)

S100470921

EDR ID Number

Year Installed: 1992-01-01 00:00:00
Pipe Type: DOUBLE WALL
Delivery System: GRAVITY

Monitor Code: 21

UST Monitor Method: DW TANK DW SUCTION AND/ OR GRAVITY PIPING WITH INTERSTITIAL

MONITORS: INTERSTITIAL.

Active Permits:

Facility Id: 210208 Update Date: 11/02/2012 Case Number: 8006-61-9

Name: REGULAR UNLEADED

Other Information: UNDERGROUND TANK 105204 T007

Material Waste: Material Hazardous Categories 1: FIRE Hazardous Categories 2: Not reported

Facility Id: 210208 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 352 ORGANIC SOLIDS (OTHER)

Other Information:

Material Waste:

Hazardous Categories 1:

Hazardous Categories 2:

Not reported

Not reported

Facility Id: 210208 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 134 AQUEOUS SOL'N W/LESS 10% ORG

Other Information: WASTE GASOLINE-WATER MIX

Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 210208 Update Date: 11/02/2012 Case Number: 8006-61-9

Name: PREMIUM UNLEADED

Other Information: UNDERGROUND TANK 105204

Material Waste: Material Hazardous Categories 1: FIRE Hazardous Categories 2: Not reported

Facility Id: 210208 Update Date: 11/02/2012 Case Number: 8006-61-9

Name: REGULAR UNLEADED

Other Information: UNDERGROUND TANK 105204 T006

Material Waste: Material Hazardous Categories 1: FIRE Hazardous Categories 2: Not reported

 Facility Id:
 210208

 Update Date:
 11/02/2012

 Case Number:
 8006-61-9

Name: REGULAR UNLEADED

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

GOLDEN BEAR FUEL (Continued)

S100470921

Other Information: UNDERGROUND TANK 105204 T008

Material Waste: Material **FIRE** Hazardous Categories 1: Hazardous Categories 2: Not reported

Violations Active Permits:

Facility Id: 210208 Update Date: 11/02/2012 Inspection Date: 11/15/2011 Violation Code: 6HV3257

Violation: 2NDRY CONTAINMENT NOT LIQUID FREE

Violation Citation: Secondary containment system components not liquid free. 2631(d)(4)

SUSP Activity:

SWEEPS UST:

Status: Active Comp Number: 5204 9 Number:

Board Of Equalization: 44-000506 Referral Date: Not reported Action Date: 06-26-92 Created Date: 02-29-88 Owner Tank Id: Not reported

SWRCB Tank Id: 37-000-005204-000006

Tank Status: Capacity: 10000 Active Date: Not reported Tank Use: M.V. FUEL

STG:

Content: **REG UNLEADED**

Number Of Tanks:

Status: Active 5204 Comp Number: Number:

44-000506 Board Of Equalization: Referral Date: Not reported 06-26-92 Action Date: Created Date: 02-29-88 Owner Tank Id: Not reported

SWRCB Tank Id: 37-000-005204-000007

Tank Status: Α 10000 Capacity: Active Date: Not reported Tank Use: M.V. FUEL

STG:

REG UNLEADED Content: Number Of Tanks: Not reported

Status: Active 5204 Comp Number: Number: 9

44-000506 Board Of Equalization: Referral Date: Not reported Action Date: 06-26-92

Direction Distance

Elevation Site Database(s) EPA ID Number

GOLDEN BEAR FUEL (Continued)

Created Date: 02-29-88
Owner Tank Id: Not reported

SWRCB Tank Id: 37-000-005204-000008

Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P

Content: LEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 5204
Number: 9

Board Of Equalization: 44-000506
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported

SWRCB Tank ld: 37-000-005204-000009

Tank Status: A
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: P
Content: LEADED

Number Of Tanks: Not reported

Status: Active
Comp Number: 5204
Number: 9

Board Of Equalization: 44-000506
Referral Date: Not reported
Action Date: 06-26-92
Created Date: 02-29-88
Owner Tank Id: Not reported

SWRCB Tank Id: 37-000-005204-000010

Tank Status: A
Capacity: 500
Active Date: Not reported
Tank Use: PETROLEUM

STG: W

Content: Not reported Number Of Tanks: Not reported

Status: Not reported Comp Number: 5204 Number: Not reported Board Of Equalization: 44-000506 Referral Date: Not reported Not reported Action Date: Created Date: Not reported Owner Tank Id: Not reported

SWRCB Tank ld: 37-000-005204-000001

Tank Status: Not reported Capacity: 4000
Active Date: Not reported

S100470921

Direction Distance Elevation

vation Site Database(s) EPA ID Number

GOLDEN BEAR FUEL (Continued)

S100470921

EDR ID Number

Tank Use: M.V. FUEL STG: PRODUCT Content: REG UNLEADED

Number Of Tanks: 5

Status: Not reported
Comp Number: 5204
Number: Not reported
Board Of Equalization: 44-000506
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported

SWRCB Tank Id: 37-000-005204-000002

Tank Status: Not reported
Capacity: 4000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported Comp Number: 5204 Number: Not reported Board Of Equalization: 44-000506 Referral Date: Not reported Action Date: Not reported Created Date: Not reported Owner Tank Id: Not reported

SWRCB Tank Id: 37-000-005204-000003

Tank Status: Not reported
Capacity: 6000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported Comp Number: 5204 Number: Not reported Board Of Equalization: 44-000506 Referral Date: Not reported Not reported Action Date: Created Date: Not reported Owner Tank Id: Not reported

SWRCB Tank ld: 37-000-005204-000004

Tank Status: Not reported
Capacity: 6000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

GOLDEN BEAR FUEL (Continued)

S100470921

Comp Number: 5204 Number: Not reported Board Of Equalization: 44-000506 Referral Date: Not reported Action Date: Not reported Not reported Created Date: Not reported Owner Tank Id:

SWRCB Tank Id: 37-000-005204-000005

Tank Status: Not reported Capacity: 280

Active Date: Not reported **PETROLEUM** Tank Use: **PRODUCT** STG: Content: Not reported Number Of Tanks: Not reported

A10 **MORENA ARCO** RGA LUST S114656745

1550 MORENA BLVD SSW N/A

< 1/8 SAN DIEGO, CA 0.004 mi.

23 ft. Site 10 of 14 in cluster A

RGA LUST: Relative:

1550 MORENA BLVD 2002 MORENA ARCO Lower 2001 MORENA ARCO 1550 MORENA BLVD

Actual: 2000 MORENA ARCO 1550 MORENA BLVD 21 ft. 1998 MORENA ARCO 1550 MORENA BLVD

1997 MORENA ARCO 1550 MORENA BLVD 1996 MORENA ARCO 1550 MORENA BLVD 1995 MORENA ARCO 1550 MORENA BLVD

ZUHAIR H ABU HIST UST U001572882 A11 N/A

ssw 1550 MORENA BLVD **SAN DIEGO, CA 92110** < 1/8

0.004 mi.

Site 11 of 14 in cluster A 23 ft.

HIST UST: Relative: STATE Region: Lower

00000026798 Facility ID: Actual: Facility Type: Gas Station 21 ft. Other Type: Not reported Contact Name: Not reported Telephone: 000000000

> Owner Name: ARCO PETROLEUM PRODUCTS CO. Owner Address: 515 SOUTH FLOWER STREET Owner City,St,Zip: LOS ANGELES, CA 90071

Total Tanks: 0005

001 Tank Num:

Container Num: 000000001 Year Installed: 1967 Tank Capacity: 00004000 Tank Used for: **PRODUCT** Type of Fuel: UNLEADED Container Construction Thickness: 0000167

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ZUHAIR H ABU (Continued) U001572882

Leak Detection: Stock Inventor, 10

Tank Num: 002

Container Num: 0000000002 Year Installed: 1967 Tank Capacity: 00004000 Tank Used for: **PRODUCT** Type of Fuel: **UNLEADED Container Construction Thickness:** 0000167

Leak Detection: Stock Inventor, 10

Tank Num: 003

000000003 Container Num: Year Installed: 1967 Tank Capacity: 00006000 Tank Used for: **PRODUCT REGULAR** Type of Fuel: Container Construction Thickness: 0000240

Leak Detection: Stock Inventor, 10

Tank Num: 004

000000004 Container Num: Year Installed: 1971 Tank Capacity: 00006000 Tank Used for: **PRODUCT** Type of Fuel: **PREMIUM** Container Construction Thickness: 0000240

Leak Detection: Stock Inventor, 10

Tank Num: 005

000000005 Container Num: Year Installed: 1967 Tank Capacity: 00000280 Tank Used for: **PRODUCT** Type of Fuel: WASTE OIL Container Construction Thickness: 0000093 Stock Inventor Leak Detection:

MORENA PET HOSPITAL S106068108 San Diego Co. HMMD South 1540 MORENA BLVD N/A

< 1/8 0.005 mi.

A12

Site 12 of 14 in cluster A 24 ft.

SAN DIEGO, CA 92110

SAN DIEGO CO. HMMD: Relative:

Facility Id: 153079 Lower 6HK10 Business Type:

Actual: EPA Id Number: Not reported 21 ft. 436-020-05-00 APN: Last HMMD Inspection: Not reported

Permit Status: **INAC** Permit Expiration: 04/30/2002 Facility Owner: JEANNE POTTER Facility Address: 1540 MORENA BL Facility City: SAN DIEGO

Facility State: CA Facility Zip: 92110-UST Owner: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

MORENA PET HOSPITAL (Continued)

S106068108

EDR ID Number

Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Subject To APSA: Not reported Generate Haz Waste: Not reported Treat Haz Waste: Not reported Generate Medical Waste: Not reported

Facility Id: 153076 Business Type: 6HK10 EPA Id Number: Not reported APN: 436-020-05-00 Last HMMD Inspection: 09/25/2012 Permit Status: OPEN Permit Expiration: 04/30/2013 Facility Owner: JEANNE POTTER Facility Address: 1540 MORENA BL Facility City: SAN DIEGO

Facility State: CA
Facility Zip: 92110UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported
Generate Haz Waste: Y
Treat Haz Waste: Not reported

Generate Medical Waste: Y

Inactive Permits:

Facility Id: 153076 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 902 INFECTIOUS WASTE, SHARPS

Other Information: Not reported Material Waste: Waste Hazardous Categories 1: Not reported Hazardous Categories 2: Not reported

Facility Id: 153076 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 541 PHOTOCHEM/PHOTOPROC WASTE

Other Information: ALLIED X-RAY
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

 Facility Id:
 153076

 Update Date:
 11/02/2012

 Inspection Date:
 09/25/2012

 Violation Code:
 6HV4204

Violation: WARNING SIGN NOT POSTED

Violation Citation: MW designated accumulation area not posted with an approved and

legible biohazardous waste "warning sign" in English and Spanish.

118310

Activity: ACTIVE

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

A13 JOHN SMITH EARTHWORK San Diego Co. HMMD S106065030 SSE 1504 MORENA BLVD N/A

< 1/8 SAN DIEGO, CA 92110

0.033 mi.

174 ft. Site 13 of 14 in cluster A

Relative:

19 ft.

SAN DIEGO CO. HMMD:

Lower
Actual:

Facility Id: 136748
Business Type: 6HK18
EPA Id Number: Not reported
APN: 436-020-10-00

Last HMMD Inspection: 11/05/1998
Permit Status: INAC
Permit Expiration: 11/30/1999
Facility Owner: JOHN F. SMITH
Facility Address: 1516 NASHVILLE ST

Facility City: SAN DIEGO

Facility State: CA

Facility Zip: 92110-3714
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported

Generate Haz Waste: Y

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

A14 DUNN EDWARDS PAINT San Diego Co. HMMD

South 1510 MORENA BLVD < 1/8 SAN DIEGO, CA 92110

0.036 mi.

192 ft. Site 14 of 14 in cluster A

Relative: SAN DIEGO CO. HMMD:

LowerFacility Id:201062Business Type:6HK18

Actual: EPA Id Number: Not reported

19 ft. APN: 436-020-31-00
Last HMMD Inspection: Not reported

Not reported

Permit Status: CHNG
Permit Expiration: 02/28/2003
Facility Owner: DUNN EDWARDS PAINT

Facility Address: 4885 E 52ND PL Facility City: LOS ANGELES

Facility State: CA

Facility Zip: 90040-2828
UST Owner: Not reported
Handle Regulated Hazmat: Not reported
Own Or Operate UST: Not reported
Subject To APSA: Not reported

Generate Haz Waste: Y

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

 Facility Id:
 131996

 Business Type:
 6HK70

 EPA Id Number:
 CAL00007670

 APN:
 436-020-31-00

 Last HMMD Inspection:
 08/13/2001

 Permit Status:
 INAC

S106063396

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

DUNN EDWARDS PAINT (Continued)

S106063396

S106060825

N/A

San Diego Co. HMMD

Permit Expiration: 02/28/2003

Facility Owner: **DUNN EDWARDS PAINT**

Facility Address: 4885 E 52ND PL Facility City: LOS ANGELES

Facility State: CA

Facility Zip: 90040-2828 UST Owner: Not reported Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

B15 JOE ROPER SURFBOARD REPAIR

SSE 1460 MORENA BLVD < 1/8 SAN DIEGO, CA 92110

0.078 mi.

414 ft. Site 1 of 9 in cluster B

SAN DIEGO CO. HMMD: Relative:

Facility Id: 110910 Lower Business Type: 6HK77

Actual: CAL000091219 EPA Id Number: 19 ft. APN: 436-020-45-00 Last HMMD Inspection: 04/15/2010

Permit Status: OPEN Permit Expiration: 10/31/2013

JOSEPH D ROPER Facility Owner: Facility Address: 2070 CHICAGO ST Facility City: SAN DIEGO

Facility State: CA Facility Zip: 92110-UST Owner: Not reported Handle Regulated Hazmat:

Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

Active Permits:

Facility Id: 110910 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 212 OXYGENATED SOLVENTS

Other Information: WASTE ACETONE

Material Waste: Waste Hazardous Categories 1: Not reported Hazardous Categories 2: Not reported

Facility Id: 110910 Update Date: 11/02/2012 Case Number: 100-42-5 STYRENE Name:

Other Information: SILMAR LAMINATING RESIN

Material Waste: Material Hazardous Categories 1: **FIRE**

Direction
Distance

Elevation Site Database(s) EPA ID Number

JOE ROPER SURFBOARD REPAIR (Continued)

S106060825

EDR ID Number

Hazardous Categories 2: Not reported

Violations Active Permits:

 Facility Id:
 110910

 Update Date:
 11/02/2012

 Inspection Date:
 07/30/2004

 Violation Code:
 6HV1001

Violation: NO UPF PERMIT FOR HAZMATS

Violation Citation: A Unified Program Facility permit has not been obtained for hazardous

materials. 68.905

Activity: ACTIVE

 Facility Id:
 110910

 Update Date:
 11/02/2012

 Inspection Date:
 10/12/2009

 Violation Code:
 6HV0228

Violation: CONTAINER NOT KEPT CLOSED

Violation Citation: Failed to keep container closed. CFR 265.173

Activity: ACTIVE

 Facility Id:
 110910

 Update Date:
 11/02/2012

 Inspection Date:
 10/12/2009

 Violation Code:
 6HV0407

Violation: EMPLOYEE TRAINING NOT ADEQUATE

Violation Citation: Employee training program for small quantity generator of hazardous

waste is inadequate. CFR 262.34(d)(5)(iii)

Activity: ACTIVE

 Facility Id:
 110910

 Update Date:
 11/02/2012

 Inspection Date:
 04/15/2010

 Violation Code:
 6HV0227

Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE

Violation Citation: Failed to properly label/date hazardous waste container &/or tank.

66262.34(f)

Activity: ACTIVE

 Facility Id:
 110910

 Update Date:
 11/02/2012

 Inspection Date:
 07/30/2004

 Violation Code:
 6HV0131

Violation: UPF Permit NOT OBTAINED for HAZWASTE

Violation Citation: A Unified Program Facility permit has not been obtained for the

generation of hazardous waste. 68.905

Activity: ACTIVE

 Facility Id:
 110910

 Update Date:
 11/02/2012

 Inspection Date:
 10/12/2009

 Violation Code:
 6HV0227

Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE

Violation Citation: Failed to properly label/date hazardous waste container &/or tank.

66262.34(f)

Activity: ACTIVE

Direction Distance

Elevation Site Database(s) **EPA ID Number**

B16 T & L AUTO REPAIR San Diego Co. HMMD S106060356 SSE 1471 MORENA BLVD **SWEEPS UST** N/A

SAN DIEGO, CA 92110 < 1/8

0.088 mi.

464 ft. Site 2 of 9 in cluster B

Relative: Lower

SAN DIEGO CO. HMMD:

Facility Address:

209177 Facility Id: Business Type: 6HK26

Actual: 19 ft.

EPA Id Number: CAL000195091 436-052-12-00 Last HMMD Inspection: 03/27/2008 Permit Status: INAC Permit Expiration: 07/31/2009 Facility Owner: KAMAL HINDI

Facility City: SAN DIEGO Facility State: CA Facility Zip: 92110 UST Owner: Not reported Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Subject To APSA: Not reported Generate Haz Waste:

Treat Haz Waste:

Not reported Generate Medical Waste: Not reported

UST:

UST Name: UNDERGROUND TANK 103625 T001

1471 MORENA BL

Last Update: 2012-11-02 14:17:38

Permit Number: 209177 Tank Type: SINGLE WALL AT0320-1 Additional Id: Capacity Gallons: 1000 **UST Contents:** LEADED Other Content Info: **LEADED** Reg Status: **REMOVED**

Remove Close Date: 1987-01-12 00:00:00

Year Installed: Not reported Pipe Type: Not reported Delivery System: Not reported

90 Monitor Code:

NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING **UST Monitor Method:**

ALTERNATIVE DURING INSPECTION.

Facility Id: 210990 Business Type: 6HK26 EPA Id Number: CAL000195091

APN: 436-052-12-00 Last HMMD Inspection: 07/27/2009 Permit Status: **OPEN** Permit Expiration: 07/31/2013 Facility Owner: PEDRO MEYER Facility Address: 1471 MORENA BL Facility City: SAN DIEGO

Facility State: CA Facility Zip: 92110 UST Owner: Not reported Handle Regulated Hazmat: Not reported **EDR ID Number**

Direction Distance

Elevation Site Database(s) EPA ID Number

T & L AUTO REPAIR (Continued)

S106060356

EDR ID Number

Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste: Y

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

UST:

UST Name: UNDERGROUND TANK 103625 T001

Last Update: 2012-11-02 14:17:38

Permit Number: 210990
Tank Type: SINGLE WALL
Additional Id: AT0320-1
Capacity Gallons: 1000
UST Contents: LEADED
Other Content Info: LEADED
Reg Status: REMOVED

Remove Close Date: 1987-01-12 00:00:00

Year Installed: Not reported Pipe Type: Not reported Delivery System: Not reported

Monitor Code: 90

UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING

ALTERNATIVE DURING INSPECTION.

Active Permits:

Facility Id: 210990 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 135 UNSPECIFIED AQUEOUS SOL'N

Other Information: PARTS WASHER

Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 210990 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 888 USED OIL FILTERS

Other Information: Not reported Material Waste: Waste Hazardous Categories 1: Not reported Hazardous Categories 2: Not reported

Facility Id: 210990
Update Date: 11/02/2012
Case Number: Not reported

Name: WASTE 221 WASTE OIL & MIXED OIL

Other Information: USED OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

 Facility Id:
 103625

 Business Type:
 6HK26

 EPA Id Number:
 CAL000137864

 APN:
 436-052-12-00

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

T & L AUTO REPAIR (Continued)

S106060356

Last HMMD Inspection: 08/02/2006 INAC Permit Status: Permit Expiration: 12/31/2008

Facility Owner: THUY THU NGUYEN Facility Address: 1471 MORENA BL Facility City: SAN DIEGO

Facility State: CA

Facility Zip: 92110-3725 **UST Owner: KIBEY & GODWIN** Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

UST:

UNDERGROUND TANK 103625 T001 **UST Name:**

Last Update: 2012-11-02 14:17:38

Permit Number: 103625 SINGLE WALL Tank Type: Additional Id: AT0320-1 Capacity Gallons: 1000 **UST Contents: LEADED** Other Content Info: **LEADED REMOVED** Reg Status:

Remove Close Date: 1987-01-12 00:00:00

Year Installed: Not reported Pipe Type: Not reported Delivery System: Not reported

Monitor Code: 90

UST Monitor Method: NO MONITORING ALTERNATIVE SELECTED. VERIFY AND ENTER MONITORING

ALTERNATIVE DURING INSPECTION.

SWEEPS UST:

Status: Active Comp Number: 3625 9 Number:

Board Of Equalization: Not reported Referral Date: Not reported Action Date: 06-26-92 Created Date: 02-29-88 Not reported Owner Tank Id: Not reported SWRCB Tank Id: Not reported Tank Status: Capacity: Not reported Active Date: Not reported Tank Use: Not reported STG: Not reported Not reported Content: Number Of Tanks: Not reported

Status: Not reported

Comp Number: 3625

Number: Not reported Board Of Equalization: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

T & L AUTO REPAIR (Continued)

S106060356

S106065893

N/A

San Diego Co. HMMD

Referral Date: Not reported Not reported Action Date: Created Date: Not reported Owner Tank Id: Not reported

37-000-003625-000001 SWRCB Tank Id:

Not reported Tank Status: Capacity: 1000 Active Date: Not reported Tank Use: M.V. FUEL STG: **PRODUCT** Content: **LEADED** Number Of Tanks: 1

SEKITO CHIROPRACTIC CENTER B17 SSE

1465 MORENA BLVD SAN DIEGO, CA 92110

0.094 mi.

< 1/8

Site 3 of 9 in cluster B 495 ft.

SAN DIEGO CO. HMMD: Relative:

Lower

Facility Id: 139234

Business Type: 6HK10 Actual: EPA Id Number: Not reported 19 ft. APN: 436-052-13-00

> Last HMMD Inspection: 09/29/2009 Permit Status: **OPEN** Permit Expiration: 06/30/2013

Facility Owner: JUNE SEKITO, D.C 1465 MORENA BL Facility Address: Facility City: SAN DIEGO

Facility State: CA 92110-Facility Zip: **UST Owner:** Not reported Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Not reported Subject To APSA: Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste:

Inactive Permits:

Facility Id: 139234 Update Date: 11/02/2012 Case Number: Not reported

WASTE 902 INFECTIOUS WASTE, SHARPS Name: Other Information: MAIL BACK SERVICES - SCI SHARPS

Material Waste: Waste Hazardous Categories 1: Not reported Hazardous Categories 2: Not reported

139234 Facility Id: Business Type: 6HK10 EPA Id Number: Not reported APN: 436-052-13-00 Last HMMD Inspection: 09/29/2009 Permit Status: **OPEN** Permit Expiration: 06/30/2013

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SEKITO CHIROPRACTIC CENTER (Continued)

S106065893

Facility Owner: JUNE SEKITO, D.C 1465 MORENA BL Facility Address: Facility City: SAN DIEGO

Facility State: CA Facility Zip: 92110-**UST Owner:** Not reported Not reported Handle Regulated Hazmat: Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

Inactive Permits:

Facility Id: 139234 Update Date: 11/02/2012 Case Number: Not reported

WASTE 902 INFECTIOUS WASTE, SHARPS Name: Other Information: MAIL BACK SERVICES - SCI SHARPS

Material Waste: Waste Hazardous Categories 1: Not reported Hazardous Categories 2: Not reported

B18 **AUTOHAVEN** San Diego Co. HMMD S109278836 SSE 1434 MORENA BL N/A

< 1/8 SAN DIEGO, CA 92110

0.118 mi.

Site 4 of 9 in cluster B 621 ft.

Relative:

Lower

SAN DIEGO CO. HMMD:

Facility Id: 206728 Business Type: 6HK26

Actual: CAL000290853 EPA Id Number: 19 ft. APN: 436-020-17-00 Last HMMD Inspection: 10/13/2009

Permit Status: OPEN Permit Expiration: 10/31/2013

Facility Owner: DEL CERRO SERVICES, INC

Facility Address: 1434 MORENA BL Facility City: SAN DIEGO Facility State: CA

92110 Facility Zip: **UST Owner:** Not reported Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Subject To APSA: Not reported Generate Haz Waste: Treat Haz Waste: Not reported Generate Medical Waste: Not reported

Active Permits:

Facility Id: 206728 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 888 USED OIL FILTERS

Other Information: Not reported Waste Material Waste: Hazardous Categories 1: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AUTOHAVEN (Continued) S109278836

Hazardous Categories 2: Not reported

Facility Id: 206728 Update Date: 11/02/2012 Case Number: Not reported

WASTE 221 WASTE OIL & MIXED OIL Name:

Other Information: USED OIL Material Waste: Waste Hazardous Categories 1: Not reported Hazardous Categories 2: Not reported

Facility Id: 206728 Update Date: 11/02/2012 Case Number: Not reported

WASTE 342 ORGANIC LIQUIDS W/METALS Name:

ANTIFREEZE Other Information: Waste Material Waste: Hazardous Categories 1: Not reported Hazardous Categories 2: Not reported

Violations Active Permits:

Facility Id: 206728 Update Date: 11/02/2012 Inspection Date: 10/13/2009 Violation Code: 6HV1014

Violation: HMBP INCOMPLETE/NOT AMENDED

Violation Citation: HMBP is incomplete/inadequate/not amended to reflect changes. 25504,

25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729

Activity: **ACTIVE**

Facility Id: 206728 Update Date: 11/02/2012 Inspection Date: 03/04/2008 Violation Code: 6HV1001

NO UPF PERMIT FOR HAZMATS Violation:

Violation Citation: A Unified Program Facility permit has not been obtained for hazardous

materials. 68.905

Activity: **ACTIVE**

Facility Id: 206728 Update Date: 11/02/2012 Inspection Date: 03/04/2008 Violation Code: 6HV1014

Violation: HMBP INCOMPLETE/NOT AMENDED

Violation Citation: HMBP is incomplete/inadequate/not amended to reflect changes. 25504,

25505(a)(2) &/or 25509(a); 25505(b); 19 CCR 2729

Activity: **ACTIVE** Map ID MAP FINDINGS Direction

Distance

Elevation Site **EPA ID Number** Database(s)

B19 ROCK ENGINEERING RCRA-SQG 1000978289 CA0001004282

SSE 1434 MORENA BLVD SAN DIEGO, CA 92110 < 1/8

0.118 mi.

Actual:

19 ft.

621 ft. Site 5 of 9 in cluster B

RCRA-SQG: Relative:

Lower Date form received by agency: 01/11/1995

Facility name: **ROCK ENGINEERING** Facility address: 1434 MORENA BLVD

SAN DIEGO, CA 92110

EPA ID: CA0001004282 MORENA BLVD Mailing address:

SAN DIEGO, CA 92110

Contact: RICHARD GALARZA Contact address: 1434 MORENA BLVD

SAN DIEGO, CA 92110

Contact country: US

(619) 275-6580 Contact telephone: Contact email: Not reported

EPA Region: 09

Small Small Quantity Generator Classification:

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: RICHARD GALARZA Owner/operator address: 1434 MORENA BLVD SAN DIEGO, CA 92110

Not reported

Owner/operator country: Owner/operator telephone: (619) 275-6580 Legal status: Private

Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Violation Status: No violations found **EDR ID Number**

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

20 FIRESTONE TIRE & SERVICE CTR San Diego Co. HMMD S106061309 NNW 1735 MORENA BLVD N/A

NNW 1735 MORENA BLVD < 1/8 SAN DIEGO, CA 92110

0.122 mi. 642 ft.

Relative: SAN DIEGO CO. HMMD:

Higher Facility Id: 116118
Business Type: 6HK26

Actual: EPA Id Number: CAL000015758
33 ft. APN: 436-020-37-00
Last HMMD Inspection: 10/07/2004

Last HMMD Inspection: 10/07/2004
Permit Status: INAC
Permit Expiration: 11/30/2006

Facility Owner: BRIDGESTONE/FIRESTONE, INC.

Facility Address: 1735 MORENA BL
Facility City: SAN DIEGO
Facility State: CA
Facility Zip: 92110UST Owner: Not reported

Handle Regulated Hazmat: Y

Own Or Operate UST: Not reported Subject To APSA: Not reported Generate Haz Waste: Y

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

Violations Inactive Permits:

 Facility Id:
 116118

 Update Date:
 11/02/2012

 Inspection Date:
 10/07/2004

 Violation Code:
 6HV1011

Violation: TRAINING RECORDS NOT AVAILABLE

Violation Citation: Personnel training records not available. 19 CCR 2732

Activity: Inactive Permit

 Facility Id:
 116118

 Update Date:
 11/02/2012

 Inspection Date:
 10/07/2004

 Violation Code:
 6HV0401

Violation: TRAINING RECORDS UNAVAILABLE

Violation Citation: Personnel training records are not maintained to document compliance

with requirements for current and former employees. CCR

66265.16(d)&(e)

Activity: Inactive Permit

 Facility Id:
 116118

 Update Date:
 11/02/2012

 Inspection Date:
 10/07/2004

 Violation Code:
 6HV1004

Violation: HMBP NOT SUBMITTED TO HMD

Violation Citation: Hazardous Materials Handler has not submitted a completed Business

Plan to the HMMD. HSC 25505(a)

Activity: Inactive Permit

 Facility Id:
 116118

 Update Date:
 11/02/2012

 Inspection Date:
 10/07/2004

 Violation Code:
 6HV1002

Violation: HMBP NOT ESTABISHED/IMPLEMENTED.

Direction Distance

Elevation Site Database(s) EPA ID Number

FIRESTONE TIRE & SERVICE CTR (Continued)

S106061309

EDR ID Number

Violation Citation: Hazardous materials handler has not established/implemented a business

plan. HSC 25503.5(a)

Activity: Inactive Permit

B21 FREDERICK L TOMASCHKE San Diego Co. HMMD S106062433
SE 1430 MORENA BLVD N/A

SE 1430 MORENA BLVD < 1/8 SAN DIEGO, CA 92110

0.123 mi.

651 ft. Site 6 of 9 in cluster B

Relative: SAN DIEGO CO. HMMD:

 Lower
 Facility Id:
 126445

 Business Type:
 Not reported

 Actual:
 EPA Id Number:
 Not reported

 19 ft.
 APN:
 436-020-17-00

Last HMMD Inspection:

Permit Status:

Not reported
INAC
Permit Expiration:

Not reported

Facility Owner: FREDERICK L TOMASCHKE

Facility Address: 2852 DEAR PARK DR

Facility City: SAN DIEGO Facility State: CA Facility Zip: 92110-UST Owner: Not reported Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Subject To APSA: Not reported Not reported Generate Haz Waste: Treat Haz Waste: Not reported Generate Medical Waste: Not reported

B22 AAMCO TRANSMISSIONS San Diego Co. HMMD S104228333

B22 AAMCO TRANSMISSIONS San Diego Co. HMMD SE 1430 MORENA BLVD SAN DIEGO, CA 92110

212018

0.123 mi.

651 ft. Site 7 of 9 in cluster B

Relative: SAN DIEGO CO. HMMD: Facility Id:

Business Type: 6HK26

Actual: EPA Id Number: CAL000072180

19 ft. APN: 436-020-17-00

Last HMMD Inspection: 04/19/2010

Permit Status: OPEN
Permit Expiration: 07/31/2013
Facility Owner: SAM J FILIPPO
Facility Address: 1430 MORENA BL

Facility City: SAN DIEGO
Facility State: CA
Facility Zip: 92110
UST Owner: Not reported

Handle Regulated Hazmat: Y

Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste: Y

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

AAMCO TRANSMISSIONS (Continued)

S104228333

EDR ID Number

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

Active Permits:

Facility Id: 212018
Update Date: 11/02/2012
Case Number: Not reported

Name: WASTE 221 WASTE OIL & MIXED OIL

Other Information: USED OIL
Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 212018 Update Date: 11/02/2012 Case Number: 8002-05-9

Name: OILS: MOTOR, GEAR, TRANSMISSION, HYDRAULIC, LUBE, GREASE

Other Information:

Material Waste:

Hazardous Categories 1:

Hazardous Categories 2:

Not reported

Not reported

Facility Id: 212018
Update Date: 11/02/2012
Case Number: Not reported

Name: WASTE 491 UNSPECIFIED SLUDGE WASTE

Other Information: HOT TANK SLUDGE

Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Facility Id: 212018 Update Date: 11/02/2012 Case Number: Not reported

Name: WASTE 888 USED OIL FILTERS

Other Information: OIL & GAS FILTERS

Material Waste: Waste
Hazardous Categories 1: Not reported
Hazardous Categories 2: Not reported

Violations Active Permits:

 Facility Id:
 212018

 Update Date:
 11/02/2012

 Inspection Date:
 04/19/2010

 Violation Code:
 6HV1002

Violation: HMBP NOT ESTABISHED/IMPLEMENTED.

Violation Citation: Hazardous materials handler has not established/implemented a business

plan. HSC 25503.5(a)

Activity: ACTIVE

 Facility Id:
 212018

 Update Date:
 11/02/2012

 Inspection Date:
 04/19/2010

 Violation Code:
 6HV0228

Violation: CONTAINER NOT KEPT CLOSED

Violation Citation: Failed to keep container closed. CFR 265.173

Activity: ACTIVE

Direction Distance

Elevation Site Database(s) EPA ID Number

AAMCO TRANSMISSIONS (Continued)

S104228333

EDR ID Number

 Facility Id:
 212018

 Update Date:
 11/02/2012

 Inspection Date:
 04/19/2010

 Violation Code:
 6HV1001

Violation: NO UPF PERMIT FOR HAZMATS

Violation Citation: A Unified Program Facility permit has not been obtained for hazardous

materials. 68.905

Activity: ACTIVE

 Facility Id:
 212018

 Update Date:
 11/02/2012

 Inspection Date:
 04/19/2010

 Violation Code:
 6HV0227

Violation: HAZWASTE TANK/CONTAINER W/O LABEL/DATE

Violation Citation: Failed to properly label/date hazardous waste container &/or tank.

66262.34(f)

Activity: ACTIVE

 Facility Id:
 212018

 Update Date:
 11/02/2012

 Inspection Date:
 04/19/2010

 Violation Code:
 6HV0304

Violation: WASTE DETERMINATION NOT MADE

Violation Citation: Generator of a waste has not determined if that waste is a hazardous

waste as defined by law. CCR 66262.11 & 66260.200(c)

Activity: ACTIVE

 Facility Id:
 212018

 Update Date:
 11/02/2012

 Inspection Date:
 04/19/2010

 Violation Code:
 6HV0131

Violation: UPF Permit NOT OBTAINED for HAZWASTE

Violation Citation: A Unified Program Facility permit has not been obtained for the

generation of hazardous waste. 68.905

Activity: ACTIVE

 Facility Id:
 212018

 Update Date:
 11/02/2012

 Inspection Date:
 04/19/2010

 Violation Code:
 6HV0218

Violation: FILTERS:FUEL/OIL NOT LABELED OR CLOSED

Violation Citation: Failed to label &/or close drained used oil filters &/or used fuel

filters. 25250.22 and 66266.130(c)(3)

Activity: ACTIVE

Facility Id: 132500 Business Type: 6HK26 EPA Id Number: CAL000072180 APN: 436-020-17-00 Last HMMD Inspection: 10/12/2009 Permit Status: **INAC** 04/30/2010 Permit Expiration: Facility Owner: ROBERT BUVEL Facility Address: 1430 MORENA BL

Facility City: SAN DIEGO

Facility State: CA

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AAMCO TRANSMISSIONS (Continued)

S104228333

S106059748

N/A

Facility Zip: 92110-UST Owner: Not reported

Handle Regulated Hazmat:

Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Not reported Generate Medical Waste:

Violations Inactive Permits:

Facility Id: 132500 11/02/2012 Update Date: Inspection Date: 03/03/2008 Violation Code: 6HV0227

HAZWASTE TANK/CONTAINER W/O LABEL/DATE Violation:

Violation Citation: Failed to properly label/date hazardous waste container &/or tank.

66262.34(f)

Inactive Permit Activity:

B23 MISSION DENTAL CERAMICS San Diego Co. HMMD

SE 1430 MORENA BLVD < 1/8 SAN DIEGO, CA 92110

0.123 mi.

651 ft. Site 8 of 9 in cluster B

Relative:

SAN DIEGO CO. HMMD:

Lower

Facility Id: 101263 Business Type: Not reported EPA Id Number: CAD981971146

Actual: 19 ft.

APN: 436-020-17-00 Last HMMD Inspection: 01/19/1989 Permit Status: INAC Permit Expiration: 01/19/1989

Facility Owner: JAMES R GLIDEWELL Facility Address: 1430 MORENA BL # A

Facility City: SAN DIEGO

Facility State: CA 92110-3724 Facility Zip: UST Owner: Not reported

Handle Regulated Hazmat:

Own Or Operate UST: Not reported Subject To APSA: Not reported

Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

B24 AFFORDABLE MARINE SERVICE San Diego Co. HMMD S106063636 N/A

SE 1430 MORENA BLVD < 1/8 SAN DIEGO, CA 92110

0.123 mi.

651 ft. Site 9 of 9 in cluster B

Relative:

SAN DIEGO CO. HMMD:

Lower Actual:

19 ft.

132700 Facility Id: Business Type: Not reported EPA Id Number: Not reported 436-020-17-00

Last HMMD Inspection: 01/06/1992 Permit Status: INAC Permit Expiration: 01/06/1992 Facility Owner: **DENNIS ALLEN** Facility Address: 1430 MORENA BL Facility City: SAN DIEGO

Facility State: CA Facility Zip: 92110-UST Owner: Not reported Handle Regulated Hazmat: Not reported Own Or Operate UST: Not reported Subject To APSA: Not reported Generate Haz Waste:

Treat Haz Waste: Not reported Generate Medical Waste: Not reported

C25 **BLUE PORPOISE MARINE** LUST S102428635 SAN DIEGO CO. SAM SSE 1244 KNOXVILLE ST N/A

1/8-1/4

0.170 mi.

899 ft. Site 1 of 5 in cluster C

SAN DIEGO, CA 92110

LUST: Relative:

STATE Lower Region: Global Id: T0607300376 Actual: Latitude: 32.7728449

20 ft. Longitude: -117.205209 Case Type: Not reported

Status: Completed - Case Closed

03/12/1991 Status Date: Lead Agency: Not reported Case Worker: Not reported Local Agency: Not reported RB Case Number: 9UT1557 LOC Case Number: Not reported File Location: Local Agency

Potential Media Affect: Aquifer used for drinking water supply

Potential Contaminants of Concern: Gasoline Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Status History:

Global Id: T0607300376

Status: Completed - Case Closed

Status Date: 03/12/1991

Global Id: T0607300376

Status: Open - Case Begin Date

Direction
Distance
Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

BLUE PORPOISE MARINE (Continued)

S102428635

Status Date: 10/26/1989

Regulatory Activities:

 Global Id:
 T0607300376

 Action Type:
 Other

 Date:
 10/26/1989

 Action:
 Leak Discovery

 Global Id:
 T0607300376

 Action Type:
 Other

 Date:
 10/26/1989

 Action:
 Leak Reported

 Global Id:
 T0607300376

 Action Type:
 Other

 Date:
 10/26/1989

 Action:
 Leak Began

 Global Id:
 T0607300376

 Action Type:
 Other

 Date:
 10/26/1989

 Action:
 Leak Stopped

LUST REG 9:

Region: 9

Status: Case Closed
Case Number: 9UT1557
Local Case: H26424-001
Substance: Gasoline
Qty Leaked: Not reported

Abate Method: No Action Required - incident is minor, requiring no remedial action

Local Agency: San Diego
How Found: Tank Closure
How Stopped: Close Tank
Source: Unknown
Cause: Unknown
Lead Agency: Local Agency

Case Type: Other ground water affected

Date Found:10/26/1989Date Stopped:10/26/1989Confirm Date:10/26/1989Submit Workplan:Not reportedPrelim Assess:03/07/1990Desc Pollution:Not reported

Remed Plan: / /

Remed Action: Not reported Began Monitor: Not reported Release Date: 10/26/1989 Enforce Date: Not reported Closed Date: 2/5/91 Enforce Type: Not reported Pilot Program: LOP Basin Number: 906.50 GW Depth:

Beneficial Use: No Beneficial groundwater use

Direction Distance

EDR ID Number Elevation **EPA ID Number** Site Database(s)

BLUE PORPOISE MARINE (Continued) S102428635

NPDES Number: Not reported Priority: High priority

File Dispn: File discarded, case closed Interim Remedial Actions: Yes Cleanup and Abatement order Number: Not reported Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. SAM:

Case Number: H26424-001

Agency: **DEH Site Assessment & Mitigation**

Funding: LOP - State Fund

Drinking Water Aquifer Impacted Facility Type:

Facility Status: Closed Case Date: 3/12/1991 Date Began: 10/26/1989

C26 **DAPPER TIRE SERVICE RGA LUST** S114609245 SSE 1244 KNOXVILLE ST N/A

1/8-1/4 SAN DIEGO, CA

0.170 mi.

899 ft. Site 2 of 5 in cluster C

RGA LUST: Relative:

2002 DAPPER TIRE SERVICE 1244 KNOXVILLE ST Lower 2001 DAPPER TIRE SERVICE 1244 KNOXVILLE ST Actual: 2000 DAPPER TIRE SERVICE 1244 KNOXVILLE ST 20 ft.

1998 DAPPER TIRE SERVICE 1244 KNOXVILLE ST 1997 DAPPER TIRE SERVICE 1244 KNOXVILLE ST DAPPER TIRE SERVICE 1996 1244 KNOXVILLE ST 1995 DAPPER TIRE SERVICE 1244 KNOXVILLE ST

C27 **DAPPER TIRE SERVICE RGA LUST** S114609244 SSE **1244 KNOXVILLE STREET** N/A

SAN DIEGO, CA

1/8-1/4 0.170 mi.

899 ft. Site 3 of 5 in cluster C

RGA LUST: Relative:

1994 DAPPER TIRE SERVICE 1244 KNOXVILLE STREET Lower

1993 DAPPER TIRE SERVICE 1244 KNOXVILLE STREET Actual: 1992 DAPPER TIRE SERVICE 1244 KNOXVILLE STREET

20 ft.

C28 **BLUE PORPOISE MARINE** RGA LUST S114584979

SSE 1244 KNOXVILLE ST 1/8-1/4 SAN DIEGO, CA

0.170 mi.

899 ft. Site 4 of 5 in cluster C

RGA LUST: Relative:

2012 BLUE PORPOISE MARINE 1244 KNOXVILLE ST Lower

BLUE PORPOISE MARINE 1244 KNOXVILLE ST 2011 Actual: 2010 **BLUE PORPOISE MARINE** 1244 KNOXVILLE ST

20 ft. 2009 **BLUE PORPOISE MARINE** 1244 KNOXVILLE ST

2008 **BLUE PORPOISE MARINE** 1244 KNOXVILLE ST N/A

Direction Distance

EDR ID Number Elevation **EPA ID Number** Site Database(s)

BLUE PORPOISE MARINE (Continued)

S114584979

2007 **BLUE PORPOISE MARINE** 1244 KNOXVILLE ST 2006 **BLUE PORPOISE MARINE** 1244 KNOXVILLE ST **BLUE PORPOISE MARINE** 2005 1244 KNOXVILLE ST

C29 THERMO MATERIALS INC. RGA LUST S114702285

1244 KNOXVILLE ST SSE N/A

1/8-1/4 SAN DIEGO, CA

0.170 mi.

Site 5 of 5 in cluster C 899 ft.

RGA LUST: Relative:

2004 THERMO MATERIALS INC. 1244 KNOXVILLE ST Lower 2003 THERMO MATERIALS INC. 1244 KNOXVILLE ST

Actual:

20 ft.

D30 **SHELL** RGA LUST S114689307

SE 1330 MORENA BL N/A

1/4-1/2 SAN DIEGO, CA

0.254 mi.

1340 ft. Site 1 of 2 in cluster D

RGA LUST: Relative:

2012 SHELL 1330 MORENA BL Lower 2011 SHELL 1330 MORENA BL Actual: 2010 SHELL 1330 MORENA BL 27 ft. 2009 SHELL 1330 MORENA BL 2008 SHELL 1330 MORENA BL 2007 SHELL 1330 MORENA BL

SHELL 2006 1330 MORENA BL 2005 SHELL 1330 MORENA BL

D31 S106874920 SHFLL LUST

1330 MORENA BL SAN DIEGO CO. SAM SE N/A

1/4-1/2 SAN DIEGO, CA 92110

0.254 mi.

1340 ft. Site 2 of 2 in cluster D

LUST: Relative:

Region: STATE Lower

Global Id: T0607326769 Actual: Latitude: 32.772116 27 ft. -117.202701 Longitude: Case Type: Not reported

Status: Completed - Case Closed

Status Date: 09/11/2013 Lead Agency: Not reported

Case Worker: JS

Not reported Local Agency: RB Case Number: Not reported LOC Case Number: Not reported File Location: Local Agency

Other Groundwater (uses other than drinking water) Potential Media Affect:

Potential Contaminants of Concern: Gasoline

Site History: Comments: The Site is currently an active Shell-branded Service

> Station located on the southern corner of the intersection of Morena Boulevard and Tecolote Road in San Diego, California. Current station

Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

SHELL (Continued) S106874920

facilities include two gasoline underground storage tanks (USTs), five dispenser islands with associated product piping, and a station building. Development in the vicinity of the Site consists of commercial and residential properties. Tecolote Creek flows through a concrete lined channel along the northwest side of Tecolote Road. In May 2003, the County of San Diego Department of Environmental Health (DEH) oversaw the removal of the three fuel USTs, three dispenser islands, and product piping. Approximately 609 tons (~904 yd3) of hydrocarbon/oxygenate-impacted soil were over-excavated in the vicinity of the dispenser islands and beneath portions of the tank zone. DEH opened Unauthorized Release Case No. H03190 -001 in July 2003 based on field observations of soil staining and odors. In August 2003, the 550-gallon waste-oil UST was removed. Due to the presence of hydrocarbons in soil samples collected from beneath the UST, the waste-oil UST cavity was remedially excavated to 14 feet below grade. Approximately 36 tons (~53 yd3) of hydrocarbon-impacted soil were removed from the Site and transported for recycling. Subsequent assessment demonstrated that soil contamination from this release is localized around the USTs and dispenser islands; however remedial excavation removed the majority of impacted soil from the Site. The total residual petroleum hydrocarbon mass of TPH greater than 100 mg/kg in soil is estimated to be approximately 149 cubic vards. The risk to station workers from vapor intrusion to indoor air was evaluated using the DEH Site Assessment and Mitigation Vapor Risk Model to estimate the potential risk to human health from benzene, ethylbenzene, naphthalene and MTBE vapors volatilizing and migrating into the station building. The model estimated the potential carcinogenic risk to occupants based on concentrations of hydrocarbons and oxygenates in soil. The model predicted that the carcinogenic risk is 1.33 x 10-9, which is less than the 10-6 target. It was concluded that soil vapor intrusion to indoor air does not pose a risk to human health for the station building employees. Ten groundwater monitoring wells have been installed at the Site. Groundwater was monitored and sampled at the Site between July 2005 and December 2012. Separate-phase hydrocarbons have never been present at the Site. Groundwater in the vicinity of the Site is designated as non-beneficial. Benzene concentrations in groundwater have generally been low to non-detect in all site wells since January 2009 and is adequately assessed. Benzene is not considered a constituent of concern in groundwater at this Site. Dissolved phase MTBE is located cross-gradient of the southern dispenser islands at MW-6 and down-gradient of the USTs. It appears that concentrations of MTBE observed in well MW-6 are localized to the vicinity of that well. TBA concentrations are mainly located in the western portion of the Site and extend under Tecolote Road. A Corrective Action Plan (CAP) was submitted on November 14, 2012 requesting case closure. The Public Participation process for the above-referenced CAP was completed. The public comment period ended on June 28, 2013. DEH received no comments. According to the environmental consultants registered professional, the Site presents no significant risk to human health and the environment. DEH concurs with this conclusion.

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id: T0607326769

Contact Type: Local Agency Caseworker

Contact Name: JON SENAHA

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHELL (Continued) S106874920

SAN DIEGO COUNTY LOP Organization Name:

P.O. Box 129261 Address: San Diego City:

Email: jon.senaha@sdcounty.ca.gov

Phone Number: Not reported

Status History:

Global Id: T0607326769

Status: Completed - Case Closed

Status Date: 09/11/2013

Global Id: T0607326769

Status: Open - Case Begin Date

05/30/2003 Status Date:

T0607326769 Global Id:

Open - Eligible for Closure Status:

Status Date: 07/11/2013

T0607326769 Global Id: Status: Open - Remediation

02/10/2005 Status Date:

T0607326769 Global Id:

Open - Site Assessment Status:

Status Date: 06/29/2009

Regulatory Activities:

T0607326769 Global Id: Action Type: **ENFORCEMENT** Date: 02/01/2011

Action: Technical Correspondence / Assistance / Other

T0607326769 Global Id: **RESPONSE** Action Type: Date: 04/20/2009

Action: Monitoring Report - Quarterly

Global Id: T0607326769 RESPONSE Action Type: Date: 01/12/2012

Action: Monitoring Report - Semi-Annually

Global Id: T0607326769 **RESPONSE** Action Type: Date: 04/29/2010

Action: Monitoring Report - Semi-Annually

Global Id: T0607326769 Action Type: **RESPONSE** Date: 07/22/2011

Monitoring Report - Semi-Annually Action:

T0607326769 Global Id: Action Type: **RESPONSE** Date: 09/25/2012

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHELL (Continued) S106874920

Action: Monitoring Report - Quarterly

Global Id: T0607326769 Action Type: **ENFORCEMENT** Date: 08/06/2013 Action: Staff Letter

Global Id: T0607326769 Action Type: **RESPONSE** Date: 10/08/2009

Action: Monitoring Report - Quarterly

Global Id: T0607326769 Action Type: RESPONSE Date: 08/31/2010

Action: Monitoring Report - Semi-Annually

T0607326769 Global Id: Action Type: **RESPONSE** Date: 12/23/2009

Action: Monitoring Report - Quarterly

Global Id: T0607326769 Action Type: **ENFORCEMENT** Date: 08/06/2013

Action: Notification - Preclosure

Global Id: T0607326769 Action Type: **RESPONSE** Date: 04/26/2011

Action: Monitoring Report - Semi-Annually

Global Id: T0607326769 Action Type: **RESPONSE** 07/09/2013 Date: Action: Correspondence

Global Id: T0607326769 **ENFORCEMENT** Action Type: Date: 04/11/2013

Action: Technical Correspondence / Assistance / Other

Global Id: T0607326769 Action Type: Other Date: 05/30/2003 Action: Leak Stopped

T0607326769 Global Id: Action Type: Other 05/30/2003 Date: Action: Leak Reported

T0607326769 Global Id: Action Type: Other 05/30/2003 Date: Action: Leak Began

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHELL (Continued) S106874920

Global Id: T0607326769 **ENFORCEMENT** Action Type: 06/10/2003 Date:

Action: Notice of Responsibility

Global Id: T0607326769 RESPONSE Action Type: Date: 07/25/2012

Action: Monitoring Report - Quarterly

T0607326769 Global Id: Action Type: **RESPONSE** Date: 09/22/2010

Action: Site Assessment Report

Global Id: T0607326769 **ENFORCEMENT** Action Type: Date: 09/11/2013

Action: Closure/No Further Action Letter

Global Id: T0607326769 Action Type: **RESPONSE** Date: 01/29/2013

Action: Monitoring Report - Quarterly

Global Id: T0607326769 Action Type: **RESPONSE** Date: 09/22/2011

Action: Monitoring Report - Semi-Annually

Global Id: T0607326769 Action Type: **RESPONSE** Date: 04/27/2012

Action: Monitoring Report - Semi-Annually

Global Id: T0607326769 **RESPONSE** Action Type: Date: 11/14/2012

CAP/RAP - Other Report - Regulator Responded Action:

T0607326769 Global Id: Action Type: **RESPONSE** Date: 02/06/2013

Action: Other Report / Document - Regulator Responded

Global Id: T0607326769 Action Type: Other Date: 05/30/2003 Action: Leak Discovery

T0607326769 Global Id: Action Type: **ENFORCEMENT** Date: 07/14/2009 Action: Letter - Notice

Global Id: T0607326769 Action Type: **RESPONSE**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

SHELL (Continued) S106874920

Date: 05/22/2013

Other Report / Document Action:

Global Id: T0607326769 Action Type: **ENFORCEMENT** Date: 01/10/2013

Action: Technical Correspondence / Assistance / Other

Global Id: T0607326769 Action Type: **ENFORCEMENT** Date: 04/16/2010

Action: Notice of Responsibility

Global Id: T0607326769 Action Type: **RESPONSE** Date: 07/13/2009

Action: Monitoring Report - Quarterly

SAN DIEGO CO. SAM:

Case Number: H03190-001

Agency: **DEH Site Assessment & Mitigation**

Funding: LOP - State Fund

GW With No Beneficial Use Designation Facility Type:

Facility Status: Remedial Investigation

Date: 2/10/2005 5/30/2003 Date Began:

E32 CITY OF SD-FIESTA ISLND SLUDGE RGA LUST S114603436

WSW 1000 FIESTA ISLAND RD

1/4-1/2 SAN DIEGO, CA

0.386 mi.

2036 ft. Site 1 of 4 in cluster E

RGA LUST: Relative:

2003 CITY OF SD-FIESTA ISLND SLUDGE 1000 FIESTA ISLAND RD Lower

Actual:

11 ft.

E33 SDCTY-WATER, FIESTA ISLAND **WSW** 1000 FIESTA ISLAND RD

SAN DIEGO CO. SAM S104750930 **SLIC** N/A

1/4-1/2 SAN DIEGO, CA 92109

0.386 mi.

2036 ft. Site 2 of 4 in cluster E

SAN DIEGO CO. SAM: Relative:

H26089-001 Case Number: Lower

> **DEH Site Assessment & Mitigation** Agency:

Actual: Funding: Private - VAP 11 ft. Facility Type: Soils Only

Facility Status: **Closed Case** 4/4/2000 Date: Date Began: 10/30/1995

SLIC:

Region: STATE

Facility Status: Completed - Case Closed N/A

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

SDCTY-WATER, FIESTA ISLAND (Continued)

S104750930

Status Date: 04/04/2000 Global Id: T0608155033

SAN DIEGO COUNTY LOP Lead Agency:

Lead Agency Case Number: H26089-001 Latitude: 32.772278 Longitude: -117.212497

Case Type: Cleanup Program Site

Case Worker:

Local Agency: SAN DIEGO COUNTY LOP

RB Case Number: Not reported File Location: Local Agency

Potential Media Affected: Soil Potential Contaminants of Concern: Not reported

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SDCTY-WATER, FIESTA ISLAND E34 **RGA LUST S114684168** N/A

wsw 1000 FIESTA ISLAND RD

1/4-1/2 SAN DIEGO, CA

0.386 mi.

Actual:

2036 ft. Site 3 of 4 in cluster E

RGA LUST: Relative:

2007 SDCTY-WATER, FIESTA ISLAND 1000 FIESTA ISLAND RD Lower

SDCTY-WATER, FIESTA ISLAND 1000 FIESTA ISLAND RD 2006 2005 SDCTY-WATER, FIESTA ISLAND 1000 FIESTA ISLAND RD

11 ft.

E35 CITY OF SD-FIESTA ISLND SLU RGA LUST S114603435

1000 FIESTA ISLAND RD **WSW**

1/4-1/2 SAN DIEGO, CA

0.386 mi.

2036 ft. Site 4 of 4 in cluster E

RGA LUST: Relative:

2004 CITY OF SD-FIESTA ISLND SLU 1000 FIESTA ISLAND RD Lower

Actual:

11 ft.

F36 MISSION CHEMICAL CO **CERC-NFRAP** 1003879077

SSE **4990 NAPLES**

1/4-1/2 SAN DIEGO, CA 92110

0.418 mi.

2206 ft. Site 1 of 7 in cluster F

CERC-NFRAP: Relative:

0902586 Higher Site ID:

Federal Facility: Not a Federal Facility Actual: NPL Status: Not on the NPL

30 ft. Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13289824.00000 Person ID: 13003854.00000

Contact Sequence ID: 13295419.00000 N/A

CAD982359895

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MISSION CHEMICAL CO (Continued)

1003879077

Person ID: 13003858.00000

Contact Sequence ID: 13301277.00000 Person ID: 13004003.00000

CERCLIS-NFRAP Assessment History:

DISCOVERY Action: Date Started: // Date Completed: 11/01/87 Priority Level: Not reported

ARCHIVE SITE Action:

Date Started:

Date Completed: 03/28/90 Priority Level: Not reported

PRELIMINARY ASSESSMENT Action:

//

Date Started: Date Completed: 03/28/90

NFRAP-Site does not qualify for the NPL based on existing information Priority Level:

F37 **MISSION CHEMICAL** RGA LUST S114651824 4990 NAPLES ST SSE N/A

1/4-1/2 SAN DIEGO, CA 0.420 mi.

2217 ft. Site 2 of 7 in cluster F

RGA LUST: Relative:

MISSION CHEMICAL 4990 NAPLES ST 2012 Higher 4990 NAPLES ST 2011 MISSION CHEMICAL Actual: 2010 MISSION CHEMICAL 4990 NAPLES ST

32 ft. 2009 MISSION CHEMICAL 4990 NAPLES ST 2008 4990 NAPLES ST MISSION CHEMICAL

2007 MISSION CHEMICAL 4990 NAPLES ST 2006 MISSION CHEMICAL 4990 NAPLES ST 2005 MISSION CHEMICAL 4990 NAPLES ST

F38 **MISSION CHEMICAL** S101302103 LUST SSE 4990 NAPLES ST SAN DIEGO CO. SAM N/A

1/4-1/2 SAN DIEGO, CA 92110 0.420 mi.

2217 ft. Site 3 of 7 in cluster F

LUST REG 9: Relative: Region: Higher

Status: Preliminary site assessment underway

Actual: Case Number: 9UT2181 32 ft. Local Case: H22857-001 Substance: Gasoline

Qty Leaked: Not reported Abate Method: Not reported Local Agency: San Diego How Found: Other Means How Stopped: Other Means Unknown Source: Cause: Unknown

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MISSION CHEMICAL (Continued)

S101302103

Lead Agency: Local Agency Case Type: Soil only Date Found: 12/04/1991 Date Stopped: 12/04/1991 Confirm Date: 02/03/1992 Submit Workplan: 2/19/92 Prelim Assess: 02/09/1994 Desc Pollution: Not reported

Remed Plan: //

Remed Action: Not reported Began Monitor: Not reported Release Date: 12/04/1991 Enforce Date: Not reported Closed Date: Not reported Enforce Type: Not reported Pilot Program: LOP Basin Number: 906.50 GW Depth: Not reported

Beneficial Use: No Beneficial groundwater use

NPDES Number: Not reported

Priority: 3A

File Dispn: File discarded, case closed Interim Remedial Actions:

Cleanup and Abatement order Number: Not reported Waste Discharge Requirement Number: Not reported

SAN DIEGO CO. SAM:

Case Number: H22857-001

Agency: **DEH Site Assessment & Mitigation**

Funding: LOP - Federal Fund

Facility Type: GW With No Beneficial Use Designation

Facility Status: Closed Case Date: 2/21/2003 Date Began: 12/4/1991

F39 FORMER MISSION CHEMICAL CO.

RGA LUST S114622717

4990 NAPLES ST N/A

SAN DIEGO, CA 1/4-1/2

0.420 mi.

SSE

2217 ft. Site 4 of 7 in cluster F

RGA LUST: Relative:

2004 FORMER MISSION CHEMICAL CO. 4990 NAPLES ST Higher

FORMER MISSION CHEMICAL CO. 2003 4990 NAPLES ST

Actual: 32 ft.

F40 **IMPORT PARTS DEPO** RGA LUST S114634940

4990 NAPLES ST SSE 1/4-1/2 SAN DIEGO, CA

0.420 mi.

2217 ft. Site 5 of 7 in cluster F

RGA LUST: Relative:

2002 IMPORT PARTS DEPO 4990 NAPLES ST Higher 2001 IMPORT PARTS DEPO 4990 NAPLES ST Actual: 2000 IMPORT PARTS DEPO 4990 NAPLES ST 32 ft. 1998 IMPORT PARTS DEPO 4990 NAPLES ST

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

IMPORT PARTS DEPO (Continued)

S114634940

1997 IMPORT PARTS DEPO 4990 NAPLES ST 1996 4990 NAPLES ST IMPORT PARTS DEPO 1995 4990 NAPLES ST IMPORT PARTS DEPO

F41 SAN DIEGO VESSEL MAINTENANCE FACILITY **ENVIROSTOR** 1000382469

LUST N/A

SSE **4990 NAPLES STREET SAN DIEGO, CA 92110** 1/4-1/2

0.420 mi.

2217 ft. Site 6 of 7 in cluster F

ENVIROSTOR: Relative: Higher

37510124 Facility ID:

Status: Refer: Other Agency

Actual: 32 ft.

Status Date: 06/01/1995 Site Code: Not reported Site Type: Historical Site Type Detailed: * Historical Acres: Not reported NPL: NO

NONE SPECIFIED Regulatory Agencies: Lead Agency: NONE SPECIFIED Program Manager: Not reported Supervisor: * Mmonroy Division Branch: Cleanup Cypress Assembly: Not reported Senate: Not reported Special Program: Not reported

Restricted Use: NO

NONE SPECIFIED Site Mgmt Req: Funding: Not reported

Latitude: 0 Longitude:

APN: NONE SPECIFIED NONE SPECIFIED Past Use:

* Sludge - Paint * UNSPECIFIED ACID SOLUTION Potential COC:

Confirmed COC: NONE SPECIFIED Potential Description: NONE SPECIFIED Alias Name: CAD9823599895

Alias Type: **EPA Identification Number**

Alias Name: 37510124

Alias Type: **Envirostor ID Number**

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Site Screening Completed Date: 06/01/1995

Comments: SD County Environmental Assessment Listing indicates that the County overseeing a Preliminary Assessment as of 12/04/91. Tank case, soil

contamination only. Local oversight program. NFA for DTSC.

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Site Screening Completed Date: 05/02/1995

Comments: SD County Environmental Assessment history indicates that the county

overseeing a Preliminary Assessment as of 12/04/91. Tank case, soil

contamination only. Local oversight program. NFA for DTSC.

Direction Distance

Elevation Site Database(s) EPA ID Number

SAN DIEGO VESSEL MAINTENANCE FACILITY (Continued)

1000382469

EDR ID Number

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 02/08/1991

Comments: PA report was reviewed by Region 4 staff. The site consists of a

15,000 sf bldg., a paved storage area, & a concrete loading dock. 99% of chemicals handled were detergent, wax and window cleaner. Presently, the bldg is used as an auto parts warehouse by Volks Parts. A driveby in 1983 by SDDHS reported that concrete was eroded outside the bldg. No sampling was done to determine if there is a hazard at the site. Staff recommends PEARM to determine if there is a

hazard DTSC should address.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 06/02/1987

Comments: SITE SCREENING DONE WILL BE WORKED ON UNDER NEW CERCLA GRANT EVIDENCE

OF ACID SPILLS WHICH ATE THROUGH CONCRETE

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 01/18/1983

Comments: FACILITY IDENTIFIED VIA 72 PHONE BOOK (IMP. CO)

Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Not reported Future Due Date: Not reported Schedule Area Name: Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Schedule Due Date: Not reported Not reported Schedule Revised Date:

LUST:

 Region:
 STATE

 Global Id:
 T0607300951

 Latitude:
 32.7700096

 Longitude:
 -117.2016994

 Case Type:
 Not reported

Status: Completed - Case Closed

Status Date: 02/21/2003 Lead Agency: Not reported

Case Worker: LA

Local Agency: Not reported RB Case Number: 9UT2181 LOC Case Number: Not reported File Location: Local Agency

Potential Media Affect: Other Groundwater (uses other than drinking water)

Potential Contaminants of Concern: Gasoline Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Direction Distance

Elevation Site Database(s) EPA ID Number

SAN DIEGO VESSEL MAINTENANCE FACILITY (Continued)

1000382469

EDR ID Number

Global Id: T0607300951

Contact Type: Local Agency Caseworker
Contact Name: LAURIE APECECHEA
Organization Name: SAN DIEGO COUNTY LOP

Address: P.O. Box 129261
City: San Diego

Email: laurie.apecechea@sdcounty.ca.gov

Phone Number: Not reported

Status History:

Global Id: T0607300951

Status: Completed - Case Closed

Status Date: 02/21/2003

Global Id: T0607300951

Status: Open - Case Begin Date

Status Date: 12/04/1991

Regulatory Activities:

 Global Id:
 T0607300951

 Action Type:
 Other

 Date:
 12/04/1991

 Action:
 Leak Discovery

 Global Id:
 T0607300951

 Action Type:
 Other

 Date:
 12/04/1991

 Action:
 Leak Reported

 Global Id:
 T0607300951

 Action Type:
 Other

 Date:
 12/04/1991

 Action:
 Leak Began

 Global Id:
 T0607300951

 Action Type:
 ENFORCEMENT

 Date:
 02/19/1992

Action: Notice of Responsibility

 Global Id:
 T0607300951

 Action Type:
 Other

 Date:
 12/04/1991

 Action:
 Leak Stopped

F42 IMPORT PARTS DEPO RGA LUST S114634939 SSE 4990 NAPLES STREET N/A

1/4-1/2 SAN DIEGO, CA

0.420 mi.

2217 ft. Site 7 of 7 in cluster F

Relative: RGA LUST:

Higher 1994 IMPORT PARTS DEPO 4990 NAPLES STREET 1993 IMPORT PARTS DEPO 4990 NAPLES STREET

Actual: 32 ft.

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

G43 **CITY CHEVROLET RGA LUST** S114602390

N/A

North 2111 MORENA BL 1/4-1/2 SAN DIEGO, CA

0.496 mi.

2617 ft. Site 1 of 2 in cluster G

RGA LUST: Relative:

2012 CITY CHEVROLET 2111 MORENA BL Lower

2011 CITY CHEVROLET 2111 MORENA BL Actual: 2010 CITY CHEVROLET 2111 MORENA BL 22 ft. 2111 MORENA BL 2009 CITY CHEVROLET

2008 CITY CHEVROLET 2111 MORENA BL 2007 CITY CHEVROLET 2111 MORENA BL 2007 2111 MORENA BL CITY CHEVROLET 2006 CITY CHEVROLET 2111 MORENA BL 2005 CITY CHEVROLET 2111 MORENA BL 2004 CITY CHEVROLET 2111 MORENA BL 2003 CITY CHEVROLET 2111 MORENA BL

G44 RGA LUST S114602391 **CITY CHEVROLET** N/A

North 2111 MORENA BLVD 1/4-1/2 SAN DIEGO, CA

0.496 mi.

Actual:

22 ft.

2617 ft. Site 2 of 2 in cluster G

RGA LUST: Relative:

2002 CITY CHEVROLET 2111 MORENA BLVD Lower

2111 MORENA BLVD 2001 CITY CHEVROLET 2000 CITY CHEVROLET 2111 MORENA BLVD 1998 CITY CHEVROLET 2111 MORENA BLVD

> 1997 CITY CHEVROLET 2111 MORENA BLVD

H45 **AAMCO TRANSMISSIONS (FORMER)** ENVIROSTOR \$104747892

SE 5251 LINDA VISTA RD. 1/2-1 SAN DIEGO, CA 92110

0.826 mi.

4362 ft. Site 1 of 2 in cluster H

ENVIROSTOR: Relative:

Facility ID: 37750009 Higher

Status: Refer: 1248 Local Agency

Actual: Status Date: 02/01/2000 32 ft. Site Code: Not reported Evaluation Site Type:

Site Type Detailed: Evaluation Acres: NPL: NO

SAN DIEGO COUNTY Regulatory Agencies: SAN DIEGO COUNTY Lead Agency:

Program Manager: Not reported

Supervisor: Referred - Not Assigned

Division Branch: Cleanup Cypress 78

Assembly: Senate: 39

Special Program: Not reported Restricted Use: NO

NONE SPECIFIED Site Mgmt Req: Funding: Not Applicable

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AAMCO TRANSMISSIONS (FORMER) (Continued)

S104747892

Latitude: 32.76593 Longitude: -117.1964 APN: 436-350-31-00 Past Use: NONE SPECIFIED Potential COC: NONE SPECIFIED NONE SPECIFIED Confirmed COC: NONE SPECIFIED Potential Description: Alias Name: 436-350-31-00 APN Alias Type:

Alias Name: 37750009

Alias Type: **Envirostor ID Number**

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: SB 1248 Notification

Completed Date: 02/01/2000

Comments: DTSC is not involved with this project.

Future Area Name: Not reported Future Sub Area Name: Not reported Future Document Type: Not reported Future Due Date: Not reported Schedule Area Name: Not reported Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

H46 MORENA VISTA REDEVELOPMENT PROJECT SE **LINDA VISTA ROAD & NAPA STREET**

1/2-1 SAN DIEGO, CA 92110

0.839 mi.

Actual:

4432 ft. Site 2 of 2 in cluster H

ENVIROSTOR: Relative:

Facility ID: 60000567 Lower

Inactive - Action Required Status: Status Date: 09/11/2012

28 ft. Site Code: Not reported Evaluation Site Type:

Site Type Detailed: Evaluation 5 Acres: NPL: NO

SMBRP, US EPA Regulatory Agencies: Lead Agency: **US EPA** Program Manager: Not reported Supervisor: * Greg Holmes Division Branch: Cleanup Cypress

Assembly: 78 Senate: 39

Special Program: EPA - PASI Restricted Use: NO

NONE SPECIFIED Site Mgmt Req:

Fundina: **EPA Grant** Latitude: 32.7646 Longitude: -117.1977

APN: NONE SPECIFIED ENVIROSTOR \$108407613

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

MORENA VISTA REDEVELOPMENT PROJECT (Continued)

S108407613

EDR ID Number

Past Use: NONE

Potential COC: Benzene Tetrachloroethylene (PCE 1,2-Dichloroethylene (cis

Confirmed COC: NONE SPECIFIED OTH, SOIL, SV Alias Name: 60000567

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name:
Completed Sub Area Name:
Completed Document Type:
Completed Date:
Comments:
Not reported
Not reported
Not reported

Future Area Name: Not reported Not reported Future Sub Area Name: Future Document Type: Not reported Future Due Date: Not reported Schedule Area Name: Not reported Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Not reported Schedule Due Date: Schedule Revised Date: Not reported

147 NIKE BATTERY 91, ANGEL ISLAND - NIKE BATTERY 91, ANGEL ISLAN

ENVIROSTOR S105790911

N/A

1/2-1 TIBURON, CA 94920

318 P.O. BOX

0.890 mi.

West

4700 ft. Site 1 of 2 in cluster I

Relative: ENVIROSTOR:

Lower Facility ID: 71000052

Status: Inactive - Action Required

 Actual:
 Status Date:
 12/19/2005

 22 ft.
 Site Code:
 201113

Site Type: Military Evaluation

Site Type Detailed: FUDS
Acres: 596
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP

Program Manager: Carrie Tatoian-Cain Supervisor: Charles Ridenour

Division Branch: Engineering & Special Projects

Assembly: 78 Senate: 39

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED

Funding: DERA
Latitude: 32.775
Longitude: -117.2222

APN: NONE SPECIFIED

Past Use: FIRING RANGE - ARTILLERY, FIRING RANGE - SMALL ARMS ETC..., FUEL -

VEHICLE STORAGE/ REFUELING

Potential COC: Explosives (UXO, MEC Munitions Debris (MD Lead TPH-gas

Confirmed COC: 30011-NO 30013-NO 30025-NO 32000-NO

Potential Description: SOIL

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

NIKE BATTERY 91, ANGEL ISLAND - NIKE BATTERY 91, ANGEL ISLAN (Continued)

S105790911

Alias Name: T0604171392 Alias Type: GeoTracker Global ID

Alias Name: 201113

Project Code (Site Code) Alias Type:

Alias Name: 71000052

Envirostor ID Number Alias Type:

Completed Info:

Completed Area Name: Not reported Completed Sub Area Name: Not reported Completed Document Type: Not reported Completed Date: Not reported Comments: Not reported

Future Area Name: Not reported Not reported Future Sub Area Name: Future Document Type: Not reported Not reported Future Due Date: Schedule Area Name: Not reported Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Not reported Schedule Due Date: Schedule Revised Date: Not reported

148 **SAN DIEGO RIVER ENVIROSTOR** S107737245 West N/A

1/2-1 SAN DIEGO, CA 92124

0.890 mi.

4700 ft. Site 2 of 2 in cluster I

Relative: Lower

ENVIROSTOR:

Facility ID: 80000459

Inactive - Needs Evaluation Status:

Actual: 22 ft.

07/01/2005 Status Date: Site Code: Not reported Military Evaluation Site Type: Site Type Detailed: **FUDS**

Not reported Acres: NO NPL: Regulatory Agencies: **SMBRP** Lead Agency: **SMBRP** Program Manager: Not reported Douglas Bautista Supervisor: Division Branch: Cleanup Cypress

Assembly: 78 Senate: 39

Special Program: Not reported

Restricted Use: NO

NONE SPECIFIED Site Mgmt Req:

Funding: **DERA** Latitude: 32.775 -117.2222 Longitude:

NONE SPECIFIED APN: NONE SPECIFIED Past Use: Potential COC: Explosives (UXO, MEC Confirmed COC: NONE SPECIFIED Potential Description: NONE SPECIFIED CA99799F560800 Alias Name:

Map ID MAP FINDINGS Direction

Distance

Elevation Site Database(s) EPA ID Number

SAN DIEGO RIVER (Continued)

S107737245

EDR ID Number

Alias Type: Federal Facility ID
Alias Name: J09CA0606
Alias Type: INPR
Alias Name: 80000459

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Inventory Project Report (INPR)

Completed Date: 12/16/1991
Comments: Not reported

Future Area Name: Not reported Not reported Future Sub Area Name: Future Document Type: Not reported Not reported Future Due Date: Schedule Area Name: Not reported Schedule Sub Area Name: Not reported Not reported Schedule Document Type: Schedule Due Date: Not reported Not reported Schedule Revised Date:

Count: 5 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Z	Zip	Database(s)
SAN DIEGO	S100732068	MISSION BAY (MZB VOR)	MISSION BAY ISLAND	9:	2109	San Diego Co. HMMD, SWEEPS UST
SAN DIEGO	S108407141	MV WEST LIGHT RAIL EXTENSION	MORENA BL, SEGMENT	9:	2108	SAN DIEGO CO. SAM
SAN DIEGO	S106905761	METROPOLITAN TRANSIT DEVELOPMENT B	MORENA BLVD @ LINDA VISTA ROAD	9:	2110	SLIC
SAN DIEGO	S101579727	MV WEST LIGHT RAIL EXTENSION	MORENA SEGMENT	9:	2108	San Diego Co. HMMD
SAN DIEGO	S108407193	PUBLIC AUTO SERVICE	PACIFIC HY	92	2110	SAN DIEGO CO. SAM

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/26/2015 Source: EPA
Date Data Arrived at EDR: 04/08/2015 Telephone: N/A

Number of Days to Update: 75 Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/26/2015 Source: EPA
Date Data Arrived at EDR: 04/08/2015 Telephone: N/A

Number of Days to Update: 75 Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/26/2015 Date Data Arrived at EDR: 04/08/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 75

Source: EPA Telephone: N/A

Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/19/2015
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015 Date Data Arrived at EDR: 04/08/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 07/10/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Varies

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 11/11/2013 Date Made Active in Reports: 02/13/2014

Number of Days to Update: 94

Source: EPA Telephone: 703-412-9810 Last EDR Contact: 05/29/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 11/11/2013 Date Made Active in Reports: 02/13/2014

Number of Days to Update: 94

Source: EPA Telephone: 703-412-9810 Last EDR Contact: 05/29/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/10/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 72

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/10/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/10/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/10/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 13

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/16/2015 Date Data Arrived at EDR: 03/17/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 77

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 06/01/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/16/2015 Date Data Arrived at EDR: 03/17/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 77

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 06/01/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 63

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/04/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 05/14/2015

Number of Days to Update: 9

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/04/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 05/14/2015

Number of Days to Update: 9

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/18/2015 Date Data Arrived at EDR: 05/20/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 16

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 08/31/2015 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 909-782-4496 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Varies

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003

Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-542-4786 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 760-776-8943 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005

Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Telephone: 760-241-7365 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 530-542-5572 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-4834 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 09/26/2011

Next Scheduled EDR Contact: 01/09/2012 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-622-2433 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001 Date Made Active in Reports: 03/29/2001

Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)

Telephone: 707-570-3769 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6710 Last EDR Contact: 09/06/2011

Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015 Date Data Arrived at EDR: 01/08/2015 Date Made Active in Reports: 02/09/2015

Number of Days to Update: 32

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 02/03/2015 Date Data Arrived at EDR: 02/12/2015 Date Made Active in Reports: 03/13/2015

Number of Days to Update: 29

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 24

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 48

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 04/28/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 55

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 03/17/2015 Date Data Arrived at EDR: 05/01/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 52

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/30/2014 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/13/2015

Number of Days to Update: 10

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/03/2015 Date Data Arrived at EDR: 04/30/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 53

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

SLIC: Statewide SLIC Cases

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006

Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007

Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 08/08/2011

Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 55

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 07/10/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/06/2015

Number of Days to Update: 19

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009 Date Data Arrived at EDR: 09/10/2009 Date Made Active in Reports: 10/01/2009

Number of Days to Update: 21

Source: California Environmental Protection Agency

Telephone: 916-327-5092 Last EDR Contact: 07/13/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 03/17/2015 Date Data Arrived at EDR: 05/01/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 52

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014 Date Data Arrived at EDR: 11/25/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 65

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/03/2015 Date Data Arrived at EDR: 04/30/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 53

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014 Date Data Arrived at EDR: 02/13/2015 Date Made Active in Reports: 03/13/2015

Number of Days to Update: 28

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 05/06/2015 Date Data Arrived at EDR: 05/19/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 34

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/26/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 27

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/30/2014 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/13/2015

Number of Days to Update: 10

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Semi-Annually

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 06/22/2015

Number of Days to Update: 48

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014 Date Data Arrived at EDR: 10/01/2014 Date Made Active in Reports: 11/06/2014

Number of Days to Update: 36

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/04/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 05/14/2015

Number of Days to Update: 9

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 06/08/2015 Date Data Arrived at EDR: 06/09/2015 Date Made Active in Reports: 07/10/2015

Number of Days to Update: 31

Source: State Water Resources Control Board

Telephone: 916-323-7905 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/23/2015 Date Data Arrived at EDR: 03/24/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 70

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 06/24/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 47

Source: Department of Conservation Telephone: 916-323-3836

Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 05/26/2015 Date Data Arrived at EDR: 05/28/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 8

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015 Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/25/2015

Number of Days to Update: 15

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 05/29/2015

Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006

Number of Days to Update: 21

Source: Department of Toxic Substance Control

Telephone: 916-323-3400 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/04/2015 Date Data Arrived at EDR: 05/05/2015 Date Made Active in Reports: 05/14/2015

Number of Days to Update: 9

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/18/2015

Number of Days to Update: 8

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 08/07/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-227-4364 Last EDR Contact: 01/26/2009

Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/25/2015 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/25/2015

Number of Days to Update: 15

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 05/29/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained.

The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009 Date Data Arrived at EDR: 09/23/2009 Date Made Active in Reports: 10/01/2009

Number of Days to Update: 8

Source: Department of Public Health Telephone: 707-463-4466

Last EDR Contact: 06/01/2015 Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/11/2015 Date Data Arrived at EDR: 06/16/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 28

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/21/2015

Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014 Date Data Arrived at EDR: 03/18/2014 Date Made Active in Reports: 04/24/2014

Number of Days to Update: 37

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/08/2015 Date Data Arrived at EDR: 06/09/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 35

Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 06/09/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 72

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 07/28/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 6

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 07/28/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 27

Source: State Water Qualilty Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/22/2013

Number of Days to Update: 50

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/10/2015 Date Data Arrived at EDR: 03/31/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 06/06/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 09/18/2014

Number of Days to Update: 8

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 07/08/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Source: USGS

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Telephone: 888-275-8747 Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 10/28/2015

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011 Date Data Arrived at EDR: 03/09/2011 Date Made Active in Reports: 05/02/2011

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 05/21/2015

Next Scheduled EDR Contact: 08/31/2015

Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/09/2015 Date Data Arrived at EDR: 03/10/2015 Date Made Active in Reports: 03/25/2015

Number of Days to Update: 15

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 05/14/2015

Next Scheduled EDR Contact: 08/24/2015

Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/15/2015 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 14

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 06/25/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 06/02/2015

Number of Days to Update: 110

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 01/29/2015

Next Scheduled EDR Contact: 06/08/2015 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 02/24/2014

Number of Days to Update: 74

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 06/12/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2015
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/25/2015

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 05/14/2015

Next Scheduled EDR Contact: 08/24/2015 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 10/15/2014 Date Made Active in Reports: 11/17/2014

Number of Days to Update: 33

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015 Date Data Arrived at EDR: 02/06/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 31

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the

Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/31/2015 Date Data Arrived at EDR: 04/09/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 63

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 06/04/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 07/13/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 06/12/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Date Data Arrived at EDR: 10/19/2011 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 83

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/07/2015 Date Data Arrived at EDR: 04/09/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 07/09/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 08/04/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 04/17/2015 Date Made Active in Reports: 06/02/2015

Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/12/2015

Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011 Date Data Arrived at EDR: 02/26/2013 Date Made Active in Reports: 04/19/2013

Number of Days to Update: 52

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 05/29/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 12/08/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 34

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Semi-Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012

Number of Days to Update: 146

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 05/26/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014 Date Data Arrived at EDR: 11/26/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 64

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 07/07/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/16/2014 Date Data Arrived at EDR: 10/31/2014 Date Made Active in Reports: 11/17/2014

Number of Days to Update: 17

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/16/2014 Date Data Arrived at EDR: 10/31/2014 Date Made Active in Reports: 11/17/2014

Number of Days to Update: 17

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/22/2015 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 12/30/2014 Date Data Arrived at EDR: 12/31/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 06/03/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS Telephone: 703-648-7709 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/14/2015

Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 01/18/2015 Date Data Arrived at EDR: 02/27/2015 Date Made Active in Reports: 03/25/2015

Number of Days to Update: 26

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 06/10/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994

Number of Days to Update: 6

Source: Department of Health Services

Telephone: 916-255-2118 Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/24/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 18

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 02/18/2015 Date Data Arrived at EDR: 02/20/2015 Date Made Active in Reports: 03/12/2015

Number of Days to Update: 20

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 03/25/2014 Date Made Active in Reports: 04/28/2014

Number of Days to Update: 34

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 06/25/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/01/2015 Date Made Active in Reports: 05/13/2015

Number of Days to Update: 12

Source: State Water Resoruces Control Board

Telephone: 916-445-9379 Last EDR Contact: 08/07/2015

Next Scheduled EDR Contact: 11/09/2015

Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/30/2015 Date Data Arrived at EDR: 05/01/2015 Date Made Active in Reports: 05/13/2015

Number of Days to Update: 12

Source: Department of Toxic Substances Control

Telephone: 916-255-3628 Last EDR Contact: 07/24/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/18/2015 Date Data Arrived at EDR: 05/22/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 14

Source: California Integrated Waste Management Board

Telephone: 916-341-6066 Last EDR Contact: 05/18/2015

Next Scheduled EDR Contact: 08/31/2015 Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 10/15/2014 Date Made Active in Reports: 11/19/2014

Number of Days to Update: 35

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/26/2015 Date Data Arrived at EDR: 05/28/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 8

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 05/28/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/13/2015 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 20

Source: Department of Toxic Substances Control

Telephone: 916-440-7145 Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 27

Source: Department of Conservation

Telephone: 916-322-1080 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015

Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/07/2015 Date Data Arrived at EDR: 06/09/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 35

Source: Department of Public Health

Telephone: 916-558-1784 Last EDR Contact: 06/09/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 05/18/2015 Date Data Arrived at EDR: 05/20/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 22

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 08/31/2015 Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/07/2015 Date Data Arrived at EDR: 06/10/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 34

Source: Department of Pesticide Regulation

Telephone: 916-445-4038 Last EDR Contact: 06/10/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Quarterly

PROC: Certified Processors Database A listing of certified processors.

Date of Government Version: 06/15/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 27

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993 Date Data Arrived at EDR: 11/01/1993 Date Made Active in Reports: 11/19/1993

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 10/05/2015

Data Release Frequency: No Update Planned

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 11/19/2014 Date Data Arrived at EDR: 12/15/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 45

Source: Deaprtment of Conservation Telephone: 916-445-2408

Last EDR Contact: 06/19/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015 Date Data Arrived at EDR: 04/17/2015 Date Made Active in Reports: 06/23/2015

Number of Days to Update: 67

Source: RWQCB, Central Valley Region

Telephone: 559-445-5577 Last EDR Contact: 07/13/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007 Date Data Arrived at EDR: 06/20/2007 Date Made Active in Reports: 06/29/2007

Number of Days to Update: 9

Source: State Water Resources Control Board

Telephone: 916-341-5227 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009 Date Data Arrived at EDR: 07/21/2009 Date Made Active in Reports: 08/03/2009

Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/12/2015

Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/13/2014 Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/30/2013 Number of Days to Update: 182

Source: State Water Resources Control Board Telephone: N/A Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/21/2015 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 08/05/2015 Number of Days to Update: 12

Source: Alameda County Environmental Health Services Telephone: 510-567-6700

Source: Alameda County Environmental Health Services

Last EDR Contact: 08/10/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/21/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/03/2015

Telephone: 510-567-6700 Last EDR Contact: 07/13/2015

Next Scheduled EDR Contact: 10/28/2015

Number of Days to Update: 12

Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List Cupa Facility List

Date of Government Version: 06/05/2015

Date Data Arrived at EDR: 06/09/2015 Date Made Active in Reports: 07/10/2015

Number of Days to Update: 31

Source: Amador County Environmental Health

Telephone: 209-223-6439 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/21/2015

Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing Cupa facility list.

> Date of Government Version: 11/20/2014 Date Data Arrived at EDR: 11/24/2014 Date Made Active in Reports: 01/07/2015

Number of Days to Update: 44

Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 07/13/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing Cupa Facility Listing

> Date of Government Version: 07/15/2015 Date Data Arrived at EDR: 07/17/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 17

Source: Calveras County Environmental Health

Telephone: 209-754-6399 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List Cupa facility list.

> Date of Government Version: 06/11/2014 Date Data Arrived at EDR: 06/13/2014 Date Made Active in Reports: 07/07/2014

Number of Days to Update: 24

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 08/10/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/26/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 13

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 08/03/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List Cupa Facility list

> Date of Government Version: 05/19/2015 Date Data Arrived at EDR: 05/22/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 14

Source: Del Norte County Environmental Health Division

Telephone: 707-465-0426 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/16/2015

Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 05/26/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 7

Source: El Dorado County Environmental Management Department

Telephone: 530-621-6623 Last EDR Contact: 08/03/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/13/2015 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 20

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 07/06/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List CUPA facility list.

> Date of Government Version: 03/11/2015 Date Data Arrived at EDR: 03/13/2015 Date Made Active in Reports: 03/24/2015

Number of Days to Update: 11

Source: Humboldt County Environmental Health

Telephone: N/A

Last EDR Contact: 07/14/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 04/27/2015 Date Data Arrived at EDR: 04/28/2015 Date Made Active in Reports: 05/13/2015

Number of Days to Update: 15

Source: San Diego Border Field Office

Telephone: 760-339-2777 Last EDR Contact: 08/07/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 09/10/2013 Date Data Arrived at EDR: 09/11/2013 Date Made Active in Reports: 10/14/2013

Number of Days to Update: 33

Source: Inyo County Environmental Health Services

Telephone: 760-878-0238 Last EDR Contact: 05/21/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

> Date of Government Version: 05/19/2015 Date Data Arrived at EDR: 06/18/2015 Date Made Active in Reports: 07/22/2015

Number of Days to Update: 34

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 08/07/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/26/2015 Date Data Arrived at EDR: 05/28/2015 Date Made Active in Reports: 06/15/2015

Number of Days to Update: 18

Source: Kings County Department of Public Health

Telephone: 559-584-1411 Last EDR Contact: 05/21/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List Cupa facility list

> Date of Government Version: 05/05/2015 Date Data Arrived at EDR: 05/07/2015 Date Made Active in Reports: 05/20/2015

Number of Days to Update: 13

Source: Lake County Environmental Health

Telephone: 707-263-1164 Last EDR Contact: 07/20/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 10/23/2009

Number of Days to Update: 206

Source: EPA Region 9 Telephone: 415-972-3178 Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: No Update Planned

HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/24/2014 Date Data Arrived at EDR: 01/30/2015 Date Made Active in Reports: 03/04/2015

Number of Days to Update: 33

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 07/10/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Semi-Annually

List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 07/21/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 13

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 07/21/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Varies

City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2015 Date Data Arrived at EDR: 07/27/2015 Date Made Active in Reports: 08/10/2015

Number of Days to Update: 14

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 07/20/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Varies

Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/15/2015 Date Data Arrived at EDR: 01/29/2015 Date Made Active in Reports: 03/10/2015

Number of Days to Update: 40

Source: Community Health Services Telephone: 323-890-7806

Last EDR Contact: 07/15/2015

Next Scheduled EDR Contact: 11/02/2015
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015 Date Data Arrived at EDR: 04/02/2015 Date Made Active in Reports: 04/13/2015

Number of Days to Update: 11

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 07/17/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/03/2015 Date Data Arrived at EDR: 05/26/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 16

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 07/27/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Annually

City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/03/2015 Date Data Arrived at EDR: 06/04/2015 Date Made Active in Reports: 07/06/2015

Number of Days to Update: 32

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 06/04/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/28/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/15/2015

Number of Days to Update: 17

Source: Madera County Environmental Health

Telephone: 559-675-7823 Last EDR Contact: 05/22/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 10/08/2014 Date Data Arrived at EDR: 10/22/2014 Date Made Active in Reports: 12/15/2014

Number of Days to Update: 54

Source: Public Works Department Waste Management

Telephone: 415-499-6647

Last EDR Contact: 07/06/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 05/22/2015 Date Data Arrived at EDR: 05/26/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 10

Source: Merced County Environmental Health

Telephone: 209-381-1094 Last EDR Contact: 05/22/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 06/01/2015 Date Data Arrived at EDR: 06/03/2015 Date Made Active in Reports: 07/06/2015

Number of Days to Update: 33

Source: Mono County Health Department

Telephone: 760-932-5580 Last EDR Contact: 06/01/2015

Next Scheduled EDR Contact: 09/14/2015

Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/30/2015 Date Data Arrived at EDR: 07/07/2015 Date Made Active in Reports: 07/16/2015

Number of Days to Update: 9

Source: Monterey County Health Department

Telephone: 831-796-1297 Last EDR Contact: 05/26/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011 Date Data Arrived at EDR: 12/06/2011 Date Made Active in Reports: 02/07/2012

Number of Days to Update: 63

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 06/01/2015

Next Scheduled EDR Contact: 09/14/2015
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008 Date Data Arrived at EDR: 01/16/2008 Date Made Active in Reports: 02/08/2008

Number of Days to Update: 23

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 06/01/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 06/03/2015 Date Data Arrived at EDR: 06/04/2015 Date Made Active in Reports: 07/22/2015

Number of Days to Update: 48

Source: Community Development Agency

Telephone: 530-265-1467 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2015 Date Data Arrived at EDR: 05/12/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 24

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/06/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Annually

List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2015 Date Data Arrived at EDR: 05/12/2015 Date Made Active in Reports: 06/08/2015

Number of Days to Update: 27

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 05/06/2015

Next Scheduled EDR Contact: 08/24/2015 Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2015 Date Data Arrived at EDR: 05/12/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 30

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 08/11/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 07/01/2015 Date Data Arrived at EDR: 07/07/2015 Date Made Active in Reports: 08/05/2015

Number of Days to Update: 29

Source: Placer County Health and Human Services

Telephone: 530-745-2363 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/15/2015 Date Data Arrived at EDR: 07/17/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 17

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 07/15/2015 Date Data Arrived at EDR: 07/17/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 17

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/07/2015 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 10

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/07/2015 Date Data Arrived at EDR: 07/27/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 7

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/30/2015 Date Data Arrived at EDR: 07/07/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 7

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 08/10/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013 Date Data Arrived at EDR: 09/24/2013 Date Made Active in Reports: 10/17/2013

Number of Days to Update: 23

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2014 Date Data Arrived at EDR: 11/21/2014 Date Made Active in Reports: 12/29/2014

Number of Days to Update: 38

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 07/22/2015

Next Scheduled EDR Contact: 11/09/2015

Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010

Number of Days to Update: 24

Source: San Diego County Department of Environmental Health

Telephone: 619-338-2371 Last EDR Contact: 06/03/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 10

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 08/06/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010 Date Data Arrived at EDR: 03/10/2011 Date Made Active in Reports: 03/15/2011

Number of Days to Update: 5

Source: Department of Public Health Telephone: 415-252-3920 Last EDR Contact: 08/06/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 07/06/2015

Number of Days to Update: 10

Source: Environmental Health Department

Telephone: N/A

Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 05/22/2015 Date Data Arrived at EDR: 05/26/2015 Date Made Active in Reports: 06/10/2015

Number of Days to Update: 15

Source: San Luis Obispo County Public Health Department

Telephone: 805-781-5596 Last EDR Contact: 05/20/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/20/2015 Date Data Arrived at EDR: 07/22/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 12

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 06/15/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Annually

Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/10/2015 Date Data Arrived at EDR: 06/16/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 06/10/2015

Next Scheduled EDR Contact: 06/29/2015 Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011 Date Data Arrived at EDR: 09/09/2011 Date Made Active in Reports: 10/07/2011

Number of Days to Update: 28

Source: Santa Barbara County Public Health Department

Telephone: 805-686-8167 Last EDR Contact: 05/22/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 06/10/2015 Date Data Arrived at EDR: 06/16/2015 Date Made Active in Reports: 07/10/2015

Number of Days to Update: 24

Source: Department of Environmental Health

Telephone: 408-918-1973 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 22

Source: Santa Clara Valley Water District

Telephone: 408-265-2600 Last EDR Contact: 03/23/2009

Next Scheduled EDR Contact: 06/22/2009

Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014 Date Data Arrived at EDR: 03/05/2014 Date Made Active in Reports: 03/18/2014

Number of Days to Update: 13

Source: Department of Environmental Health

Telephone: 408-918-3417 Last EDR Contact: 06/01/2015

Next Scheduled EDR Contact: 09/14/2015 Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/07/2015 Date Data Arrived at EDR: 05/12/2015 Date Made Active in Reports: 06/08/2015

Number of Days to Update: 27

Source: City of San Jose Fire Department

Telephone: 408-535-7694 Last EDR Contact: 08/07/2015

Next Scheduled EDR Contact: 11/23/2015 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 05/22/2015 Date Data Arrived at EDR: 05/26/2015 Date Made Active in Reports: 06/08/2015

Number of Days to Update: 13

Source: Santa Cruz County Environmental Health

Telephone: 831-464-2761 Last EDR Contact: 05/22/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/12/2015 Date Data Arrived at EDR: 06/16/2015 Date Made Active in Reports: 07/10/2015

Number of Days to Update: 24

Source: Shasta County Department of Resource Management

Telephone: 530-225-5789 Last EDR Contact: 05/26/2015

Next Scheduled EDR Contact: 09/07/2015

Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015 Date Data Arrived at EDR: 06/24/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 20

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 06/10/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2015 Date Data Arrived at EDR: 06/30/2015 Date Made Active in Reports: 07/07/2015

Number of Days to Update: 7

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 06/10/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List

Cupa Facility list

Date of Government Version: 06/22/2015 Date Data Arrived at EDR: 06/26/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 18

Source: County of Sonoma Fire & Emergency Services Department

Telephone: 707-565-1174 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2015 Date Data Arrived at EDR: 07/07/2015 Date Made Active in Reports: 07/14/2015

Number of Days to Update: 7

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 06/22/2015

Next Scheduled EDR Contact: 10/12/2015 Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 06/05/2015 Date Data Arrived at EDR: 06/09/2015 Date Made Active in Reports: 07/06/2015

Number of Days to Update: 27

Source: Sutter County Department of Agriculture

Telephone: 530-822-7500 Last EDR Contact: 06/05/2015

Next Scheduled EDR Contact: 09/21/2015 Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 07/13/2015 Date Data Arrived at EDR: 07/28/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 6

Source: Divison of Environmental Health

Telephone: 209-533-5633 Last EDR Contact: 07/24/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 06/26/2015 Date Data Arrived at EDR: 07/17/2015 Date Made Active in Reports: 08/03/2015

Number of Days to Update: 17

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015 Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012

Number of Days to Update: 49

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 06/26/2015

Next Scheduled EDR Contact: 10/19/2015 Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 37

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 08/12/2015

Next Scheduled EDR Contact: 11/30/2015 Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 04/27/2015 Date Data Arrived at EDR: 04/29/2015 Date Made Active in Reports: 05/13/2015

Number of Days to Update: 14

Source: Ventura County Resource Management Agency

Telephone: 805-654-2813 Last EDR Contact: 07/27/2015

Next Scheduled EDR Contact: 11/09/2015 Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/27/2015 Date Data Arrived at EDR: 06/17/2015 Date Made Active in Reports: 07/06/2015

Number of Days to Update: 19

Source: Environmental Health Division Telephone: 805-654-2813

Last EDR Contact: 06/17/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 07/08/2015 Date Data Arrived at EDR: 07/13/2015 Date Made Active in Reports: 07/22/2015

Number of Days to Update: 9

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 07/06/2015

Next Scheduled EDR Contact: 10/05/2015 Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 05/18/2015 Date Data Arrived at EDR: 05/19/2015 Date Made Active in Reports: 06/05/2015

Number of Days to Update: 17

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523 Last EDR Contact: 07/31/2015

Next Scheduled EDR Contact: 11/16/2015

Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013 Date Data Arrived at EDR: 08/19/2013 Date Made Active in Reports: 10/03/2013

Number of Days to Update: 45

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 05/18/2015

Next Scheduled EDR Contact: 08/31/2015 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 07/17/2015 Date Made Active in Reports: 08/12/2015

Number of Days to Update: 26

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 07/13/2015

Next Scheduled EDR Contact: 10/28/2015 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/01/2015 Date Data Arrived at EDR: 05/06/2015 Date Made Active in Reports: 05/20/2015

Number of Days to Update: 14

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/06/2015

Next Scheduled EDR Contact: 11/16/2015 Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/24/2015 Date Made Active in Reports: 08/18/2015

Number of Days to Update: 25

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 07/20/2015

Next Scheduled EDR Contact: 11/02/2015 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 06/19/2015 Date Made Active in Reports: 07/15/2015

Number of Days to Update: 26

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 05/26/2015

Next Scheduled EDR Contact: 09/07/2015 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 03/19/2015 Date Made Active in Reports: 04/07/2015

Number of Days to Update: 19

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/11/2015

Next Scheduled EDR Contact: 09/28/2015 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation Telephone: 281-546-1505

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation Telephone: 800-823-6277

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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Certified Sanborn® Map Report

8/24/15

Site Name: Client Name:

Fairfield - 1579 Morena Blvd 1579 Morena Blvd San Diego, CA 92110 Advantage Env. Consultants 145 Vallecitos De Oro San Marcos, CA 92069

EDR

EDR Inquiry # 4391457.2 Contact: Scott Schiffer

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Advantage Env. Consultants LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: Fairfield - 1579 Morena Blvd

Address: 1579 Morena Blvd City, State, Zip: San Diego, CA 92110

Cross Street:

P.O. # NA

Project: Fairfield - 1579 Morena Blvd

Certification # DDE9-4163-BB28



Sanborn® Library search results Certification # DDE9-4163-BB28

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

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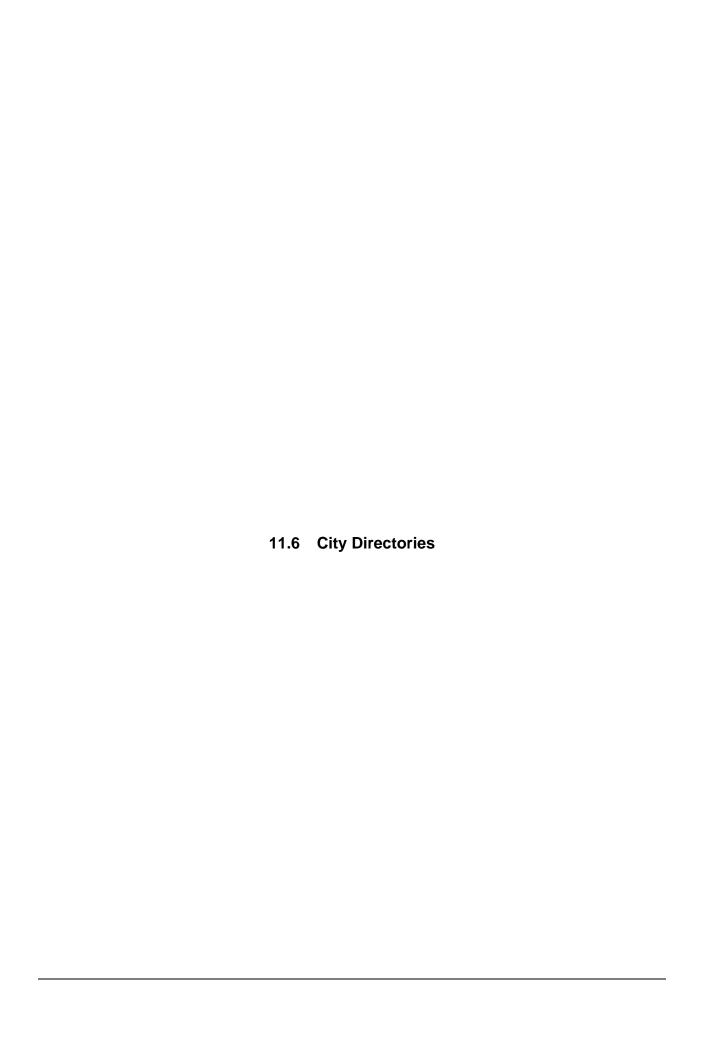
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Fairfield - 1579 Morena Blvd 1579 Morena Blvd San Diego, CA 92110

Inquiry Number: 4391457.4 August 25, 2015

The EDR-City Directory Abstract



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Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING. WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1903 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	Source	<u>TP</u>	<u>Adjoining</u>	Text Abstract	Source Image
2013	Cole Information Services	Χ	X	X	-
2008	Cole Information Services	Χ	X	X	-
2006	Haines Company, Inc.	Χ	X	X	-
2000	Haines & Company	Χ	X	X	X
1995	PACIFIC BELL WHITE PAGES	-	X	X	-
1992	PACIFIC BELL WHITE PAGES	Χ	X	X	-
1991	PACIFIC BELL WHITE PAGES	-	X	X	-
1989	Pacific Bell	Χ	X	X	-
1985	PACIFIC BELL WHITE PAGES	-	X	X	-
1984	R. L. Polk & Co.	Χ	X	X	X
1980	R. L. Polk & Co.	Χ	X	X	X
1976	Luskey Brothers & Co., Inc.	-	-	-	-
1975	R. L. Polk & Co.	Χ	X	X	X
1971	Community Directory Co.	-	-	-	-
1970	John M. Ducy	Χ	X	X	-

EXECUTIVE SUMMARY

<u>Year</u>	Source	<u>TP</u>	<u>Adjoining</u>	Text Abstract	Source Image
1966	R. L. Polk & Co.	Χ	X	X	X
1965	Luskey Brothers Co., Inc.	-	-	-	-
1962	Community Directory Co.	-	-	-	-
1961	R. L. Polk & Co.	Χ	X	X	X
1960	The Pacific Telephone Telegraph Co.	Χ	X	X	-
1956	R. L. Polk & Co.	-	-	-	-
1955	R. L. Polk & Co.	Χ	X	X	-
1952	R. L. Polk & Co. of California	Χ	X	X	X
1950	The Pacific Telephone Telegraph Co.	-	-	-	-
1948	San Diego Directory Co.	-	X	X	X
1945	San Diego Directory Co.	-	X	X	-
1943	San Diego Directory Co.	-	X	X	X
1940	San Diego Directory Co.	-	-	-	-
1938	San Diego Directory Co.	-	-	-	-
1933	San Diego Directory Co.	-	-	-	-
1927	San Diego Directory Co.	-	-	-	-
1921	San Diego Directory Co. Inc.	-	-	-	-
1907	San Diego Directory Co.	-	-	-	-
1903	San Diego Directory Co.	-	-	-	-

TARGET PROPERTY INFORMATION

ADDRESS

1579 Morena Blvd San Diego, CA 92110

FINDINGS DETAIL

Target Property research detail.

MORENA

1579 MORENA

<u>Year</u>	<u>Uses</u>	Source
1960	Bjorken Violet	The Pacific Telephone Telegraph Co.
	Buettner John J	The Pacific Telephone Telegraph Co.
	Burt K O	The Pacific Telephone Telegraph Co.
	Campbell Clewell B	The Pacific Telephone Telegraph Co.
	Campbell Ruth Seavr	The Pacific Telephone Telegraph Co.
	Clausen Hettie L	The Pacific Telephone Telegraph Co.
	Coastal Trailer Villa	The Pacific Telephone Telegraph Co.
	Cornell Carol Ann	The Pacific Telephone Telegraph Co.
	De Juhasz Peter K	The Pacific Telephone Telegraph Co.
	De Lashmitt J C	The Pacific Telephone Telegraph Co.
	Doherty Alecia	The Pacific Telephone Telegraph Co.
	Dornhofer Wm J	The Pacific Telephone Telegraph Co.
	Dressler John W	The Pacific Telephone Telegraph Co.
	Dunn Bert	The Pacific Telephone Telegraph Co.
	Eriksen Lars P	The Pacific Telephone Telegraph Co.
	Espy Betty	The Pacific Telephone Telegraph Co.
	Frazer Pearl Mrs	The Pacific Telephone Telegraph Co.
	Galvin R H	The Pacific Telephone Telegraph Co.
	Gollehur Myrtle	The Pacific Telephone Telegraph Co.
	Green Lloyd	The Pacific Telephone Telegraph Co.
	Gutsch Eva	The Pacific Telephone Telegraph Co.
	Haas Ray C	The Pacific Telephone Telegraph Co.
	Halsted Lyle Wilfred	The Pacific Telephone Telegraph Co.
	Harmount L Pearl	The Pacific Telephone Telegraph Co.
	Hauck W A Mrs	The Pacific Telephone Telegraph Co.
	Hunt R W Ron	The Pacific Telephone Telegraph Co.

<u>Year</u>	<u>Uses</u>	Source
1960	Jones Marguerite	The Pacific Telephone Telegraph Co.
	Kaminski Albert	The Pacific Telephone Telegraph Co.
	Licht Elsie Mrs	The Pacific Telephone Telegraph Co.
	Macy Walter J	The Pacific Telephone Telegraph Co.
	Mairson Robt A	The Pacific Telephone Telegraph Co.
	Mann Harry A	The Pacific Telephone Telegraph Co.
	Martinis John	The Pacific Telephone Telegraph Co.
	Mason Evon	The Pacific Telephone Telegraph Co.
	Mc Fadden Laura C	The Pacific Telephone Telegraph Co.
	Mendenhall Fred T	The Pacific Telephone Telegraph Co.
	Meyer Donald	The Pacific Telephone Telegraph Co.
	Mitchum Thos F	The Pacific Telephone Telegraph Co.
	Nymann Walter	The Pacific Telephone Telegraph Co.
	Oppenheimer Carl H	The Pacific Telephone Telegraph Co.
	Patterson Warren W	The Pacific Telephone Telegraph Co.
	Pihi Cora M Mrs	The Pacific Telephone Telegraph Co.
	Roth Bennie	The Pacific Telephone Telegraph Co.
	Schaible Robt E	The Pacific Telephone Telegraph Co.
	Smith Carolyn E Mrs	The Pacific Telephone Telegraph Co.
	Smith Thos E	The Pacific Telephone Telegraph Co.
	Staples Ralph B	The Pacific Telephone Telegraph Co.
	Starr Arthur B Mrs	The Pacific Telephone Telegraph Co.
	Sundelin Frans E	The Pacific Telephone Telegraph Co.
	Travis Wm	The Pacific Telephone Telegraph Co.
	Trudersheim Blanche	The Pacific Telephone Telegraph Co.
	Van Dyke Elizabeth A	The Pacific Telephone Telegraph Co.
	Walraven Mabel I	The Pacific Telephone Telegraph Co.
	Walraven Vernon A	The Pacific Telephone Telegraph Co.
	Woods Bob	The Pacific Telephone Telegraph Co.
	Woods Claude E	The Pacific Telephone Telegraph Co.
	Zilly Fred S	The Pacific Telephone Telegraph Co.
1955	Baker John H	R. L. Polk & Co.
	Beyer R M	R. L. Polk & Co.
	Campbell Clewell B	R. L. Polk & Co.
	Campbell Ruth Seaver	R. L. Polk & Co.
	Clausen Hettie L	R. L. Polk & Co.
	Coastal Trailer Villa	R. L. Polk & Co.
	Cochrane Rose Mrs	R. L. Polk & Co.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1955	Cook L E	R. L. Polk & Co.
	Cummings John T	R. L. Polk & Co.
	De Lashmitt J C	R. L. Polk & Co.
	Dressler J W	R. L. Polk & Co.
	Dressler John W	R. L. Polk & Co.
	Eastman Lawrence J	R. L. Polk & Co.
	Gollehur Myrtle	R. L. Polk & Co.
	Grimley W H	R. L. Polk & Co.
	Harmount L Pearl	R. L. Polk & Co.
	Haslanger David A	R. L. Polk & Co.
	Hauck W A Mrs	R. L. Polk & Co.
	King C D	R. L. Polk & Co.
	Kuykendoll Jas	R. L. Polk & Co.
	Lagerblade John L	R. L. Polk & Co.
	Lewellen P R Jr	R. L. Polk & Co.
	Macy W J	R. L. Polk & Co.
	Mendenhall Fred T	R. L. Polk & Co.
	Mottram P E	R. L. Polk & Co.
	Oppenheimer Carl H	R. L. Polk & Co.
	Parker Donald	R. L. Polk & Co.
	Ratz Arthur L Lt	R. L. Polk & Co.
	Row Howard C	R. L. Polk & Co.
	S D Merchants Patrol	R. L. Polk & Co.
	Sides Vera	R. L. Polk & Co.
	Smith Stanley S	R. L. Polk & Co.
	Starr Arthur B Mrs	R. L. Polk & Co.
	Stout Theo S	R. L. Polk & Co.
	Vassar Forest D	R. L. Polk & Co.
	Walker Cletus L	R. L. Polk & Co.
	Walters Hugh	R. L. Polk & Co.
	Woods Bob	R. L. Polk & Co.
	Wright Esther F	R. L. Polk & Co.

MORENA BLVD

1579 MORENA BLVD

-	<u>Year</u>	<u>Uses</u>	<u>Source</u>
2	2013	COASTAL TRAILER VILLA	Cole Information Services
2	2008	COASTAL TRAILER VILLA PARK	Cole Information Services

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2008	JD GARAGE DOOR INSTALLERS	Cole Information Services	
	SPORTS LEAGUE	Cole Information Services	
2006	CAMPBELL James	Haines Company, Inc.	
	COASTAL TRLR VLA EATES Wilbur	Haines Company, Inc.	
	COASTALTRLR	Haines Company, Inc.	
	FREEMAN Craig	Haines Company, Inc.	
	GRENDHAL Phillip	Haines Company, Inc.	
	HETTELSATTER	Haines Company, Inc.	
	MADRUGA Margaret	Haines Company, Inc.	
	MORRISON Bemard S	Haines Company, Inc.	
	OVREBO Laeny	Haines Company, Inc.	
	POG E William	Haines Company, Inc.	
	SCHOBERG Thomas	Haines Company, Inc.	
	Scot KENNEDY Nancy	Haines Company, Inc.	
	SILVA Larry D	Haines Company, Inc.	
	VILLA DUARTE Ezequiel	Haines Company, Inc.	
2000	BUTLER Gaen	Haines & Company	Image pg. A1
	COASTAL TRLR VLA	Haines & Company	Image pg. A1
	COASTALTRLR VILLA	Haines & Company	Image pg. A1
	COOPER MD	Haines & Company	Image pg. A1
	LASH Norman J	Haines & Company	Image pg. A1
	LEE Robert E	Haines & Company	Image pg. A1
	MUSGROVE Susan A	Haines & Company	Image pg. A1
	NEVESJoseph A	Haines & Company	Image pg. A1
	PODLESNYGreg A	Haines & Company	Image pg. A1
	SCHMITTER Ruth	Haines & Company	Image pg. A1
	SCHOBERGThomas	Haines & Company	Image pg. A1
	SILVA Larry D	Haines & Company	Image pg. A1
	THOMPSON Leon	Haines & Company	Image pg. A1
	THOMPSON Patty	Haines & Company	Image pg. A1
1992	Baker GR	PACIFIC BELL WHITE PAGES	
	Butler Gene	PACIFIC BELL WHITE PAGES	
	Coastal Trailer Villa	PACIFIC BELL WHITE PAGES	
	Cochrane Robt M	PACIFIC BELL WHITE PAGES	
	Cooper MD	PACIFIC BELL WHITE PAGES	
	Dunlap John	PACIFIC BELL WHITE PAGES	
	Furda Juraj	PACIFIC BELL WHITE PAGES	
	Lesicka Michael	PACIFIC BELL WHITE PAGES	

<u>Year</u>	<u>Uses</u>	Source
1992	Lesicka Rex Marvin P O Box 16746	PACIFIC BELL WHITE PAGES
	Ogle Grady	PACIFIC BELL WHITE PAGES
	Owens Danny	PACIFIC BELL WHITE PAGES
	Roeske F	PACIFIC BELL WHITE PAGES
	Roth Bennie	PACIFIC BELL WHITE PAGES
	Saba Jud R	PACIFIC BELL WHITE PAGES
	Schoberg Thomas	PACIFIC BELL WHITE PAGES
	Silva Larry	PACIFIC BELL WHITE PAGES
	Strattman Allan P	PACIFIC BELL WHITE PAGES
	Strattman Denise	PACIFIC BELL WHITE PAGES
	Tannouri Jamil A	PACIFIC BELL WHITE PAGES
	Tanny C	PACIFIC BELL WHITE PAGES
	Terry Frank	PACIFIC BELL WHITE PAGES
1989	Astor I	Pacific Bell
	Baker G R	Pacific Bell
	Barnes Wm	Pacific Bell
	Belles Douglas W	Pacific Bell
	Butler Gene	Pacific Bell
	Coastal Trailer Villa	Pacific Bell
	Cochrane Robt M	Pacific Bell
	Considine Virginia	Pacific Bell
	Cooper M D	Pacific Bell
	Dunlap John	Pacific Bell
	Dunnivant Sam	Pacific Bell
	Furda Juraj	Pacific Bell
	Gongora Jesus	Pacific Bell
	Gutsch E	Pacific Bell
	Lackey Jewell	Pacific Bell
	Lawrie Wm M	Pacific Bell
	Le Page Ernest	Pacific Bell
	Lesicka Michael	Pacific Bell
	Lytle Bill	Pacific Bell
	Maddox Lett	Pacific Bell
	Ogle Grady	Pacific Bell
	Owens Danny	Pacific Bell
	Priseler B Nawassa	Pacific Bell
	Roberts Gary	Pacific Bell
	Roeske F	Pacific Bell

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1989	Roth Bennie	Pacific Bell	
	Saba Jud R	Pacific Bell	
	Schoberg Thos	Pacific Bell	
	Scott Michael R	Pacific Bell	
	Silva Larry D	Pacific Bell	
	Slason John L C	Pacific Bell	
	Strattman Allan P	Pacific Bell	
	Tannouri Jamil A	Pacific Bell	
	Terry Frank	Pacific Bell	
1984	A 1 Volker Norman	R. L. Polk & Co.	Image pg. A5
	A 11 Baldwin Libbie Mrs	R. L. Polk & Co.	Image pg. A5
	A 13 Waddell Geo E	R. L. Polk & Co.	Image pg. A5
	A 15 Vacant	R. L. Polk & Co.	Image pg. A5
	A 17 Turner Barbara	R. L. Polk & Co.	Image pg. A5
	A 19 El Zapeda Roy	R. L. Polk & Co.	Image pg. A5
	A 3 Staples Ralph B	R. L. Polk & Co.	Image pg. A5
	A 5 Barnes Wm	R. L. Polk & Co.	Image pg. A5
	A 9 Purvis E A Mrs	R. L. Polk & Co.	Image pg. A5
	B 1 Bester Harold	R. L. Polk & Co.	Image pg. A5
	B 10 Trudersheim Blanche Mrs	R. L. Polk & Co.	Image pg. A5
	B 11 Garcia Jessie	R. L. Polk & Co.	Image pg. A5
	B 12 Bender Clifford J	R. L. Polk & Co.	Image pg. A5
	B 13 Gongora Jesus	R. L. Polk & Co.	Image pg. A5
	B 14 No Return	R. L. Polk & Co.	Image pg. A5
	B 15 Walsh Rose	R. L. Polk & Co.	Image pg. A5
	B 16 Baker Florence Mrs	R. L. Polk & Co.	Image pg. A5
	B 17 Lesicka Sally	R. L. Polk & Co.	Image pg. A5
	B 18 Maddox Lettard	R. L. Polk & Co.	Image pg. A5
	B 19 Davis Bernice	R. L. Polk & Co.	Image pg. A5
	B 2 Jones Grace Mrs	R. L. Polk & Co.	Image pg. A5
	B 20 Lytle Bill	R. L. Polk & Co.	Image pg. A5
	B 3 Smelser Roger	R. L. Polk & Co.	Image pg. A5
	B 4 Murphy Jack	R. L. Polk & Co.	Image pg. A5
	B 5 Hill Gary	R. L. Polk & Co.	Image pg. A5
	B 6 Mc Vey Vernon	R. L. Polk & Co.	Image pg. A5
	B 7 Gutsch Eva Mrs	R. L. Polk & Co.	Image pg. A5
	B 8 Jerome E A	R. L. Polk & Co.	Image pg. A5
	B 9 Johnson John S	R. L. Polk & Co.	Image pg. A5

<u>Year</u>	<u>Uses</u>	Source	
1984	Barrett H C	R. L. Polk & Co.	Image pg. A5
	C 1 Barber Ralph	R. L. Polk & Co.	Image pg. A5
	C 10 Sowa Adam	R. L. Polk & Co.	Image pg. A5
	C 11 Bradley D Patk	R. L. Polk & Co.	Image pg. A5
	C 12 Lovejoy Mary	R. L. Polk & Co.	Image pg. A5
	C 13 Pugh Bill	R. L. Polk & Co.	Image pg. A5
	C 14 Mairson Helen Mrs	R. L. Polk & Co.	Image pg. A5
	C 15 Cooper M D	R. L. Polk & Co.	Image pg. A5
	C 16 Priseler Wassa	R. L. Polk & Co.	Image pg. A5
	C 17 No Return	R. L. Polk & Co.	Image pg. A5
	C 18 Considine Virginia K Mrs	R. L. Polk & Co.	Image pg. A5
	C 19 Phoalsawasdi Suthep	R. L. Polk & Co.	Image pg. A5
	C 2 Rodarte Manuel	R. L. Polk & Co.	Image pg. A5
	C 20 Harrison James	R. L. Polk & Co.	Image pg. A5
	C 21 Keeney Hazel G Mrs	R. L. Polk & Co.	Image pg. A5
	C 23 Wolfe Ruth V	R. L. Polk & Co.	Image pg. A5
	C 3 Robertson Scott	R. L. Polk & Co.	Image pg. A5
	C 4 Roth Benj	R. L. Polk & Co.	Image pg. A5
	C 5 Hood Paul	R. L. Polk & Co.	Image pg. A5
	C 6 Strattman Allan P	R. L. Polk & Co.	Image pg. A5
	C 7 Westlake Edgar	R. L. Polk & Co.	Image pg. A5
	C 9 Terry Frank E	R. L. Polk & Co.	Image pg. A5
	Coastal Trailer Villa	R. L. Polk & Co.	Image pg. A5
	D 1 Newton Craig L	R. L. Polk & Co.	Image pg. A5
	D 10 Geisler Ken	R. L. Polk & Co.	Image pg. A5
	D 11 Sefcyk Anthony F	R. L. Polk & Co.	Image pg. A5
	D 12 Vacant	R. L. Polk & Co.	Image pg. A5
	D 13 Slason John L	R. L. Polk & Co.	Image pg. A5
	D 14 Geisler Paul	R. L. Polk & Co.	Image pg. A5
	D 15 Hill Russell	R. L. Polk & Co.	Image pg. A5
	D 16 Kuehl Helen Mrs	R. L. Polk & Co.	Image pg. A5
	D 17 Clark Dorothy S	R. L. Polk & Co.	Image pg. A5
	D 18 Dornhafer Helen	R. L. Polk & Co.	Image pg. A5
	D 19 Huffman Gertrude Mrs	R. L. Polk & Co.	Image pg. A5
	D 2 Barber Frank	R. L. Polk & Co.	Image pg. A5
	D 20 Doyle Steven	R. L. Polk & Co.	Image pg. A5
	D 21 Moore Margt	R. L. Polk & Co.	Image pg. A5
	D 22 Adams Sylvia A	R. L. Polk & Co.	Image pg. A5

<u>Year</u>	<u>Uses</u>	Source	
1984	D 23 Grier J Robt	R. L. Polk & Co.	Image pg. A5
	D 24 Vacant	R. L. Polk & Co.	Image pg. A5
	D 25 Vacant	R. L. Polk & Co.	Image pg. A5
	D 3 Parker James R	R. L. Polk & Co.	Image pg. A5
	D 4 Saba Jud R	R. L. Polk & Co.	Image pg. A5
	D 5 Morrisson Harold	R. L. Polk & Co.	Image pg. A5
	D 6 Hale Bob	R. L. Polk & Co.	Image pg. A5
	D 7 No Return	R. L. Polk & Co.	Image pg. A5
	D 8 Kelsay Bud	R. L. Polk & Co.	Image pg. A5
	D 9 Delaney Ruth	R. L. Polk & Co.	Image pg. A5
	E 10 Vacant	R. L. Polk & Co.	Image pg. A5
	E 12 Vacant	R. L. Polk & Co.	Image pg. A5
	E 14 Phebus D	R. L. Polk & Co.	Image pg. A5
	E 16 Castle Vickie	R. L. Polk & Co.	Image pg. A5
	E 18 Hass Margt D	R. L. Polk & Co.	Image pg. A5
	E 2 Wrona John J	R. L. Polk & Co.	Image pg. A5
	E 20 Belles Douglas W	R. L. Polk & Co.	Image pg. A5
	E 22 Hastings Paul	R. L. Polk & Co.	Image pg. A5
	E 24 Weber Dorothy L	R. L. Polk & Co.	Image pg. A5
	E 26 Coughlin David P	R. L. Polk & Co.	Image pg. A5
	E 4 Ogle Grady	R. L. Polk & Co.	Image pg. A5
	E 6 Allen Clement	R. L. Polk & Co.	Image pg. A5
	E 8 Ward Paul	R. L. Polk & Co.	Image pg. A5
	Leffler James	R. L. Polk & Co.	Image pg. A5
	Martin C L	R. L. Polk & Co.	Image pg. A5
	SPACES	R. L. Polk & Co.	Image pg. A5
1980	A 13 Garrett Aris	R. L. Polk & Co.	Image pg. A10
	A 19 N E 1 Zapeda Roy	R. L. Polk & Co.	Image pg. A10
	B 10 Trudersheim Blanche Mrs	R. L. Polk & Co.	Image pg. A10
	B 12 Bender Clifford J	R. L. Polk & Co.	Image pg. A10
	B 13 Me Bride James	R. L. Polk & Co.	Image pg. A10
	B 14a Waddell Geo	R. L. Polk & Co.	Image pg. A10
	B 15 Walsh Rose	R. L. Polk & Co.	Image pg. A10
	B 16 Baker Florence Mrs	R. L. Polk & Co.	Image pg. A11
	B 17 N Lesicka Sally	R. L. Polk & Co.	Image pg. A11
	B 18 Maddox Lett	R. L. Polk & Co.	Image pg. A11
	B 19 N Davis Bernard	R. L. Polk & Co.	Image pg. A11
	B 2 Jones Grace Mrs	R. L. Polk & Co.	Image pg. A10

<u>Year</u>	<u>Uses</u>	Source	
1980	B 20 Vacant	R. L. Polk & Co.	Image pg. A11
	B 3 OConnell Raymond	R. L. Polk & Co.	Image pg. A10
	B 4 Murphy Jack	R. L. Polk & Co.	Image pg. A10
	B 5 Hill Gary	R. L. Polk & Co.	Image pg. A10
	B 6 De Juhaaz Pete	R. L. Polk & Co.	Image pg. A10
	B 7 Gutsch Eva Mrs	R. L. Polk & Co.	Image pg. A10
	B 8 Pollard Greg S	R. L. Polk & Co.	Image pg. A10
	B 9 Johnson John S	R. L. Polk & Co.	Image pg. A10
	Baldwin Libbie Mrs	R. L. Polk & Co.	Image pg. A10
	Barnes Wm	R. L. Polk & Co.	Image pg. A10
	Bedford Robt I	R. L. Polk & Co.	Image pg. A11
	BII N Garcia Jessie	R. L. Polk & Co.	Image pg. A10
	C 01 Bradley D Patk	R. L. Polk & Co.	Image pg. A11
	C 10 N Sowa Adam	R. L. Polk & Co.	Image pg. A11
	C 12 N Lovejoy Mary	R. L. Polk & Co.	Image pg. A11
	C 13 Pugh Bill	R. L. Polk & Co.	Image pg. A11
	C 14 Mairson Helen Mrs	R. L. Polk & Co.	Image pg. A11
	C 15 Cooper M D	R. L. Polk & Co.	Image pg. A11
	C 16 Priseler Wassa	R. L. Polk & Co.	Image pg. A11
	C 17 No Return	R. L. Polk & Co.	Image pg. A11
	C 18 Considine Virginia K Mrs	R. L. Polk & Co.	Image pg. A11
	C 19 N Lamonte Eug	R. L. Polk & Co.	Image pg. A11
	C 2 Rodarte Manuel	R. L. Polk & Co.	Image pg. A11
	C 20 Dunn Mary Mrs	R. L. Polk & Co.	Image pg. A11
	C 21 Keeney Hazel G Mrs	R. L. Polk & Co.	Image pg. A11
	C 23 Wolfe Ruth V	R. L. Polk & Co.	Image pg. A11
	C 3 Vacant	R. L. Polk & Co.	Image pg. A11
	C 4 Roth Benj	R. L. Polk & Co.	Image pg. A11
	C 5 Hood Paul	R. L. Polk & Co.	Image pg. A11
	C 7 Westlake Edgar	R. L. Polk & Co.	Image pg. A11
	C 9 Terry Frank E	R. L. Polk & Co.	Image pg. A11
	Coastal Trailer Villa	R. L. Polk & Co.	Image pg. A10
	D 1 N Newton Craig	R. L. Polk & Co.	Image pg. A11
	D 12 Vacant	R. L. Polk & Co.	Image pg. A11
	D 13 Worle y Virginia Mrs	R. L. Polk & Co.	Image pg. A11
	D 14 Geisler Ken	R. L. Polk & Co.	Image pg. A11
	D 15 Hill Russell	R. L. Polk & Co.	Image pg. A11
	D 16 Kuehl Helen Mrs	R. L. Polk & Co.	Image pg. A11

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<u>Year</u>	<u>Uses</u>	Source	
1980	D 17 Clark Dorothy S	R. L. Polk & Co.	Image pg. A11
	D 18 Dornhafer Helen	R. L. Polk & Co.	Image pg. A11
	D 19 Huffman Gertrude Mrs	R. L. Polk & Co.	Image pg. A11
	D 2 Barber Frank	R. L. Polk & Co.	Image pg. A11
	D 21 N Moore Margt	R. L. Polk & Co.	Image pg. A11
	D 22 N Adams Sylvia A	R. L. Polk & Co.	Image pg. A11
	D 24 Vacant	R. L. Polk & Co.	Image pg. A11
	D 25 Roberts John	R. L. Polk & Co.	Image pg. A11
	D 3 Beckfield Lucille L	R. L. Polk & Co.	Image pg. A11
	D 4 Saba Jud R	R. L. Polk & Co.	Image pg. A11
	D 5 N Morrisson Harold	R. L. Polk & Co.	Image pg. A11
	D 7 No Return	R. L. Polk & Co.	Image pg. A11
	D 9 Delaney Ruth	R. L. Polk & Co.	Image pg. A11
	Dii Sefcyk Anthony F	R. L. Polk & Co.	Image pg. A11
	DZO N Doyle Steven	R. L. Polk & Co.	Image pg. A11
	E 10 Vacant	R. L. Polk & Co.	Image pg. A11
	E 12 Jakaboski Donald	R. L. Polk & Co.	Image pg. A11
	E 14 Morissey John	R. L. Polk & Co.	Image pg. A11
	E 16 Castle Vickie	R. L. Polk & Co.	Image pg. A11
	E 18 Hass Margt D	R. L. Polk & Co.	Image pg. A11
	E 2 Wrona John J	R. L. Polk & Co.	Image pg. A11
	E 20 Belles Douglas W	R. L. Polk & Co.	Image pg. A11
	E 22 Hastings Paul	R. L. Polk & Co.	Image pg. A11
	E 24 N Weber Dorothy L	R. L. Polk & Co.	Image pg. A11
	E 26 Coughlin David P	R. L. Polk & Co.	Image pg. A11
	E 6 Allen Clement	R. L. Polk & Co.	Image pg. A11
	E 8 Ward Paul	R. L. Polk & Co.	Image pg. A11
	Grier J Robt	R. L. Polk & Co.	Image pg. A11
	Hale Bob	R. L. Polk & Co.	Image pg. A11
	Kotlinek Ann B Mrs	R. L. Polk & Co.	Image pg. A10
	I N Volker Norman	R. L. Polk & Co.	Image pg. A10
	Leffler James	R. L. Polk & Co.	Image pg. A10
	N Barber Ralph	R. L. Polk & Co.	Image pg. A11
	N Martin C L	R. L. Polk & Co.	Image pg. A10
	Ogle Grady	R. L. Polk & Co.	Image pg. A11
	Purvis E A Mrs	R. L. Polk & Co.	Image pg. A10
	SPACES	R. L. Polk & Co.	Image pg. A10
	Staples Ralph B	R. L. Polk & Co.	Image pg. A10

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1980	Strattman Allan P	R. L. Polk & Co.	Image pg. A11
	Thomson Frank J	R. L. Polk & Co.	Image pg. A11
	Vacant	R. L. Polk & Co.	Image pg. A10
	Vacant	R. L. Polk & Co.	Image pg. A11
	White Gloyd M	R. L. Polk & Co.	Image pg. A10
1975	A 13 Wallace Wm A	R. L. Polk & Co.	Image pg. A16
	A 19 Gonzalez Blanca Mrs	R. L. Polk & Co.	Image pg. A16
	B 10 Trudersheim Blanche Mrs	R. L. Polk & Co.	Image pg. A16
	B 11 Freeland Laura Mrs	R. L. Polk & Co.	Image pg. A16
	B 12 Bender Clifford J	R. L. Polk & Co.	Image pg. A16
	B 13 Me Bride James	R. L. Polk & Co.	Image pg. A16
	B 14 Henning Geo	R. L. Polk & Co.	Image pg. A16
	B 15 Vacant	R. L. Polk & Co.	Image pg. A16
	B 16 Baker Mary Mrs	R. L. Polk & Co.	Image pg. A16
	B 17 Leum Mary	R. L. Polk & Co.	Image pg. A16
	B 18 Clement A C	R. L. Polk & Co.	Image pg. A16
	B 19 Welch C P	R. L. Polk & Co.	Image pg. A16
	B 2 Jones Grace Mrs	R. L. Polk & Co.	Image pg. A16
	B 20 Donaghy Chester	R. L. Polk & Co.	Image pg. A16
	B 3 Compare Thos	R. L. Polk & Co.	Image pg. A16
	B 4 Murphy Jack	R. L. Polk & Co.	Image pg. A16
	B 5 Sows Adam P	R. L. Polk & Co.	Image pg. A16
	B 6 De Juhasz Pete	R. L. Polk & Co.	Image pg. A16
	B 7 Gutsch Eva Mrs	R. L. Polk & Co.	Image pg. A16
	B 8 Anderson Donal R	R. L. Polk & Co.	Image pg. A16
	B 9 Johnson John S	R. L. Polk & Co.	Image pg. A16
	Baldwin Libbie Mrs	R. L. Polk & Co.	Image pg. A16
	Barnes Wm	R. L. Polk & Co.	Image pg. A16
	C 10 Cleaver Charles D	R. L. Polk & Co.	Image pg. A16
	C 11 Walsh Cyril	R. L. Polk & Co.	Image pg. A16
	C 12 Green Lloyd	R. L. Polk & Co.	Image pg. A16
	C 13 Souder Albert T Jr	R. L. Polk & Co.	Image pg. A16
	C 14 Mairson Helen Mrs	R. L. Polk & Co.	Image pg. A16
	C 15 Jacobson John A	R. L. Polk & Co.	Image pg. A16
	C 16 Henderson Ethel	R. L. Polk & Co.	Image pg. A16
	C 17 Palmer Bill	R. L. Polk & Co.	Image pg. A16
	C 18 Considine Virginia	R. L. Polk & Co.	Image pg. A16
	C 19 Buchanan Virginia Mrs	R. L. Polk & Co.	Image pg. A16

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<u>Year</u>	<u>Uses</u>	Source	
1975	C 2 Mc Cluan Virginia M	R. L. Polk & Co.	Image pg. A16
	C 20 Dunn Bert	R. L. Polk & Co.	Image pg. A16
	C 21 Keeney Hazel Mrs	R. L. Polk & Co.	Image pg. A16
	C 22 Vacant	R. L. Polk & Co.	Image pg. A16
	C 23 No Return	R. L. Polk & Co.	Image pg. A16
	C 3 Martin James F	R. L. Polk & Co.	Image pg. A16
	C 4 Roth Benj	R. L. Polk & Co.	Image pg. A16
	C 5 Hood Paul	R. L. Polk & Co.	Image pg. A16
	C 7 Westlake Edgar	R. L. Polk & Co.	Image pg. A16
	C 8 Crowley Loretta J Mrs	R. L. Polk & Co.	Image pg. A16
	C 9 Terry Frank E	R. L. Polk & Co.	Image pg. A16
	Coastal Trailer Villa	R. L. Polk & Co.	Image pg. A16
	D 1 Johnson Clarence E	R. L. Polk & Co.	Image pg. A16
	D 11 Perry Della Mrs	R. L. Polk & Co.	Image pg. A16
	D 12 Geis Floyd	R. L. Polk & Co.	Image pg. A16
	D 13 Worley Virginia Mrs	R. L. Polk & Co.	Image pg. A16
	D 14 Menogue M F	R. L. Polk & Co.	Image pg. A16
	D 15 Hill Russell	R. L. Polk & Co.	Image pg. A16
	D 16 Kuehl Helen Mrs	R. L. Polk & Co.	Image pg. A16
	D 17 Clark Dorothy S	R. L. Polk & Co.	Image pg. A16
	D 18 Dornhoffer Wm J	R. L. Polk & Co.	Image pg. A16
	D 19 Smith W K	R. L. Polk & Co.	Image pg. A16
	D 2 Simons Geo W	R. L. Polk & Co.	Image pg. A16
	D 20 Doyle Steve	R. L. Polk & Co.	Image pg. A16
	D 21 Mc Elvain Paul	R. L. Polk & Co.	Image pg. A16
	D 22 Vacant	R. L. Polk & Co.	Image pg. A16
	D 24 Barber Ralph	R. L. Polk & Co.	Image pg. A16
	D 25 Tallman Margt Mrs	R. L. Polk & Co.	Image pg. A16
	D 3 Beckfield Lucille L	R. L. Polk & Co.	Image pg. A16
	D 4 Saba Jud	R. L. Polk & Co.	Image pg. A16
	D 5 Campbe U Fred	R. L. Polk & Co.	Image pg. A16
	D 7 Souder Albert T	R. L. Polk & Co.	Image pg. A16
	D 9 Delaney Ruth	R. L. Polk & Co.	Image pg. A16
	E 10 Noble H D	R. L. Polk & Co.	Image pg. A16
	E 12 Capps Orville E	R. L. Polk & Co.	Image pg. A16
	E 14 Lindberg Mark	R. L. Polk & Co.	Image pg. A16
	E 16 Robinson Ruth	R. L. Polk & Co.	Image pg. A16
	E 18 Haas Larry	R. L. Polk & Co.	Image pg. A16

<u>Year</u>	<u>Uses</u>	Source	
1975	E 2 Mahenay Lee	R. L. Polk & Co.	Image pg. A16
	E 20 Belles Douglas W	R. L. Polk & Co.	Image pg. A16
	E 22 Lackey Leonard	R. L. Polk & Co.	Image pg. A16
	E 24 Shaible Robt E	R. L. Polk & Co.	Image pg. A16
	E 26 Coughlin David P	R. L. Polk & Co.	Image pg. A16
	E 6 Allen Clement	R. L. Polk & Co.	Image pg. A16
	E 8 Ward Paul	R. L. Polk & Co.	Image pg. A16
	Ellis Daymon	R. L. Polk & Co.	Image pg. A16
	Gates Donald W Jr	R. L. Polk & Co.	Image pg. A16
	Grier J Robt	R. L. Polk & Co.	Image pg. A16
	Hale Bob	R. L. Polk & Co.	Image pg. A16
	Hart Otis	R. L. Polk & Co.	Image pg. A16
	Jenkins Harry	R. L. Polk & Co.	Image pg. A16
	Kotlinek Ann B Mrs	R. L. Polk & Co.	Image pg. A16
	Mitchell David R	R. L. Polk & Co.	Image pg. A16
	Moneypenny E C	R. L. Polk & Co.	Image pg. A16
	Ogle Grady	R. L. Polk & Co.	Image pg. A16
	Purvis C E	R. L. Polk & Co.	Image pg. A16
	Quick Daisy Mrs	R. L. Polk & Co.	Image pg. A16
	Ruckles John L	R. L. Polk & Co.	Image pg. A16
	Staples Ralph B	R. L. Polk & Co.	Image pg. A16
	Sturtevant H M	R. L. Polk & Co.	Image pg. A16
1970	COASTAL TRAILER VILLA	John M. Ducy	
1966	COASTAL TRAILER SLS	R. L. Polk & Co.	Image pg. A21
	COASTAL TRAILER VILLA	R. L. Polk & Co.	Image pg. A21
	OCONNELL LAWRENCE	R. L. Polk & Co.	Image pg. A21
1961	Coastal Trailer SIs	R. L. Polk & Co.	Image pg. A27
	Coastal Trailer Villa	R. L. Polk & Co.	Image pg. A27
	Mendenhall Fred T	R. L. Polk & Co.	Image pg. A27
1952	Brackett H S	R. L. Polk & Co. of California	Image pg. A32
	Brochek J C	R. L. Polk & Co. of California	Image pg. A32
	Cochrane Rose Mrs	R. L. Polk & Co. of California	Image pg. A32
	Costal Tralier Villa	R. L. Polk & Co. of California	Image pg. A32
	Craighead T C	R. L. Polk & Co. of California	Image pg. A32
	Delvida John	R. L. Polk & Co. of California	Image pg. A32
	Downs C H	R. L. Polk & Co. of California	Image pg. A32
	Dressler Jack	R. L. Polk & Co. of California	Image pg. A32
	Freed Clyde B	R. L. Polk & Co. of California	Image pg. A32

<u>Year</u>	<u>Uses</u>	Source	
1952	Horner L R	R. L. Polk & Co. of California	Image pg. A32
	Macy W J	R. L. Polk & Co. of California	Image pg. A32
	Mendenhall F T	R. L. Polk & Co. of California	Image pg. A32
	Sanchez G R	R. L. Polk & Co. of California	Image pg. A32
	Shannon E W	R. L. Polk & Co. of California	Image pg. A32
	Starr E B Mrs	R. L. Polk & Co. of California	Image pg. A32
	Stroud Claude	R. L. Polk & Co. of California	Image pg. A32
	Wall B C	R. L. Polk & Co. of California	Image pg. A32
	Wilkes C W	R. L. Polk & Co. of California	Image pg. A32
	Woods H J	R. L. Polk & Co. of California	Image pg. A32

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

FRANKFORT ST

1325 FRANKFORT ST

<u>Year</u>	<u>Uses</u>	Source	
2006	SANTOS Gerardo	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A2
1992	Drum Leslie	PACIFIC BELL WHITE PAGES	
	Drum Otto L	PACIFIC BELL WHITE PAGES	
	I Drum R R	PACIFIC BELL WHITE PAGES	
	Ott Mary E	PACIFIC BELL WHITE PAGES	
1989	Ott Mary E	Pacific Bell	
	Drum Les Electric	Pacific Bell	
1984	Ott Mary E Mrs	R. L. Polk & Co.	Image pg. A6
1980	Ott Mary E Mrs	R. L. Polk & Co.	Image pg. A12
1975	Ott Mary E Mrs	R. L. Polk & Co.	Image pg. A17
1970	OTT JOHN F	John M. Ducy	
1966	OTT JOHN F	R. L. Polk & Co.	Image pg. A22
1961	Ott John F	R. L. Polk & Co.	Image pg. A28
1952	Evans J W	R. L. Polk & Co. of California	Image pg. A33

1331 FRANKFORT ST

<u>Year</u>	<u>Uses</u>	Source	
2006	ONEAL Natalle	Haines Company, Inc.	
	ONEALNatalle	Haines Company, Inc.	
1984	White Ora L	R. L. Polk & Co.	Image pg. A6
1980	White Ora L	R. L. Polk & Co.	Image pg. A12
1975	White Ora L	R. L. Polk & Co.	Image pg. A17
1970	WHITE ORA L	John M. Ducy	
1966	WHITE ORA L	R. L. Polk & Co.	Image pg. A22
1961	White Ora L	R. L. Polk & Co.	Image pg. A28
1952	White O L	R. L. Polk & Co. of California	Image pg. A33

1339 FRANKFORT ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2006	INLOW Mada	Haines Company, Inc.

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2000	INLOW Maria L	Haines & Company	Image pg. A2
1984	No Return	R. L. Polk & Co.	Image pg. A6
1980	No Return	R. L. Polk & Co.	Image pg. A12
1975	Inlow Clarence W	R. L. Polk & Co.	Image pg. A17
1970	NO RETURN	John M. Ducy	
1966	WATTS GERTRUDE M MRS	R. L. Polk & Co.	Image pg. A22
1961	Allen Bernard F	R. L. Polk & Co.	Image pg. A28
1952	Allen B F	R. L. Polk & Co. of California	Image pg. A33
1347 FRA	NKFORT ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	STEPHENS LOFTI 00 a	Haines Company, Inc.	
	Sally	Haines Company, Inc.	
2000	STEPHENSSally	Haines & Company	Image pg. A2
1984	French Larry L	R. L. Polk & Co.	Image pg. A6
1980	French Larry L	R. L. Polk & Co.	Image pg. A12
1975	Frias Genevieve D Mrs	R. L. Polk & Co.	Image pg. A17
1970	FRIAS GENEVIEVE D MRS	John M. Ducy	
1966	FRIAS RAUL A	R. L. Polk & Co.	Image pg. A22
1961	Frias Raul A	R. L. Polk & Co.	Image pg. A28
1952	Griggs C L	R. L. Polk & Co. of California	Image pg. A33
1355 FRA	ANKFORT ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	SCHULTZJames	Haines Company, Inc.	
2000	LAMPEEdw L	Haines & Company	Image pg. A2
1992	Lampe Edward R	PACIFIC BELL WHITE PAGES	
	Lampe Edw L	PACIFIC BELL WHITE PAGES	
1989	Lampe Edw L	Pacific Bell	
1984	Lampe Edw L	R. L. Polk & Co.	Image pg. A6
1980	Lampe Edw L	R. L. Polk & Co.	Image pg. A12
1975	Lampe Edw L	R. L. Polk & Co.	Image pg. A17
1970	LAMPE EOW L	John M. Ducy	
1966	LAMPE EDW L	R. L. Polk & Co.	Image pg. A22
1961	Lampe Edw L	R. L. Polk & Co.	Image pg. A28
1952	Lampe E L	R. L. Polk & Co. of California	Image pg. A33

1363 FRANKFORT ST

<u>Year</u>	<u>Uses</u>	Source	
2006	GROTH Walter	Haines Company, Inc.	
2000	GROTHWalter J	Haines & Company	Image pg. A2
1992	Grothe Dan	PACIFIC BELL WHITE PAGES	
	Groth Walter J	PACIFIC BELL WHITE PAGES	
1989	Groth Walter J	Pacific Bell	
1984	Groth Walter J	R. L. Polk & Co.	Image pg. A6
1980	Groth Walter J	R. L. Polk & Co.	Image pg. A12
1975	Groth Walter	R. L. Polk & Co.	Image pg. A17
1970	GROTH WALTER	John M. Ducy	
1966	GROTH WALTER	R. L. Polk & Co.	Image pg. A22
1961	Stewart Danl D	R. L. Polk & Co.	Image pg. A28
1952	Robinson E C	R. L. Polk & Co. of California	Image pg. A33
1369 FRA	NKFORT ST		
<u>Year</u>	<u>Uses</u>	Source	
2000	ARTHUR Richard E	Haines & Company	Image pg. A2
1984	Arthur Richd E	R. L. Polk & Co.	Image pg. A6
1980	Arthur Richd E	R. L. Polk & Co.	Image pg. A12
1975	Arthur Richd E	R. L. Polk & Co.	Image pg. A17
1970	ARTHUR RICHARD E	John M. Ducy	
1966	DOMIANO CARMELO E	R. L. Polk & Co.	Image pg. A22
1961	Louden Earl R	R. L. Polk & Co.	Image pg. A28
1952	Marquardt J F	R. L. Polk & Co. of California	Image pg. A33
1377 FRA	NKFORT ST		
<u>Year</u>	<u>Uses</u>	Source	
2000	No Current Listing	Haines & Company	Image pg. A2
1992	Tarango Y S	PACIFIC BELL WHITE PAGES	
1989	Tarango A M	Pacific Bell	
	Tarango Y S	Pacific Bell	
1984	Tarango Y Salvador T	R. L. Polk & Co.	Image pg. A6
1980	Tarango Y Salvador T	R. L. Polk & Co.	Image pg. A12
1975	Tarango Y Salvador	R. L. Polk & Co.	Image pg. A17
1970	TARANGO Y SALVADOR	John M. Ducy	
1966	TARANGO Y SALVADOR	R. L. Polk & Co.	Image pg. A22
1961	Tarango Y Salvador	R. L. Polk & Co.	Image pg. A28
1952	Langlois E G	R. L. Polk & Co. of California	Image pg. A33

1404 FRANKFORT ST

1404 FRANKFORT ST			
<u>Year</u>	<u>Uses</u>	Source	
2013	ROBERT TAECKENS	Cole Information Services	
2006	SHAVER Mary C	Haines Company, Inc.	
2000	SHAVERMary C	Haines & Company	Image pg. A2
1992	lonadi Charles & Karen	PACIFIC BELL WHITE PAGES	
1984	Archibal Margo V	R. L. Polk & Co.	Image pg. A6
1980	Archibeque Michl A	R. L. Polk & Co.	Image pg. A12
1975	Archibeque M V	R. L. Polk & Co.	Image pg. A17
1970	VACANT	John M. Ducy	
1966	VACANT	R. L. Polk & Co.	Image pg. A22
1961	Archibeque Marjorie L Mrs	R. L. Polk & Co.	Image pg. A28
1952	Archibeque J D	R. L. Polk & Co. of California	Image pg. A33
1412 FR	ANKFORT ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	o TOLLERTON Ella	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A2
1989	Tollerton E	Pacific Bell	

1420 FRANKFORT ST

<u>Year</u>	<u>Uses</u>	Source	
1952	Tobey E S	R. L. Polk & Co. of California	Image pg. A33

MIRA MESA BLVD

1464 MIRA MESA BLVD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1989	Mira Mesa	Pacific Bell

1506 MIRA MESA BLVD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1989	Mira Mesa	Pacific Bell

1530 MIRA MESA BLVD

YearUsesSource1989Mira MesaPacific Bell

MISSION BAY DR

1551 MISSION BAY DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1966	MISSION BAY BOAT BROKERAGE	R. L. Polk & Co.	Image pg. A23
	BOAT DLRS	R. L. Polk & Co.	Image pg. A23
	MISSION BAY SPORT FISHING	R. L. Polk & Co.	Image pg. A23
	BOAT RENTALS	R. L. Polk & Co.	Image pg. A23
	FUELING DOCK	R. L. Polk & Co.	Image pg. A23
	MISSION BAY YACHT SALES	R. L. Polk & Co.	Image pg. A23
	QUIVIRA BASIN ENTERPRISES	R. L. Polk & Co.	Image pg. A23
	BOAT LANDING	R. L. Polk & Co.	Image pg. A23
	QUIVIRA MARINA SHELL	R. L. Polk & Co.	Image pg. A23
	MISSION BAY YACHT LANDING	R. L. Polk & Co.	Image pg. A23

1605 MISSION BAY DR

<u>Year</u>	<u>Uses</u>	<u>Source</u>
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1995 Direct Tire PACIFIC BELL WHITE PAGES

MORENA

1460 MORENA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	HANCO INC genl contrs	The Pacific Telephone Telegraph Co.
1955	Lykins Cecile Mrs	R. L. Polk & Co.

1464 MORENA

<u>Year</u>	<u>Uses</u>	Source
1960	Eklund Melvin R	The Pacific Telephone Telegraph Co.
	Bigadza Gregory R	The Pacific Telephone Telegraph Co.
	Barron John T	The Pacific Telephone Telegraph Co.
	Sherlock H K	The Pacific Telephone Telegraph Co.
	Kohl Cella Ann	The Pacific Telephone Telegraph Co.
1955	Westbrook T D	R. L. Polk & Co.

1465 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1960 Fidelis Photos The Pacific Telephone Telegraph Co.

1955 Mc Kenney Gordon R. L. Polk & Co.

1471 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1960 San Diego Ceramics The Pacific Telephone Telegraph Co.

1955 S D Ceramics R. L. Polk & Co.

1476 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1960 Howell Archie R The Pacific Telephone Telegraph Co.

1955 De Renne Helen B R. L. Polk & Co.

1502 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1960 Frocks J M The Pacific Telephone Telegraph Co.

1506 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1955 Moore Karl I R. L. Polk & Co.

Megginson Richard S R. L. Polk & Co. Reynolds John R. L. Polk & Co.

1510 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1955 Du Pont Walter R. L. Polk & Co.

1515 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1960 Bay Park Trailer Sales The Pacific Telephone Telegraph Co.

1955 Bay Park Trailer Sales R. L. Polk & Co.

1526 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1960 Palmer Jas R The Pacific Telephone Telegraph Co.

1540 MORENA

<u>Year</u> <u>Uses</u> <u>Source</u>

1960 Morena Pet Hospital The Pacific Telephone Telegraph Co.

Lansing Keith B Dr Morena Pet Hospital The Pacific Telephone Telegraph Co.

1550 MORENA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Triangle Cleaners	The Pacific Telephone Telegraph Co.
1955	Clairemont Cafe The	R. L. Polk & Co.

1639 MORENA

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1960	Picaroni Sally Mrs	The Pacific Telephone Telegraph Co.	
1955	Gable Joy H	R. L. Polk & Co.	

1641 MORENA

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1960	Savage A F	The Pacific Telephone Telegraph Co.
1955	Dickson R A	R. L. Polk & Co.

MORENA BLVD

1448 MORENA BLVD

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1989	Thomas Lola V	Pacific Bell	
1984	Shinn Beryl	R. L. Polk & Co.	Image pg. A5
1980	Israel Betty R	R. L. Polk & Co.	Image pg. A10
1975	Shinn Beryl	R. L. Polk & Co.	Image pg. A16
1970	SHINN BERYL	John M. Ducy	
1966	LEVINGER HARVEY R	R. L. Polk & Co.	Image pg. A21
1961	Gray Joseph C	R. L. Polk & Co.	Image pg. A27

1450 MORENA BLVD

<u>Source</u>	
Haines Company, Inc.	
Haines & Company	Image pg. A1
H Haines & Company	Image pg. A1
Haines & Company	Image pg. A1
PACIFIC BELL WHITE PAGES	
Pacific Bell	
H Pacific Bell	
Pacific Bell	
R. L. Polk & Co.	Image pg. A5
oliance repr R. L. Polk & Co.	Image pg. A5
R. L. Polk & Co.	Image pg. A5
R. L. Polk & Co.	Image pg. A5
	Haines Company, Inc. Haines & Company Haines & Company Haines & Company Haines & Company PACIFIC BELL WHITE PAGES Pacific Bell Pacific Bell Pacific Bell R. L. Polk & Co. Pliance repr R. L. Polk & Co. R. L. Polk & Co.

<u>Year</u>	<u>Uses</u>	Source	
1984	C Cox David E	R. L. Polk & Co.	Image pg. A5
	D No Return	R. L. Polk & Co.	Image pg. A5
	E Tanzer Matthew O	R. L. Polk & Co.	Image pg. A5
	F Olette F	R. L. Polk & Co.	Image pg. A5
	G Bradfield Benton	R. L. Polk & Co.	Image pg. A5
	H Failla Laura M	R. L. Polk & Co.	Image pg. A5
1980	Apartments	R. L. Polk & Co.	Image pg. A10
	A N Gundlack Robt	R. L. Polk & Co.	Image pg. A10
	B N t Don Joan	R. L. Polk & Co.	Image pg. A10
	C N Deer Cath	R. L. Polk & Co.	Image pg. A10
	D N Holmes Chris	R. L. Polk & Co.	Image pg. A10
	Bi F EHJir	R. L. Polk & Co.	Image pg. A10
	E N Defluri Jos G	R. L. Polk & Co.	Image pg. A10
	F N Schott Mike D	R. L. Polk & Co.	Image pg. A10
	G Stocker Michl	R. L. Polk & Co.	Image pg. A10
	H N Diehl Gerry	R. L. Polk & Co.	Image pg. A10
1975	Da Mar Apartments	R. L. Polk & Co.	Image pg. A16
	A Vacant	R. L. Polk & Co.	Image pg. A16
	B Cubillas Lily	R. L. Polk & Co.	Image pg. A16
	C Markland Michl	R. L. Polk & Co.	Image pg. A16
	D Owen Robt E	R. L. Polk & Co.	Image pg. A16
	E Shehane Jim	R. L. Polk & Co.	Image pg. A16
	F Olson Oscar	R. L. Polk & Co.	Image pg. A16
	G Edwards Raymond	R. L. Polk & Co.	Image pg. A16
	H Vacant	R. L. Polk & Co.	Image pg. A16
1970	HI LO APARTMENTS	John M. Ducy	
	B VACANT	John M. Ducy	
	C VACANT	John M. Ducy	
	VACANT	John M. Ducy	
	E SAMANIEGO ALEX	John M. Ducy	
	F BRAND GREGORY C	John M. Ducy	
	G SMITH DONALD J	John M. Ducy	
	H LAWLER HERMAN W	John M. Ducy	
	A BAKER ROGER R	John M. Ducy	
1966	HI LO APARTMENTS	R. L. Polk & Co.	Image pg. A21
	A VACANT	R. L. Polk & Co.	Image pg. A21
	B BRIER MAY	R. L. Polk & Co.	Image pg. A21
	C VACANT	R. L. Polk & Co.	Image pg. A21

<u>Year</u>	<u>Uses</u>	Source	
1966	D VACANT	R. L. Polk & Co.	Image pg. A21
	E VACANT	R. L. Polk & Co.	Image pg. A21
	F WOLFE JACK	R. L. Polk & Co.	Image pg. A21
	G MOORE VERNE C	R. L. Polk & Co.	Image pg. A21
	H THAXTON BERYL	R. L. Polk & Co.	Image pg. A21
1961	Reinert Geo A	R. L. Polk & Co.	Image pg. A27
1452 MOF	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2006	STANKUS James	Haines Company, Inc.	
2000	MILLERNeva	Haines & Company	Image pg. A1
1992	Ruddy Terry	PACIFIC BELL WHITE PAGES	
	Vargo Amy	PACIFIC BELL WHITE PAGES	
	Vargo B	PACIFIC BELL WHITE PAGES	
	Vargo Daniel	PACIFIC BELL WHITE PAGES	
1989	Ricardo Frank & Maureen	Pacific Bell	
1984	Apartments	R. L. Polk & Co.	Image pg. A5
	A Toomire R E	R. L. Polk & Co.	Image pg. A5
	B Jackson Keith	R. L. Polk & Co.	Image pg. A5
	C Hansen Bo	R. L. Polk & Co.	Image pg. A5
	D Johnson Geo A	R. L. Polk & Co.	Image pg. A5
1980	Apartments	R. L. Polk & Co.	Image pg. A10
	A No Return	R. L. Polk & Co.	Image pg. A10
	B Connevey Nancy E	R. L. Polk & Co.	Image pg. A10
	C N Davis Robt R	R. L. Polk & Co.	Image pg. A10
	D Taylor Janet A	R. L. Polk & Co.	Image pg. A10
1975	Apartments	R. L. Polk & Co.	Image pg. A16
	A Vacant	R. L. Polk & Co.	Image pg. A16
	B Mc Fadden Rick	R. L. Polk & Co.	Image pg. A16
	C Bell David L	R. L. Polk & Co.	Image pg. A16
	D Vines Wm L	R. L. Polk & Co.	Image pg. A16
1970	HI LO APARTMENTS	John M. Ducy	
	A STERLING BEATRICE	John M. Ducy	
	B BOSLEY CHARLES J	John M. Ducy	
	C FORD DONALD	John M. Ducy	
	D VINES WM L	John M. Ducy	
1966	APARTMENTS	R. L. Polk & Co.	Image pg. A21
	A RANKIN CAROL	R. L. Polk & Co.	Image pg. A21
	B BONE DOROTHY D	R. L. Polk & Co.	Image pg. A21

<u>Year</u>	<u>Uses</u>	Source	
1966	C BARTLEY WAYNE F	R. L. Polk & Co.	Image pg. A21
	D VINES WM	R. L. Polk & Co.	Image pg. A21
1945	Mitasoff K A r	San Diego Directory Co.	
1454 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2006	HILLMAN David	Haines Company, Inc.	
	B RIEDELJohn	Haines Company, Inc.	
2000	HEFFERNAN Shannon J	Haines & Company	Image pg. A1
1989	Whitley Jeff	Pacific Bell	
1984	Apartments	R. L. Polk & Co.	Image pg. A5
	A Mc Iver Kevin	R. L. Polk & Co.	Image pg. A5
	B Burkley Brian	R. L. Polk & Co.	Image pg. A5
	C Scaduto C	R. L. Polk & Co.	Image pg. A5
	D Bale Jerry	R. L. Polk & Co.	Image pg. A5
1980	Apartments	R. L. Polk & Co.	Image pg. A10
	A Thompson Eliz	R. L. Polk & Co.	Image pg. A10
	B Vacant	R. L. Polk & Co.	Image pg. A10
	C No Return	R. L. Polk & Co.	Image pg. A10
	D N Strecker Bob	R. L. Polk & Co.	Image pg. A10
1975	Apartments	R. L. Polk & Co.	Image pg. A16
	A Renger Gaylia L Mrs	R. L. Polk & Co.	Image pg. A16
	B Knight R C	R. L. Polk & Co.	Image pg. A16
	C Vacant	R. L. Polk & Co.	Image pg. A16
	D Vacant	R. L. Polk & Co.	Image pg. A16
1970	HI LO APARTMENTS	John M. Ducy	
	A VACANT	John M. Ducy	
	B VACANT	John M. Ducy	
	C LEGATE BOYD	John M. Ducy	
	NINTEMAN N M	John M. Ducy	
1966	D SHOEMAKER CAROL	R. L. Polk & Co.	Image pg. A21
	APARTMENTS	R. L. Polk & Co.	Image pg. A21
	A DREHLING DAVID	R. L. Polk & Co.	Image pg. A21
	B WESTBERRY HARRY P	R. L. Polk & Co.	Image pg. A21
	C WRIGHT JOHN L	R. L. Polk & Co.	Image pg. A21
1456 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2006	B MAKER H	Haines Company, Inc.	

<u>Source</u>

<u>Year</u>

<u>Uses</u>

rear	<u>0000</u>	<u> </u>	
2006	TRASK Simon	Haines Company, Inc.	
2000	DEPTOLLAAngela L	Haines & Company	Image pg. A1
	THEWSIella	Haines & Company	Image pg. A1
1989	Bennett Jean	Pacific Bell	
1984	Apartments	R. L. Polk & Co.	Image pg. A5
	A Holbert Chris	R. L. Polk & Co.	Image pg. A5
	B Gains H	R. L. Polk & Co.	Image pg. A5
	C Vaughn T	R. L. Polk & Co.	Image pg. A5
	D Vacant	R. L. Polk & Co.	Image pg. A5
1980	Apartments	R. L. Polk & Co.	Image pg. A10
	A Vacant	R. L. Polk & Co.	Image pg. A10
	B N Tempke Robt W	R. L. Polk & Co.	Image pg. A10
	C N Kaltschmidt Donald Jr	R. L. Polk & Co.	Image pg. A10
	D Vacant	R. L. Polk & Co.	Image pg. A10
1975	Apartments	R. L. Polk & Co.	Image pg. A16
	A Giese Wm A	R. L. Polk & Co.	Image pg. A16
	B Vacant	R. L. Polk & Co.	Image pg. A16
	C Vacant	R. L. Polk & Co.	Image pg. A16
	D Vacant	R. L. Polk & Co.	Image pg. A16
1970	HI LO APARTMENTS	John M. Ducy	
	A WELLS ROBT	John M. Ducy	
	B KLINKE JUDY	John M. Ducy	
	C CASEY PAULA	John M. Ducy	
	D VACANT	John M. Ducy	
1966	C GIBBS ARTH F JR	R. L. Polk & Co.	Image pg. A21
	D SCIFRES JOHN	R. L. Polk & Co.	Image pg. A21
	APARTMENTS	R. L. Polk & Co.	Image pg. A21
	A MORRIS JAMES	R. L. Polk & Co.	Image pg. A21
	B LOPEZ BEN C	R. L. Polk & Co.	Image pg. A21
1458 MC	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	STERIA Gary	Haines Company, Inc.	
1989	Garcia Alfredo G	Pacific Bell	
1984	Brennan Viola Mrs	R. L. Polk & Co.	Image pg. A5
1980	Brennan Viola Mrs	R. L. Polk & Co.	Image pg. A10
1975	Brennan Viola Mrs	R. L. Polk & Co.	Image pg. A16
1966	VACANT	R. L. Polk & Co.	Image pg. A21
1961	Hannah Robt M	R. L. Polk & Co.	Image pg. A27

1460 MORENA BLVD

<u>Year</u>	<u>Uses</u>	Source	
2013	L J TRANSPORTATION	Cole Information Services	
	ROPERS JOE SURFBOARD REPAIR	Cole Information Services	
2008	L J TRANSPORTATION	Cole Information Services	
2006	LJ	Haines Company, Inc.	
	TRANSPORTATION LJ	Haines Company, Inc.	
	TRANSPORTATION	Haines Company, Inc.	
	LJ 619 B	Haines Company, Inc.	
	TRANSPORTATION	Haines Company, Inc.	
	INC ROPERS JOE	Haines Company, Inc.	
	SURFBOARD	Haines Company, Inc.	
	REPAIR	Haines Company, Inc.	
2000	ROPERS JSRFBRD	Haines & Company	Image pg. A1
	DISTEC	Haines & Company	Image pg. A1
1992	Ropers Joe Surfboard Repair	PACIFIC BELL WHITE PAGES	
1989	Sun Roll Security Shutters	Pacific Bell	
	SUN SECURITY INC	Pacific Bell	
	HANCO HOME IMPROVEMENT CO	Pacific Bell	
1985	SUN-ROLL SECURITY SHUTTERS	PACIFIC BELL WHITE PAGES	
1984	Sunroll Security Shutters security shutters sls ret	R. L. Polk & Co.	Image pg. A5
	Hanco Home Improvement Co Inc genl contrs	R. L. Polk & Co.	Image pg. A5
	Bes Tex Protectives	R. L. Polk & Co.	Image pg. A5
1980	shutters sis ret	R. L. Polk & Co.	Image pg. A10
	Sunroll Industries Inc security	R. L. Polk & Co.	Image pg. A10
	genl contrs	R. L. Polk & Co.	Image pg. A10
	Architectural Coating Products Inc	R. L. Polk & Co.	Image pg. A10
	protectives	R. L. Polk & Co.	Image pg. A10
	Hanco Home Improvement Co Inc	R. L. Polk & Co.	Image pg. A10
1975	Architectural Coating Products Inc	R. L. Polk & Co.	Image pg. A16
	coating protectives	R. L. Polk & Co.	Image pg. A16
	Hanco Home Improvement Co Inc	R. L. Polk & Co.	Image pg. A16
	geni contra	R. L. Polk & Co.	Image pg. A16
	American Bldg Contrs Assn Nat I	R. L. Polk & Co.	Image pg. A16
	Home Imprvmnt Cncl	R. L. Polk & Co.	Image pg. A16
1970	HANCO INC GENL CONTRS	John M. Ducy	
1966	HANCO INC GENL CONTRS	R. L. Polk & Co.	Image pg. A21
1952	Lykins C M Mrs	R. L. Polk & Co. of California	Image pg. A32

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1948	Lykins Raney	San Diego Directory Co.	Image pg. A36
1943	Mc Niel C W	San Diego Directory Co.	Image pg. A37
1461 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2000	No Current Listing	Haines & Company	Image pg. A1
1970	STATE FARM INSURANCE COS	John M. Ducy	
1966	STATE FARM INSURANCE COS	R. L. Polk & Co.	Image pg. A21
1961	State Farm Ins Cos	R. L. Polk & Co.	Image pg. A27
	Loch Crane & Assoc archt	R. L. Polk & Co.	Image pg. A27
1464 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	CRISTY Daron	Haines Company, Inc.	
	HATHORN Tom	Haines Company, Inc.	
2000	TEMPLETom R	Haines & Company	Image pg. A1
	TEMPLETom R	Haines & Company	Image pg. A1
	WASDENGabrielle	Haines & Company	Image pg. A1
1992	Garcia Tony	PACIFIC BELL WHITE PAGES	
	Irwin Lucia	PACIFIC BELL WHITE PAGES	
	Irwin M	PACIFIC BELL WHITE PAGES	
1989	Bay Park	Pacific Bell	
	Saling Keith	Pacific Bell	
1984	Apartments	R. L. Polk & Co.	Image pg. A5
	Ferrer Nancy	R. L. Polk & Co.	Image pg. A5
	A Barber Saeko H	R. L. Polk & Co.	Image pg. A5
	B Guerrero Lucia G	R. L. Polk & Co.	Image pg. A5
	C Barber Patricia Mrs	R. L. Polk & Co.	Image pg. A5
	D Hurtado Patricia	R. L. Polk & Co.	Image pg. A5
	E Gomez Cheryl	R. L. Polk & Co.	Image pg. A5
1980	Apartments	R. L. Polk & Co.	Image pg. A10
	N Fordham Rosemary Mrs	R. L. Polk & Co.	Image pg. A10
	A Barber Saeko H	R. L. Polk & Co.	Image pg. A10
	B Mewborn Adela Mrs	R. L. Polk & Co.	Image pg. A10
	C N Barber Patricia Mrs	R. L. Polk & Co.	Image pg. A10
	D Hurtado Patricia	R. L. Polk & Co.	Image pg. A10
	E Ferrer Nancy A	R. L. Polk & Co.	Image pg. A10
1975	Apartments	R. L. Polk & Co.	Image pg. A16
	A No Return	R. L. Polk & Co.	Image pg. A16

<u>Year</u>	<u>Uses</u>	Source	
1975	B Meuborn Adela Mrs	R. L. Polk & Co.	Image pg. A16
	C No Return	R. L. Polk & Co.	Image pg. A16
	D Hurtado Patricia Mrs	R. L. Polk & Co.	Image pg. A16
	E Ferrer Fred S	R. L. Polk & Co.	Image pg. A16
	H Newsom Richd	R. L. Polk & Co.	Image pg. A16
1970	C OWEN JAMES R	John M. Ducy	
	D DISLER JOSEPH	John M. Ducy	
	E DAMSTRA ROBT	John M. Ducy	
	APARTMENTS	John M. Ducy	
	TUCKER FLOYD	John M. Ducy	
	A BEST BARBARA MRS	John M. Ducy	
	B MC ATEE JAMES M	John M. Ducy	
1966	APARTMENTS	R. L. Polk & Co.	Image pg. A21
	JONES HELEN MRS	R. L. Polk & Co.	Image pg. A21
	A GOWLOVICH AURORA MRS	R. L. Polk & Co.	Image pg. A21
	B NIELSON PATRICIA MRS	R. L. Polk & Co.	Image pg. A21
	C SCESNY JAMES	R. L. Polk & Co.	Image pg. A21
	D GILSON ROBT C	R. L. Polk & Co.	Image pg. A21
	E HEYN LOUIS J	R. L. Polk & Co.	Image pg. A21
1961	Apartments	R. L. Polk & Co.	Image pg. A27
	A Jones Ernest D	R. L. Polk & Co.	Image pg. A27
	B Bigadza Gregg R	R. L. Polk & Co.	Image pg. A27
	C Hoover Robt R	R. L. Polk & Co.	Image pg. A27
	D Sampo Geo	R. L. Polk & Co.	Image pg. A27
	E Smith Mancil J	R. L. Polk & Co.	Image pg. A27
1952	Westbrook T D	R. L. Polk & Co. of California	Image pg. A32
1948	Westbrook T D	San Diego Directory Co.	Image pg. A36

1465 MORENA BLVD

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2008	MERIDIAN NTERNATIONAL SCHOOL OF HEAL	Cole Information Services
	SEKITO CHIROPRACTIC CENTER	Cole Information Services
	BLUM ALAN M DC	Cole Information Services
2006	EAST & WEST	Haines Company, Inc.
	CHIROPRACTIC MERIDIAN INTLSC	Haines Company, Inc.
	OF HEALTH SON SEKITO	Haines Company, Inc.
	CHIROPRACTIC	Haines Company, Inc.
	CENTER SEKITOJUNEDC	Haines Company, Inc.

<u>Source</u>

<u>Year</u>

<u>Uses</u>

rear	<u>0000</u>	<u> </u>	
2006	LAC DOM SEKITO JUNKO DC	Haines Company, Inc.	
	LAC DOM ND	Haines Company, Inc.	
2000	EAST&WEST	Haines & Company	Image pg. A1
	CHIROPRACTIC	Haines & Company	Image pg. A1
	SEKITO CHIROPRACTIC	Haines & Company	Image pg. A1
	CENTER	Haines & Company	Image pg. A1
	SEKITOJUNE DC LAC	Haines & Company	Image pg. A1
1989	NINTEMAN CONSTRUCTION COMPANY	Pacific Bell	
1984	Ninteman Constn Co Inc	R. L. Polk & Co.	Image pg. A5
1980	Ninteaman Constn Co Inc	R. L. Polk & Co.	Image pg. A10
1975	Ninteman L J Constn Co Inc geni contr	R. L. Polk & Co.	Image pg. A16
1970	CONTR	John M. Ducy	
	NINTEMAN L J CONSTN CO INC	John M. Ducy	
1966	NINTEMAN L J CONSTN CO INC	R. L. Polk & Co.	Image pg. A21
	CONTR	R. L. Polk & Co.	Image pg. A21
1961	Ninteman L J Constn Co Inc	R. L. Polk & Co.	Image pg. A27
1952	Mc Kenney G G	R. L. Polk & Co. of California	Image pg. A32
1471 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2013	PMF TOTAL AUTO REPAIR	Cole Information Services	
2008	T & L AUTO REPAIR	Cole Information Services	
2006	T&L AUTO REPAIR	Haines Company, Inc.	
2000	T&L AUTO REPAIR	Haines & Company	Image pg. A1
1992	Pro Align Service	PACIFIC BELL WHITE PAGES	
1989	Kibbey Gerald S	Pacific Bell	
	Mutual Realty	Pacific Bell	
	Nordstrom Jack Mutual Realty	Pacific Bell	
	Samppala David R MAI	Pacific Bell	
	American Homestead Service Realty	Pacific Bell	
	KIBBEY COMPANY	Pacific Bell	
1984	Components Corp electronic equip sls	R. L. Polk & Co.	Image pg. A5
	Vacant	R. L. Polk & Co.	Image pg. A5
	Bowen Steven L Realty	R. L. Polk & Co.	Image pg. A5
	Tatreau Douglas real est appr	R. L. Polk & Co.	Image pg. A5
	Godwin Harold A real est appr	R. L. Polk & Co.	Image pg. A5
	Berger Mark real est appr	R. L. Polk & Co.	Image pg. A5
	Kibbey Gerald S & Associates Inc real est appr	R. L. Polk & Co.	Image pg. A5

<u>Year</u>	<u>Uses</u>	Source	
1980	Components Corp electronic equip sis	R. L. Polk & Co.	Image pg. A10
	J L H Wallcovering wallpaper sis	R. L. Polk & Co.	Image pg. A10
	installation	R. L. Polk & Co.	Image pg. A10
	Kibbey Gerald S & Associates real	R. L. Polk & Co.	Image pg. A10
	eat appr	R. L. Polk & Co.	Image pg. A10
	Berger Mark real eat appr	R. L. Polk & Co.	Image pg. A10
	Godwin Harold A Jr real eat appr	R. L. Polk & Co.	Image pg. A10
	Nordstrom John G real eat appr	R. L. Polk & Co.	Image pg. A10
	Olson Phillip real eat appr	R. L. Polk & Co.	Image pg. A10
	Porter Gordon real eat appr	R. L. Polk & Co.	Image pg. A10
	Tatreau Douglas real eat appr	R. L. Polk & Co.	Image pg. A10
	Bowen Steven L Realty	R. L. Polk & Co.	Image pg. A10
	Mutual Realty	R. L. Polk & Co.	Image pg. A10
1975	S & M Electric Co Inc contr	R. L. Polk & Co.	Image pg. A16
1970	5 M ELECTRIC CONTR	John M. Ducy	
1966	S & M ELECTRIC CONTR	R. L. Polk & Co.	Image pg. A21
1961	San Diego Ceramics	R. L. Polk & Co.	Image pg. A27
1952	San Diego Ceramics	R. L. Polk & Co. of California	Image pg. A32
1948	Patterson W W pottery	San Diego Directory Co.	Image pg. A36
1473 MOI	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2008	A & M 24 HOUR TOWING & RECOVERY	Cole Information Services	
2006	RCVRY SV	Haines Company, Inc.	
	RCVRY SV A&M 24 HR TWNG&	Haines Company, Inc.	
	A&M 24 HRTWNG&	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A1
1992	Vons Pharmacies	PACIFIC BELL WHITE PAGES	
	Vons Outboards	PACIFIC BELL WHITE PAGES	
1989	Vons Outboards	Pacific Bell	
1476 MOI	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2000	WEIGLEMICHAEL	Haines & Company	Image pg. A1
	WEIGLEMICHAEL	Haines & Company	Image pg. A1
	COMPANY	Haines & Company	Image pg. A1
1992	Bonn John J Co	PACIFIC BELL WHITE PAGES	
1989	Bonn John J Co	Pacific Bell	

<u>Year</u>	<u>Uses</u>	Source	
1984	Bonn John J Co Inc flexible instrument hose mfr	R. L. Polk & Co.	Image pg. A5
	Hopkins Manufacturing Co flexible instrument hose mfr	R. L. Polk & Co.	Image pg. A5
1980	Bonn John J Co flexible instrument	R. L. Polk & Co.	Image pg. A10
	hose mfr	R. L. Polk & Co.	Image pg. A10
	Hopkins Manufacturing Co flexible	R. L. Polk & Co.	Image pg. A10
	instrument hose mfr	R. L. Polk & Co.	Image pg. A10
1975	Bonn John J Co flexible instrument hose mfr	R. L. Polk & Co.	Image pg. A16
	Hopkins Manufcaturing Co flexible instrument hose mfr	R. L. Polk & Co.	Image pg. A16
1970	MC ATEE LAURENCE W	John M. Ducy	
1966	MC ATEE LAURENCE W	R. L. Polk & Co.	Image pg. A21
1961	Vacant	R. L. Polk & Co.	Image pg. A27
	Bailey Donald L	R. L. Polk & Co.	Image pg. A27
1952	Fox J S Rev	R. L. Polk & Co. of California	Image pg. A32
1948	Fox J S Rev	San Diego Directory Co.	Image pg. A36
1945	Du Pont Fred r	San Diego Directory Co.	
1943	ADupent W F	San Diego Directory Co.	Image pg. A37
1478 MOF	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2000	No Current Listing	Haines & Company	Image pg. A1
1970	MARY & GAILS POODLE GROOMING	John M. Ducy	
1966	KILBURN FLORENCE	R. L. Polk & Co.	Image pg. A21
1485 MOF	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2000	No Current Listing	Haines & Company	Image pg. A1
1491 MOF	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1989	Clairemont	Pacific Bell	
1501 MOF	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2013	LOPEZ ENGINEERING	Cole Information Services	
2008	LOPEZ ENGINEERING INC	Cole Information Services	
	TEZA DESIGN	Cole Information Services	
2006	LOPEZ	Haines Company, Inc.	

<u>Source</u>

Haines Company, Inc.

<u>Year</u>

2006

<u>Uses</u>

ENGINEERING INC

2000	No Current Listing	Haines & Company	Image pg. A1
1992	Ofc	PACIFIC BELL WHITE PAGES	
1984	Pekarek Group The landscape architects	R. L. Polk & Co.	Image pg. A5
1980	a Whirligig Of Mission Bay party sup	R. L. Polk & Co.	Image pg. A10
1502 MOF	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
1984	Michaels Moving & Delivery	R. L. Polk & Co.	Image pg. A5
	Michaels Moving & Develivery	R. L. Polk & Co.	Image pg. A5
1980	Me Donald Geo S Painting Contr	R. L. Polk & Co.	Image pg. A10
1975	Mc Donald Painting & Decorating Co contr	R. L. Polk & Co.	Image pg. A16
1970	FLETT JOHN	John M. Ducy	
1966	VACANT	R. L. Polk & Co.	Image pg. A21
1961	Frocks John M	R. L. Polk & Co.	Image pg. A27
1952	Small L L	R. L. Polk & Co. of California	Image pg. A32
1948	Redman E V	San Diego Directory Co.	Image pg. A36
1943	AMorin C K	San Diego Directory Co.	Image pg. A37
1503 MOF	RENA BLVD		
	11	•	
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
<u>Year</u> 2013	Uses DESIGN CONSORTIUM THE	Source Cole Information Services	
2013	DESIGN CONSORTIUM THE	Cole Information Services	
2013 2006	DESIGN CONSORTIUM THE CONSORTIUM THE	Cole Information Services Haines Company, Inc.	
2013 2006	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN	Cole Information Services Haines Company, Inc.	
2013 2006 1506 MOF	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD	Cole Information Services Haines Company, Inc. Haines Company, Inc.	
2013 2006 1506 MOF	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses	Cole Information Services Haines Company, Inc. Haines Company, Inc.	
2013 2006 1506 MOF	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses FORREST HARRY J	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy	Image pg. A21
2013 2006 1506 MOF <u>Year</u> 1970	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses FORREST HARRY J KINNEY RONALD	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy John M. Ducy	Image pg. A21 Image pg. A21
2013 2006 1506 MOF <u>Year</u> 1970	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses FORREST HARRY J KINNEY RONALD KINNEY RAY	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy John M. Ducy R. L. Polk & Co.	
2013 2006 1506 MOF Year 1970	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses FORREST HARRY J KINNEY RONALD KINNEY RAY FORREST HOWARD J	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy John M. Ducy R. L. Polk & Co. R. L. Polk & Co.	Image pg. A21
2013 2006 1506 MOF Year 1970	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD USES FORREST HARRY J KINNEY RONALD KINNEY RAY FORREST HOWARD J 1/2 Vacant	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy John M. Ducy R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co.	Image pg. A21 Image pg. A27
2013 2006 1506 MOF Year 1970 1966	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses FORREST HARRY J KINNEY RONALD KINNEY RAY FORREST HOWARD J 1/2 Vacant Mc Atee Lawrence W	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy John M. Ducy R. L. Polk & Co.	Image pg. A21 Image pg. A27 Image pg. A27
2013 2006 1506 MOF Year 1970 1966	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses FORREST HARRY J KINNEY RONALD KINNEY RAY FORREST HOWARD J 1/2 Vacant Mc Atee Lawrence W 1/2 Mc Lure Val	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy John M. Ducy R. L. Polk & Co.	Image pg. A21 Image pg. A27 Image pg. A27 Image pg. A32
2013 2006 1506 MOF Year 1970 1966 1961 1952	DESIGN CONSORTIUM THE CONSORTIUM THE DESIGN RENA BLVD Uses FORREST HARRY J KINNEY RONALD KINNEY RAY FORREST HOWARD J 1/2 Vacant Mc Atee Lawrence W 1/2 Mc Lure Val Mc Luckie J R	Cole Information Services Haines Company, Inc. Haines Company, Inc. Source John M. Ducy John M. Ducy R. L. Polk & Co.	Image pg. A21 Image pg. A27 Image pg. A27 Image pg. A32 Image pg. A32

<u>Source</u>

1509 MORENA BLVD

<u>Uses</u>

<u>Year</u>

2000	SMITH ROBT B CSI CCS	Haines & Company	Image pg. A1		
1510 MORENA BLVD					
<u>Year</u>	<u>Uses</u>	Source			
2013	DISCOUNT GUN MART	Cole Information Services			
	CALIFORNIA HEALTH & FITNESS CENTER	Cole Information Services			
2008	DISCOUNT GUN MART & INDOOR RANGE	Cole Information Services			
	DUNNEDWARDS	Cole Information Services			
	DUNNS DISCOUNT GUNS & SPORTING	Cole Information Services			
	DUNN EDWARDS PAINTS	Cole Information Services			
2006	DISCOUNT GUN	Haines Company, Inc.			
	DUNN EDWARDS	Haines Company, Inc.			
	PAINTS SD DUNNS DISCOUNT	Haines Company, Inc.			
	GUN MART	Haines Company, Inc.			
2000	DUNN EDWARDS	Haines & Company	Image pg. A1		
	PAINTS	Haines & Company	Image pg. A1		
1995	Sports Industrial Physical Therapy Medical Clinics	PACIFIC BELL WHITE PAGES			
1992	Discount Gun Mart	PACIFIC BELL WHITE PAGES			
	Discount Insurance	PACIFIC BELL WHITE PAGES			
	Dunn Edwards Paints & Wallcoverings	PACIFIC BELL WHITE PAGES			
	Dunn Edwin	PACIFIC BELL WHITE PAGES			
	Dunnum L	PACIFIC BELL WHITE PAGES			
	Fabian Brothers Inc	PACIFIC BELL WHITE PAGES			
1991	Blockbuster Video	PACIFIC BELL WHITE PAGES			
	Sports Industrial Physical Therapy Medical Clinics	PACIFIC BELL WHITE PAGES			
1989	Fabian Brothers Inc	Pacific Bell			
	SPORTSINDUSTRIAL PHYSICAL THERAPY MEDICAL CLINICS	Pacific Bell			
1984	b Vacant	R. L. Polk & Co.	Image pg. A5		
	Central Credit Union Of San Diego Admn Ofc	R. L. Polk & Co.	Image pg. A5		
	D Sports Industrial Physical Therapy Inc	R. L. Polk & Co.	Image pg. A5		
1980	b Vacant 1510b 1510e	R. L. Polk & Co.	Image pg. A10		
	f Appliance T V Warehouse Co ret	R. L. Polk & Co.	Image pg. A10		
	Central Credit Union Of San Diego	R. L. Polk & Co.	Image pg. A10		
1970	VACANT	John M. Ducy			

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1970	REAR DUPONT JOSEPHINE MRS	John M. Ducy	
1966	DUPONT JOSEPHINE MRS	R. L. Polk & Co.	Image pg. A21
	REAR VACANT	R. L. Polk & Co.	Image pg. A21
1961	Manning Fred T	R. L. Polk & Co.	Image pg. A27
1952	Du Pont W H	R. L. Polk & Co. of California	Image pg. A32
1948	Du Pont W H	San Diego Directory Co.	Image pg. A36
1943	UJAWM W	San Diego Directory Co.	Image pg. A38
1511 MOF	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2013	TRACK & FIELD SAN DIEGOIMPERIAL	Cole Information Services	
	SAN DIEGO IMPERIAL ALL SPORTS	Cole Information Services	
2008	SAN DIEGO IMPERIAL ALL SPORTS	Cole Information Services	
	SI SWIMMING	Cole Information Services	
2006	ATHLETICS	Haines Company, Inc.	
	SPORTS SD IMPERIAL	Haines Company, Inc.	
	DIEGO SD IMPERJALALL	Haines Company, Inc.	
	SWIMMING SAN	Haines Company, Inc.	
	TRACK & FIELD SD	Haines Company, Inc.	
	IMPERIAL	Haines Company, Inc.	
	DIEGO IMPERIAL MASTERS	Haines Company, Inc.	
	DIEGOIMPERIAL	Haines Company, Inc.	
	CONGRESS SWIMMING SAN	Haines Company, Inc.	
	ALL SPORTS SAN	Haines Company, Inc.	
2000	ALLSPORTSSAN	Haines & Company	Image pg. A1
	DIEGO IMPERIAL	Haines & Company	Image pg. A1
	MASTERSSWIMMING	Haines & Company	Image pg. A1
	SAN DIEGO	Haines & Company	Image pg. A1
	SDIMPERIALALL	Haines & Company	Image pg. A1
	SPORTS	Haines & Company	Image pg. A1
	SD IMPERIAL	Haines & Company	Image pg. A1
	ATHLETICS CONGRESS	Haines & Company	Image pg. A1
	SWIMMINGSAN	Haines & Company	Image pg. A1
	DIEGOIMPERIAL	Haines & Company	Image pg. A1
	TRACK&FIELDSAN	Haines & Company	Image pg. A1
	DIEGOIMPERIAL	Haines & Company	Image pg. A1
1989	Design Forum	Pacific Bell	
	Mc Keown Jayne ASID	Pacific Bell	
1984	Cooper & Associates	R. L. Polk & Co.	Image pg. A5

<u>Source</u>

1513 MORENA BLVD

<u>Year</u> <u>Uses</u>

<u>r cur</u>	<u> </u>	<u> </u>	
2000	No Current Listing	Haines & Company	Image pg. A1
1515 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2013	KMA ARCHITECTS & ENGINEERING	Cole Information Services	
2008	KMA	Cole Information Services	
	K M A ARCHITECTURE & ENGINEERING	Cole Information Services	
2006	KM ENGINEERS	Haines Company, Inc.	
	ARCHITESTUREAND	Haines Company, Inc.	
	ENGRG	Haines Company, Inc.	
2000	ARCHITECTURE&ENGINEERING	Haines & Company	Image pg. A1
	ARCHITECTURE&ENGINEERING	Haines & Company	Image pg. A1
	AETEKTONENGNRS	Haines & Company	Image pg. A1
1995	KMEngineers	PACIFIC BELL WHITE PAGES	
1992	KROMME N HOE K MCKE OW N ARCHITE CTS	PACIFIC BELL WHITE PAGES	
	Krommenhoek William C	PACIFIC BELL WHITE PAGES	
	Krommes Gail E	PACIFIC BELL WHITE PAGES	
1991	KM Engineers	PACIFIC BELL WHITE PAGES	
1989	KROMMENHOEKMCKEOWN & ASSOCIATES ARCHITECTS	Pacific Bell	
1984	Krommenhoek Mc Koewn & Associates archts	R. L. Polk & Co.	Image pg. A5
1980	Krommenhoek Me Koewn	R. L. Polk & Co.	Image pg. A10
	Associates archts	R. L. Polk & Co.	Image pg. A10
1975	Honeywell Inc Industrial Products Div	R. L. Polk & Co.	Image pg. A16
	Honeywell Inc Br temperature	R. L. Polk & Co.	Image pg. A16
	control mfg	R. L. Polk & Co.	Image pg. A16
	Honeywell Inc	R. L. Polk & Co.	Image pg. A16
1970	ELECTRONIC DATA PROCESSING	John M. Ducy	
	SALES DIV HONEYWELL	John M. Ducy	
	HONEYWELL INC BR TEMPERATURE	John M. Ducy	
	CONTROL MFG	John M. Ducy	
	MICRO SWITCH DIV OF HONEYWELL	John M. Ducy	
	INC ELECTRONICS PARTS MFG	John M. Ducy	
1966	HONEYWELL INC TEMPERATURE	R. L. Polk & Co.	Image pg. A21
	CONTROL MFG	R. L. Polk & Co.	Image pg. A21
	MICRO SWITCH DIV OF	R. L. Polk & Co.	Image pg. A21

<u>Year</u>	<u>Uses</u>	Source	
1966	HONEYWELL INC ELECTRONICS	R. L. Polk & Co.	Image pg. A21
	PARTS MFG	R. L. Polk & Co.	Image pg. A21
1961	Micro Switch electrical equip mfrs	R. L. Polk & Co.	Image pg. A27
	Minneapolis Honeywell Regulator Co temp contr mfg	R. L. Polk & Co.	Image pg. A27
1952	Bay Pk Trailer Sls	R. L. Polk & Co. of California	Image pg. A32
1524 MOR	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2000	No Current Listing	Haines & Company	Image pg. A1
1975	Carter Walter H	R. L. Polk & Co.	Image pg. A16
	Carters Wood Yard fire wood sis	R. L. Polk & Co.	Image pg. A16
1970	CARTER WALTER H	John M. Ducy	
1966	LAGACE OSWALD J	R. L. Polk & Co.	Image pg. A21
1961	No Return	R. L. Polk & Co.	Image pg. A27
1952	Ohlsen D L	R. L. Polk & Co. of California	Image pg. A32
1948	Du Pont W F	San Diego Directory Co.	Image pg. A36
1943	Klinefelter Vernor	San Diego Directory Co.	Image pg. A38
1525 MOR	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2013	ROBERTOS TACO SHOP	Cole Information Services	
2008	SANTANAS MEXICAN GRILL INC	Cole Information Services	
2006	SANTANAS MEXCN	Haines Company, Inc.	
2000	SANTANASMEXCN	Haines & Company	Image pg. A1
1992	Outrageous Brownies	PACIFIC BELL WHITE PAGES	
1989	Outrageous Brownies	Pacific Bell	
	Sybil et fils	Pacific Bell	
1984	J C Company petroleum equip	R. L. Polk & Co.	Image pg. A5
1980	J C Company petroleum equip	R. L. Polk & Co.	Image pg. A10
1975	Blue Ribbon Meats meats	R. L. Polk & Co.	Image pg. A16
1966	BAY PARK TRAILER SLS	R. L. Polk & Co.	Image pg. A21
1961	Bay Park Trailer SIs	R. L. Polk & Co.	Image pg. A27
1534 MOR	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2000	No Current Listing	Haines & Company	Image pg. A1

1535 MORENA BLVD

<u>Year</u>	<u>Uses</u>	Source	
2008	CIRCLE K	Cole Information Services	
2006	STORES	Haines Company, Inc.	
	CIRCLE K FOOD	Haines Company, Inc.	
2000	STORES	Haines & Company	Image pg. A1
	CIRCLEKFOOD	Haines & Company	Image pg. A1
1984	Utotem Market No S	R. L. Polk & Co.	Image pg. A5
1980	Utotem Market No S	R. L. Polk & Co.	Image pg. A10
1975	Utotem Market No S 22 grm ret	R. L. Polk & Co.	Image pg. A16

1540 MORENA BLVD

1540 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2013	MORENA PET HOSPITAL	Cole Information Services	
2008	MORENA PET HOSPITAL & BIRD CENTER	Cole Information Services	
2006	BIRD CENTER THE	Haines Company, Inc.	
	MORENA PET	Haines Company, Inc.	
	HOSPITAL&BIRD	Haines Company, Inc.	
	CNTR POTTER JEANNEN	Haines Company, Inc.	
2000	BIRD CENTER THE	Haines & Company	Image pg. A1
	MORENA PET	Haines & Company	Image pg. A1
	HOSPITAL	Haines & Company	Image pg. A1
	POTTER JEANNE M	Haines & Company	Image pg. A1
1992	Bird Center The	PACIFIC BELL WHITE PAGES	
	Bird	PACIFIC BELL WHITE PAGES	
	Potter Jeanne M DVM	PACIFIC BELL WHITE PAGES	
	Bird Center & Morena Pet Hospital	PACIFIC BELL WHITE PAGES	
1989	Bird Center The	Pacific Bell	
	Morena Pet Hospital	Pacific Bell	
	Ewing Dean E DVM	Pacific Bell	
	Bird Doctor The	Pacific Bell	
1984	Morena Pet Hospital	R. L. Polk & Co.	Image pg. A5
1980	Morena Pet Hospital	R. L. Polk & Co.	Image pg. A10
1975	Morena Pet Hospital	R. L. Polk & Co.	Image pg. A16
1970	MORENA PET HOSPITAL	John M. Ducy	
1966	MORENA PET HOSPITAL	R. L. Polk & Co.	Image pg. A21
1961	Morena Pet Hosp	R. L. Polk & Co.	Image pg. A27

1550 MORENA BLVD

<u>Year</u>	<u>Uses</u>	Source	
2013	MORENA SMOG PROS	Cole Information Services	
2008	MORENA SMOG PROS	Cole Information Services	
	SMOGPROS	Cole Information Services	
2006	MORENA SMOG	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A1
1992	Smog Pros	PACIFIC BELL WHITE PAGES	
1989	Morena Service Center	Pacific Bell	
1984	Bernies Arco gas sta	R. L. Polk & Co.	Image pg. A5
1980	Morena Boulevard Arco gas sta	R. L. Polk & Co.	Image pg. A10
1966	BOULEVARD INN TAVERN	R. L. Polk & Co.	Image pg. A21
	TRIANGLE BARBER SHOP	R. L. Polk & Co.	Image pg. A21
1961	Boulevard Inn restr	R. L. Polk & Co.	Image pg. A27
	Georges Used Furn	R. L. Polk & Co.	Image pg. A27
	Triangle Barber Shop	R. L. Polk & Co.	Image pg. A27
1570 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
1970	WILLSON W E	John M. Ducy	
1575 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2000	No Current Listing	Haines & Company	Image pg. A1
1605 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
1948	Rosenbaum W C	San Diego Directory Co.	Image pg. A36
1945	Jones W R sanitation contr	San Diego Directory Co.	
1611 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1948	Robinson H G	San Diego Directory Co.	Image pg. A36
1623 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2006	No Current Listing	Haines Company, Inc.	
2000	RICKS Sean M	Haines & Company	Image pg. A1
1989	Carter W H	Pacific Bell	
1984	Carter Walter H	R. L. Polk & Co.	Image pg. A5
1980	Carter Walter H	R. L. Polk & Co.	Image pg. A11
1000	Cartor Traitor II		

<u>Year</u>	<u>Uses</u>	Source	
1975	Nold C Jon	R. L. Polk & Co.	Image pg. A16
1970	FOUGERON GERTRUDE C MRS	John M. Ducy	
1966	FOUGERON GERTRUDE 0 MRS	R. L. Polk & Co.	Image pg. A21
1961	Fougeron Augustus F	R. L. Polk & Co.	Image pg. A27
1952	Fougeron A F	R. L. Polk & Co. of California	Image pg. A32
1948	Fougeron A F	San Diego Directory Co.	Image pg. A36
1943	Faugerson A F	San Diego Directory Co.	Image pg. A38
1635 MOR	ENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
1952	Jenkins J R	R. L. Polk & Co. of California	Image pg. A32
1639 MOR	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2006	No Current Listing	Haines Company, Inc.	
2000	WASHLICKJohn M	Haines & Company	Image pg. A1
1984	Bailey Pauline Mrs	R. L. Polk & Co.	Image pg. A5
1980	Bailey Pauline Mrs	R. L. Polk & Co.	Image pg. A11
1975	Bailey Pauline Mrs	R. L. Polk & Co.	Image pg. A16
1970	KEMP HARRY	John M. Ducy	
1966	JENNINGS ETHEL R	R. L. Polk & Co.	Image pg. A21
1961	Ray Adam R	R. L. Polk & Co.	Image pg. A27
1641 MOR	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2006	No Current Listing	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A1
1984	Kinney Ronald	R. L. Polk & Co.	Image pg. A5
1980	Kinney Ronald	R. L. Polk & Co.	Image pg. A11
1975	Kinney Ronald	R. L. Polk & Co.	Image pg. A16
1970	MILLER RICHD	John M. Ducy	
1966	COLLINS WM	R. L. Polk & Co.	Image pg. A21
1961	Savage Andrew F	R. L. Polk & Co.	Image pg. A27
1643 MOR	RENA BLVD		
<u>Year</u>	<u>Uses</u>	Source	
2000	No Current Listing	Haines & Company	Image pg. A1
1984	Israel Margarita	R. L. Polk & Co.	Image pg. A5
1980	N Bitto Betty	R. L. Polk & Co.	Image pg. A11
1975	Ellis Wayny	R. L. Polk & Co.	Image pg. A16

<u>Year</u>	<u>Uses</u>	Source	
1970	CONNELL ORA E MRS	John M. Ducy	
1966	CONNELL ORA E MRS	R. L. Polk & Co.	Image pg. A21
1961	Vacant	R. L. Polk & Co.	Image pg. A27
1645 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	MENGUAL Estelila	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A1
1984	Davis B	R. L. Polk & Co.	Image pg. A5
1980	Israel Margarita Mrs	R. L. Polk & Co.	Image pg. A11
1975	Israel Margarita Mrs	R. L. Polk & Co.	Image pg. A16
1970	JACOBS CHARLES	John M. Ducy	
1966	VACANT	R. L. Polk & Co.	Image pg. A21
1961	Peters Helen O Mrs	R. L. Polk & Co.	Image pg. A27
1655 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2013	LIGHT BULB WAREHOUSE	Cole Information Services	
2008	SAN DIEGO LIGHT BULB CO	Cole Information Services	
2006	LIGHT BULB HOUSE	Haines Company, Inc.	
	WAREHOUSE	Haines Company, Inc.	
	LIGHT BULB	Haines Company, Inc.	
	WAREHOUSE INC SD LIGHT BULB CO	Haines Company, Inc.	
	LIGHT BULB	Haines Company, Inc.	
2000	LIGHTBULB	Haines & Company	Image pg. A1
	WAREHOUSE	Haines & Company	Image pg. A1
	LIGHTBULB	Haines & Company	Image pg. A1
	WAREHOUSE INC	Haines & Company	Image pg. A1
	SD LIGHT BULB CO	Haines & Company	Image pg. A1
1989	GF PIANOS	Pacific Bell	
1985	VIDEO LIBRARY	PACIFIC BELL WHITE PAGES	
1984	Video Library rentals	R. L. Polk & Co.	Image pg. A5
	Phone Shops Of San Diego The	R. L. Polk & Co.	Image pg. A5
	Bio Ceramics Dental Laby dental laby	R. L. Polk & Co.	Image pg. A5
	Artisa Dental Laboratory	R. L. Polk & Co.	Image pg. A5
	R & H Enterprises inv broker	R. L. Polk & Co.	Image pg. A5
	Vacant	R. L. Polk & Co.	Image pg. A5
	Giacalone Remodeling	R. L. Polk & Co.	Image pg. A5
	Phone Shops Of San Diego The Sub Ofc	R. L. Polk & Co.	Image pg. A5

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1980	Vacant	R. L. Polk & Co.	Image pg. A11
	Phone Shops Of San Diego The	R. L. Polk & Co.	Image pg. A11
	Bio Ceramics Dental Laby dental	R. L. Polk & Co.	Image pg. A11
	State Farm Ins Co	R. L. Polk & Co.	Image pg. A11
	Caduceus Instrument Co med	R. L. Polk & Co.	Image pg. A11
	instr repr	R. L. Polk & Co.	Image pg. A11
	Roberts Construction Co	R. L. Polk & Co.	Image pg. A11
	Vacant	R. L. Polk & Co.	Image pg. A11
	Giacalone Remodeling	R. L. Polk & Co.	Image pg. A11
	Phone Shops Of San Diego The	R. L. Polk & Co.	Image pg. A11
	Sub Ofc	R. L. Polk & Co.	Image pg. A11
1975	Ozzies Music Inc rentals	R. L. Polk & Co.	Image pg. A16
	Storehouse Survival Foods	R. L. Polk & Co.	Image pg. A16
	dehydrated foods	R. L. Polk & Co.	Image pg. A16
1970	OZZIES MUSIC INC RENTAL	John M. Ducy	
1966	OZZIES MUSIC INC RENTAL	R. L. Polk & Co.	Image pg. A21
1961	Ozzies Music Inc	R. L. Polk & Co.	Image pg. A27
1660 MO	RENA BLVD		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
<u>Year</u> 1989	<u>Uses</u> Hanco Home Improvement	Source Pacific Bell	
1989			
1989	Hanco Home Improvement		
1989 1675 MO	Hanco Home Improvement RENA BLVD	Pacific Bell	
1989 1675 MO <u>Year</u>	Hanco Home Improvement RENA BLVD <u>Uses</u>	Pacific Bell Source	
1989 1675 MO <u>Year</u>	Hanco Home Improvement RENA BLVD Uses YONG Y V MD	Pacific Bell Source Cole Information Services	
1989 1675 MO <u>Year</u>	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION	Pacific Bell Source Cole Information Services Cole Information Services	
1989 1675 MO <u>Year</u>	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION	Pacific Bell Source Cole Information Services Cole Information Services Cole Information Services	
1989 1675 MO <u>Year</u> 2013	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC	Pacific Bell Source Cole Information Services Cole Information Services Cole Information Services Cole Information Services	
1989 1675 MO <u>Year</u> 2013	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC	Pacific Bell Source Cole Information Services	
1989 1675 MO <u>Year</u> 2013	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC EN ROUTE TRANSPORTATION	Pacific Bell Source Cole Information Services	
1989 1675 MO <u>Year</u> 2013	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC EN ROUTE TRANSPORTATION YV YONG MD INC	Pacific Bell Source Cole Information Services	
1989 1675 MO Year 2013	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC EN ROUTE TRANSPORTATION YV YONG MD INC COMMUNICATIONS PLUS	Pacific Bell Source Cole Information Services	
1989 1675 MO Year 2013	Hanco Home Improvement RENA BLVD USES YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC EN ROUTE TRANSPORTATION YV YONG MD INC COMMUNICATIONS PLUS TRANSPORTATION MOYLAN CHIRO	Source Cole Information Services Haines Company, Inc.	
1989 1675 MO Year 2013	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC EN ROUTE TRANSPORTATION YV YONG MD INC COMMUNICATIONS PLUS TRANSPORTATION MOYLAN CHIRO YONG Y VMD	Source Cole Information Services Haines Company, Inc. Haines Company, Inc.	
1989 1675 MO Year 2013	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC EN ROUTE TRANSPORTATION YV YONG MD INC COMMUNICATIONS PLUS TRANSPORTATION MOYLAN CHIRO YONG Y VMD COMNCTNS PLUS	Source Cole Information Services Haines Company, Inc. Haines Company, Inc.	Image pg. A1
1989 1675 MO Year 2013 2008	Hanco Home Improvement RENA BLVD Uses YONG Y V MD TELECARE CORPORATION EN ROUTE TRANSPORTATION MOYLAN CHIROPRACTIC MOYLAN CHIROPRACTIC EN ROUTE TRANSPORTATION YV YONG MD INC COMMUNICATIONS PLUS TRANSPORTATION MOYLAN CHIRO YONG Y VMD COMNCTNS PLUS EN ROUTE	Source Cole Information Services Haines Company, Inc. Haines Company, Inc. Haines Company, Inc. Haines Company, Inc.	Image pg. A1 Image pg. A1

<u>Year</u>	<u>Uses</u>	Source	
2000	MOYLANCHIRO	Haines & Company	Image pg. A1
	SANDVEN Alice	Haines & Company	Image pg. A1
	SCHNEIDER	Haines & Company	Image pg. A1
	COMMUNICATION INC	Haines & Company	Image pg. A1
	TELECO	Haines & Company	Image pg. A1
	YONG Y V MD	Haines & Company	Image pg. A1
1992	Bay Park Medical Clinic	PACIFIC BELL WHITE PAGES	
	Bay Park Medical Clinic Counseling Services	PACIFIC BELL WHITE PAGES	
	Bay Park Physical Therapy	PACIFIC BELL WHITE PAGES	
	Ofc	PACIFIC BELL WHITE PAGES	
	Res	PACIFIC BELL WHITE PAGES	
1989	Dimas Alejandro	Pacific Bell	
	Gallo Fleet Management	Pacific Bell	
	Giacalone Remodeling & New Homes	Pacific Bell	
1985	DO-LT-YOURSELF BUSINESS PHONE SYSTEMS	PACIFIC BELL WHITE PAGES	
	PHONE SHOPS OF	PACIFIC BELL WHITE PAGES	
	PHONES 4 SALE	PACIFIC BELL WHITE PAGES	

MORENA PL

1510 MORENA PL

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1985	VIDEO LIBRARY	PACIFIC BELL WHITE PAGES

MORENCI ST

1403 MORENCI ST

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	GARZA Grace	Haines Company, Inc.	
2000	MROWKAMark S	Haines & Company	Image pg. A1
1992	Garza G	PACIFIC BELL WHITE PAGES	
1989	Garza G	Pacific Bell	
1984	Wettach Bradley A	R. L. Polk & Co.	Image pg. A7
1980	Wettach Bradley A	R. L. Polk & Co.	Image pg. A13
1975	Sala Christopher V	R. L. Polk & Co.	Image pg. A18
1970	NO RETURN	John M. Ducy	
1966	FLORES NORMA MRS	R. L. Polk & Co.	Image pg. A24
1961	Pineda Nabor	R. L. Polk & Co.	Image pg. A29

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1960	Pineda Nabor	The Pacific Telephone Telegraph Co.	
1955	Pineda Nabor	R. L. Polk & Co.	
1406 MOI	RENCI ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	No Current Listing	Haines Company, Inc.	
2000	OBEIRNEJill	Haines & Company	Image pg. A1
	OBEIRNE Kevin	Haines & Company	Image pg. A1
1989	Van Orshoven J L	Pacific Bell	
1984	Van Orshoven Joseph L	R. L. Polk & Co.	Image pg. A7
1975	Van Orshoven Joe L	R. L. Polk & Co.	Image pg. A18
1970	VAN ORSHOVEN J LEO	John M. Ducy	
1966	VAN ORSHOVEN J LEO S	R. L. Polk & Co.	Image pg. A24
1961	Van Orshoven J Leo	R. L. Polk & Co.	Image pg. A29
1960	Van Orshoven J L	The Pacific Telephone Telegraph Co.	
1413 MOI	RENCI ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	Wirl Susan	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A1
1989	Brooke Robt D	Pacific Bell	
1984	Brooke Robt D land inv	R. L. Polk & Co.	Image pg. A7
1980	Brooke Robt D land inv	R. L. Polk & Co.	Image pg. A13
1975	Brooke Robt D land inv	R. L. Polk & Co.	Image pg. A18
1970	BROOKE ROT	John M. Ducy	
1966	BROOKE ROT D	R. L. Polk & Co.	Image pg. A24
1961	Pyne Alf W	R. L. Polk & Co.	Image pg. A29
1960	Pyne Alfred W	The Pacific Telephone Telegraph Co.	
1414 MOI	RENCI ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	BRUNETTO Anthony	Haines Company, Inc.	
2000	BRUNETTOAnthony	Haines & Company	Image pg. A1
1984	Lonn Marc A	R. L. Polk & Co.	Image pg. A7
1980	Lonn Marc A	R. L. Polk & Co.	Image pg. A13
1975	Cole Raymond L	R. L. Polk & Co.	Image pg. A18
1970	COLE RAYMOND L	John M. Ducy	
1966	RICE DONALD F S	R. L. Polk & Co.	Image pg. A24
1961	Sweeney Clement J	R. L. Polk & Co.	Image pg. A29

<u>Year</u>	<u>Uses</u>	Source	
1955	Beebe Franklin L	R. L. Polk & Co.	
1425 MOR	ENCI ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	MILLER Darlene	Haines Company, Inc.	
2000	RUDASILL Geraldine	Haines & Company	Image pg. A1
1992	Rudasill Geraldine A	PACIFIC BELL WHITE PAGES	
1989	Rudasill Geraldine A	Pacific Bell	
1984	Rudasill Geraldine A Mrs	R. L. Polk & Co.	Image pg. A7
1980	Rudasill Geraldine A Mrs	R. L. Polk & Co.	Image pg. A13
1975	Rudasill Robt E	R. L. Polk & Co.	Image pg. A18
1970	RUDASILL ROBT E	John M. Ducy	
1966	RUANE FRED S	R. L. Polk & Co.	Image pg. A24
1961	Hay Lester P	R. L. Polk & Co.	Image pg. A29
1426 MOR	ENCI ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	BROOKE Robs D	Haines Company, Inc.	
2000	BROOKERobt D	Haines & Company	Image pg. A1
1992	Brooke Robt D	PACIFIC BELL WHITE PAGES	
	Brooke Ron	PACIFIC BELL WHITE PAGES	
1984	No Return	R. L. Polk & Co.	Image pg. A7
1980	Quick Terry M	R. L. Polk & Co.	Image pg. A13
1975	Jelley Ernest E	R. L. Polk & Co.	Image pg. A18
1970	NOORE M BETTY a	John M. Ducy	
1966	MOORE HOYT B S	R. L. Polk & Co.	Image pg. A24
1961	Moore Hoyt B	R. L. Polk & Co.	Image pg. A29
1428 MOR	ENCI ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	ELLIOTT Glenn	Haines Company, Inc.	
2000	ELLIOTTGlenn	Haines & Company	Image pg. A1
1989	Elliott Glenn	Pacific Bell	
1984	Via Cara J T	R. L. Polk & Co.	Image pg. A7
1980	Hammack Jeanne L	R. L. Polk & Co.	Image pg. A13
1975	Schillinger Paul J JrR0	R. L. Polk & Co.	Image pg. A18
1970	SCHILLINGER PAUL J JR a	John M. Ducy	
1966	CAMPBELL EDW L	R. L. Polk & Co.	Image pg. A24
1961	Dyer Robt L	R. L. Polk & Co.	Image pg. A29

<u>Year</u>	<u>Uses</u>	Source	
1961	Clapsaddle Harold K	R. L. Polk & Co.	Image pg. A29
1960	Clapsaddle Harold K	The Pacific Telephone Telegraph Co.	
1431 MOR	RENCI ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	MAVIS John	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A1
1992	Mavis John K	PACIFIC BELL WHITE PAGES	
1989	Mavis John K	Pacific Bell	
1984	Mavis John K	R. L. Polk & Co.	Image pg. A7
1980	Mavis John K	R. L. Polk & Co.	Image pg. A13
1975	Mavis John K	R. L. Polk & Co.	Image pg. A18
1970	CAMPBELL EDW L	John M. Ducy	
1966	PECK LOUIS	R. L. Polk & Co.	Image pg. A24
1961	Peck Louis	R. L. Polk & Co.	Image pg. A29
1960	Peck Louis	The Pacific Telephone Telegraph Co.	
1436 MOR	RENCI ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	No Current Listing	Haines Company, Inc.	
2000	INSCOETeri L	Haines & Company	Image pg. A1
1984	Filter Rusty	R. L. Polk & Co.	Image pg. A7
1980	No Return	R. L. Polk & Co.	Image pg. A13
1975	Gabriel Jorge E	R. L. Polk & Co.	Image pg. A18
1970	HOUSE MELVIN	John M. Ducy	
1966	HOUSE MELVIN	R. L. Polk & Co.	Image pg. A24
1961	Alexander Vaughan Mrs	R. L. Polk & Co.	Image pg. A29
1960	Alexander Vaughan	The Pacific Telephone Telegraph Co.	
1955	Alexander Vaughan	R. L. Polk & Co.	
1437 MOR	RENCI ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	e TUGGEY Glenn	Haines Company, Inc.	
2000	TUGGEY Glenn E	Haines & Company	Image pg. A1
1984	Tuggey Glen E	R. L. Polk & Co.	Image pg. A7
1980	Tuggey Glen E	R. L. Polk & Co.	Image pg. A13
1975	Tuggey Glen	R. L. Polk & Co.	Image pg. A18
1970	NO RETURN	John M. Ducy	
1966	LOTT CLARENCE	R. L. Polk & Co.	Image pg. A24

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1961	Curry Marjorie P Mrs	R. L. Polk & Co.	Image pg. A29
1960	Curry Marjorie P	The Pacific Telephone Telegraph Co.	
NASHVI	IIF ST		
IVACITY	LLL 01		
1323 NA	SHVILLE ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	O DON Carios	Haines Company, Inc.	
2000	DONLupe	Haines & Company	Image pg. A3
1992	Don Lupe	PACIFIC BELL WHITE PAGES	
1989	Don Lupe	Pacific Bell	
1984	Don Carlos	R. L. Polk & Co.	Image pg. A8
1980	N Don Carlos	R. L. Polk & Co.	Image pg. A14
1975	Don Carlos J	R. L. Polk & Co.	Image pg. A19
1970	MORENO ANTHONY	John M. Ducy	
1966	JENNINGS ETHEL MRS	R. L. Polk & Co.	Image pg. A25
1961	Blasingham Jay	R. L. Polk & Co.	Image pg. A30
1952	Sanchez Jose	R. L. Polk & Co. of California	Image pg. A34
1325 NA	SHVILLE ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
<u>Year</u> 2006	<u>Uses</u> BANKS UIIIy	Source Haines Company, Inc.	
	BANKS UIIIy	Haines Company, Inc.	Image pg. A3
2006	BANKS UIIIy APPLE Glenn	Haines Company, Inc. Haines Company, Inc.	Image pg. A3 Image pg. A8
2006	BANKS UIIIy APPLE Glenn MOLLOY Brian	Haines Company, Inc. Haines Company, Inc. Haines & Company	
2006 2000 1984	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co.	Image pg. A8
2006 2000 1984 1980	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co.	Image pg. A8 Image pg. A14
2006 2000 1984 1980 1975	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co.	Image pg. A8 Image pg. A14
2006 2000 1984 1980 1975 1970	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy	Image pg. A8 Image pg. A14 Image pg. A19
2006 2000 1984 1980 1975 1970	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co.	Image pg. A14 Image pg. A19 Image pg. A25
2006 2000 1984 1980 1975 1970 1966 1961 1952	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co.	Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30
2006 2000 1984 1980 1975 1970 1966 1961 1952	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R Jamiekowski C J	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co.	Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30
2006 2000 1984 1980 1975 1970 1966 1961 1952 1326 NA	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R Jamiekowski C J	Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co.	Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30
2006 2000 1984 1980 1975 1970 1966 1961 1952 1326 NA Year	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R Jamiekowski C J SHVILLE ST Uses	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30 Image pg. A34
2006 2000 1984 1980 1975 1970 1966 1961 1952 1326 NA Year 2000	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R Jamiekowski C J SHVILLE ST Uses No Current Listing	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30 Image pg. A34
2006 2000 1984 1980 1975 1970 1966 1961 1952 1326 NA Year 2000 1989	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R Jamiekowski C J SHVILLE ST Uses No Current Listing Tapp J & C L	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. Source Haines & Company Pacific Bell	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30 Image pg. A34
2006 2000 1984 1980 1975 1970 1966 1961 1952 1326 NA Year 2000 1989 1984	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R Jamiekowski C J SHVILLE ST Uses No Current Listing Tapp J & C L No Return	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. Of California	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30 Image pg. A34 Image pg. A34
2006 2000 1984 1980 1975 1970 1966 1961 1952 1326 NA Year 2000 1989 1984	BANKS UIIIy APPLE Glenn MOLLOY Brian Mc Guirk Hazel M Mrs Me Guirk Hazel M Mrs Cubillos Conrad MC GUIRK HAZEL M MRS MC GUIRK HAZEL M MRS Phillips John R Jamiekowski C J SHVILLE ST Uses No Current Listing Tapp J & C L No Return Palmer James R	Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30 Image pg. A34 Image pg. A3 Image pg. A8 Image pg. A8 Image pg. A14

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1970	PALMER JAMES R	John M. Ducy	
1966	VACANT	R. L. Polk & Co.	Image pg. A25
1961	Rainwaters Benj F	R. L. Polk & Co.	Image pg. A30
1952	Rainwater B F	R. L. Polk & Co. of California	Image pg. A34
1332 NA	SHVILLE ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	MANGOLD R	Haines Company, Inc.	
	LOGGINS Kelley	Haines Company, Inc.	
2000	MINESTracay	Haines & Company	Image pg. A3
1992	Jacobsen N & W	PACIFIC BELL WHITE PAGES	
1989	Jacobsen N & W	Pacific Bell	
1984	Hansen Jolly R	R. L. Polk & Co.	Image pg. A8
1980	Hansen Jolly R	R. L. Polk & Co.	Image pg. A14
1975	Hansen Jolly R	R. L. Polk & Co.	Image pg. A19
1970	HANSEN JOLLY R	John M. Ducy	
1966	HANSEN JOLLY R	R. L. Polk & Co.	Image pg. A25
1961	Sarkin Stewart C	R. L. Polk & Co.	Image pg. A30
1952	Partman J G	R. L. Polk & Co. of California	Image pg. A34
1333 NA	SHVILLE ST		
1333 NA <u>Year</u>	SHVILLE ST <u>Uses</u>	<u>Source</u>	
		Source Cole Information Services	
<u>Year</u>	<u>Uses</u>		
<u>Year</u> 2008	<u>Uses</u> IMPERIAL AVE LIONS CLUB	Cole Information Services	Image pg. A3
<u>Year</u> 2008 2006	Uses IMPERIAL AVE LIONS CLUB No Current Listing	Cole Information Services Haines Company, Inc.	Image pg. A3 Image pg. A8
<u>Year</u> 2008 2006 2000	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes	Cole Information Services Haines Company, Inc. Haines & Company	
Year 2008 2006 2000 1984	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co.	Image pg. A8
Year 2008 2006 2000 1984 1980	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co.	Image pg. A8 Image pg. A14
Year 2008 2006 2000 1984 1980 1975	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art Coleman Art	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co.	Image pg. A8 Image pg. A14
Year 2008 2006 2000 1984 1980 1975	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art Coleman Art COLEMAN ART	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy	Image pg. A8 Image pg. A14 Image pg. A19
Year 2008 2006 2000 1984 1980 1975 1970 1966 1961	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art Coleman Art COLEMAN ART COLEMAN ART	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25
Year 2008 2006 2000 1984 1980 1975 1970 1966 1961	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art Coleman Art COLEMAN ART COLEMAN ART COLEMAN ART	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25
Year 2008 2006 2000 1984 1980 1975 1970 1966 1961 1339 NA	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25
Year 2008 2006 2000 1984 1980 1975 1970 1966 1961 1339 NA Year	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art Coleman Art COLEMAN ART COLEMAN ART Coleman Arth SHVILLE ST Uses	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25
Year 2008 2006 2000 1984 1980 1975 1970 1966 1961 1339 NA Year	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art SHVILLE ST Uses EVYLENA Ford	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co. Source Haines Company, Inc.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25
Year 2008 2006 2000 1984 1980 1975 1970 1966 1961 1339 NA Year 2006	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art Coleman Art COLEMAN ART COLEMAN ART Coleman Arth SHVILLE ST Uses EVYLENA Ford FORD Evy	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co. Source Haines Company, Inc. Haines Company, Inc.	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30
Year 2008 2006 2000 1984 1980 1975 1970 1966 1961 1339 NA Year 2006	Uses IMPERIAL AVE LIONS CLUB No Current Listing CADYJamnes Coleman Art Coleman Art Coleman Art COLEMAN ART COLEMAN ART COLEMAN ART SHVILLE ST Uses EVYLENA Ford FORD Evy FORDEvy L	Cole Information Services Haines Company, Inc. Haines & Company R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. John M. Ducy R. L. Polk & Co. R. L. Polk & Co. Haines Company, Inc. Haines & Company	Image pg. A8 Image pg. A14 Image pg. A19 Image pg. A25 Image pg. A30

<u>Year</u>	<u>Uses</u>	Source	
1975	Ford Evylena Mrs	R. L. Polk & Co.	Image pg. A19
1970	FORD EVYLENA MRS	John M. Ducy	
1966	FORD EVYLENA MRS	R. L. Polk & Co.	Image pg. A25
1961	Ford Evylena Mrs	R. L. Polk & Co.	Image pg. A30
1952	Ford V Y	R. L. Polk & Co. of California	Image pg. A34
1340 NAS	HVILLE ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	e WIEMERDarran	Haines Company, Inc.	
1984	Roberts Danl E	R. L. Polk & Co.	Image pg. A8
1980	Redden David C consto wkr	R. L. Polk & Co.	Image pg. A14
1975	Redden David	R. L. Polk & Co.	Image pg. A19
1970	REDDEN DAVID	John M. Ducy	
1966	REDDEN DAVID	R. L. Polk & Co.	Image pg. A25
1961	Griggs Carroll L	R. L. Polk & Co.	Image pg. A30
1952	Chisenhall W V	R. L. Polk & Co. of California	Image pg. A34
1347 NAS	HVILLE ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2006	No Current Listing	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A3
1984	Schott Michl D	R. L. Polk & Co.	Image pg. A8
1980	Don Ruben T	R. L. Polk & Co.	Image pg. A14
1975	Pribyl Eulalia Mrs	R. L. Polk & Co.	Image pg. A19
1970	PRIBYL EULALIA MRS	John M. Ducy	
1966	RIVAS BERT	R. L. Polk & Co.	Image pg. A25
1961	Wallace Wm A	R. L. Polk & Co.	Image pg. A30
1952	Downs O G	R. L. Polk & Co. of California	Image pg. A34
1348 NAS	HVILLE ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	LEE Matthew	Haines Company, Inc.	
	MCGINLEY Brian	Haines Company, Inc.	
2000	ROSEJack	Haines & Company	Image pg. A3
	ROSE Michael	Haines & Company	Image pg. A3
1984	Fordham Wm L	R. L. Polk & Co.	Image pg. A8
1980	Fordham Wm L	R. L. Polk & Co.	Image pg. A14
1975	Fordham Wm L	R. L. Polk & Co.	Image pg. A19
1970	FARMER JOHN R	John M. Ducy	

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1966	FARME JOHN R	R. L. Polk & Co.	Image pg. A25
1961	Farmer John R	R. L. Polk & Co.	Image pg. A30
1952	Farmer J R	R. L. Polk & Co. of California	Image pg. A34
1351 N	ASHVILLE ST		
<u>Year</u>	<u>Uses</u>	Source	
2006	a BADDOURWadia	Haines Company, Inc.	
2000	SHEIBLEYTina M	Haines & Company	Image pg. A3
1992	I Matthews Teri L	PACIFIC BELL WHITE PAGES	
	Matthews T	PACIFIC BELL WHITE PAGES	
	Matthews Steven	PACIFIC BELL WHITE PAGES	
1989	Matthews Steven	Pacific Bell	
1984	Hardner Mark	R. L. Polk & Co.	Image pg. A8
1980	N Napier Corky	R. L. Polk & Co.	Image pg. A14
1975	Moss Bruce	R. L. Polk & Co.	Image pg. A19
1970	MOSS BRUCE	John M. Ducy	
1966	HOLMES RHEA MRS	R. L. Polk & Co.	Image pg. A25
1352 N	ASHVILLE ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1980	Ormsby Foster P	R. L. Polk & Co.	Image pg. A14
1355 N	ASHVILLE ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2000	STAIRSK	Haines & Company	Image pg. A3
1989	Oberg C H	Pacific Bell	
1984	Brown Eunice H Mrs	R. L. Polk & Co.	Image pg. A8
1980	Brown Eunice H Mrs	R. L. Polk & Co.	Image pg. A14
1975	Brown Eunice M Mrs	R. L. Polk & Co.	Image pg. A19
1970	BROWN J OTIS	John M. Ducy	
1966	BROWN J OTIS	R. L. Polk & Co.	Image pg. A25
1356 N	ASHVILLE ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2008	OPTIMUMPROGRAMS CO	Cole Information Services	
2006	o TRAN Hoa	Haines Company, Inc.	
2000	No Current Listing	Haines & Company	Image pg. A3
1992	Robinson Scott A	PACIFIC BELL WHITE PAGES	
1984	Collins R	R. L. Polk & Co.	Image pg. A8
1980	Collins R	R. L. Polk & Co.	Image pg. A14

1975 Buchanan Jim R. L. Polk & Co. 1970 GIBBS ARTH F JR John M. Ducy 1966 PETERSEN VERL R. L. Polk & Co. 1961 Whitesell Wallace L R. L. Polk & Co. 1960 Whitesell Wallace L The Pacific Telephone Telegraph Co. 1952 Allen J L R. L. Polk & Co. of California 1357 NASHVILLE ST Year Uses Source 2006 MURRELL Jambe Haines Company, Inc. STONGE Dennis Haines & Company 1984 No Return R. L. Polk & Co. 1980 No Return R. L. Polk & Co.	Image pg. A19 Image pg. A25 Image pg. A30 Image pg. A34
1966 PETERSEN VERL 1961 Whitesell Wallace L 1960 Whitesell Wallace L 1952 Allen J L 1357 NASHVILLE ST Year Uses 2006 MURRELL Jambe STONGE Dennis 1984 No Return R. L. Polk & Co. R. L. Polk & Co. R. L. Polk & Co. SR. L. Polk & Co. Haines Company, Inc. Haines & Company R. L. Polk & Co.	Image pg. A30 Image pg. A34
1961 Whitesell Wallace L 1960 Whitesell Wallace L 1952 Allen J L 1357 NASHVILLE ST Year Uses 2006 MURRELL Jambe STONGE Dennis 1984 No Return R. L. Polk & Co. The Pacific Telephone Telegraph Co. R. L. Polk & Co. of California Stone Telegraph Co. R. L. Polk & Co. Haines Company, Inc. Haines Company, Inc. Haines & Company R. L. Polk & Co.	Image pg. A30 Image pg. A34
1960 Whitesell Wallace L 1952 Allen J L 1357 NASHVILLE ST Year Uses 2006 MURRELL Jambe Haines Company, Inc. STONGE Dennis Haines & Company 1984 No Return The Pacific Telephone Telegraph Co. R. L. Polk & Co. of California Source Haines Company, Inc. Haines & Company R. L. Polk & Co.	Image pg. A34
1952 Allen J L R. L. Polk & Co. of California 1357 NASHVILLE ST Year Uses 2006 MURRELL Jambe Haines Company, Inc. STONGE Dennis Haines Company, Inc. 2000 KULIN Randal Haines & Company 1984 No Return R. L. Polk & Co.	
1357 NASHVILLE ST Year Uses 2006 MURRELL Jambe Haines Company, Inc. STONGE Dennis Haines Company, Inc. 2000 KULIN Randal Haines & Company 1984 No Return R. L. Polk & Co.	
YearUsesSource2006MURRELL JambeHaines Company, Inc.STONGE DennisHaines Company, Inc.2000KULIN RandalHaines & Company1984No ReturnR. L. Polk & Co.	Image pg. A3
2006 MURRELL Jambe Haines Company, Inc. STONGE Dennis Haines Company, Inc. 2000 KULIN Randal Haines & Company 1984 No Return R. L. Polk & Co.	Image pg. A3
STONGE Dennis Haines Company, Inc. 2000 KULIN Randal Haines & Company 1984 No Return R. L. Polk & Co.	Image pg. A3
2000 KULIN Randal Haines & Company 1984 No Return R. L. Polk & Co.	Image pg. A3
1984 No Return R. L. Polk & Co.	Image pg. A3
· · · · · · · · · · · · · · · · · · ·	3 - 1 - 3
1980 No Return R. L. Polk & Co.	Image pg. A8
	Image pg. A14
1975 Larson Clarence W R. L. Polk & Co.	Image pg. A19
1970 LARSON CLARENCE W John M. Ducy	
1966 LARSON CLARENCE M R. L. Polk & Co.	Image pg. A25
1961 Straume Arnold F R. L. Polk & Co.	Image pg. A30
1364 NASHVILLE ST	
<u>Year</u> <u>Uses</u> <u>Source</u>	
2006 a STONGE Dennis Haines Company, Inc.	
1984 St Onge Dennis J R. L. Polk & Co.	Image pg. A8
1980 Vacant R. L. Polk & Co.	Image pg. A14
1975 Barrett Jason P R. L. Polk & Co.	Image pg. A19
1970 BARRETT J P a John M. Ducy	
1966 VACANT R. L. Polk & Co.	Image pg. A25
1961 Monson Thos R. L. Polk & Co.	Image pg. A30
1952 Monson Thos R. L. Polk & Co. of California	Image pg. A34
1370 NASHVILLE ST	
<u>Year</u> <u>Uses</u> <u>Source</u>	
2006 No Current Listing Haines Company, Inc.	
2000 PHIPPSJerry E Haines & Company	Image pg. A3
1984 Phipps Jerry R. L. Polk & Co.	Image pg. A8
1980 Kromer Robt R. L. Polk & Co.	Image pg. A14
1975 Wallace Wayne W R. L. Polk & Co.	Image pg. A19
1970 WALLACE WAYNE W John M. Ducy	
WALLACE WATTE W	Image pg. A25

<u>Year</u>	<u>Uses</u>	<u>Source</u>		
1961	Hinton Billy D	R. L. Polk & Co.	Image pg. A30	
1952	Mc Call R L	R. L. Polk & Co. of California	Image pg. A34	
1371 NAS	SHVILLE ST			
<u>Year</u>	<u>Uses</u>	Source		
2006	o WILSON Thomas	Haines Company, Inc.		
1984	White Arth C	R. L. Polk & Co.	Image pg. A8	
1980	White Arth C	R. L. Polk & Co.	Image pg. A14	
1975	White Arth C	R. L. Polk & Co.	Image pg. A19	
1970	WHITE ARTH a	John M. Ducy		
1966	WHITE ARTH	R. L. Polk & Co.	Image pg. A25	
1961	Vacant	R. L. Polk & Co.	Image pg. A30	
S MORENA BLVD				
1675 S M	ORENA BLVD			
<u>Year</u>	<u>Uses</u>	<u>Source</u>		
1992	Lichtenstein Bernard MD	PACIFIC BELL WHITE PAGES		
TONOPAH AVE				
4504 TOI	NOPAH AVE			
<u>Year</u>	<u>Uses</u>	Source		
2006	a MOORE CM	Haines Company, Inc.		
4512 TOI	4512 TONOPAH AVE			
<u>Year</u>	<u>Uses</u>	Source		
2006	GOOD Megan	Haines Company, Inc.		
	MURPHY Paticia	Haines Company, Inc.		
4520 TO	NOPAH AVE			
<u>Year</u>	<u>Uses</u>	Source		

Haines Company, Inc.

Haines Company, Inc.

Source

2006

<u>Year</u>

2006

4528 TONOPAH AVE

<u>Uses</u>

o CHAVARRIA Thos H

REATEGUI James

TONOPAH ST

4504 TONOPAH ST

<u>Year</u>	<u>Uses</u>	Source	
2000	MOOREC M	Haines & Company	Image pg. A4
	MOOREC M	Haines & Company	Image pg. A4
1992	Hagen IF	PACIFIC BELL WHITE PAGES	
1989	Hagen I F	Pacific Bell	
1984	Hagen Iva F Mrs	R. L. Polk & Co.	Image pg. A9
1980	Hagen yva F Mrs	R. L. Polk & Co.	Image pg. A15
1975	Hagen Iva F Mrs	R. L. Polk & Co.	Image pg. A20
1970	HAGEN HARRY C	John M. Ducy	
1966	HAGEN HARRY C	R. L. Polk & Co.	Image pg. A26
1961	Hagen Harry C	R. L. Polk & Co.	Image pg. A31
1960	Hagen Harry C	The Pacific Telephone Telegraph Co.	
1952	Hudson J A	R. L. Polk & Co. of California	Image pg. A35
4512 TON	OPAH ST		
<u>Year</u>	<u>Uses</u>	Source	
1984	Rachmanow Andrew A	R. L. Polk & Co.	Image pg. A9
1980	Rachmanow Andrew A	R. L. Polk & Co.	Image pg. A15
1975	Rachmanow Andrew A p 1mb contr	R. L. Polk & Co.	Image pg. A20
1970	STACK MAC B	John M. Ducy	
1966	NO RETURN	R. L. Polk & Co.	Image pg. A26
1961	Hoofard Wilber C	R. L. Polk & Co.	Image pg. A31
1960	Hoofard W C	The Pacific Telephone Telegraph Co.	
1955	Flood Stephen A Mrs	R. L. Polk & Co.	
1952	Flood S A	R. L. Polk & Co. of California	Image pg. A35
4520 TON	OPAH ST		
<u>Year</u>	<u>Uses</u>	Source	
2000	CHAVARRIAThos H	Haines & Company	Image pg. A4
1992	Chaverra Betsaida	PACIFIC BELL WHITE PAGES	
	Chavarria Thos H	PACIFIC BELL WHITE PAGES	
1989	Chavarria Thos H	Pacific Bell	
1984	Chavarria Thos H	R. L. Polk & Co.	Image pg. A9
1980	Chavarria Thos H	R. L. Polk & Co.	Image pg. A15
1975	Chavarria Thos H	R. L. Polk & Co.	Image pg. A20
1970	CHAVARRIA THOS H	John M. Ducy	
1966	MORGAN CORINNE M MRS	R. L. Polk & Co.	Image pg. A26

<u>Year</u>	<u>Uses</u>	<u>Source</u>	
1961	Morgan Corrine M Mrs	R. L. Polk & Co.	Image pg. A31
1960	Morgan Corinne	The Pacific Telephone Telegraph Co.	
	Huffaker Edw	The Pacific Telephone Telegraph Co.	
1955	Morgan Corinne	R. L. Polk & Co.	
1952	Morgan C M Mrs	R. L. Polk & Co. of California	Image pg. A35
4528 TO	NOPAH ST		
<u>Year</u>	<u>Uses</u>	<u>Source</u>	
2000	KRAUSETimolhy J	Haines & Company	Image pg. A4
	KRAUSE Liz	Haines & Company	Image pg. A4
	KRAUSETim	Haines & Company	Image pg. A4
1992	Krause Tim& Liz	PACIFIC BELL WHITE PAGES	
	Krause Timothy J	PACIFIC BELL WHITE PAGES	
1989	Krause Tim & Liz	Pacific Bell	
	Krause Timothy J	Pacific Bell	
1984	Browne Frances M Mrs	R. L. Polk & Co.	Image pg. A9
1980	Browne Leonard K	R. L. Polk & Co.	Image pg. A15
1975	Browne Leonard K	R. L. Polk & Co.	Image pg. A20
1970	BROWNE LEONARD K	John M. Ducy	
1966	BROWNE LEONARD K	R. L. Polk & Co.	Image pg. A26
1961	Browne Leonard K	R. L. Polk & Co.	Image pg. A31
1960	Browne Leonard K	The Pacific Telephone Telegraph Co.	
1955	Browne Leonard K	R. L. Polk & Co.	

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
1579 Morena Blvd	1995, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1950, 1948, 1945, 1943, 1940,
	1938, 1933, 1927, 1921, 1907, 1903

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
1323 NASHVILLE ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1325 FRANKFORT ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1325 NASHVILLE ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1326 NASHVILLE ST	2013, 2008, 2006, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1331 FRANKFORT ST	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1332 NASHVILLE ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1333 NASHVILLE ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1333 NASHVILLE ST	2013, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1339 FRANKFORT ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1339 NASHVILLE ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1340 NASHVILLE ST	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1347 FRANKFORT ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1347 NASHVILLE ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1348 NASHVILLE ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1351 NASHVILLE ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1352 NASHVILLE ST	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1940, 1938, 1933, 1927, 1921, 1907, 1903

Address Researched	Address Not Identified in Research Source
1355 FRANKFORT ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1355 NASHVILLE ST	2013, 2008, 2006, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1356 NASHVILLE ST	2013, 2008, 1995, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1356 NASHVILLE ST	2013, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1357 NASHVILLE ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1363 FRANKFORT ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1364 NASHVILLE ST	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1369 FRANKFORT ST	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1370 NASHVILLE ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1371 NASHVILLE ST	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1377 FRANKFORT ST	2013, 2008, 2006, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1403 MORENCI ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1404 FRANKFORT ST	2013, 2008, 1995, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1404 FRANKFORT ST	2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1406 MORENCI ST	2013, 2008, 1995, 1992, 1991, 1985, 1980, 1976, 1971, 1965, 1962, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1412 FRANKFORT ST	2013, 2008, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1413 MORENCI ST	2013, 2008, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1414 MORENCI ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1420 FRANKFORT ST	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1425 MORENCI ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1426 MORENCI ST	2013, 2008, 1995, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1428 MORENCI ST	2013, 2008, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903

Address Researched	Address Not Identified in Research Source
1431 MORENCI ST	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1436 MORENCI ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1437 MORENCI ST	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1448 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1450 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1452 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1454 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1456 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1458 MORENA BLVD	2013, 2008, 2000, 1995, 1992, 1991, 1985, 1976, 1971, 1970, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1460 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1460 MORENA BLVD	2013, 2008, 1995, 1991, 1976, 1971, 1965, 1962, 1961, 1960, 1956, 1955, 1950, 1945, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1460 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1461 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1464 MIRA MESA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1464 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1464 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1465 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1465 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1465 MORENA BLVD	2013, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1471 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903

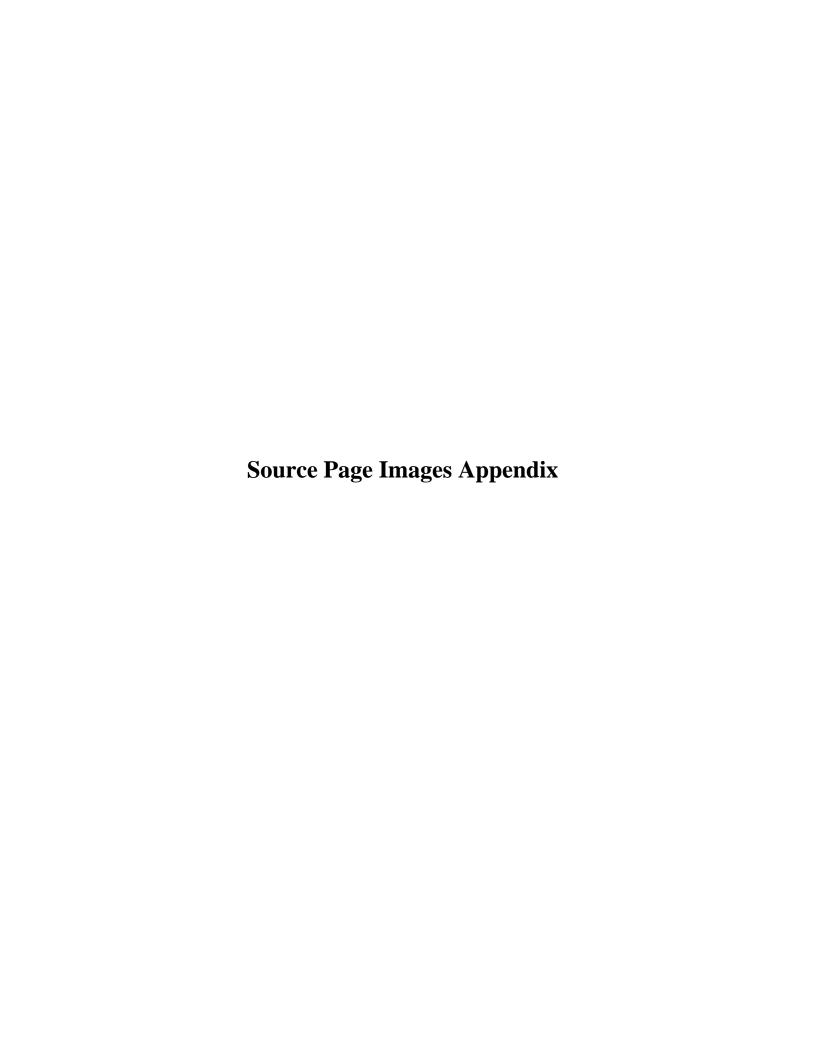
Address Researched	Address Not Identified in Research Source
1471 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1471 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1473 MORENA BLVD	2013, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1473 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1476 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1476 MORENA BLVD	2013, 2008, 2006, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1478 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1485 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1491 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1501 MORENA BLVD	2013, 2008, 1995, 1991, 1989, 1985, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1501 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1502 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1502 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1945, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1503 MORENA BLVD	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1503 MORENA BLVD	2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1506 MIRA MESA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1506 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1506 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1940, 1938, 1933, 1927, 1921, 1907, 1903

Address Researched	Address Not Identified in Research Source
1509 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1510 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1510 MORENA BLVD	2013, 2008, 1985, 1976, 1975, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1945, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1510 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1510 MORENA PL	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1511 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1985, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1511 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1513 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1515 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1515 MORENA BLVD	2013, 2008, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1515 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1524 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1945, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1525 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1970, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1525 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1526 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1530 MIRA MESA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1534 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1535 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903

Address Researched	Address Not Identified in Research Source
1535 MORENA BLVD	2013, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1540 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1540 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1540 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1550 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1550 MORENA BLVD	2013, 2008, 1995, 1991, 1985, 1976, 1975, 1971, 1970, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1550 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1551 MISSION BAY DR	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1570 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1575 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1605 MISSION BAY DR	2013, 2008, 2006, 2000, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1605 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1611 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1623 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1950, 1945, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1635 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1639 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1639 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1641 MORENA	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903

FINDINGS

Address Researched	Address Not Identified in Research Source
1641 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1643 MORENA BLVD	2013, 2008, 2006, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1645 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1655 MORENA BLVD	2013, 2008, 1995, 1992, 1991, 1976, 1971, 1965, 1962, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1655 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1660 MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1675 MORENA BLVD	2013, 2008, 1995, 1991, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1675 MORENA BLVD	2006, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
1675 S MORENA BLVD	2013, 2008, 2006, 2000, 1995, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4504 TONOPAH AVE	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4504 TONOPAH ST	2013, 2008, 2006, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1955, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4512 TONOPAH AVE	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4512 TONOPAH ST	2013, 2008, 2006, 2000, 1995, 1992, 1991, 1989, 1985, 1976, 1971, 1965, 1962, 1956, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4520 TONOPAH AVE	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4520 TONOPAH ST	2013, 2008, 2006, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4528 TONOPAH AVE	2013, 2008, 2000, 1995, 1992, 1991, 1989, 1985, 1984, 1980, 1976, 1975, 1971, 1970, 1966, 1965, 1962, 1961, 1960, 1956, 1955, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903
4528 TONOPAH ST	2013, 2008, 2006, 1995, 1991, 1985, 1976, 1971, 1965, 1962, 1956, 1952, 1950, 1948, 1945, 1943, 1940, 1938, 1933, 1927, 1921, 1907, 1903



MORENA BLVD 2000

ENABLVD	92110 CONT	.MORENA B	LVD GOREHAM	92110 CONT 619-275-6191	MORENA	BLVD	92110 CO	VT. JMORI	ENA BLV	IO IONES James	92110 CC 619-278-0226	NT.	MORENA BLVD * ARGUS	92110 CON 619-276-3939	T _MO	RENA PL * KILLEBREW ROOFING	92110 CC	TAC
33 XXXX	OO OO 619-279-2424 5		MOOREAASSOC LA CONCHA BCH	619-275-6191	1525	*SANTANAS MEXCN FOOD	619-275-6010		37 R	IONES James RUSHTON Gordon XXXX	519-275-4921 OO	+9	TROPHYBENGRAVING CO	#13=Z16-3333	Ί.,	* KILLEBREW HOUPING * NICOS MEXICAN FOOE 5171 XXXX	858-272-7907 00	
●FEIKE Sheldon 2D	00 8		RESRT	619-275-7050	1534 4 1535	XXXX * CIRCLE K FOOD	00 619-276-9451	+9 20	143	XXXX BOMEZ Ramon E	OO 619-276-0231	+9	* BLUE UNE BUILDERS	819-276-6101	3	S181 XXXX X CUSHMA!	00	
2 *CMTREKING 4 *TDJCOING	619-275-1500 619-276-5920		CONTRACTING SYNCROTECH	619-275-5440	1540	STORES + BIRD CENTER THE	619-275-0888	4 20	351 B	KOLCOMB Frank B BARTLETT Greg	619-276-4472 619-275-5375	5 +9	★INSTALLED ROOFING USA		+9	★ 8 BUS 3 RES	2 NEW	
FURNAHM ACCENT	619-275-5810 5	1337	SFTWARE XXXX	00		* MORENA PET HOSPITAL	619-275-0688	20	263 2 265 2	XXXX	00		★LAW OFC OF VICTOR URSO	619-278-8577	M	ORENA VIEW D	OR 9190	6
E2 XXXX	619-276-2727 6 CO	1339 1345	XXXX XXXX I C I DULUX PAINTS	00 00 619-275-8188		*POTTER JEANNE M DVM	619-275-0588	0 20	059 IN	XXXX NIGUEZ Norma	00 519-276-4646	В	*R&R APPRAISAL GROUPING	619-275-5900	+9 C	AMPO		
54 XXXX	00 00 619-275-3834	X	TECOLOT	E RD	1550	FRANKFC xxxx	00	20	263	XXXX XXXX SLAWUSCH Don	OO OO 619-275-4989		*STUDIES&ANALYSIS *TRI-STAR NEWORY INC			WEALTH CODE 30		
	619-275-3834 619-276-8933 +9		SPECIALTIES ENGINEERING CORP MORENA MBL VLG	619-276-3333	1575	XXXX . COASTAL TRUR VLA	00 619-276-8117	20	C	SLAWUSCH DON CHALUPNIK MICH DI BAY PARK FINANCIAL	619-276-2651		*URSD VICTOR X JELLETT	619-275-8577		SRZA XXXX	00	
	00		BAKER Gene BAKER Lae	619-275-1309 619-275-1309		*COASTAL TRUR VILLA COOPER M.D.		20	*B	MAY PARK-REALTY WORLD	619-276-1431	+9	2505 XXXX 2519 XXXX	00 00		9831 HAYES Montgomery X LAKEVIEV	618-478-9121	
76 *CONCORD LIGHTING	619-275-2303		BANTA Michael J CATALANO Orlando A	619-275-5209 619-276-3728		LASH Norman J LEE Robert E	619-275-3882	+9	*R	REALTY WORLD BAY	619-275-1431	+9	2521 *LIQUOR LOCKER 2523 *MORENA BAYTAN	619-276-5055 619-276-7206 -	19 25	9901 TIFFANY Jules TIFFANY Rev	619-478-2504 619-478-2504	+:
* CONCORD LIGHTING CO	619-275-2305 4		ENSIGN Thomas FERRUSI Joe	619-275-2566 + 619-275-3127	9	MUSGROVE Susan A NEVES Joseph A	619-275-6146	+9 20 +9 20		CAVANAGHJW XXXX	519-276-7295 OO		2525 *MORENA BARBER SHP *SAFARI SIGNS	619-276-2023 -		9906 XXXX 9940 XXXX	00	
* CONCORD LIGHTING CO			FLEISCH Richard O GARCIAJAVIER Pathy	619-276-9071 + 619-276-5541	5	PODLESNY Greg A SCHMITTER Ruth	619-276-8832		X +c	NAPIER STY CHEVROLET	619-276-6910		2555 *LABOR READY *MELLOW YELLOW	619-276-7364 619-275-2335	7	X WHITE GO	OSE RE)
*CONCORD LIGHTING CO			GARRALDA Abel A GAULT V C	619-275-6671 619-275-4317	7	SCHOBERG Thomas SILVA Larry D	619-275-0925 619-276-1843	2	B	SODY SITY CHEVROLET GEO			DESIGNS *PETRICCAS RESTRICT	619-275-2555		NO# BARNWELL Terry FI * D BUS & RES	619-478-5320 2 NFW	
MO *HAUSER FURNITURE XXXX CONTLLIGHTING MAIN	00		GIPSON Eloyd G GOMEZ Amada GOULD L	619-276-1522 619-276-5017 619-276-3964	8 (579	THOMPSON Leon THOMPSON Patty		+9 +9	*C	LKSWGNNEW STY CHEVROLET PRTS	\$ 619-276-6900		*SEATTLE'SLATTE CAFE	619-275-5282	1 84	ORENCI 92110		
STORE	858-560-8108 7		GRAHAM Grace A GREENE G	619-276-8755 619-276-8722	1523 1639	RICKS Sean M WASHLICK John M	619-275-6131 619-276-3167	+9	*C	ITY CHEVROLET SER' ITY FASINGARENTALS	V 619-276-4260 619-276-6171		X INGULF	00		AN DIEGO		
CONNECTIONS	619-275-3632 5		GULDEN Richard HAROLD Bester	619-275-4536 619-275-3269	7 1541 1543	XXXX	00		+C	EASING&HENTALS ITY VOLKSWAGEN ITY'S MISSION BAY	619-276-6171 619-276-4250		X CLAIREM	ONT DR		WEALTH CODE 40		
EXCHANGE	858-560-5500 6		HERNANDEZ Famando HOVIAK R J	819-275-3724 + 619-275-3075	9 1545 1655	XXXX ★LIGHT BULB	DO 619-275-7851	+9	V	OLKSWGN SV	619-276-5910		MORENA BLVD V	V 92110		NCACH CODE 40		
* ROSS' CD&LASER DISC EXCHANGE			JONES Vernon L LESLIE Bruce	619-275-0226 619-275-6317		WAREHOUSE *LIGHT BULB	619-275-0351	7	V	LKSWGNBODY STY'S MISSN BAY	819-276-6171	A	SAN DIEGO	. 02110		X TONOPAH	I AV	
7 *PELLA WINDOW STORE 9 *WINDOW BLIND DEPOT	619-275-0200 619-276-6007 +9		LOCASCIO Peter Caesar MACUINALEZ Samuel	619-275-6169	7 8	WAREHOUSE INC ★SD LIGHT BULB CO	619-276-1500	5	V	LKSWGNMAIN TTY'S WISSN BAY	519-276-6900	8	WEALTH CODE 54			1406 OBERNEJA OBERNEKOVO	619-276-0188 619-275-0188	0.55
K DORCAS			MORENA MOBILE VLLGE PAYNE Lilian	619-276-5699 619-275-5402	1675	*COMNCTHS PLUS *FOLEY SUSAN PHD DMD LAC	619-275-3500 619-275-0500	7	* H	LKSWGNPARTS HISSN BAY	619-275-5910	1	WDCIII DOCE 34			1413 XXXX 1414 •BRUNETTO Anthony	00	4
NAPLES 11 *BUDS NATURAL MAN	619-275-2411 2		POSTAK Mike RISO Domenick J	619-275-3053 619-275-1467		*MOYLAN CHIRO *SANDVEN Alica	619-276-5752 CO	3 8	S	OLKSWAGEN BODY			1022 *ABBEY CARPETS *AMERICA'S BEST	619-275-2229 619-275-2229	6	1425 PRUDASILL Geraldina 1426 PROOKE Robt D	619-276-4145 619-276-4726	21
* NATURAL MAN THE * P&L BARBER SHOP	619-275-2411 619-276-1888		RUTHVEN Edward S SALGADO AL	619-275-3155 619-275-6955	1 3	* SCHNEIDER COMMUNICATIONING	619-276-3000	6	V	HISSN BAY OLKSWAGEN MAIN	619-276-6171		CARPETS INC *LAMPSHADES	619-276-6530	-9 1	1428 ELLIOTT Glimn 1431 XXXX	619-276-7419 CO	
MANAGEMENT	619-275-0980 7		SAVIN A SERRANO Judy	619-276-3962 619-275-0221	В	*TELECO *YONG Y V MD	619-276-3000 619-275-2777	6 3	+ M	DFC HISSN BAY OLKSWAGEN PARTS	619-276-6900	1	UNLIMITED +SHUTTERMART OF CA		-	1436 •INSCOETerri. 1437 •TUGGEY Glenn E 1441 •NYGARD Curtis A	00	1
CONSULTANTS	619-276-7600 6		SHOEMAKER Lastin L SOTO Angel M	619-276-0602 619-275-8989 +		*AF M ENTERTAINMENT *AMER FORTH MSCN 32	619-276-4324 5 619-276-4324	7	D	OLKSWAGEN PARTS IPT IISSN BAY	519-276-4260	,	★TILE CLUB ★TILECLUB	619-276-0271 619-276-0271		1441 PNYGARD Curts A 1444 PDOME Mark 1451 PBRACY Laforest R	OO OO 619-276-2696	÷
*CASE MANAGEMENT TRANSITION TM	Appropriate the control of the contr	1395	XXXX	00	1735	* MUSICIANS ASSN 325 * FIRESTONE	619-276-4324 619-276-0577	7	V	OLKSWAGEN SERV DEPT		1	1029 XXXX 1065 *MORENA TILE SUPPLY		- 2	1451 PHACY LINORES H 1452 PRAINS LJ 1460 PLARRIVA Frank R	619-275-4854 619-276-1425	+1
* CENTURY FINANCIAL RESOURCES * CITY LIGHTS XMAS ST			BIKES BY THE BAY CAS OOCTOR INC	619-275-2268 619-275-2129	1 1747	TIRE&SERVICE CENTE XXXX	00		+14	LORENA DISTRIBUTING	B19-275-6552	4	1071 XXXX 1075 XXXX	00		X ASHER	00	141
* D L B REALTY INC	619-276-6863 7 619-276-4722 7	1409 1410 ±	PRO ALIGN SERVICE XXXX	00 619-276-8685 00	4 X	ASHER	00	. 22		MILTON	00		1076 XXXX 1105 *WATERS CATERING	00 619-276-8803		1507 BORGHES Edith BORGHES Edith H	619-278-5167	+1
* EDGE TECH INDUSTRIES	619-275-4884 +9		COOL LICK	619-276-2040 619-276-1662	2 1801	*ALL AMER MAN *INTL HAIR	619-276-4340 619-276-4340	7 22	21 +5	ILVERSPIGOT LINGE M V DISTRIBUTORS	619-276-1030 619-275-0125	8	X BUENOS	AV		1514 •WILSON Fitsuko 1522 FORREY Tun P	00 619-275-2312	4
* EMPLOYMENT SERVICES	619-276-8071 6	*	KOOL LICK TRIPLE AAA AUTO	619-276-2040 619-276-4682	2	REPLACEMENT SYSTEMS *ROSARIAS PIZZA 8	619-275-0450		*T	AILGATE SPORTS	619-275-2000	7	1120 *ART WORLD&FRAMING *WDRLO ART&FRAMING	619-275-0461	6	1523 •KLEIN kvin J 1526 XXXX	00	;
SYSTEMS TRASTA	619-276-2157 6		BODY&PAINT MIKE MOORES TOWING		1813	*SHUFORD DAVID W *A M PM SWR&DRN	619-276-3100 619-286-6348	0 22	м	OUMATE EDCTNL	619-275-7117	2	1121 *ADVANCED FLOOR COVERINGS	819-275-5338	1	1531 CASTILLO David A 1532 BARTOLINI Norma	619-276-1824 519-276-5021	(
PRORM EMP SERV	619-276-8071 +9		MOORES MIKE TOWING REEVES Larry	619-276-3483 619-276-8956	1013	CLNG *BILL HOWE PLUMBING		, 22	241 *M	XXXX Ausictech	OO 619-276-4201		*CARPETS GALORE	619-276-7773 619-276-1104	6	1540 KOSITS Cheryl D • KOSITS Rudolph J	619-275-4257 619-275-4257	.20
* PGI * PENTRUST	619-276-7600 +9 619-275-9200 7		TRANSMISSIONS	619-276-2700	2	*HOWE BILL PLUMBING *HOWE BILL PLUMBING	618-276-6620	2 22	*A	ACTION GAR DR CO ACTION AUTO BARAGE DOOR OPNR	619-276-1422 619-276-1222	8	ENVIRONMENTAL LAB			1541 •DERIEUX Thomas A 1549 XXXX 1550 CARLSON Enk	DO DO B19-275-2749	-
	00	1433 *	SOUTHRN CA TOWING JOE JR AUTO REPAIR	619-276-8697 619-276-4600	1815 1817	XXXX *A A A NV RSDNT AGNT			245 +M	KORENA WELDING BOLL WEEVIL	619-275-4829 619-276-8015	8	*DAVIS PUGH INC 1125 *DURLER CONSTRICO	619-275-7330 619-276-0113 619-278-4777	3	CARLSON Kristin 1559 •WOOD Robert L	619-275-2749 619-276-7971	í
* DICTATING SYSTEMS CO INC			CAPITAL RESOURCE	819-276-2000	3	* A ALPHA SERVICE INC * AALPHA CORPORATE	619-275-1040 619-275-7339	+9	X	LISTER		•	#SANDY'S CUSTOM DESIGNS 1127 #PRESIDIO JEWELRY	619-276-4711 619-275-3494	8	X ERIE		
19 * SOPHIAS NAILS	619-275-2544 5 619-275-6151 0		INC FAST STOP INS SERVS	2400 1220000 0	,	SERVICES * AALPHA SERVICES INC	619-275-1040	5 23	313	SABA DONALD G DDS XXXX DURFEE Melvin J	619-276-2145 OO 619-276-0666		1127 *PHESIDIOJEWELHT 1129 XXXX 1130 *UNIQUESTONE	00 619-275-8300	7	X LITTLEFIE * 0 BUS 32 RES		
29 * CAR COVERS NORTH CST TARPAULIN	619-276-7100 6		MASON R FINANCIAL SERVICES	619-276-0123	7	* ADVISOR PRINTING * AIR PLUS MECHANICA * ALPHA CORPORATE	L 619-276-8155	5 23	317	XXXX MITH Anthony J	DO 619-276-7262		IMPORTS 1131 *ALLENBHENING	619-276-9790	M	ORENO AV 920	40	
TARPAULIN WORKS	819-275-7100 B		MCCLINTOCK SELF DEFENSE	619-281-8500	S	SERVICES *BJ DRIVING SCHOOL			E	BUILDING ADVANCEO MUSCLE	619-278-1144	8	1133 +CUT A RUG 1136 +GENGHIS KHAN	619-276-6515 619-275-1182		KESIDE	1 10	
	619-276-3411 8 619-275-4114		PEREZACO INC SOLUTIONS SERVICE	619-276-2200 + 619-276-4771 +	9	*ESTHETIC CRMC ONTL *HERR PHILIP	619-275-2145 619-275-1040	3	T	HERAPY	S19-278-7312		FURNITURE 1162 XXXX	00	1	WEALTH CODE 6.0		
RSTRNT * CUBAN ANDRES RSTRNT	619-275-4114 0	*	GROUP TAX SERVICE	619-276-0460 +	•	* PAC HEIGHTS PRINTING	619-276-5550	7	*A	WCE LUDUBON SOCIETY	519-275-0557	3	1164 XXXX 1170 *COLES CARPET CLEAR	00 819-276-1199	8			
* MERA MARIA	619-276-4245 OD		VOLHEIM&ASSOCIATE: WRIGHT THOMAS XXXX	619-275-1717 CO	8 1929 8 1845	XXXX *ALL STAR GLASS CO	00 619-275-3343		*B	BRUCE CLINT BRUND RICHARD CPA	619-275-8750 619-275-0511	6	A DIV *COLES CARPET WRHS	819-278-5140	1	X WILLOW F 1035 *REYNOLDS Siella J	RD ∞	
41 * CONTL LIGHTING	619-275-3444 5	1442 X	LONGMIRE Robot M KNOXVILL	619-276-0778	3 1849 1851	SIMPSON Heather KNOX Daniel J	619-276-1072 619-276-6430	+9	*C	COAST PRINTING CUSTOM HAIR DESIGNS	619-275-8654 619-276-8487	+9 6	*FLOOR INSTALLERS 1171 *N A P A AUTO PARTS	858-484-3220 618-686-6272	8 1	1046 XXXX 1054 KUMKEM	00 619-44 3- 1198	+!
	619-275-6523 5	1446	SWARTZELL Jessica T	619-278-8357	8 1855 1857	XXXX XXXX XXXX	00 00	-	*1	R ORTHODONICS ARKINS ED	\$19-275-5245 \$19-276-8750	8	1175 *HAUSER CONTRACT 1181 *QUALITY INTERIORS	619-275-3214 619-275-5737	6	1055 ★SUN BAR ROPING CLUB	619-443-8239	¥01
50 +50 CO MNTL HLTH CTR 59 + QUINTANAAASSOCIAT-			LEHIGH BEEMAN BODDIO	619-275-2843 +	9 1867	LUCAS Esther A	619-275-5510	+9	*P	ANASONIC EASA	519-276-7312		1190 *LEVITZ FURNITURE CORP	619-276-8210	11	1956	00 619-290-4312 619-443-3048	+:
ES *THE LIVING ELEMENT	515.0 100.00		LATSHAW Rosemary H SCHENK Cynthia BODYWORK	619-275-3901 + 519-275-6701 + 519-276-2608		LITTLEFIE * BAY PARK MOTOR CARS	619-275-2222		*P	HONEMATE INSWERING MACH	519-276-7312	+9	*LEVITZ FURNITURE CORP GELIVERY	760-471-5808	7	1103 HAMEL Laurin HAMEL Liso HAMEL Liso	619-443-5454 619-443-2527	
60 * CHURCH OF RELIGIOUS SCIENCE SD	619-276-1223	0.000	EMPORIUM MILLER Neva	810.075.1043 4	1903	RADEMAKER JIM + WORKMAN DENTAL	619-278-5515 619-275-4336	+9	S	ALES PUBLIC TELEPHONE	619-276-7312		*LEVITZ FURNITURE CORPORATION	819-276-2495	11	1109 * BUCHMANN EGG INC * GET IN THE ZONE	619-443-6875 619-390-7315	
SECURITY	619-275-7020 3	1454	HEFFERNAN Shannon J		7 1905	LAB BRITT Kenneth F	619-276-5813	+9	*A	OC RECORD A CALL SYS	619-278-7312	2	X DORCAS	00	1	SPORTSWEAR +LOS AMIGOS	619-561-2781	8
	619-275-7000 8 619-275-7007 5	1456	DEPTOLLA Angela L THEW Stella	619-276-4632 + 619-278-7630 +	9 1907 9 1909	WALDROP Charles D XXXX	619-275-4109 OO	5	*9	O AUDUBON SOCIETY SECURITY	619-276-0557 619-276-2480	8	CRAFTED FURN	819-275-0250		DSTRBTNG 1115 XXXX	00	
	619-276-1223 1	10	CORTLAND CRIFD PRO SO FLY FISHERS CLUB	519-278-4822 519-275-4822	1911 1915	XXXX	00 00		*5	SPECIALISTS SOUTHWST APPRAISA SUBJA NUVESTUENT CO			*STAR FURMITURE 1210 *PETCO	618-275-5101 618-275-5100	8 1	1121 •CARPENTER Edward E 1123 •RIDING M M	619-443-1297 619-443-6480	
CHURCH	619-276-1223	х.	STROUD TACKLE NASHVILL	619-278-1822 .E	1923 1929	* FASHION CAREERS CA PRICE Michael C	619-275-4700 619-275-4542	5 2321.		SUBIA INVESTMENT CO OLO TRIESTE RESTRA		2	≠RELIABLE FURNITURE	619-275-6006 00 00	1	1127 *PINCIOTTI Kewn D 1128 XXXX 1135 *ALVERNAZ John P	00 00 00	*
CENTER CENTER SIGNATURE SOFT INC	4117111770		POPERS J SRFBRD	619-275-3478 619-275-0447	8 1931 1 1933	XXXX XXXX CARDENAS Roman D	00 00 619-275-7821	1	*T	TRIESTE RESTAURANT XXXX	619-276-1841 OO		1215 XXXX 1221 +CNGINC	00 819-275-1563 00	1 1	1135 *ALVERNAZJOHN P 1137 *MCALOUN Thomas J 1138 *LAKESIDE PLTRY RINC	00	
72 * SAMPPALA DAVID MAI	619-275-0967 2 619-275-0967 2	1461	RPR XXXX	00	1935Y 1937 1939	CARDENAS Roman D XXXX XXXX	619-275-7821 00 00		345 *E	D G INV INC BARNER GENE	619-275-0015 619-276-1648		1225 XXXX 1240 ± TOYS R US 1245 XXXX	619-276-7094 OO	5	1145 PNEWMAN Robi C 1149 PDAVID Paul Auk	619-443-1763 619-551-3930	
*X-M GLOBAL ENTERPRISES	619-275-0766 +9	1484	TEMPLE Tom R TEMPLE Tom R	819-276-6106 819-276-6922 819-275-5021 +	8 1943	XXXX STANTON Michael J.Jr	00 619-276-7637	+9 23	351 +C	REALTOR CENTURY 21 SOLYMAR	R 519-275-4280	5	1285 * PATTIE WELLS' DANCETINE CENTER	619-275-3523	8 1	1158 • BRZEZINSKI Thomas J 1163 • GARATE John E	00	+
* CRAIN DARREL DC	619-278-7575 7 619-276-6718 +9	1465 *	WASDEN Gabrielle EAST&WEST CHIROPRACTIC	819-275-5021 + 619-278-6565 +	9 1947 1949	XXXX LIGHTNER Bruce P	OQ 619-276-8502	+9	2	EVOE KENCENTURY		5	1274 XXXX 1275 *DENTAL HEALTH	00 619-275-7190	6 1	1169 •HILL Daniel W 3D 1171 •ARTAZ Bobbie G	00 00	+
	619-275-1339 4 619-276-8141	*	SEKITO CHIROPRACTIC CENTER	619-275-6565	9	RUF Reinhardt Wit.SON Heather	819-276-2510 619-275-4540	+9	G	GARNER GENE-REALTOR	519-276-1631		FOUNDATION *DENTAL SOC SD CO	819-275-0244		1172 POFFENBARGER CR 1173 WALCZAK Clauda	00 619-443-5526	
PARTS	619-275-0883 3	18	SEKITO JUNE DC LAC		9 1951 1955	XXXX *BACI RESTAURANT	OO 619-275-2094		X	KANE	619-275-4280	4				WALCZAK Ron VILORIA Stewart J WALCZAK Ron	619-443-5526 00 619-443-2800	
PARTS	619-275-8141	1475 +	TAL AUTO REPAIR	619-276-1049 1 OO	9 1959	* DA NINO'S PIZZA XXXX * K F C DELIVERY	619-275-4395 OO 619-275-2584		415 +M	XXXX MARTIN'S	DO 819-275-1872	1	FURNITUREABED CO +SD CO DENTAL SOC	619-275-0244	3	X MARY LN		
BD XXXX	00 619-276-9560	1476 *	WEIGLE MICHAEL WEIGLE MICHAEL	619-275-4517 4 619-275-5028 +	7	*K F C DELIVERY *K F C DINEIN OR CARRY OUT	619-275-2584 619-275-2594	7	S	REFRIGERATION SERVICE REGINAL DIPAUL BLTY	E10.575		★TOOTH FAIRY 1289 XXXX	619-275-7195 OO	1	1202 XXXX 1203 XXXX 1205 JAGGITom	00	
THE	619-276-9560	1478	COMPANY	00	X	ASHTON	*** ***		* S	REGINALD PAUL FILTY Swisher Sanitation Caccamo Malthew Fi		4	1285 * MITCHELL'S FLOOR COVERINGS	619-276-8300	1	1205 JAGGI Tom 1215 • FRY Robert L 1218 GUNSAULS Ancela	619-443-4008 00 619-390-8663	
MONARCH * CASHWAY ELECTRIC	200200000000000000000000000000000000000	1485 1501	XXXX XXXX SMITH ROBT B CSI CCS	00	2001	* A-1 AMERICAN FIRE EQUIP HYDROS * G E T WET SCUBA FUN	619-275-3473	24	423% ★T	DAUCAMO MATERIAN H TIN AUTO BOOY REPAIR	619-275-1226	5	X VEGA	819-276-0272		GUNSAULS Angela GUNSAULS Keth 1218 STELLMACK J M	619-390-8663 619-443-3209	
SUPPLY * ELECTRIC MINTHO&RPR		303600 6	ARCH DUNN EDWARDS	619-276-7431 619-276-0022	,	*GET WET SCUBA FUN *GET WET WATER EDUCATION TRANS	619-275-1822 619-275-1822	+9 24	431 +A	AESTHMETRICS ATTORNEY SCOTT	619-276-4523 619-276-6656	+9	X TECOLOT	ERD	1	1224 • JONES Harry T 1233 • LEBLANG Waller	619-443-1996 OO	•
72 XXXX 34 XXXX	00		PAINTS ALL SPORTS SAN	619-275-1292	6	+SCUBA SAN DIEGOGE WET		8	J. ★B	IAMES DAVID Baugh Clyde á atty	619-278-0104	6	CENTERS INC 1455 * BLUE PORPOISE WAN		5 1	1236 ◆FAGAN John C 1245 XXXX	00	+
	619-278-1122 00		DIEGO IMPERIAL MASTERS SWIMMING	619-275-1292	6	*50 BICYCLE&SKATE RENTAL			*H	COLT&BAUGH ATTY A	B19-275-0104 T 619-275-0104	6	1457 *DANIELS TIRE SERV * 48 BUS 15 RES	619-276-4415	0 1	1248 *THE MARSHALL GROUP	619-561-8098	
	619-276-5637		SAN DIEGO SD IMPERIAL ALL	619-275-1292	6	★SD SCUBA-GET WET ★W E T-WATER	619-275-3483 619-275-3483		1. * N	.AW MILLAY PATRICK P	619-275-0330	7				VANA Sophie F LUTZ & A	00	+
12 XXXX 14 *PRISSY'S BEAUTY	00 619-276-5345	- 14	SPORTS SD IMPERIAL	619-275-6542	6	*WATER EDUCATION	619-275-1822	+9	31	OINT PACIFIC NSURANCE INC	619-275-0330	5	MORENA PL 921 SAN DIEGO	10	-	1254 TOCCO Pele TOCCO Sandy	619-561-0570 619-561-0570	
SALON M5 *BAY VIEW MOTEL	619-276-3657 C	,	ATHLETICS CONGRESS SWIMMING SAN	619-275-1292	6	TRAINING WET *WET WATER	619-275-1822	i	* S	SCALA JOE REALTY SCALAS	619-275-5758 619-275-5760	1				1256 XXXX 1311 JOHNSON Howard W DI		
STANLEY Kristin D	619-275-6254 +9 619-275-6613 +9		DIEGOIMPERIAL TRACK&FIELD SAN	619-275-6542	6 2005	EDUCATION TRAINING ★ CRAVEY THOMAS M	619-275-5088		# \$	LOORNGAINTR COTT JAMES DAVID	619-276-5658	6	X MORENA	BLVD 610-276-9758		OHNSON ValT ALBINO Carol CANTERBURY Churk	619-561-3409 619-390-3095 619-443-6737	
ne xxxx	619-276-9079 +9 00	1513	DIEGOIMPERIAL XXXX	00		* MASON'S-SERVICING BMW AUTHOLS	619-275-5088	24	437 +A	ATTY AT LAW AVALON FRANS&LIVERY	619-276-4052	2	5145 *ACCUPRINT 5151 *ADMIRAL ROOFING *DRKILLEBREW		+8 1	11329 CANTERBURY Chiek 11332 XXXX 11337 FROBERTSON Jack J	619-443-6737 00 00	
325 XXXX	619-276-9101 OO 619-275-2744 0		AETEKTON ENGINES	619-275-7480	3 2027 20275	DLIVETTI Keith P COLLINS John F XXXX	619-275-6534 619-276-3611 DO	3	* N	TRANS&LIVERY MEETING MANAGER THE	619-275-0181	2	ROOFING *GAROIS	619-275-5772	1	11337 •HOBERTSONJACKJ 11358 •CUODEBACK Wm B 11409 •COSCIA Tony	519-443-8D70 619-561-2824	
300 * MDRENA BLVD SHELL	619-276-2744 0 619-276-3653 3 619-276-3663	•	K M A ARCHITECTURE&ENGI- NEERING	619-276-7710	6 2029 2031 2033	XXXX XXXX	00 00	24	445 +A	I HE AMER MASTERS PRINTINGAGRAPHICS	619-275-5912	+9	NEILAASSOCTS GRABER Jeff	619-275-2182	1 1	11410 •SAVAGE KAJ: 11424 THOMAS Graves	819-443-3627 519-443-6489	
	v-a.v-v003												DEVER EXCEPT AS AUTHORIZE					

<u>Adjoining</u>

<u>Source</u>

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FRANKFORT ST 2000

		FRANKFOR	151 2000		
FORT STOCKTON DR 92103CI 1866 XXXX 00 1867 OCONNOR JK 519-297-7878 X SIERRA VISTA 1874 XXXX 00	1504 ROGERS Ed 859-272-7941 8 • ROGERS Ently 859-272-7941 8 1551 • NEELEY Daniel L OO + 5 1553 • ISHIDA Saburo OO + 5	FORWARD \$2037 CONT X TAFT AV 778 SWANSER Alan 858-464-6903 618 XXXX O 624 CAFFERY M 849-469-4695	FOURSOME DR 91941 CONT 3493 XXXX 00 X BIRDIE DR X GOLF DR	FRANCES DR 92019 EL CAJON	FRANCISWAY 91941 CON 4275 **SELLAR E.W OO 4285 **EXCHANGAR J 619-644-0953 **BONAXDAR J 619-644-0953 **BONAXDAR R 519-644-0953
1874 XXXX 001 1887 KIRBY John H Jr 619-295-6475 X ST JAMES PL 1903 XXXX 00	2 1555 •HENSHAW Watlace G 00 T X PROMONTORY 1562 XXXX 00	824 CAFFERYM 858-459-4689 STEIN Martin 858-459-4689 STEIN Martin 858-454-9619 X LINDA ROSA AV	* 1 BUS 31 RES 3 NEW FOUTZ AV 92109	WEALTHCODE & & X HARBISON CANYON	X NERIDR * 0 BUS 15 RES 4 NEW
1913 XXXX OC 1914 *RADIAJER Vidor OC 1918 XXXX OC 1919 *POGUEŁASSOCIATES 619-683-2600	X INGRAHAM 7 1505 OVERDORF Lonnie 858-273-4636 5 X JEWELL	RAS LARRETTE Chreeks REPLECT RISK 40	SAN DIEGO PACIFIC BEACH AREA	RD 113 XXXX 00 117 *HARBISON CNYN BIBLE 618-445-1231	FRANK LN 92071 SANTER
1920 *ESPRESSO MIO 619-296-3037 *MISSN HILLS MARKET 619-295-5353 CAFE	8 X SHASTA +9 1785 FRE(TAS Romelia R 858-483-8010 E 1787 XXXX 00 1791 XXXX 00	FOSS 92154 SAN DIEGO	2223 XXXX OC OC 2231 PICKERING Matthew 858-272-8011 8	121 XXXX 00 124 •MCANDREWS William A 00 7 129 •FAHRENBRUGH Mark C DO 7 137 XXXX 00	10366 = FLUNT Wikiam R OO 10370 XXXX OO
X ALLEN RD X HICKORY 2005 XXXX	X KENDALL	WEALTH CODE SO	PICKÉRING Trisha 858-272-8011 8 2248 CLOUTIER Bonnie 858-483-3136 +9 2295 BUSH Michael A 858-272-9514 +9	144 XXXX 00 145 HIGGINS Ruben 519-445-7631 8 X ROSALIE WAY	10372 *OLSENED 519-448-3557 X KRIS WAY 10376 *ELISARY Linds N OO
2008 •MATSCHINESGAm P OO 2015 •SEVILLA Charles OO 2017 XXXX OO 2019 XXXX OO	7 X LAMONT 1905 LAVIGNE Christopher R 858-274-5822 +6	3465 MARTINEZ Frances A OO 6	* 0 8US 5 RES 2 NEW FOWLER DR 92139	209 *SCHNEIDER Carl J OO 7 210 XXXX OO 214 *PATTON KL 818-445-4599 +9 218 *LOFTIS Wynn 0 OO 7	10377
2020 CALLO Arren R 519-299-4100 GALLO Arren R 619-280-0911 +ELDER LAW GRDUP 619-299-4100 THE	8 1926 XXXX OO +9 1927 ADAM Roger W 858-581-1672 7 1929 RHOADES Ronald 858-270-4456 8	3475 • CHALMERS M E 00 7 3485 • ALVARADO Editrurid R 00 7 3495 • ULLOA FL 00 7 X COCHRAN AV	SAN DIEGO WEALTHCODE 50	221 XXXX 00 233 XXXX 00 X ALMYRA RD	10383
PORFIRIO J MO 619-260-0911 2025 **EDWARDS John W 819-298-9194 2031 GARCIA Graham 619-299-8846 2005 XXXX OO	8 1931 FITZGERALO/acqueine 858-270-1602 X HONEYCUTT 1835 XXXX 00 1940 WELLWOOD Gary W OO +f	* 0 BUS 6 RES 0 NEW	PARADISE HILLS AREA	X MOUNTAIN VIEW RD * 1 BUS 13 RES 1 NEW	10392 XXXX 00 X ROCHELLE LN * 0 BUS 11 RES 2 NEW
2038 •KISSLING George 519-542-0860 X PINE 2107 THOMPSON Judith 519-296-2107	1942 XXXX OO 1963 •LODGE Adam 858-273-4985 +5 7 1984 FLINK Gris 858-272-0147 & 7 1985 SLATER Byron 958-483-4477		X DOTI POINT DR 2143 XXXX 00 2146 • JOHANSEN David L 00 +9	FRANCIS N 92102 SAN DIEGO	FRANKFORT 92110 SAN DIEGO
2110 XXXX OO 2121 •DEFRATES A 619-296-5755 2124 •TUTTLEEnc OO	1973 XXXX 00 +9 X MORRELL +8 1980 JAYCOX Malfissa 858-273-6806 +6		2153 *MASON Leonard L OO +9 2158 *MONERA Grago E OO +9 2154 *BENKE Ralph R 519-479-1510 2 2170 XXXX OO	WEALTH CODE 0.0	WEALTH CODE 5 2
2127 FEENEY John C 619-293-3795 •FEENEY Nanci H 619-293-3795 2129 XXXX	7 1982 BODRIGUEZ Kelly M 858-272-9520 +5 RODRIGUEZ Kelly M 858-272-9523 +5 1984 XXXX OO 1988 ROSAM Matthew J 858-581-0064 6	1331 XXXX OO 1375 NELSON Dan 519-445-3121 PICKERING Harold L 819-445-3718 6 1497 XXXX OO	2173	215 *BELL Wilka D OO +9 219 XXXX OO 223 XXXX OO 227 RIVERA Julio 619-338-0188 2	X MORENA BLVD 1325 XXXX 00 1329 •INLOW Mana L 00 1327 •STEPHENS Sally 619-275-3772
2206 HALLIDAY Juhe 619-295-9178 • HALLIDAY Walty 619-295-9178 2211 OOORISIO Bryan 619-299-3487 • OOORISIO Laurinne 619-299-3487	2004 XXXX 00 X CROWN POINT DR * 0 BUS 34 RES 8 NEW	1480 XXXX OO * 0 8US 5 RES 0 NEW	2183 XXXX DO 2186 WELLS Donaid E 519-479-8446 2193 XXXX DO 2195 • DAYRIT Enca CO 7	229 XXXX OO 059-234-0943 4 273 SARRIOS Miguel 619-235-0471 +9 MAGALLANES Teresa 619-231-0212 +9	1355 • LAMPEEdw L 619-275-1899 1363 • GROTH Watter J OO 1369 • ARTHUR Richard E OO
2212	FORTUNA VSTA CT 92071	FOSS RD 91901 ALPINE WEALTH CODES.0	X JAMIE AV 2210 •LUGUE Imeida CO 7 2220 AGUIRRE Carda 619-479-5658 6	RAMIREZ Rosatta 519-234-8785 +9 Guevara 283 PRADO Samuel 519-234-9418 8	1377 XXXX C0 X TONOPAH AV 1404 •SHAVERMary C 619-276-7655 1412 XXXX 00
NASH JR 819-291-5773 NASH W 619-692-0118 NASH W 819-291-6773 2221 *JOHNSTON W OO	7 WEALTH GODE 4.0	1633	Carmelita 2231 * BROAS ALBERT DMD 519-335-2494 +9 • SROAS Alberto 619-470-6644 &	291 *VARGAS Martha 00 +9 * 0 BUS 11 RES 5 NEW FRANCIS S 92113	1420 PPLZZAŁH OO 1431 XXXX OO 14431 XXXX OO 14431 XXXX OO 14436 PREPRIANDEZ Mans R OO 1444 PRUMBAUGH Karen 519-276-4562
2227 CHAFFIN D.L 619-295-1527 2228 SNYDER Alen C 619-295-2512 2235 MEDINA JONJUM A 619-298-5029 2236 GALINSON Jeff 619-291-5959	7402 XXXX OO 7413 REYNOLDS Ray P 619-258-7016 7 7419 DELPAPA Ronald N 619-449-8024	1633 ASCHENBRENER LA 619-445-0724 1639 • ASCHENBRENER E A 619-45-6587 6 1646 ASCH April Diane 619-445-7124 7 • ASCH Garry L OO +6	2240 XXXX 00 * 1 BUS 17 RES 6 NEW FOWLER CNYN RD 91935	SAN DIEGO	X GALVESTON 1453 •GLEEMAN F 619-276-8645 1459 •HICKEY J G DO H
GALINSON Jeffrey H 619-291-5960 •GALINSON Stepnisnie 619-291-5959 2244 •GRANT AnthonyJ OO 2245 •BENITEZ Jetskia OO	7 GRABER Raymond 819-596-3097 6 7 7430 XXXX 00 8 7442 XXXX 00 7 7447 XXXX 00	1658 • GREY Lana A OO 7 1681 • YAYLOR Ralph OO +9 1705 • HESTON Bryant OO +9	JAMUL	WEALTHCODE 1.0 X WEBSTER AV	1465 XXXX DO X ASHER 1504 XXXX DO
X HORTENSIA 2252 •HAGERBarry 619-294-7517 2255 •GLIFFORD Daniel H 00	7453 ACUFF Bradley 619-448-7917 +6 BIDINGER Randal 619-258-7308 7 7458 XXXX OO	1735 •MULACH William J CO +9 1745 MILLER Kyle L 618-445-9167 8	inglicition of the control of the co	202 •FIASCON Nector Manuel 519-544-1938 5 203 TURNER Bessle L 519-231-2525 +9 203½ ZAMORA Palar 519-702-2535 +9 211 XXXX OO	1512 POWELL Dorothy L DO 1519 GLIDDEN David 619-276-5033 - HAY Meghan 619-276-4508 -
2258 XXXX CO 2260 *GEIGER Chas T 619-296-4965 2265 ENGEBRETSON PJ 619-291-7743 *INTERRA 619-291-4862	X BUSHY HILL DR * 0 BUS 10 RES 1 NEW 7 FORTUNE LN 91941	1748 XXXX CO 1753 XXXX CO X SOUTH GRADE RD * 0.8US 15 RES 5 NEW	3425 •KJONEGAARD Rebecca OO 7 3435 •ABY Mary O OO 7 3455 XXXX OO	212 AMERSON Philip 519-234-5267 213 XXXX DO 215 XXXX OO	HAY Traver 819-276-4508 1 1520 •MOLINARI Jana DO 1527 XXXX DO 1528 MCMICHAEL Casay 619-276-5729 1
NORWOOD A J 619-291-7743 2274 • FRASE Larry E OO 2276 • FLETCHER Malcolm G OO 2277 XXXX OO	LA MESA	FOSTER 92114	3552 * ASBURY 619-568-7765 6 MANUFACTURING * CUSTOM POWDER 619-440-5512 2 FNSHG	217 XXXX CO 234 RUSSELI. Richard 619-236-8150 +9 242 RUSSELI. Richard 519-233-1225 243 MORALES Ruby 619-235-8833 +9	1535 XXXX DO 1536 MITCHELL Craig A OO 1543 RAHLFS Diane 819-275-5177 • RAHLFS Juhl 619-275-5177
2285 •CARLSTEIN Barbara OO X TRIAS 2302 BRADBURY Elaine 619-285-1580	+9 WEALTH CODE 5.0 9310 UPHAM Eather 619-484-3943 S	SAN DIEGO WEALTH CODE 5.0	* RACE CAR DYNAMICS 619-588-4723 +9 3554 XXXX OO 3562 WILSON Lou Stelle 619-440-8198	254 XXXX CO 277 XXXX OO X FRANKLIN AV 305 •BERMUDEZ Noolia OO 7	1549 •MALY Jos 819-276-4984 X LITTLEFIELD 1709 XXXX 00
2305 XXXX 00 2314 •CAIN Sleven 00 2315 •TAYLOR Azeta 00	#UPHAM Pater W 619-464-3943 5 9340 DINGER Barbara 619-463-7904 +9 DINGER Hailan 519-463-7904 +9 6355 *OUENGA Jeanne A DD	6970 •LY Hon.N 619-266-8202 6 ★ 0 BUS 1 FIES 0 NEW	• WILSON Thos D 619-440-6198 3585 • © TENSCHN Norman 619-444-030 3588 • WILSON Derek 619-440-223 WILSON Terri 619-440-223	311 •FRAGOSO Victor 619-239-8690 317 •ESCOREDO Lux 619-230-1139 •ESCOREDO Victoriano 619-230-1139 323 •FIGUEROA Sivino L OO +9	1720 LARRABEE Mark W 619-275-0228 • LARRABEE Park R 619-275-0228 1730 CARBONARA Pasquala 619-278-7247
2330	7 9365 •HORTON Eldon E OO 8 9375 •JAMES Larry 519-450-5843 9380 •PULLEN Lkeyd P 519-459-0903 9385 •LISTUG C A OO 8	FOUNTAIN 92109 SAN DIEGO	* 3 SUS 9 RES 1 NEW FOWLER WAY 92071	328 XXXX OO 329 XXXX OO * 0 BUS 20 RES 5 NEW	X GARDENA AV 1804 *ZAGORSCAK Donna 619-275-0615 - 1805 *PICKLE Debrase CO 1810 *SRUCE Michael CO -
2344	7 9395 BLALACKKL 619-463-6970 9BLALACKRyan 619-463-4629 8 X TREASURE DR	PACIFIC BEACH AREA	SANTEE WEALTHCODE 5 0	FRANCIS DR (98) 91977 SPRING VALLEY	1811 XXXX OO 1822 SMITH Richard T 619-276-4858 1827 • ROMERO Buddy 619-276-0367 1832 • ARZOLA Paulina F OO -
2384 XXXX 00 X ARISTA DR * 52 BUS 159 RES 35 NEW	9401 **DELAFLOR Gange L OO 19405 **PARNELL Thos F 619-465-2870 9410 **SARBOUR Allen M 619-697-7502 9415 **CORNETT Dan M OO 19405 **CORNETT DAN M O	4250 CLENNEY Genise 858-483-6816 +9 CLENNEY Michael 858-483-681 +9 CLENNEY Michael 858-483-7404 +9 CLENNEY Michael 858-483-7404 +9	A HODVIBLICKI E DB	9210 MARSO Myra 519-465-C403 8 9296 XXXX OO OO 312 ZIELINSKI William M 518-465-7693 +9	1837 *KAWAR Mary J OO 1842 *ALEXANDER Rose D OO 1850 *BURGER Leopoid R OO 1855 *REA Demonic 619-275-2675
FORTUNA 91911 CHULA VISTA	9420 **DESER Lucy OC 9430 **LEON Gary OC 9435 **ANDERSON Daniel O OC 9440 **JARIOSIN Daniel OC +4	4270 ANDERSON Dean R 358-274-1889 +9 4290 THIELE Dan 358-273-8679 +0 + 0 BUS 6 RES 6 NEW	X CATHYWOOD DR 9848 *CHAMBERS Gary W 619-582-8317 * 0 BUS 1 RES 0 NEW	9315	1861 XXXX OO 276-338 1866 NORVELLME 619-276-0328 1870 PALMERKL 619-276-0523
WEALTH CODE 5.0	9450 HAVIN Anne 619-451-3780 6 • HAVIN Jerry 619-461-3780 6 9480 • BAHENA Richard DO 9485 • WATERS Don A 619-460-1229	+FOUNTAIN GRV PL (99) 91915 CHULA VISTA	FOXBORO AV (90) 91911 CHULA VISTA	9347 NGUYEN Ngoc-Lan 619-667-9779 +9 9365 •MILLER Minin A CO +9 9373 •PERSINGER Melcolm Jr 619-463-7733 8	1879 •SCALASC 00 + X ASHTON 1915 •FILDESTUIA V 00
X EVANS AV 56 **BAUTISTA Dennis M QO 57 **MERCED Kennelh 619-422-5438	* 0 8US 29 RES 1 NEW B FORWARD 92037	1414 CARZOLI Sergio 519-856-0256 +9 1415 CASTILLO Perdinand 519-421-7312 +9 * 0 BUS 2 RES 2 NEW	WEALTH CODE 6.0	\$380 *SANCHEZ Carmen OO +9 \$390 *GOBLEOO FORM OO +9 \$391 *FAZEKAS Michael J OO +9 * 0 BUS 13 RES 9 NEW	1919 ◆STROUSE Janves C OO 1927 ★MORRISON 619-276-0425 ENGINEERING 1933 JOHNSON Russell 619-275-4943 -
52 *CLARK Raymond E.Jr 619-422-5958 63 LEDEZMA Gabriela 619-475-8060 LEDEZMA Jose M 619-476-8090 *LEDEZMA Manuel 619-476-8294	7 VEALTH COOR 7.0	FOURSOME DR 91941 LA MESA	1101 XXXX OO 1107 •GARCIA Agustin E OO 7 1119 •DIMALANTA Dennis D OO 7	FRANCISCAN WAY 92116 SAN DIEGO	•WEYZIG Ronald B CC 1936 LLOYOM 619-276-3438 •LLOYO P 619-276-3438 1943 FLOYO Flichard L 619-275-0161
59 HUNT Randy 619-426-8141	X CALUMET AV 320 •NIETRELD Wm D 855-454-0878	WEALTH CODE 7.0	1125 *ACAYAN Shirlay T 519-218-0019 B 1131 *LAGDAMEN B.M OO +9 1143 *MARIISTELA Antonio R OO 7 1149 *RISTORUCCI Jose 519-421-1912 B	WEALTH CODE 6.0	1948 DIAMDND Andrew 619-275-7830 DIAMOND Andrew 619-275-7840 (951 • GRASSMANN Medie R CO 1954 • BECKMAN A W 619-278-0953
80 *GOMEZE OC 84 *GILL Gibert OC 85 *CAMPBELL Dorothy J OC	+8 322 HANLON Sean 856-459-7089 +1 7 328 KUETZINGE 856-454-0581 7 X CHELSEA AV	X NIBLICK DR 3501 •BLIZARD Boyd J 00 7	1155	1149 XXXX OO 1154	1951 • SBANDL Marc W OO 1952 XXXX OO 1952 XXXX OO 1952 XXXX OO 1959 JOHDAN Lance 619-275-6943
X CUYAMACA AV 109 XXXX 00 110 CASTILLO Artemio 619-425-5305 115 \$NOLLAR Waller J Cdj 619-427-8109	X LAJOLLA BLVD	3504 XXXX OD 3507 •WILLUS Ruby C OO 7 3509 CLARK Heid! K 519-697-2232 CLARK Loren B 519-697-2232	1173	1250 •LYDON R W 519-295-1139 1280 •DIAZ Ruben OO +9 X MARYLAND	FECHER Sub 619-275-4839 FECHER Sub 619-275-4839
116 •KERR Rey E 619-426-5521 121 AGUAYOSANTIAGO Jose 619-420-5539 •AGUAYOSANTIAGO 619-420-5539 Yolanda	5 504 •SHERMAN Eric H 858-454-6619 510 CHRISTENSEN Monie 836-459-6397	3515 • CAIN Paul 619-453-6909 3 3518 • NIEMI Ethel M OO 7 3521 • GAILEY Clark E OO 7	FOXBOROUGH CT (97) 92040 LAKESIDE	1404 SENTERRITT AM 519-297-1025 • SENTERRITT Amold 519-297-1025 1411 • ADAM Carrick OO 7 1419 • LANDCO 619-291-7706 8	1891 FILLEY Debby 619-276-1605 FILLEY F R 619-276-2236 ●FILLEY John 619-276-1805
126 XXXX OC 127 ESCARCEGA Minista 130 HOFFMANN Hanold W 619-427-7163 134 •CEVEN David J 619-426-8902	+8 SHAKLEE SUPERVISOR 838-456-8047 : +8 516 HOLLENBECK Dixin 858-459-8724 •HOLLENBECK Phyllis 858-459-6612 827 •AMIDEI Paul R 858-459-6612	3522	WEALTH CODES 0	DEVELOPMENT CO + MISSN PROPERTIES 619-291-7706 8 • WAGNET Thomas OO 7 + 2 BUS 10 RES 1 NEW	X ORTEN 2001 •BALISTRIERI Manuel 619-275-1653 2006 •VANDERSPEK Renee OO 2007 •BALISTRIERI Manuel OO
135	+9 528 O'Connor Stephen 856-458-8497 +1 YURAN Debra 858-454-980 1 YURAN Debra 558-454-980 1 X BEAUMONTAV	3539 XXXX OO 3540 + ASSISTANCE REAL 819-463-2605 8 ESTATE QUINVARIAND OO 7	6724 • RICE Hobert 619-390-2729 7 RICE Robert 619-390-5028 +9	FRANCIS WAY 91941 LA MESA	2018 *GROFT L.J 519-275-5855 2018 RESNICK Jos J 519-276-5724 2024 *BALLATORE Balsia 519-276-2205 2025 XXXX OO
FORTUNA AV 92109 SAN DIEGO	612 *BLANDIN B J L T COL 858-454-5420 618 XXXX CQ 824 XXXX OQ 829 *HOLLOWAY J M 859-551-9802	3548 CAFTER Glens A 619-462-1427 +8 3551 •WOMACK Einer H OO 7 3557 •SCHAIN Edith L OO 7	6725	*	2035 • PHILLIPS Grant 619-276-2006 2043 • CNEAL Natisle 619-276-7700 CNEAL Natisle 619-276-6754 2044 • JOHNSON Charles S OO
WEALTH CODE 3.9 PACIFIC BEACH AREA	537 WITT Elizabeth 858-729-0876 H WITT Todd 858-729-0876 H X WAVERLY AV	3569 COBB Manin 619-466-2906	X FOXBOROUGH LN X WELLINGTON HILL DR	4220 ROBINSONT 619-589-2876 6 4225 MIGLEHEART JUSA L OO 7 4230 SIMPSON Glenn H OO +8	X NAPIER 2107 XXXX CO 2121 BACKE Robi J 619-276-4016
X RIVIERA DR	702 •MAGEE Helen T OC +17 714 •FROST Rocky 658-456-2300 718 SCARSELLA D 858-456-2893 +17 SCARSELLA G 858-456-2893 +17	3570 •FRAZIER C A OO 5 3575 •SANCHEZ Ullinna OO +8 3576 MENARD Henry F 619-489-6049 •MENARD Jeyca M 519-489-6049	* 0 BUS 6 RES 2 NEW	4235 •ALBANOJ 818-458-2214 4240 •AIEWANF OO 7 4245 •ARCHER Jaliney E OO 8 4250 •FARNSWORTH L 619-468-4758	JONES Frank S 519-276-4018 2124 XXXX CO 2135 FELICE Vancent CO 2138 DUNCAN Helen Jo 518-276-1024
1480 ROSERSLEE Suzanna 658-272-0580 WELKERJ 859-274-7495 WOLFEL Melissa 858-270-1982 X HAINES	+9 721 •VILLAVERDELUIS M 00 +1 7 X BELLEVUE AV 3 752 RILEY Cally 058-456-1495	3581 •NESDALE Richard 819-486-8469 0 3582 •VANLE Blanche E OO 7 3587 •SPRIGGS Harold B 619-468-6925 3588 •VALDEZ Meadelana 619-469-8739 6	EL CAJON	4255 STECKLAIR Paul 619-469-8150 8 4280 XXXXX 00 4265 XXXX 00 4270 *WILSON Albe S 00 7	2144 COCHRAN Dottle 619-276-1647 COCHRAN On/dis M 619-276-1647 2145 XXXX CO 2152 XXXX CO

<u>Adjoining</u>

<u>TP</u>

<u>Source</u> Haines & Company

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BANSETIA√ XXXX •CHANDLERE W	92107 CONT 00	NARRAGAN 4822 4825	VSETT AV XXXX BARBER Karvi R	92107 CONT. 00 619-225-0962	. NARPLAG 5049 5050	ANSETT AV *DANOKWERTH Joi C WILLIS Cheryl A	92107 CONT. OO +9 619-222-4695 7	NARWHA 968 978	XXXX XXXX	92154 CONT 00 00	NATALIE 4671	PHALL Karen	92115 CONT 619-286-9273 8 CO	NATIONAL 1729 1733	ALCANTAR Mana G XXXX	52113 CC 519-236-0955 OO	
●CHANDLERE W HARRISON Layre ■MANNULA	619-224-8324 619-523-8868 8 619-222-7179	1000	MONTALBANO Robert STRATTON Bre 1	619-224-6905 3 619-223-5188 8	5052 5054	XXXX *BEACH AREA	00 619-225-4133 7	885 888	●DRAPER Don ●MORGA Ricardo C	619-575-8852 OO 7	4672 4577	●KELSEN Sylvia E GERBER Gary T	00 7 619-283-8521 5	1735	* FRASERS BOILER SERV	619-223-0196	
MANNUL A Chid	619-222-4371 +9 00 7	4830	PEREZ Roger WIBERG Hal	619-223-4784 +9 619-224-0182		*ELSBREE HOUSE	619-226-4123 7	895 X	SCHIRRA		4678	MURPHY Douglas XXXX *JANSEN Allard	819-284-9871 8 00	1736 1738 1744	XXXX XXXX	00 00	
●ECKLAR Jas T SMTH Hugt C	619-222-8743 619-222-3517		WYCKOFF William C EVANS Robert C KEESLARI Erik	619-523-8612 +9 619-523-5242 6 619-225-0319 8	5056	BEDABREAKFAST ■ELSBREE Philip C ELSBREE Kala	OO 8 619-224-5860 7	*	0 BUS 36 RE		4684 4689 4700	PHUGHES Michael R STRACK Jos M	00 7 00 +9 619-284-2133	1748 1748/5	BAEZA Ricado CABALLERO Raul	619-234-9226 619-702-7605	+3 +3
MARRS JOT, LESS	619-226-1718 5 619-226-2849 5		LEE Edward WILLOUGHBY Paul Jr	619-294-4686 +9 619-222-1501	5057	ELSBREE Phil	619-224-5860 7		HVILLE 9211 DIEGO	10	4705 4710	SKILES K A GALAIP Adam	619-281-6766 OO +9	1750 1752	CJEDA Jos	615-235-8621	É
GUIZOT	819-222-4380	4845	APARTMENTS BERENTSON Brent E	619-523-1790 7		BEONORZ Enc HUNT Gregory	619-223-9900 4-9 619-223-6506 4-9	SAIN	DIEGO		4715 4718	WEBER Michael W ALEXANDER Kristi A	00 B 00 7	1759 1764	XXXX	00 00	
*SHPLE+S XXXX STRONG Room	619-222-5977 +9 DO 519-523-6810 5		BUSHROE Kevin CONROW Francisco	619-222-5713 +9 619-758-9976 +9		HUNT Therese MCKELVEY Jennifer L	619-223-6506 +9 619-225-1807 +9		WEALTH CODE 4 0		4724 4725 4728	PALLY Leske B MOPALES Stevens C	00 +9 00 +9 619-284-7890 8	1775	* TRIAD MARINEAINDUSTRIAL	619-239-2024	3
MITCHELL LOSS MITCHELL MAIN	519-222-0285 6 519-222-0285 8		LAPIHUSKA NISSI D MOORE Ryan A	619-224-3129 7 619-224-8723 +9		MCLEAN SCOTI * PAC PALMS APARTMENTS	619-224-7906 +6 619-226-5330 7	X	MORENA		4729 4733	RAMIREZ C D SHAW Floyd L	00 +9 619-281-8689	1776	CLNG ★ TROPIC ICE CREAM LIRA Ricardo	619-232-8641 619-233-8647	+5
MITCHELL Mark L ANCIANX Mark L	619-222-6674 B 00 7	4845	APARTMENTS BETTS Joffray S	519-224-69 64 4	5057	SCHROEDER Susan E	619-225-1876 8	1323	OON Lupe MOLLOY Brean	619-276-1347 619-275-2122 8 OO	4737 4749	XXXX BOARMAN Chris	OO 619-260-1381	1789 1792	★ LA PINATA XXXX	619-232-2033 OO	
*KUHLMEYER Kyle KXXX	00 +9 00 619-223-9910		DINAN Joseph 1 EPEAK Debrya L	619-523-6141 +9 619-523-5883 +9	5058 5070	●ELSBREE KatiO APARTMENTS	00 +5	1326 1332 1333	*MINES Tracey CADY James	00 8 00 7	4752	BOARMAN Jesse XXXX	819-280-1381 CO	1783 X	* AMADORM CJRMKT BEARDSL	519-233-5911	
●BGNE Las H XXXX XXXX	00		MANNING Michelle PATULAK Jennifer L	619-523-5746 +9 619-226-1849 7		CLEARY John	619-222-7397 E 619-224-8422 +9	1339 1347	●FORD E _Y L XXXX	00 7 00	4755 4758 4761	LYNN Patrick J SANTANA Mana T SIMONS A T	00 +9 00 7 619-284-2348		* CHICANO CHINTY HETE * FAMILY PLANNING	619-234-6171	
XXXX ALLCOCK Energy	00 7	4850	PETTINA Tony WEHBE Richard	619-225-6695 7 619-223-1451 +9		DEVER James GERSHCOW Fred J KNELLER Charlotte J	619-223-3403 +9 619-225-1750 1 619-222-5420	1348	ROSE Michael	619-275-4348 7 619-276-5204 +9 00 +9	X	CONSTA D EUS 50 RE	NCE DR		* LOGAN HEIGHTS FAMILY HEALTH CT	819-233-2621	
EBERST JV XXXX	619-224-2344 +9 CO 619-222-7876 +9	4851 4853	HOWARD David XXXX	619-223-0950 +9 OO		SLEPSKIM SZYDLIK NIM	619-758-1421 +9 619-225-0474 1	1351 1355 1356	SHEIBLEY Tma M STAIRS K XXXX	00 +9 00 8 00	NAT	E WAY 9207		1818	* LOGAN HTS HEALTH CT XXXX	619-234-8171	
ZYMERMAN Jason XXXX PRICE Joseph P	619-222-7876 +9 OO 619-222-4237 1		XXXX BERRYMAN States	00 619-523-1739 +9	Carconolor	WESTFALL Joff YTTERDAL Norm	619-221-8134 +9 619-224-3889	1357	KULIN Randal PHIPPS Jerry E	00 8 00 7	SAN		1	1820	XXXX VILLANUEVA Rema	00 619-696-7*23	+9
XXXX	00	4863	BASSETT Jack KLEIN Dore M MISODA Marin E	619-758-1605 +9 619-523-6022 +9 619-223-6118 8	5070 5072 5074	XXXX	00	1378 X	TONOPA	619-276-1571 H AV		WEALTH CODE 6 0		1827 1828	XXXX	00	
■LARET Eugena ■HOLZ John	00 +9 00 +9	4858 4870 4871	XXXX	00	5075	. APARTMENTS ANDERSON Jennifer L	619-222-7542 +5	1411	DAVIS Deborah J GROSS R	619-275-1539 619-275-2243		WEALTH GODE DO		1830	GOMEZ Michael AVALOS Jesus Montano GOMEZ Maria	619-696-5399 619-232-5929 619-232-5902	0 7 +9
* HOLZ JOHN REALTY XXXX WOOD Donate G	619-222-6616 5 OO 619-224-0202 8	4872 • 4873	ROTSCH Rick PETERSON Jon K	619-224-4478 619-222-4219		CRAIG Karuna CRAIG Mark	519-222-3473 5 619-222-3473 5	1412	GROSS Robt L • GALLARDO Lewis M XXXX	619-275-1539 0O +9	X 10418	AVANTI A	\V	1833	CRUZ Mana DELATORRE Eslaben LORENZ Christa M	619-237-8638 619-231-1374	8
YANDSZK •WOOD RIME	619-224-0202 8 619-222-4469	4876	PETERSON Scott XXXX	619-221-0380 OO		GLAH Henry J Martinez M	619-758-0588 +9 618-223-1305 +9	1436	STANFORD David SMITH Smitty	619-275-2179 619-276-8682	10419 10425	XXXX •KENNEDY Jackie L	00 00 7		* ACE RADIATOR * RICARDO'S FLEET	619-233-8811 619-234-8801	1
XXXX FRUEH Dindy	00 519-222-9226 8	4877 4880 4887	LECLAIR Michael XXXX XXXX	00 7 00 00		MULLEN Linda SMITH Wesley P SRANDEV Michael S	619-226-1031 +9 619-226-2756 8 619-223-4666 8	1444 X	MARR Shen D BERVY	00 +9	10436 10437	PORD Charles L XXXX	00 619-562-7311 4 00	1842	SERVICE	00	
FROUDE	00		BOYLANJOHI P CABLE	619-222-2890	5075	YOUNG Kirsu	619-222-3259 +5	1525 1526	◆LEDESMA Larry ZMOLEK W	619-276-7964 619-276-0932 +9	10442 10443	PENALOZA Michael A MEILAHN Claudine	00 +9 619-448-5244	1852 1853 1854	* RANCHO FRESCO XXXX XXXX	619-338-9140 00 00	6
◆AVERY Paul B XXXX Matter No.002 Provide	619-224-5631 OO 619-758-1787 +9	4905 4911	XXXX EVANS John	00 619-224-1 56 5 +9	5083 5085	KEELY T XXXX	619-224-5218 +9 00	X	◆ZMOLEK WaterS KNOXVIL		10448	MEILAHN Kenneth OBRIENUR L	619-448-5244 OO 7	1855 1857	XXXX XXXX BARRIENTOS Joel	00 619-232-7565	
•MEISENBERG Steve •MCKA:N B C XXXX	619-758-1787 +9 00 7 00	4919	SPROUT GERLACK D	619-225-8600 +9 619-226-6470	5089 5089% 5091	DEGINAN Jack T WHITE Carlos L XXXX	619-222-5176 6 619-222-4349 +9 OO	1	D BUS 26 RE	S 5 NEW	10449 10456	●MEDINAKT ●GEMELLIRA □ 0 5US 12 RE	OO 7 619-258-7084 7 S 1 NEW	1857 ¹ / ₂ 1861	GARCIA Mana De BALTAZAR Marylos	619-702-7174 619-233-0582	+9 +0
ALVARADO Edward K KAPLAN Alan M	00 7 00 +9		JACZYK Stephon P LEAFSTEDT Heidi REID Natasha R	619-225-9092 +9 619-523-0538 +9 519-523-5544 +9	5093V		619-222-8316		SAU DR 921 DIEGO	15	L NAT		1.1617	1863 1864	CASTENEDA Daena * MAURICIOSSONS INC	619-238-9714 619-232-6400	+9
PANDZA Tony BROWN Jason	619-224-8850 619-222-8552 +9	4926	KEID Neushel R XXXX MORRISON Doug	519-523-5544 +9 00 519-523-8906 +9	5101	MIRANDA Jan	619-223-6924 6 619-223-6924 6	JAN				HAN 91945 ON GROVE	1		* SLEEPER'S PRODUCE * SLEEPER'S PRODUCE ACCITING DEPT		+9
JAEGER R XXXX XXXX	619-224-9230 6 OO OO	4928	HELM Shawna GALLUP Arrhur	619-758-9754 +9 619-224-1426 +9	5103 5107	XXXX AULETTA David	00 619-222-4848 8		WEALTH CODE 2 0			WEALTH CODE 5 0		1865 1865 ¹ / ₂	* MARY'S BRIDAL SHOP	619-239-6618 619-239-8224	7
XXXX •SWETT Mary J	80 80 +9	4930	HOBBINS Connie L XXXX	00 7		THORNLEY Daniel * WENZELL LEWIS ATT	619-523-5345 +5 619-224-9422	X	LIVINGST	TON		WEALINGODESU		18671/2	MICHEL Sara SIERRA Rema	619-696-9530 619-231-2029	
XXXX •SWETTMJ	00 619-226-3443 3	4932 4933 4944	XXXX WREN Clara CASA MADRID ARTS	00 619-226-2170 +9	5118	 SILVER SPRAY APTS ADRACTAS Anastesion ALEN Rochelle 	619-523-3053 +5 619-523-0353 6	3609 3612 3617	NECOECHEA Richard SLEDZINSKI Francis HUNT Robert L	2 00 7 00 +5 00 7	X 3010	LINCOLN •DIETERLE Chas E	519-464-8859	1866	XXXX	00 00 619-235-6892	40
BRADBERRY Catherine I XXXX	00		ANDERSON Brian	619-222-2964 7 619-222-1020 +9		ARMISTEAD Don BALISTRERI John C	619-226-6871 7 619-758-9381 +9	3618 3623	XXXX	00	3011 3019	PALMER Withorn E CAMBEROS James A	00 7 619-461-4415 3	1875 ¹ / ₂ 1876	ABARCA Araceli * F J BRAWLEY CONCRETE	619-231-7778	
BARCELO Veronica SNYDER James XXXX	519-523-4748 +9 OO +9 OO		CALKINS Bob DENGLER Dwight	619-225-4045 3 619-224-2537 7		BERGADO Melasa BREAR Daviel	619-223-7330 +5 619-223-4305 +5	3624 3629	OUEZADA Martin C XXXX	00 6 00	X,	DARRYL 0 BUS 3 RES	0 NEW	1877	XXXX CRUZ Vicenta	00 619-234-9241	+9
DUBY Amber DUBY Jet	619-225-6929 +9 819-225-8929 +9		FORREY Witham C NADOLSKI Krista N	619-223-2988 619-223-7439 +9		BUHLMANN Eric CARBONEULS	619-523-8556 +5 619-223-2101 +6	3630 3635	●WILSON Jorned E ●CHATEAU M	OO 7 619-286-1061 +9	NAT	IONAL 9191	0	1882 1885	BECERRA Felipe XXXX	519-232-0299 OO	
◆DOPKE M HURST John H	619-225-1158 6 819-223-1062 6		SMITH Any WEISER Rom	619-222-7139 +9 619-222-6131 3		CLARKSON Phylis CONNORS Tom CLIARESMA Efran K	619-226-1673 5 619-523-6567 6 619-222-6722 +5	3635 3641	*CHATEAU M XXXX RIVERA Robert	519-286-8247 OO 619-583-5451 7		LA VISTA		1897	* PONDEROSA DELI MARKET	619-235-4501	
HURST Juden NAZARIAN Christiaan NAZARIAN Ruth	619-223-1062 6 619-223-6423 +9 619-223-6423 +9	4945	FELTEN Tim FOX Sleven A	619-223-6443 +9 619-228-6903 +9		GERBERDING Victoria / GOEBEL Eric	619-758-9268 +6 619-523-5305 6		MCLAUGHLIN Wm. J SHELTON B	819-582-5671 (819-582-8981		SEEBROADWAY		1901	CROSBY	00	
FURROWS Cive	619-222-6400 +9 OO		GLYNN ET GLYNN ET	619-223-0016 619-523-0283 6		GRAHAM AH K ISHIDA HIDIDI	619-523-5423 +5 619-221-1240 +5		SCHULTZ Emest PENA Afred A	619-583-7361 8 619-582-8921		IONAL AV 9	2101	1902 1905	XXXX XXXX * ASTRD PAK	00 00 619-231-1022	0
ELIEZER Devid WILL IAMS Holly B	519-523-9350 8 619-224-0647 6	4952	RODRIGUEZ A XXXX JUGE Chris I	819-225-0249 8 OO 619-758-0587 +9		IZUNI Axo KLEHA Steve LARKINS-Runce Barbar	819-758-0669 +1 619-226-2136 a 619-758-1716 +1	3654 3659	ROW Stanley J GIST Jos H	619-562-7812 619-265-1964 619-583-4347	SAN	DIEGO	1	1936 1937	XXXX	00	
RICE Sharon A XXXX XXXX	619-224-7521 +9 00 00	4955	APARTMENTS CONAVAY Lee J	619-224-7102 7		MAZUR Chris MOCHIZUKI Yuki	619-222-7946 1 619-758-0525 +9	3660 3665 3666	●COBB Donald M RAMBEAU R H	619-286-1892 619-582-7094		*P C E DIESEL *P G AUTO PARTS	619-687-0035 +9 519-236-1363 5	1955 1950	XXXX *SD CLG CESAR	00 619-230-2895	
XXXX XXXX DOBROSIELSKI Pelek	00 00 619-224-7823 +9		CONWELL Frank O FRASER Pat	619-222-6483 8 619-223-6117 8		MCRSE Donielle A OSBORNE Gary R	619-223-3541 +9 619-225-8335 4	3672 3675	WILLIAMS Helen K BENSON Jesse M	00 +9	1344	* PEE GEE AUTO PART * PELL MELL SUPPLY	619-238-1633	1953	CHAVEZ XXXX	00	
Cris POBINSON Brian	619-222-4094 +9		HOROWIYZ B KLEIN Aajon	619-226-4222 +9 619-224-7944 +9		# SILVER SPRAY AFTS	619-222-6744 +5 619-223-8185	3578 3702	CREWSL G PETERS Jas P	OC 7 619-582-4915 2	X	COMMER 14TH	RCIAL	1965 X	DEWEY	00	
XXXX PORTER CL	DO 519-223-9570		KRESS John ROBERTS Sharre M SULLIVAN Garv	619-224-3133 8 619-226-0271 +9 519-223-8269 7	5116	THOMAS Nicole J 12 BUS 426 RE	619-222-6579 +1	3703 3708 3709	ROBY John PAZDERNIK Rodney NORTON Dorotry	619-563-4284 OO 6 619-286-1896				2017	* LA CENTRAL MARKET XXXX XXXX	619-232-0293 00 00	
POUGLASS Jeraster A CAWLEY Michael R XXXX	619-523-6018 +9 619-225-8406 7 OO		WAGNER Robert G Jr	619-223-2708 +9	20		151 AD A151	3714	NORTON J W JONES Marge	619-229-9406 +5 619-286-8146		ZIP CODE		2019 2029 2045	XXXX •GUZMAN Pedro Marlin	00 619-238-0185	4
XXXX POWELL Charles	00 619-222-9410 0	4958 4958	XXXX NESPOR Rick	00 619-222-6547 8		RAGANSET 7 SAN DIEG		3715	JONES Russell KANZEL Kenh A	619-266-8146 OO +5			-	2049 2055	XXXX GARCIA Ramon	00 619-702-7865	8
EBERS	00	4960 4961 4962	WEAVER Tiffan K XXXX	619-224-1440 8 00		WEATTH CODE 8 D		3721 3726	HEINRICHS Ward S HELTON Rex C	DO 8 619-582-3063		WEALTH CODE 0 1	1	2059	GUZMAN Ralph PEREZ J C	619-238-2409 619-239-2549 619-696-3413	5 4 +9
COFFLAND Douglas L	619-224-8589 619-224-2183 +9	4964	XXXX XXXX AMALFITANG Sheron L	00 00 819-523-4734 +9				3727 3732 3733	GAUDETTE Daniel MARTIN Thos J Jr XXXX	619-286-2373 619-267-4031 DO	1430 X	*RELABLE PIPE SPLY	619-233-0118	2061	SOSA Joaquii MENDOZA Jose C XXXX	519-235-6649 DO	7
XXXX XXXX XXXX	00 00	4968 4969	BOSTWICK Meghan XXXX	519-222-2539 6 OO	X	NARRAG/ AV	ANSETT	3738 3744	BLICK Richard CAMACHO Joe C	619-287-2248 0 00 7	1501	*SO AND IMPERIAL VALLEY RR	619-239-7348 8	2084 / ₂ 2085	NAVARRA Jas	619-232-076 0 OO	5
HALBFINGER Mercy C XXXX	619-225-1450 B OO		XXXX STROBEL E F	00 619-222-3731 4	1838	*HAGAR Ben W XXXX	619-222-3542 OO	3750 3751	FREELAND Robin	DO +5 619-265-8844	1521 1528 1540	XXXX XXXX *NATI, TOWING	00 00 519-595-5555 5	2087	GONZALES Guillomo S HERNANDESSALDANA	619-836-6631	7
HUDDLE Michael XXXX	619-222-2413 8 OO	4973 4974 4977	XXXX XXXX OTTERBEINJon	00 00 519-223-6172 +9	1844	◆HERMAN Jeffray S XXXX	00 H	3756	GAMBLE Donald G BROWNE A K	619-265-8844 619-582-3140 619-583-8508	1551	*NATI, TOWING XXXX *CENTRL	519-595-5555 5 00 519-239-1391	mana	Sávia SALDANA Angelesa • LEWIS Barbara	619-235-6961 OO	5 +9
LAPIHETTE Douglas P XXXX STIGALL Enc	619-523-6260 +9 00 619-523-6448 +9	4978 • 4979	TOTTEN Kenneth J XXXX	00 7 00		CIBIT Joseph C BALLEY Waller Jr 0 BUS 6 RES	OO 7 619-222-5942 1 NEW	3762 X	BROWNE GAINE WAITE D	619-583-7571	1505	MEAT&PROVISM XXXX	00	X	EVANS S * DIEGOASON PRINTG	619-230-5373	15)
XXXX	00	4984 • 4985 •	ROONEY C.J. BRENNEN Hobi E	OG 7 619-222-7759	NAD	WHAL 92154		_ ^.	O BUS 45 RE	S 8 NEW	1606	XXXX XXXX *NATL AUTO WRECKI	00		* DIEGOASON PRINTS * DIEGOASON PRINTSNG	200000000000000000000000000000000000000	
STEUMETZWn BRIERTON John T	619-224-7733 619-758-9845 +9		XXXX XXXX BACON	00		DIEGO	•		ALIE DR 921	115	1643 1651 1659	XXXX *RADFORD OVEND	VG 519-234-3134 OO 519-239-8558	2113	INC ●TORRE Blanca E	00	7
NOGGLE C C OORIUS Japeth CHAVEZ Dashean	619-223-0527 619-224-2956 +9 619-223-9531 +9	5011	XXXX KNECHT Thomas B	00 819-223-1744 +9		WEALTH CODE 4.0		SAN	DIEGO		1663	DOORS XXXX	00	2121 2129 2130	XXXX XXXX XXXX	00 00 00	
XXXX	00		MCINERNEY Steve NBL Marshall	619-221-9285 5 619-222-6764 7	705	DINO Nona	619-429-8838		WEALTH CODE 7 0		1667 1668	*SMOLAN INDSTRUSE *CITY TOWING SERVICES	L 619-233-6141 619-232-2489 +9	2133 2134	GUARDADO Josefna XXXX	619-702-5684 DO	
XXXX HOWELL Romae	00 619-523-4057 +9		XXXX XXXX BERNOT M M	00 00	713 721	●GONZALES Roth C ■CASTELLANOS Gamalia	619-424-5285 al 619-575-0181	X	NORMA I		1673 1675	XXXX	00	2135 2136	CASTORENA Palnoa XXXX	519-702-4829 00	+9
DOWDY Myrile M XXXX LARUE A	619-224-7258 OO 619-523-0334 +9		BERNOT M M XXXX XXXX	619-224-4359 B OO OO	729 730	JONES Arthur C GOLDIGER Juseph J	619-424-7059 OO	4507 4515 4519	SON Monika E XXXX KROEPEL Bay G	00 I 00 619-282-9341	1677 1678	CASTANEDA David RODRIGUEZ Josephin	619-231-6895 e 619-232-8334	2137 2139	XXXX GUADARRAMA Rosalino OSEGUEDA Octavo	00 619-696-3934 619-236-9031	+9 7
XXXX NAIL David A	OC 619-226-4866	5024 5025	XXXX HARRIS Natalia	00 619-221-0351 +9	737	XXXX TURRUBIARTES Jose	00 619-424-5196 +5	4522 4525	■WELSH Vernal Jr XXXX	619-284-6454 OO	1682 1686	VARIGAS Mercedes * CARLOS CLEANERS SHAMOO Kamai	619-234-0638 619-239-3793 619-338-8387 8	2139% 2145	MADRID Hida • MEDINA Dokues	619-696-0056 OO	+9 7
SOULE Heather L XXXX	619-222-5527 +9 OC	5026	ONEIL Tom XXXX	819-222-8359 +9 OO	750 753	MCGEE Clovis E CHRISTENSON Charles	619-424-9980 819-575-6046	4526 4531	XXXX • ARMSTRONG Jack R	00	1596	SHAMOO Kamal GARCIA Requel C *NATL LIQUOR HOUSE	619-233-3002	2147 2148	XXXX EGIPTO Darlena	00 619-702-8124	+9
XXXX PORIER Steve XXXX	OC 619-523-6198 +9 OO	5028 5029 5030	XXXX FLAHERTY Chris HALLWARD P M	00 619-222-3122 8 619-222-4756	760	JUNIO G J AQUINO Paul G BARRIOS Angelica	00 +	4534 4536	BAHR Max J MCPHERSON Charles KERR Michael F	00 :	1595	* BARRETT ENGINEER PUMPS	ED 619-232-7867	2149 2151	XXXX MENDOZAJuro C Holez	00 619-239-6990 00	+9
*UNISYS INFORMATION TECHNOLOGY	619-523-2069 8		HARRISSM MURILLO Vider	819-224-1705 8 819-222-6310 +9	777	 STRONG Takeko 	619-429-5035 +1 00 423-2415	X	MADISOI •SHACHAR Shama 8	NAV	1701	SIGSBEE *NATL BAKERY	619-239-4043	2153 2155 2157	XXXX XXXX	00 00	
THIELE Linda XXXX STAVROS Chris S	619-222-3480 +9 00	5031	PARKER Elizabelh XXXX	619-223-8273 +9 OO	780 785 790	HAMPTON R A Lock HOPPER Evereti C GASILLAS Blanca	619-423-2415 OO 1	4603	POTTER Randy DURFEE Miles A	00 H	1705	*SUPER WELDING XXXX *GEDDOS GARAGE	619-239-8003 OO 619-238-6068 4	2159	●JIMENEZ Jaxne VILLATOROESCOBAR	00 619-238-6106	+9 7
STAVROS Chas S ANTONEL Clay ANTONEL Sondra	00 7 619-224-9107 619-224-9107		HOLUBS VALENCIA David DAMBROSE Joey L	619-224-9278 8 619-224-9278 8 619-222-7734 8	795	MOORE Joson MOORE With A	619-423-0681 619-423-0681	4610	BIYAZI A B GREEN HIKA D	619-281-3273 619-281-3273	1709	* GEODOS GARAGE /: * UPHILL CONSTRUCTION	619-238-6068 4 619-236-1099 +9	2161	Walter XXXX	00 619-239-8758	
XXXX	00		HOWELL Stan R MASTRANGELOKIM	819-523-6965 +9 619-522-2840 +9	X 805	GRISSON	00	4811 4616	VERNEULE John C PAMPUCH Mary D	00 +	1711 1713	XXXX	00	2168 2169	♦HI BI Mabel M/s ★ CENTRO CRISTIANO BETHEL ICIP	619-231-4356	8
* HAIR OF THE DOG XXXX	619-223-3080 3 OO	5038 5040	XXXX	00	808 815	●DUBERT P J XXXX	00	4617 4622 4623	SCHLEICHER Tisha D XXXX	619-284-8548 0 00 i	1715 1719	XXXX * MODEL EX OFFENDE	00 RS 619-234-6191	2177	XXXXX COSSIO Zabdi	00 619-235-6893	+9
COE Scott XXXX • FOTIES Peter	619-225-6621 7 00 619-223-0820 40	1	INMAN Mathew D MCGRATH James 2D	619-222-3353 +9 619-523-8152 +9	818 825	GARIBAY Ana Serena CRUZ Frederick ONG Bornline	619-423-7558 +1 619-575-8049 +1 619-423-2107 6	4631 4637	■GLENN Gorden A	619-282-8845 OO		*SD MODEL EX OFFNDRS *SO MODEL EX	619-237-9765 619-237-9385	2183 2188	XXXXX MENDEZ Grisalda	00 619-702-7122	
SUNSET	619-222-9630 +9 CLIFFS	1	TRANS WORLD DEVELOPMENT VITALE M	619-225-1157 5 619-223-2321 +9	828 835 838	ONG Rosaline MUNOZ David N VORCE Richard A	00 1	4642 X	DIETZ F Heidin ADAMS A	619-284-2593 V	1720	OFFNDRS RUIZ Daniel William	619-234-3904 +9	2190 2193	XXXX	DO DO 619-235-8478	
	619-223-2230	5042 5044	XXXX	00	845 848	ENTONIUA Enrico ANTHONEY Colsen B	619-423-4581 +6	4848 4651	WHITAKER Victor 3D ●BARRIOS Emile G	619-280-8485 DO	1722 1723	/a COTA Ramon L XXXX	619-239-7976 7 OO	2194	*LA POPULAR TORTLERA		
THORNTON Senuel BOSWORTH Michael C	619-223-6777 49 619-225-1112 49 619-523-0055 6	5045 5046	KOSTKA Andrew XXXX	619-223-1507 +9 OO	858	 FULLECIDO Modesto M XXXX 	619-423-5013 OC	4854 4660	MOFFATT Gregg HALL John HALL John R Jr	619-563-9043 619-280-9273 619-280-7570	1727	/a LUNA Ernestina XXXX	619-338-9734 6 OD 619-230-1587 B	Z204	SAMPSOI *LOGAN HEIGHTS FINLY COUNSLING CT	Y 619-685-1650	+9
● BAYS John		5048	XXXX	00	865	CAMPOS Guillermo	619-429-3757 +9		I MILL JOHN M JI	010-200-15/0	1726	●FLORES Sylva L	019*230*136/ B		Panishing 91		

<u>Adjoining</u>

<u>Source</u> Haines & Company

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R. L. Polk & Co.

MORENA BLVD 1984

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MORAGA PL—Contd 3376 Wood Kirby W @ MORAGA AV INTERSECTS	Stenorette Sales & Service Co dictating mach sis & serv 276-4002 1277 Jarco Auto Parts & Warehouse 276-8141	104 Rees Sarah 275-2697 105 Zeiss Jerome 275-3109 106 Edwards Raymond 276-9174	B7 Gutsch Eva Mrs © 276-5040 B8*Jerome E A 275-5429 B9 Johnson John S ⊚
127	1278 Monroe Calculator Co (Div Litton Industries) sls & serv 276-8920	108 Presser Julie Mrs 110 No Return	B10 Trudersheim Blanche Mrs © 276- B11 Garcia Jessie
MORENA BLVD -FROM 4263 TAYLOR ST NORTH	1280 Vacant 1287 Hoover Company The vacuum cin sis & serv	112 Kunath Verna	B12 Bender Clifford J @ 276-0452 B13*Gongora Jesus @ 275-3933
ZIP CODE 92110 INTERSTATE 8 CROSSES SAN DIEGO RIVER CROSSES	276-9560 1291 San Diego Valve & Fitting Co (Ofc) 276-2384 1292 Puppy World Aquarium Pet Centers pet	KNOXVILLE ST INTERSECTS 1405 Al'a Electric Motor Repair 276-5170	B14 No Return B15 Walsh Rose 275-2467 B16 Baker Florence Mrs ©
SAN DIEGO RIVER CROSSES 814 Building	shop 275-4267 1295a San Diego Valve & Fitting Co Inc 276-1122	1411 K & L. Liquor & Market (Whee)	B17 Lesicka Sally 276-9354 B18 Maddor Letterd © 275-3261
Suites 101 Comps Incorporated secretarial serv	1295b Vacant 1296 Al's Place tavern 275-0826 VIOLA ST BEGINS	1413 K & L Liquor & Market 276-1662 1420a Autobahn The used car sis 275-0221 1420b Hobbs Auto Service 275-2615	B19 Davis Bernice 275-2755 B20*Lytle Bill
296-6391 108 Gaylor Institute trains psychotherapist	1310 O'Connell's Sports Lounge	1420c King's Auto Body repr 276-7282 1426 Moore's Mike 24-Hour Towing & Road	C1 Barber Ralph C2 Rodarte Manuel @ 275-2188
298-9033 108 Lyon International University 298-9040 108 Lyon International University (Clinic)	1314 Prissy's Beauty Salon 276-5345 1315 Bay View Motor Lodge 276-9182 Forbes Dale E	Service 276-3483 1430-a Cal West Dental Ceramics dental laby 276-0212	C3#Robertson Scott 276-8530 C4 Roth Benj © 276-3040 C5 Hood Paul © 275-1879
296-2309 201 Vacant (Suites 201-204)	1316 Gun Co The guns & ammunition ret 276-2201	1430-b Moore's Mike 24 Hour Towing & Rd Serv (dispatch ofc) 276-3483	C6 Strattman Allan P 275-1744 C7 Westlake Edgar @ 276-0363
208 Martindill Densid phys 298-9753 210 Credco Of California Inc 296-1008	1319 Morena Club tavern 275-1224 1325a Vacant	1430c A Better Answer answering serv 275-3481 1430 Modern Roofing Methoda contr 275-3576	8*Barrett H C 276-5529 C9 Terry Frank E @ 276-9780
 302 Diener-Hauser-Bates Co Inc advertising 291-8176 302 K L C Third Inc 296-7588 	1325b Vacant 1327 Western Towing Service 276-5481 Robert Allen's Specialty Towing 560-1247	1430-d Kodmur Service Agency 276-1102 1430d Public Service Consultants 276-7596 1430 Joe Duran Appliance Repair 275-4908	C10 Sowa Adam C11 Bradley D Patk © 276-7935
303 Sassarano Vickie E bookkeeping serv 306 Bayetta Oxford Office Complex leasing	San Diego Jet Ski Rentals boat rentals 276-9200	1433 Sam's Auto Care 275-1505 1437 Building	C12 Lovejoy Mary © C13 Pugh Bill © 276-8819 C14 Mairson Helen Mrs © 276-2388
office 298-8800 308 Mensch Nieves & Co 291-5636 309 Stapp J Robert acct 295-8807	1330 Sea World Shell Service gas 276-3663 TECOLOTE RD INTERSECTS	150 Joanne's Dance Place 275-4054 200 De Hamer Electric Inc electrical contr	C15 Cooper M D @ C16 Priseler Wassa @ 276-3774
309 Stapp J Robert acct 295-8907 310 Vacant LINDA VISTA RD INTERSECTS	1364 Three M Business Products Sales Inc duplicating mach 276-8000 1395 Morena Mobile Village trailer park 276-5699	275-0043 202 Roberts Construction Co genl contr 203 Graphic Graffiti graphics specialty adv	C17 No Return C18 Considine Virginia K Mrs @ 276- C19*Phoalsawasdi Suthep 276-0536
	1 Harter Melvin H Rev 275-1398	275-5573 204 Nakamura Institute Of Oriental Medicine	COD+Hamison James @ 275 4049
45 Vacant 55 Tops Cleaners 295-4720 Rug Doctor Rents (Rental Sta) NAPA ST BEGINS	2 Hooker Kath T 3*Starr Ainarra 276-7056	acupuncture 275-1890	C23 Wolfe Ruth V @ 276-0924 D1 Newton Craig L 276-0304
SHERMAN ST ENDS O9 A B A Recovery Service Inc collection agey 295-5666	4 Munday Ora B 276-1029 5 Jack Wesley T 276-5253 6 Marcille Hazel E Mrs 276-2440	1440½ Jurgensen Larry 1442 Brown E Pat 275-2639 1444*Gilmore Ronald W 276-6471	D2 Barber Frank 276-8476 D3*Parker James R © 276-7304 D4 Saba Jud R 276-5889
A B A Recovery Serv Inc (Collection Div) 297-8050		1446 Konecny C P 276-9037 1448 Shinn Bervi 276-5770	D5 Morrisson Herold D6 Hale Bob ©
Bey Park Towing 295-2179 20 Scan Furniture House 296-7875	8 Hadaway Wayne 9 Hurley Charles R 276-1453 10 Lucas Geo	1450 Apartments Same Day Service appliance repr 276-3666	D7 No Return D8*Kelsay Bud © 275-5375
99 Audi Service Center 297-8383 Reynoso Auto Detail body repre-car wash 291-1100	11 Merchant Laura Mrs 276-3046 12 Martinez Gilda 14 Archambeault Eliz 275-0336	A≠Morgan Robt B Vacant C★Cox David E 276-6557	D9 Delaney Ruth ⊚ D10*Geisler Ken ⊚ 276-9543 D11 Sefcyk Anthony F 276-9253
W MORENA BLVD BEGINS 101 Witherow Roofing profine contra 297-4701	15 Vacant 16 Hill Elmer D 276-0022	D No Return E*Tanzer Matthew O 275-5718	D12 Vacant
004 Stellar Fish Co whol sea food 299-5900 Union Fish Co whol 299-1570	17 Vacant 18 Walsh Yvonne Mrs 276-0393	F*Olette F G*Bradfield Benton 276-5569	D13★Slason John L © 275-5506 D14 Geisler Paul 275-4258 D15 Hill Russell ⊚
013 Hauser Furniture 291-1013 Muntz Electronics Inc 298-1990 019 Vacant	19 Vacant 20 Wilkins Clara H 276-3120 21 Pusich Richd W 276-3442	H★Failla Laura M 275-2214 1451 Thomas Ray Furniture 276-0663 1452 Apartments	D16 Kuehl Helen Mrs © D17 Clark Dorothy S © 276-8170 D18 Dornhafer Helen © 276-4373
22 Raffee's Carpets Unlimited ret als 275-3032 Conlin Brothers Sporting Goods who) mfrs	21 Pusch Richd W 2/6-3442 22 Lucas Edith B 276-3395 23 O'Brien Lorraine Mrs	A*Toomire R E B*Jackson Keith 275-3275	D13 Huffman Gertrude Mrs © 276-43 D20 Doyle Steven
275-0670 Shutter Mart Of California shutters custom	24 Lawhorn Carrie B Mrs 276-4932 25 Naas Lenora 276-3214	C≭Hansen Bo D±Johnson Geo A 276-4388	D21 Moore Margt 275-2439 D22 Adams Sylvia A 276-2154
mfrs 276-6722 Tile Mart tile ceramic dha 276-0271	26 Dick Isabel Mrs 27 Green Lloyd	1454 Apartments A★Mc Iver Kevin	D23 Grier J Robt © 276-1586 D24 Vacant
945 Morena Boulevard Market 296-1623 170 Vacant 176 Alex Foreign Car Service repr. 278-4274	28 Davidson Ruby 29 Miller Kristen 375-2609 30 Allen Robt	B★Burkley Brian C★Scaduto C D★Bale Jerry	D25 Vacant E2 Wrong John J 276-4852 E4 Orle Grady © 276-8246
776 Alex Foreign Car Service repr 278-4274 83 Jet Gas 276-9106 90 Drive Line Service Of San Diego engine	30 Allen Robt 31 Dolstad Florence M Mrs 32 Herring Al	1456 Apartments A*Holbert Chris 276-2264	E4 Ogie Grady © 276-8246 E6 Allen Clement © E8 Ward Paul ©
rebldg 275-0150 MORENA PL BEXINS	33 Sibyk Člara Mrs 276-4934 34 Sanborn Eliz Mrs 35∗Banta Mich J 275-5209	B*Gains H C*Vaughn T 275-1256	E10 Vacant E12 Vacant E14*Phebus D @ 275-6447
MORENA PL BEGINS 102 Bay Park Pet Clinic 276-1616 03 Fotomat Corp (Whee) 276-6775 05 Vacant	36 Kuhn Clara Mrs 276-4893 37 Greene Grace 276-8722	D Vacant 1457 Stroud Tackle fishing tackle 276-4822 Stroud Wilferd © 276-4822	E16 Castle Vickie E18 Hass Margt D © E20 Belles Douglas W © 276-0211
06 Vacant 08 Williams Richd H archt 276-1794	38 La Rocque Gibert E 276-5514 39 Brooks Joe 276-3218	1458 Brennan Vinia Mrs 1460 Bes-Tex protectives 276-4141	E22 Hastings Paul 😉
22 Bowen Auto Body paint & body shop 276-0840	40 Coleman Hazel 276-1976 41 Herbstritt Cletus E 276-1757 42 Hancock Richmond	Hanco Home Improvement Co Inc genl contrs 276-2636 Sunroll Security Shutters security shutters	E24 Weber Dorothy L 276-7549 E26 Coughlin David P ⊚ 1623 Carter Walter H 276-5329
23 Fiesta Publishing Co Inc newspaper publ 276-4820 El Informador sch newspaper 276-4820	43 Fournier Eather 44 Mc Vane Walter	sla ret 275-4400	1639 Bailey Pauline Mrs 1641 Kinney Ronald
25 Tulio's Auto Enterprises auto reprs 276-3262 BLENO AV INTERSECTS	45 Riso Domenick J 276-3104 46 Pinochett John E 276-3104	*Ferrer Nancy 276-0084 A Barber Saeko H	1643★Israel Margarita 1645★Davis B 275-1016
29 Sardina's Italian Restaurant 276-8393 34 Clairemont Plumbing Service plmb contr 276-1397	47 No Return 48 Arney V I Mrs 49 Hendricks N E Mrs 275-2216	B∗Guerrero Lucia G 276-6071 C Barber Patricia Mrs D Hurtado Patricia 275-2670	1655 Video Library rentals 275-0012 OFFICE BUILDING SUITES
276-1397 51 Vacant 52 Iveron Pacific Corporation electronic sys	50 Hult Stanley 51 Mc Gee Hazel F Mrs 276-5802	E*Gomez Cheryl 1465 Ninteman Constn Co Inc 276-5810	100 Phone Shops Of San Diego The 2 200 Bio Ceramics Dental Laby dental
275-1500 54 T D J Company Inc electronic parts mirs	52*Sweet Lewrence 58 No Return	1471 Kibbey Gerald S & Associates Inc real est appr 275-0967	276-6671 201 Artisa Dental Laboratory 275-6671
276-5920 55 Bowen Auto Repair 276-8530	54 White Charles A 276-1736 55 Kader June 57 Anderson Daphne A 276-3197	Berger Mark real est appr 275-0967 Godwin Harold A real est appr 275-0967 Tatreau Douglas real est appr 275-0967	202 R & H Enterprises inv broker 275 204 Vacant 205 Giacalone Remodeling 275-2340
56 Western Gift Distributors 422-4525 52 Southwestern Picture Framing & Art 275-0715	57 Anderson Daphne A 276-3197 59 Koon Rose E Mrs 276-7420 60 No Return	Bowen Steven L Realty 275-4210 Vacant	206 Phone Shops Of San Diego The (S 1717 Musicians Assn Of San Diego Local No
33 Coast Glass Co glass installers 276-5831 34 If Bagno bath room fixtures 295-6005	61 No Return 62 Gould S Jay 276-3964 63 Enyart Vivian	Componenta Corp electronic equip als 275-3433	labor org 276-4324 1735 Four Day Tire Co sls & serv 275-0561 ASHER ST BEGINS
5 Dawson Richd S Co pumps 276-5552 7 Sunshine Supply Co Inc constn bldg matls	64 Saling Elvira Mrs 276-8093	1476 Bonn John J Co Inc flexible instrument hose mfr 275-0242 Hopkins Manufacturing Co flexible	ASHER ST BEGINS 1801 No Return Usnik Anna M 275-1187
276-7442 National Signature Co rubber stamps 276-9146	65 Asbury Earl E 276-6038 66 Romero Manuel B 67 Ziegler Everett	instrument-hose mfr NASHVILLE ST BEGINS	1813 Pink Panther tavern 275-0541 1815 Red Carpet Realtors 276-7850
2 Community Congress Of San Diego The pub serv nonprofit orgn 275-1700	68 Lacher La Vonne Mrs 276-0197 69 Michaelson Harriet E Mrs 276-5988	1502 Michael's Moving & Develvery 1501 Pekarek Group The landscape architects	1817 Bay Building Rooms
6 Casual Living Center 275-1176 6 San Diego Rattan furn 276-2480	70 Gough Dorothy A 275-0559 71 Filina Ellen Mrs 276-5108 72 Le Levier Robt	275-5550 1502 Michael's Moving & Delivery 276-0799 1510b Vacant	C Williams Edwin K & Co bkpg serv business mgmnt 276-3161 E Bromec Insurance Agency 276-0782
R & H Management Inc management consultants 276-2480 1 Doors Etcetera doors & door fixtures retail	73 No Return 74 Johnson Marion	1510 Central Credit Union Of San Diego (Admn Ofc) 276-8054	G Westward Escrow Co H Coffman Wm J genl ins 276-4361
275-6151 3. Acceptaint offset pratts 276-9766	75 Nerlinger Jacob J 276-4745 76 Walter Robt	D Sports-Industrial Physical Therapy Inc 457-4040	1845 Vacant 1849 Campbell Jessie E Mra 276-6227 1851±Vogt Chas R 275-5149
5 European Performance Components foreign auto parts whol & ret 276-2850	77 Quick Orio H 276-3604 78 Martine James 79 Pusich Martha Mrs 276-5794	1511 Cooper & Associates 275-10221515 Krommenhoek Mc Koewn & Associates archts 276-7710	1851 *Vogt Chas R 275-5149 1853 Ray Gladys E Mrs 276-1485 1855 De Pola Kath 276-7886
7 Pella San Diego windows & doors ret als 275-0200 9 Computer Software Analysts Inc 275-5070	80 Hart Otis 81 King Mary	1525 J C Company petroleum equip 275-0180 1635 Utotem Market No S22 276-9120	1857 Ramsdetter 1859 Hagood Margt C 1861 Mosa B J 275-3758
O Vacant APLES ST ENDS	82 Waugh Fred 276-7414 83*Willis H 275-5538	1540 Morena Pet Hospital 276-2112 1550 Bernie's Arco gas sta 275-0777 FRANKFORT ST BEGINS	1863 Griffin
1 P & L Barber Shop 276-1888	84 Williams Agnes Mrs 275-0792 85*Johnson K 275-3448 86*Toothacre L M 275-6265	FRANKFORT ST BEGINS 1579 Coastal Trailer Villa 276-0612 Martin C L 276-0612	1865 Schrock Inc bldg & genl contr 276-6800 LITTLEFIELD ST BEGINS 1901 Creighton Auto Sales 276-2297
6 El Carnino Auto Court 1 Comeast Music Network Inc inst background mus sys 275-1842	87 Edwards Ronald 276-8412	SPACES A1 Volker Norman 276-6916	1903 R & H Recreational Services For The
Swick Print offset printing 275-1551	88*Flores Shirley 276-8836 89 Brown Earl C 276-4271 90 Crawford James	A3 Staples Raiph B @ 276-0190 A5 Barnes Wm @ 276-7889	Handicapped 275-1920 1903a Workman Dental Laboratory 275-4336 Decker Ronald C lwyr 275-3073
7 El Cajon Appliance 276-5823	91 Graham Robt 276-8755 92 Giaccone Maria 276-3873	A9 Purvis E A Mrs ⊚ A11 Baldwin Libbie Mra ⊚ 11 Leffler James ⊚	1905 Clark Thos A 276-3533 1909 Roach Michelle 276-3154 1911+Roach Patk W 276-3301
mkrs 275-2524	93 Nyrup Eleanor 276-3954 94 No Return 95 Holding Norene	A13*Waddell Geo E © 275-3147	1911 Koach Patk W 276-3301 1916 Vacant 1917 American Holistic Church 278-6610
Wurts Interiors 275-5850	96 Di Leo Peter A 275-0995 97 Mogul John 276-8972	A17★Turqer Barbara © A19 El Zapeda Roy © 275-3775	1923 Fashion Careers Of California voc educ merchandising 275-4700
Image House photo finishers 275-1212	98 Scott Richd W 275-1970 99 Johnston J 276-0942	B1*Bester Harold ◎ 275-3269 B2 Jones Grace Mrs ◎ 276-8419	1929 Handley Arven B ⊚ 276-6130 1931*Casselman Rachel
Hydrotronics Incorporated eng serve	100 Blair Stuart 101 Guyette Margt 276-8020	B3★Smelser Roger 276-7732 B4 Murphy Jack © B5 Hill Gary	1933 Adba A E 276-6010 1935 Bjørnson Geo G 276-8929
underwater tech 276-5800 Dictating Systems Co Inc mach als & serv	102 Vacant		193514 Mc Mahon Damaris A 276-8673

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R. L. Polk & Co.

FRANKFORT ST 1984

202 Dews Eleanor Mrs ◎ 232-0944
203 Cummings Gertrude V Mrs 233-0221
203a Dunn Edw K 234-1998
209*Rose Leo D 235-6417
211 Brown Harston
212 Amerson Phillip © 234-5267
213±√ackson Mry 233-3911
215 No Return
217*Agundez Fradice
218*Rödriguet Freddie
219 Weeks Floriel Mrs 234-8998
224 Apartments FORTUNA AV—Contd PROMONTORY ST INTERSECTS 1553 Clark Frunces W Mrs 273-0523 1555 Winczewski Frank © 274-1517 1862*Hinrichs Jill F 272-9496 INGRAHAM ST INTERSECTS 7177 Barge Arth F ⊚ 277-3938 7178 Clark Raymond L ⊚ 277-9870 7185±Guilliano Steve ⊚ 277-0879 7186 Kunze Alma W ⊚ 277-3808 JAMIE AV INTERSECTS FOX AV -- FROM 4200 MORAGA AV EAST FORWARD ST (LA JOLLA)—FROM 2 BLKS WEST OF 5800 LA JOLLA BLVD EAST ZIP CODE 92117 INGRAHAM ST INTERSECTS

1605*Plodgett Joseph
1605½ Alsten Bradford A 272-7438
JEWELL ST INTERSECTS
1720 Roach Mildred Mrs @ 273-8393
1730 No Return
1730½ Jayne C L 488-1413
SHASTA ST INTERSECTS
1770 Himmelshach Esther M Mrs @ 273-8875
1785 Morales Anthony M 273-3379
1787 Scarry Michl W G 274-8807
1789*Cincotts Brian P 483-4877
1791±Mercuro Alfano
KENDALL ST INTERSECTS
1843a±Mc Mustry D A 270-7805
1843b±Arthur S
SEQUOIA ST INTERSECTS
1843a±Mc Mustry D A 270-7805
1856 Pernicano Frank J @ 274-1718
LAMONT ST INTERSECTS
1905-4-Jones Elmer R 272-5456
1911 Mokiaso Chas 277-8586
1925±Longley Ron L 483-218
1286a±Linger Dani 270-5511
1282b±Msuger Dani 270-740
1303 Flugerald Herbert F Jr 270-1802
1318 Bleis Robe L R 78-877
1940b±Lafebure Prederick 274-788
1942 Rudie Joyce R 273-8715
HONEYCUTT ST INTERSECTS
1963 Anderson Herma Mrs @ 270-3897
1973*Coleman F C @ 270-1741
1890±Leman K
1982±Mackenzie J
1984±Yeich
1896±Henner B
MORRELL ST INTERSECTS
2004 Edwards Wm E @ 276-9618 ZIP CODE 92117
4010 Vincent Raymond J 273-5647
4020 Navarro Pedro Jr 270-1618
4030 Hendrix Arth D © 272-2384
4040 Ransom Walter D
1050 Tasousis Geo ©
4060 Franklin Louis R © 273-4637
4070 Espisito Sam 273-0316
4081 Vacant WEST OF 5600 LA JOLLA BLVD E

ZIP CODE 92037
310*Royston Ivor 454-2422
316 Aldrich James H ◎ 459-7507
320 Nietfeld Wm D ◎ 454-0878
322*Miner M Kathryn Mrs ◎ 459-7089
328 Kuetzing Walter ◎ 644-0581
354 Nixon John N ◎
365 Stewart Marie W Mrs ◎ 454-2689
Resr J M Repair auto repairs 454-6619
LA JOLLA BLVD INTERSECTS
415 Durst R F ◎ 454-0914
20 No Return
427 Mc Coy Paul B ◎ 459-8820
LA JOLLA HERMOSA INTERSECTS
504 Sherman Eric H ◎ 454-6612
510 Vacant
516 Hollenbeck P Dicn 459-8612
523 O'Conner Stave ◎ 459-9420
Rear Huguenard G 454-9583
BEAUMONT AV INTERSECTS
508 Vacant
612 Blandin Bruce J ◎ 454-5420
518 Puffer Earl E ◎ 459-5847
524 Thiel Elly F Mrs ◎ 454-5420
518 Puffer Earl E ◎ 459-5847
524 Thiel Elly F Mrs ◎ 454-5420
525 Holloway Janine M @ 454-4396
537 Murray Kathryn D Mrs 645-1894
529 Holloway Janine M @ 464-4396
537 Murray Kathryn D Mrs 645-1894
520 Jeanth 219 Weeks Floriel Mrs 234-8998
224 Apartments
224 Apartments
227 Whe Lorres Cecil 236-9412
227 Whe Lorres Cecil 236-9412
237 Wacant
2334 Vacant
234 Apartments
1+Valdose Walter 239-3290
+Robinson Pete Jr 233-7206
24 Francis St. Apartments model
1+Villa Mary L Mrs 233-9479
6+Sullivan K L 239-9479
6+Sullivan K L 239-8584
305 Asero Henry ⊚
311+Fingson Victor 239-8690
311+Fingson Victor 239-8690
317±Bacobedo Victor T 230-1139
323 Adkins Lorrenco ⊚ 231-2730
329 Harris Maude C Mrs ⊚ 232-1305 FOX PL -FROM 4200 MORAGA AV WEST ZIP CODE 92117 3310 Rogers James D © 273-0387 3311 Ellis Lowell V 270-1378 3333 No Return 3334 Buffington Richd © 274-8487 3353 Bigler Clarence V © 272-0848 FOXWOOD RD -FROM 7950 LANDON PL NORTH NORTH

ZIP CODE 92126
10710 Nichols Wm T © 566-6146
10711 Gilbert Engineering Co Inc international als 820-8204
Filink Howard B © 695-2203
10720 Vacant
10723 Carpenter Glen 693-8080
10730-4Mils Gary 693-6589
10735-4Warren Dale L © 271-7281
10740 Bivens Mark 566-7599
10747 Biggs Geo E © 10750 Guillen Thos © 693-8151
10759 Giancy Michol T © 566-857
10750 Guillen Thos © 693-8151
10759 Giancy Michol T © 566-857
10771 Bennest Dorothy P Mrs
10780 Lindsey Vivian E
10781 Cindsey Vivian E
10783 Compton Robt L © 578-5217
10790-£Lathrop Robt
GOLETA RD INTERSECTS FRANCISCAN WAY —FROM 1 WEST OF MARYLAND ST NORTH 3 EAST OF KNOXVILLE ST ZIP CODE 92116 ZIP CODE 9216
1149 No Return
1154 Forshey Elma N Mrs © 2964431
1150 No Return
1165 Smith Berkley P © 2964478
1224 Jackson Everett G © 295-2904
1234 Rogers Richd 294-9679
1256 Lydon Richd W © 295-1139
1256 Lydon Richd W © 295-1139
1250 Matthews Mona F Mrs 291-0621
MARYLAND ST INTERSECT
404 Senterfitt Ann M Mrs © 297-1025
1411 Kalafer Michl E © 297-0663
1414 Vacant
1419 Wagner Tom W 299-1785 837 Murray Kathrya D Mrs ⊚ 459-1894
WAVERIY AV INTERSECTS
702 Vacant
711 Clarke Thos L 456-0774
714 Mc Gee Barney T ⊚ 459-8638
Mc Gee Linds G Mrs bidg contr
718 Vacant
721 No Return
726 No Return
726 No Return
727 No Return
727 No Return
728 Control Davis ⊚ 459-5492
Berner Herman D 454-7368
729 Griffin £rwin J ⊚ 459-5493
720 Griffin £rwin J ⊚ 459-5495
721 Swanser Bernard A 454-9503
723 Swanser Bernard A 454-9503
723 Swanser Bernard A 454-9503
723 Wanser R 459-5462
728 Swanser Bernard A 454-5480
729 Mary R 459-5462
729 Swanser Bernard A 454-5480
729 Mary R 459-5462
720 Swanser Bernard A 454-5480
720 Swanser Bernard A 454-5480
721 Swanser Bernard A 454-5480
722 Mary R 459-5462
723 Swanser Bernard A 454-5480
724 Swanser Bernard A 454-5480
725 Swanser Bernard A 454-5480
726 Swanser Bernard A 454-5480
727 Swanser Bernard A 454-5480
728 Swanser Bernard A 454-54 FRANKFORT ST -FROM 1540 MORENA BLVD NORTH FORUM ST -FROM WEST OF AUBURNDALE ST EAST FOYLE WAY -FROM 4500 BLK CANNINGTON DR EAST ZIP CODE 92110

1325 Ott Mary E Mrs © 276-1534

1331 White Ora L ©

1339 No Return

1337 French Larry L

1356 Lampe Edw L © 276-1899

1363 Groth Walter J © 276-4406

1369 Arthur Richd E ©

1377 Tarange Y Salvador T © 276-0650

TONOPAH ST INTERISECTS

1412 Tollerton Ella Y Mrs © 276-2888

1413 Gleman Fern T Mrs © 278-8645

1459 Hickey Helen ©

1444 No Return

GALVESTON ST BEGINS

1452 Duran Antonio B © 276-774

1453 Gleeman Fern T Mrs © 278-8645

1459 Hickey Helen ©

160 Bucy Wayne W ©

1612 Fowell Dorothy L Mrs ©

1612 Fowell Dorothy L Mrs ©

1612 Powell Dorothy L Mrs ©

1613 Vacant

1520 Mrs Bruch © 276-3048

1549 Maly Joseph © 276-4984

1171LEFIELD ST INTERESECTS

1705 Smith Edw D ©

1709 Hendrick Wm 278-2088

1719 No Return

120 Larrabee Earl T © 276-3886

1730 Equivel Robt 276-5089

1719 No Return

1720 Larrabee Earl T © 276-3886

1730 Equivel Robt 276-5089

1741 No Return

1750 Larrabee Earl T © 276-3886

1750 Mrs Ruth Mrs © 276-1415

1810 Estrada Ernie A contr

1811 Praha Mark Jr 278-7643

1821 Lansdown Ella G Mrs © 276-2598

1827 Morris Kenneth C ©

1850 Burger Leopold R ©

1850 Mrs Clarence E © 276-4151

1810 Estrada Ernie A contr

1811 Praha Mark Jr 278-7843

1821 Lansdown Ella G Mrs © 276-5259

1827 Morris Kenneth C ©

1850 Burger Leopold R ©

1850 Burger Leopold R ©

1850 Burger Leopold R ©

1850 Write Senneth C ©

1860 Burger Leopold R ©

1871 Duncan Loma A Mrs © 276-0523

1879+Fortebraccio David © 276-7845

ASHTON ST INTERSECTS

1916 Flides Roy C © 276-0875

1917 Duncan Loma A Mrs © 276-0523

1879+Fortebraccio David © 276-583

1870 Flides Roy C © 276-0875

1916 Clapmann Herman R © 276-0523

1879+Fortebraccio David © 276-583

1870 Flides Roy ZIP CODE 92111
6501 Ericson Bertil A ◎ 278-1930
6502 Gasaman
6521 Countryman Jean L ◎ 279-6720
6522 Vacant
6531+Eaves Burt L ◎ 279-8361
6531+Varon Richd L ◎ 277-7049
6532 Vacant
6531-Vernon Richd L ◎ 277-7049
6532 Rown Mark S ◎ 279-7704
6533 Rown Mark S ◎ 279-7704
6534 Rown Mark S ◎ 279-7704
6535 Rown Mark S ◎ 279-7704
6536 Rown Mark S ◎ 279-501
6537 Hall & Hall Inc elec contr 279-3692
Hall Walter E ◎ 279-3692
6539+Vasvani Aneel S ◎ 277-2411
6541 Eave Laurance J ◎ 278-5019
6544 Laux Laurance J ◎ 278-5019
6544 Laux Laurance J ◎ 278-5119
6546 Ota Peter I ◎ 277-7090
6540 No Return
AUBURNDALE ST INTERSECTS
6705 No Return
6706 Roby Robt E ◎ 278-1288
6735 Gastecasi Joseph ◎ 292-7395
6507 Stupk Rene H ◎ 279-2842
6536 Stiacke Products hith food 279-7038
6567 Stupk Rene H ◎ 279-2842
6568 Stalie Products hith food 279-7038
6587 Laugan Jerry W ◎ 555-0047
6586 Ferraro Nice ◎ 277-4482
6597 Helle Doug 278-5271
6599 Borce Teofilo J ◎
6910 Cobalovic Sulio ◎ 279-5062
6592 Mc Ghee Nell H Mrs ◎ 279-0336
±Mc Ghee Nell H Mrs ◎ 279-0336
±Mc Ghee Nell H Mrs ◎ 279-0336
±Mc Ghee Nell H Mrs ◎ 279-036
6591 Cobalovic Sulio ◎ 279-8576
6591 Cobalovic Sulio ◎ 279-8576
6591 Chapton Clair R ◎ 278-4878
6591 Chapton Clair R ◎ 278-4878
6591 Chapton Clair R ◎ 278-878
6591 Chapton Clair R ◎ 278-877
6592 Christy Danald O 278-871
111 Mc Naughton S E ◎ 278-4146
112 Davis Martino P ② 278-827
122 Randall John F ◎ 278-827
123 Randall John F ◎ 278-827
124 Randall John F ◎ 278-827
125 Randall John F ◎ 278-827
126 Randall John F ◎ 278-831
127 Mc Naughton S E ◎ 278-4146
128 Davis Martino P Ø 278-851
129 Christy Danald O 278-8016
121 Chapton Davis Berturn
137 No ZIP CODE 92117

6511 Laurentana Louis G

6521 Rōjo Nelson ⊕

6521 Rōjo Nelson ⊕

6534*Klücit Allen S ⊕ 571-3589

6534*Grman Joel ⊕ 565-8250

6541*Kalley Chas £ ⊕ 566-8298

6550 Guy Ronaid ⊕ 571-1655

6551 Maske beffrey 566-7363

6560 Heming Robt H ⊕ 279-2891

6570 Heming Robt G ⊋ 277-3281

6570 Horras Rosald F ⊕ 279-2895

6581 Beeker Bruce C ⊕ ZIP CODE 92117 FOSTER ST —FROM IMPERIAL AV EAST 3 NORTHEAST OF LISBON ST ZIP CODE 92114 FRAKES ST -FROM 3500 ATOLL ST EAST FRAKES ST —FROM 3500 ATOLL S
ZIP CODE 92111
7102 Papier Maurica J II © 277-6526
7112 Murphy Naomi Mrs ©
7113 Leibrand Joseph G © 560-0369
7122 Rebinson Kenneth C ©
7123 Reverse Curlis H © 279-175
7132 Trago Michl P 279-1951
7133 Robertson D B © 279-0322
7142 Anaya Roger A ©
7142 Anaya Roger A ©
7144 Fabrer Davier Wallace © 278-1464
7183 Hebertson D B © 278-1464
7184 Fabrer Davier Wallace © 278-1464
7184 Fabrer Davier S
7185 S
7185 Vernon Norvin F ©
7172 Dempsey Loon C ©
7173 Arias Manuel F III 278-604
7182 Forster Locators auto 277-5460
118 Porsche Locators auto 277-5460
118 Dunlap Earl F © 278-0473 FOUNTAIN ST -FROM 2250 REED AV NORTH ZIP CODE 92109 4260*Jackson Jerald 272-2987 4270*Miller Richd 270-9526 4288*Machenheimar Jerry 270-0582 4290*Olson Donald L 274-0575 FOUTZ AV --- FROM 2200 OLIVER AV SOUTHEAST SOUTHEAST

ZIP CODE 92109

2223 Hickborn Bonne G 483-3138

2231-kKingsbury Joe 274-7488

2239 Ensminger John T 273-8236

2240 Bunge John R 274-5574

2246 Wolfe Donald N 276-4990

2256-Wilson Vernon 276-3099

2260 Vacant

2265-kBleaure Dale

2270-6Gooseona Peter 273-5320

2271-8-Groggins Warren 272-3788

2279 Reichard Jjmmie W 270-8869

2257-8-Strana Paul

2295-4-Johnson Wm 483-5481 FRANCIS ST N -FROM COMMERCIAL ST NORTH 2 EAST OF S 34TH ST NORTH 2 EAST OF S 34TH ST

ZIP CODE 92102
215 Bell Willow
219 Newton Harrey C 231-4737
221 Vacant
223 Johnson Owens 239-3588
227 No Return
229 Gilbert Pamela A Mrs
231 Vacant
235 Fernandez Gracia Mrs ©
L ST INTERSECTS
23 Wabash Terrace Apartments
B Vacant
C Smith Loia A Mrs
D Russell Marzella D Mrs
217 Moore Melody L Mrs 232-6920
23 Apartments
A Dixon Frances M Mrs 231-9604
B Vacant
C Smith W C 239-5830
D Vacant 537 FOWLER DR -FROM 6750 DOTI POINT EAST EAST

ZIP CODE 92139
2140 Minder Jesus © 479-3361
2143*Cartmill Jim 475-863
2146 Parlade Roth B @ 479-8700
2152*Cooper Robert W @ 479-0569
2153 Mason Lenord L © 475-9046
2158 Kelley Loran 475-1804
2163*Hamric Stan 267-6322
2164 Benke Ralph 475-9913
2170 Thompson Mike R © 479-4435
2173 No Return
2182 Gonzale Wild Robert 475-3978
2188 Montoya Paul R 479-6631
2183 Weld Robert 475-3978
2188 Mortoya Paul R 479-6631
2189 Wild Robert 475-3978
2188 Wording Raymond R © 267-5482
2204 Collab Raymond R © 267-5482
2204 Collab Cart Graymond Mario © 2230 Tomas Mario © 2231 Vacant
2240 Blakely Earl L © 475-9053 B Vacant C Smith W C 239-5830 D Vacant 291*Mc Cullough Tyrone N © 235-8590

FRANCIS ST S -- FROM 3400 WEBSTER AV SOUTH ZIP CODE 92113 18*Whitening Raymond M © 235-8651

Source

R. L. Polk & Co.

MORENCI ST 1984

205 E 7 Up Ratkmastar coin operator machs 278-5850
205 Cecl Construction geni contr 278-5850
207 Mister Build Bay Park Builders 278-9702
208 Lexigraphics 278-4970
210 Coker Insurance Agcy 278-100
211 Tri (Tiy Landscaping ine 278-2720)
211 Tri (Tiy Landscaping ine 278-2720)
212 Liquor Locker The liquor store 278-5055
223 Horne & Office Mischines 278-3340
2252 Liquor Locker The liquor store 278-5055
223 Horne & Office Mischines 278-3340
2252 Argus Trophy & Engraving Co engravers 278-3339
Morens Barber Shop 278-4468
2255 Bean's Photo Service photo feature 278-5202
2355 End Dands Daginerst in consts 278-5022
2556 M Kinnon Associates real est 278-1740
INGULF ST BEOINS
2055 La Dards Daginerst in consts 278-5022
2556 M Kinnon Associates real est 278-1740
INGULF ST BEOINS
2057 Villa Laredo Condominiums 1019-Barry W 278-4464
1037-Henoderson Leta 278-6334
1038-Henoderson Leta 278-6344
1049 Henoderson Leta 278-6340
2072 Villa Laredo Condominiums 1019-Barry W 278-4466
1074-Mosaveranhani Farhang 278-4159
108 Carrel N W 278-4355
2022-84/Th J
203 Ingram John R 275-1773
204 Womack J C © 275-1667
2056-Will M W 278-95-0179
2066-Will M M 779-Piendlev Sallie M 979-Piendlev Sallie M 979-Pie 403 Magic Wind Inc (Annex)
500 Total Concepts Inc automated cabt equip
270-5850
510 Evana R K Graphic Design 463-4085
500 Digidyns Corporation data processing
equip 463-0364
700 Vacant
710 Validity Corp 272-7703
702 Validity Corp 272-7703
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706 Pedus Buildity Services Inc jan serv
270-2590
807 Fluid Systems Div Of U O P water
purification r & 299-9920
809 Perfect Pan The 274-7131
811 Vacant
901 Vacant
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901 Rayroll Person System Integration 272-4644
1101 Graphic graphics 468-5181
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1101 Person System Integration 272-4644
1101 Graphic graphics 468-5181
1102 K Tube Corp infa medical tubling
1104 Control Concepts Corp West Coast Div
elec mfg 272-0750
STREET CONTINUED MORENA BLVD—Contd 1939 Torrescano Bertha C 275-3894 1939 **Bayette Caroline 275-6378 1941 Johnson Hildur C 1943 Bright Grace 276-4220 1945 Stone Cath 1941 Johnson Hildur C
1943 Bright Grace 276-4220
1945 Stone Cath
1943 Bright Grace 276-4220
1945 Stone Cath
1951 Renxull's Jewelry World ret 275-1782
1955 Baris Renxull's Jewelry World ret 275-1782
1955 Baris Renxull's Brezing Chucken 275-2294
ASHSTON ST BEDINS
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2007 Bay Park Apartment 276-9225
**Boardman Lawrence
2007 Bay Park Apartment 276-9225
**Boardman Lawrence
20029-4-restand M
20039-6-restand M
2003-6-restand M
2003-6-r 211 Tri City Lendscaping Inc 275-2720

JELLET ST BEGINS

67

2205 Thifty Self Service gas sta 276-917

2251 Liquor Locker The liquor store 275-5055

2252 Liquor Locker The liquor store 275-5055

2253 Liquor Locker The liquor store 275-5055

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2255 Liquor Locker The liquor store 275-5055

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2255 Liquor Locker The Store 275-5052

2255 Liquor Liquor Locker The Store 275-5052

2255 Liquor Locker The Store 275-5056

2256 Liquor Loc MORENA PL —FROM 1103 MORENA BLVD SOUTHEAST ZIP CODE 92110
5145 I. & L Printers Inc 276-0010
Salini Joseph M coml artist 276-0012
Lem Roland Lettering Studio design
lettering 276-0013
5151a Bruntwood Custom Pictures & Gallery
picture frames 276-8280
SISTEM-Voltanon Vivian
5151e Voltanian
5171 Vocania
5181 Engel Advertising
Lift Off Incorporated production & als
CUSHMAN AV INTERSECTS 4330 Bucchis Showroom furn mfrs 270-2181
4343 building
1 Mac Laughlin National Yellow Pages advagey 483-4040
2 Vacant
3a Unity Capital Corp 275-8030
4 Rose Canyon Travel travel agey 272-25670
7 Maigh & Haigh 276-0222
8 G M C Video Productions video productions
9 Just Graphica 275-6121
10 World Book-Childrent International Inc
encyclopedia six 275-063
4369 Gestetner Corporation duplicators als &
service 275-1960
4411 Vacant
4429 Tuesday Productions Inc coml musical prod
272-760
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275-2055 Yoder Pamela J 275-1793
2056 Apartments
2056 Apartments
2056a Lexendre Stave 275-4565
20589-450ute Vm 275-0279
20589-45uward C E 276-8425
20589-45uward 2111 City Chevrolet 276-6171

MILTON ST BEGINS
2305 City Chevrolet 276-6171

2305 City Chevrolet Checkell Lounge 276-1030
2222 Silver Signet Cocktell Lounge 276-1030
2222 Silver Signet Cocktell Lounge 276-1030
2223 Silver Signet Cocktell Lounge 276-1030
2223 Silver Signet Cocktell Lounge 276-1030
2224 Sears Borglar Alarma burglar alarma sle & serv 275-2044
2243 A-Action garage doors & opener 276-1222
2258 Olinda's Merican Rest 778-0224
2243 Sears Borglar Alarma burglar alarma sle & serv 275-2044
2258 Olinda's Merican Rest 778-024
2215 TER ST BEGINS
A Sasha Donald G dentist 275-2145
A Sasha Donald G dentist 275-2145
A Sasha Donald G dentist 275-2145
2211 Western Wholessle Motors car als 275-3040
2213 Walker 10c C 275-047
2215 Durfee Melvin J 276-7262
2217 Burglar Cocket Singer tax bkpg 275-3070
2216 Singer tax bkpg 275-3070
2217 Brown 1 Cocket Singer tax bkpg 275-308
Xidi American Aviators Ina 275-5480
D Southwest Appraisal Serv real est appraiser
E Wands 2804/2 255-011
E Galloway Property Development Co chiro 275-412
2235 Old Trieste Restaurnt 276-1341
2235 Old Trieste Restaurnt 276-1342
2341 Marsthoo Construction Corp 276-4401
2251 Marsthoo Construction Corp 276-4401
2252 Marsthoo Construction Corp 276-4401
2253 Old Trieste Restaurnt 276-1361
C Autobaus used ear din 270-6703
D Moren Br) 276-1516
C Autobaus used ear din 270-6703
D Morey Ken Realty 276-6711
E Johanon Jack D int Gentle wall Covering ret. 755-581
C Autobaus used ear din 270-6703
D Morey Ken Realty 276-671
E Johanon Jack D int Gentle wall Covering ret. 755-581
C Autobaus used ear din 270-6703
D Morey Ken Realty 276-671
E Johanon Jack D int Gentle wall Covering ret. 755-581
C Autobaus used ear din 270-6703
D Morey Ken Realty 276-671
E Johanon Jack D int Gentle wall Covering ret. 755-581
C Autobaus used ear din 270-6703
D Morey Ken Realty 276-671
E Johanon Jack D int Gentle wall Covering ret. 755-581
C Autobaus used ear din 270-6703
D Morey Ken Realty 276-671
E Johanon Jack D int Gentle For Crean & Hundre Cleaning 276-671
E Johanon Jack D int Gentle MORENCI ST —FROM 4200 TONOPAH ST NORTHEAST MORENCI ST.—FROM 4200 TONOPAE S
NORTHEAST

ZIP CODE 92110
1403 Wettzeh Briddey A 275-3563
1406 Yan Ornhoven Joseph L © 276-0185
1413 Brooke Robt D land inv © 276-4728
1413 Brooke Robt D land inv © 276-4728
1414 Brooke Robt D land inv © 276-4728
1425 Ronalit A © 275-276
1426 Tonopae Service Control of the Service Contro 5 Plank
6 Ryan Shirley
7*Barrett K
8*Combe Bridget 276-9569
9*Pollard Orb
18*Combe Bridget 276-9569
9*Pollard Orb
21*Combe Bridget 276-9569
9*Pollard Orb
22*Combe Bridget 276-9579
24*Alex JD 276-420
3*Halliana Jas
4*Harmon H
5*Wieb D J76-5179
24*Alex JD 276-420
3*Halliana Jas
4*Harmon H
5*Wieb D J76-5306
7*Kally J
8*Federico Angelo 276-5728
9 Kaylor Gayle L 276-9274
10*Johnson Jas 275-3671
11*Fuller Michelle 276-867
11*Pollard Michelle 276-868
15*Crandall A
1-6-50:sewart Mary E 276-8487
17 Mallette Gerald D 276-013
15*Crandall A
1-6-50:sewart Mary E 276-8487
17 Mallette Gerald D 276-013
15*Crandall A
15*Crandall A
25*Crandall A
25*Cranda 4645 A. R. A. Services Magazine & Book Divingazine ditty T70-504
4677 No. Return
4685 Vianut.
L. CT INTERSECTS
JUTICAND D. B. EGGINS
ARIANE D. R. INDS
4801 Rose Canyon Business Park 274-2250
SUITES
104 State Farm Insurance 483-8800
105 Vianut.
112 Lifeline Systems Inc 482-8200
114 Surburst Homes Corp şeni control
114 Surburst Homes Corp şeni control
115 Hanjam Business Forms Inc busil
115 Hanjam Business Forms Inc busil 112 Liesnie Systems Inc 462-820
113 Steam Homes Corp genl contr
272-4773
114 Shaper Homes Corp genl contr
272-4773
115 Haniqua Bustiness Forms Inc business
forms whol 275-2020
120 Vacant
121 Validily Corporation 275-0124
120 Validily Corporation 275-0124
120 Validily Corporation 275-0124
120 Vacant
220 Vacant
220 Vacant
220 Vacant
220 Vacant
230 Design West sign designers 270-3000
331 Rose Canyon Deli 270-5002
332 Mori Fisheries Inc fishing sup 270-8666
332 Mori Fisheries Inc fishing sup 270-8666
333 Cormoratical Carpet Cleanurs 273-1300
340 Cormoratical Carpet Cleanurs 273-1300
340 Cormoratical Carpet Cleanurs 273-1300
340 Tasher Busting Structures Inc electronic 483-6891
341 Tauber Busting 184-6803
342 Pacific Magnetic Structures Inc electronic magnetic recording 270-4821
343 Tauber Busting Inc 174-8734
344 Tauber Busting Inc 174-8734
345 Bunker-Ramo Corp electronic equip 272-742
345 Alantic & Pacific Computer Services sla & serv 483-1370
347 Auber Lordonic Computer Services sla & serv 483-1370
348 Service Corporation 270-1614
348 Multi Audio Visual Inc audio visual equip 270-6865
342 Foto I comi photographers 270-4082
344 Amodeo Mice Service 270-3800
345 Evergreen Janitorial Supplies retail als 270-5970
357 270-3000
358 Cormoratic Corporation 270-1614
359 Multi Audio Visual Inc audio visual equip 270-6865
342 Foto I comi photographers 270-4082
343 Amodeo Mice Service 270-3800
359 Corporation 270-6865
350 Foto I comi photographers 270-4082
351 Amodeo Mice Service 270-3800
352 Evergreen Janitorial Supplies retail als 270-5970
353 Corporation 270-6865
353 Foto I comi photographers 270-4082
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357 Particula MORLAN ST --FROM 5000 BLK GAYLORD DR EAST DR EAST

ZIP CODE 92:117

3601 Bulman Raymond B © 273-4215

3602 **Warren James © 272-3443

3609 Berger Russell © 272-343

3610 Gaus Henry J © 1 © 273-7415

3610 Bulgar John M © 174-5469

3625 Morefield Kenneth A © 273-157

5626 Lec Cecl S 274-4576

5633 No Return

3634 Markham James C © 273-553

3641 Morrison Elaine N ©

3642 Martinet Frank © 273-136

3642 Martinet Frank © 273-136

3643 Markham James L © 273-136

3646 Herold Robt E © 273-138

3656 Sparks John A © 271-2629

3666 Boxberger Eleanor A Mrs ©

3673 Scheibl Howard

3674 Geret Albert P 272-1471

3636 Guret Albert P 272-1471

3636 Guret Martine D 273-2739

3664 No Return 276-4860

I Vacant
J Ace Junitorial jan serv 275-1665

J B W Lockamith 275-4445

2422 International Institute For Orban & Human Develop educ & human factor research

2431 Building

2431 Building

SITES

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16 Cado Computer Specialista computer sla
229-4741

D Bigslow Investments real est counselors
276-8662

E Vacanta de la computer Specialista computer sla
282-4742

Building

18 Vacanta de la computer Specialista computer sla
28 Vacanta de la computer Specialista computer sla
28 Vacanta de la computer Specialista computer sla
29 E Vacanta de la computer Specialista computer sla
217-54682

E Head Stater Plus non-profit educ organ
275-3163

2445 Building MORLEY ST -FROM 2200 COMSTOCK ST BALBOA AV INTERSECTS
City Dept of Utilities 236-5664
City Dept of Genl Servs (Equip Div)
236-6289
City Dept Of Genl Servs (St Mtce Div)
236-5620 B Hean Start rus Solventer Services School States S

NASHVILLE ST 1984

PARTICULAR CONTRACT AV-Good Indicators of Cold Follows Long 200	San				
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See Charles Paylan C. 202413 See Ch		103 Vacant	153 286-1592	3136★Finney T ◎	1852 Ginglardy & Sons Welding Works 232-3285 1853*Hernandez Cecilio 233-4977 1853'b Juarez Aristeo 264-5732
See Charles Paylan C. 202413 See Ch	ĮΣ	201 Berning Paul W 222-1314 203 Chapp C 223-4707	3642 Mc Laughlin Wm J @ 582-5671		1854 Ace Radiator Service auto radiator repr 239-5225
Part 19 19 19 19 19 19 19 1	SO	204 Toliver Phyllis C 222-3271 301 Larkin P A 223-3894	3648 Schultz Ernest S @ 3653 Pena Alf A @ 582-8921	NATIONAL AV -FROM 150 12TH AV SOUTHEAST	1855*Hemaley Patricia 239-7804 1855% Vacant
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Application of the content of the	*	B Fickle H 223-7781 C#lkezi H 224-8671	3666 Rambeau Robt H 582-7094 3672 Lindquiet Helene Mrs ©	236-1608	1863 Coast Ship Supplies industrial chemistry 239-7158
## Actions for 2 20000 ## Actions for 2 200000 ## Actions for 2 200		D Ceruti Marion G 222-9173 1*Kleha Steve 226-2136	3675 Benson Jesse M @		1864 Bettencourt Auto Paint & Body 239-4175
## Command State of Com	School		3702 Peters James P © 582-4916 3703 Roby John C 583-4264	ZIP CODE 92113	1865 Villabos Catalina 1867 Mandore Security 220 5502
## Schools (1997) 1997 199	오월	4 Ellersdorfe Vern 5∗Davisson Luther 222-1724	3708 Baxter Lucie Mrs ⊕ 582-0599 3709 Norton Michl V ⊚ 286-1896		1867 Mendoza Senovio 239-5093
	#E		3715 Pepin Arth J bookkeeping serv © 582-3460	15TH ST INTERSECTS	1869'4 Medina Martin V 234-7523
	100	9*Currier E M 222-6912		1501 Olson Building ofc bldg City Housing (Rehab Program) 236-6607	1875*Rodrigues Jose 239-1852 1875' Vacant
1	,	11 Hauver Robt	3727 Hathaway Daryl L @ 583-6705 3732 Martin Thos J Jr @ 287-4031		1877½★Rivera Francisco
1	æ	13 Zudick Carter 224-7907	3733*Brazil Carlos © 287-4959 3738 King Alf J © 582-8631	Whee) 1531 Graybill Oil Terminals petroleum distr	1879*Perez Diego 1880 Bettencourt Auto Paint & Body (Stge)
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Thinks T		18★Elsenpeter Joseph 226-6648	3750 Hotz Al Contractor bldg contra 583-8818 Hotz Albert @ 583-8818	1603 Central Meat & Provision Co Inc whol	1885 El Sarape Cafe 234-0900 Rear Penney Lucille Mrs ®
19 Thomas C 28-605 Mer. 1 20 100 Mer. 1 20 1	•	21 Tobin Edw 23 Griffin Michael		1605 Central Meat & Provisions Co (Stge)	
19 Thomas C 28-605 Mer. 1 20 100 Mer. 1 20 1		24 Nickerson John C 222-4728 25*Meystrik M 223-7920	3766 Gammie Donaid G @ 582-3140 3762 Browne Galen E @ 583-7571	1635 Verent	COOCHY OF INTERPRETATE
1 Vessel: 1		27±Oleen Donna 223-2775		1639 Summerville Bessie M Mrs © 234-5875	1915 Rangel Pedro E @ 239-6831 1917 Leon Maria 239-5831
## CANNOTES A 1284 PART ## 1287 CODE SULS		40 Vacant	NATALIE DR -FROM 4509 NORMA DR	1659 Radford Overhead Doors mfg 239-8558	1921 Liebers Industries Inc auto parts 232-4578
Vicate Stank 1927F0 441.		42*Valoria J 224-1924	2TP CODE 92115	1667 Smolen Industrial Supply 233-6141 1668 Triad Marine & Industrial Cleaning Corn cla	1935 Putt-Putt Shops Inc auto repr 232-1156
Cor World Devid 105-790 Transport Corporate	=1	44 Vacant	4507 Morris Lewis @ 280-1811 4511 Hurtado Edw @ 281-0112		1936 Bay Auto Parts 238-0907 Bay Auto Wrecking 238-0907
Cor World Devid 105-790 Transport Corporate	티	45 Holl F Steph 223-7792 46*Rogers Nick 222-1908	4515+Hear Chris @ 594-8019	Castaneda Vicente 233-9447 1675 Castaneda Cecilia 234-5384	1951 Andrade Esperanza Mrs © 239-6432 1955 Charlie For Barrels dir barrels 232-0319
460 Egentum Ray & 902/2076 46	캶	50*Weil David 226-7991	4519 Kroepel Julia S © 282-9341 4522 Welsh Vernal C © 284-6454		
Sey Walters Lumina M 224-414 81 Chasses 81 No. Research 81 No. Research 82 No. Research 83 No. Research 83 No. Research 84 No. Research 85 No. Research 85 No. Research 86 No. Research 86 No. Research 87 No. Research 87 No. Research 87 No. Research 88 No. Research 88 No. Research 88 No. Research 88 No. Research 89 No. Research 89 No. Research 89 No. Research 89 No. Research 80 No. Research		52*Ford B A 224-6213	4525 Ross Stanley H 281-3870 4526 Eigenmann Henry ⊚ 282-2797	1682 Vargas Luis 234-0638 1886 Carlos Cleaners 239-3793	1965 Medina Teodora 235-4193 1967*Mollenac Marcos
80 No. Betumo 224-646	Convoy,	54*Creighton Steve 223-0798		1694 National Liquor House 237-9067	2000 Chicano Park
MARBACANSTIT CT - FROM 406 MARBACANSTIT AT YORTH THE CODE 20197 JEV [Jase N W 9 222-3424 JESS 22-3442 JESS 22-34442 JESS 22-34442 JESS 22-34442 JESS 22-34442 JESS 22-34442 JESS 22-34442 J		81 Vacant	4536 Mc Cuistion Celsus P ⊚ 284-4744 4537 Pasto J R ⊚ 280-9233	SIGREE ST INTERSECTS	9017+Mounil Issanh
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### Company of the Co	=	87 No Return	4603 DOCTOR AIDER A @ 284-7608 4600 Baker Geo W @ 46104 Wingar May @ 281.3273	1709 Business Advisory business consultants	2031 Gary Paul
### Company of the Co		NARRAGANSETT CT -FROM 4100	4611 Farrell Mabel S Mrs © 284-1887	Rear A-One Radiator repr 239-5661	2037 Nigro Mary Mrs @ 232-1791
1844 Symanki Fauline Y © 2234902 1844 Symanki Fauline Y © 2234902 1844 Symanki Fauline Y © 2234902 1845 Symanki Fauline Y © 2334902 1845 Symanki Fauline Y © 2344902 1845 Symanki F			4617 Lee Jan © 284-8548 4622 Campbell Wm C © 262-5807	1711 Torres Jose G 233-8713	
1844 Symanki Fauline Y © 2234902 1844 Symanki Fauline Y © 2234902 1844 Symanki Fauline Y © 2234902 1845 Symanki Fauline Y © 2334902 1845 Symanki Fauline Y © 2344902 1845 Symanki F	- (ZIP CODE 92107 1837 Hagar Ben W @ 222-3542	4623 Reinicke Vertus E ⊚ 2814603 4630 Petrone Maybelle A Mrs ⊚	1715 Zavala Faustino 1719 Model Ex-Offenders Inc rehab orgn for ex	2045 Gurman Dalah 239.0024
1849 Anderson: Walter #1 © 224-4992	$\neg 1$	1843 Goldsmith Gano C @ 222-2135	4631 Benoit Rosemond J @ 282-8845 4637 Horowitz Judy		2051*Valenzula Henry 2055 No Return
### BLVD NORTH ### Sport Same Age 128		1849 Anderson Walter H @ 224-8692	4642 Dietz Fredk H © 284-2593 4648 Whittaker Victor III © 280-8485	1722 Barajas Hilario 284-7053 1722½ Reigo Consuelo Mrs 234-9547	2059 Mendoza Antonio 2059a Macias Jose 234-1257
### BLVD NORTH ### Sport Same Age 128	5		ADAMS AV INTERSECTS 4651 Bailey Wm C ⊚ 284-0580	1723 No Return 1724*Monroy Cruz G 235-9204	2074 Johnston Alfonso L @ 239-1896
1325 Mc Guirk Hars M Mr	2	NASHVILLE ST -FROM 1400 BLK MORENA	4604 * Sykes Philip 283-3782 4660 Polzer Jacob A @ 284-5258	1 (26 FIGTES LAUS @	2084 Ybarra Enrique 239-1997 2084 Y. Navarra James © 232-0769
1325 Mc Guirk Hars M Mr	1071_007	ZIP CODE 89110	4666 Dale John A ⊗ 281-0471 4671 Rabin Allan H ⊕ 284-8790	1781 Ramirez Ruben 235-4461	2080 Moranz Allan 2090 Sheppard Howard © 234-1644
1328 No. Betturn 1339 Ford Evylens Mrs @ 176-5703 4693 Ebg Donald C @ 250-21178 1763 Ford Evylens Mrs @ 176-5703 1349 Ford Evylens Mrs @ 176-5703 1350 Fords Mrs @ 176-5703 1350 Fords Mrs @ 176-5703 1360 Fords Mrs @ 176-5703	3	SPORTS ARENA BLVD INTERSECTS 1323 Don Carlos 276-1347	4677 Patterson Helen L Mrs ©	1735 France's Roller Serv (SHOP) 233,0195	2104 Vacant
1340# Roberts Dead E 275-5473 4705 Silles 1 050 pt 144 No. Dames in a 250-156 145 No. Dames in	4	1325 Mc Guirk Hazel M Mrs @ 276-2153 1326 No Return	4683 Kern John P @ 280-1285 4684 De Sure Ann S Mrs @ 282-0046	1738 Velez Joseph ®	2113 De La Barca Ricardo V Rev © 233-3649 2119 Talamentes Sue A © 232-0772
1340# Roberts Dead E 275-5473 4705 Silles 1 050 pt 144 No. Dames in a 250-156 145 No. Dames in	1 1 1	1332 Hansen Jolly R @ 276-5703 1333 Coleman Art @	4689 Eng Donald C © 280-1278 4690 Siuta Jack R © 563-9496	1743 Vacant 1744*Pena Carmen 234-3013	2121 Vacant
1348 Fordham Win 1 20-03-03 1354 Fordham Win 2 276-194 1354 Fordham Win 2 276-195 1355 Frow Eturic H Mrs ⊕ 276-4905 1356 Flow Eturic H Mrs ⊕ 276-4905 1356 Flow Eturic H Mrs ⊕ 276-4905 1357 No Return 1384-455 Chap Dennis J 1357 No Return 1384-455 Chap Dennis J 1357 No Return 1384-455 Chap Dennis J 1358 Frow Eturic H Mrs ⊕ 276-1571 1358 Frow Eturic H Mrs ⊕		1340 x Roberts Dani E 2/5-63/3	4700 Strack Joseph M	1744%±Gonzalez M E 239-7976 1746 No Return	2129 No Return
1858 From Ennice H Mrs ⊕ 2764905 172 Vecant 1750 Ojeda Manuel 234-4683 1750 Ojeda Joe 238-691	3	1348 Fordham Wm L @ 275-2194	4710 Kratz Agnes Mrs © 284-5465 4715★Martinez Wm H ©	1746% Anguiano Consuelo Mrs 232-3915 1746 Soltero Elens	2130 Escoto Jose 236-9680
1368 Colling Dennis J	-	1355 Brown Eunice H Mrs @ 276-4905	4718*Applebaum Norm 281-4718 4721 Vacant	1750 Ojeda Manuel 234-6931 1750% Ojeda Joe 235-8691	2134 Vacant 2135 Plazola Jose 233-0274
1370 White Arth C ⊕ 1371 White Arth C ⊕ 1378 Koon Mildred E Mr ⊕ 276-1571 TONOPAR ST INTERSECTS 1411 Gross Robt L ⊕ 275-1539 1412 Trango. Nellie D Mr ⊕ 276-0755 1422 Smith John F ⊕ 276-0755 1423 Smith John F ⊕ 276-0755 1424 Smith John F ⊕ 276-0755 1425 Smith John F ⊕ 276-0755 1425 Smith John F ⊕ 276-0756		1357 No Return	4724 Hoag Cyrus C ⊚ 4725 Weber Harvey G ⊚ 284-3581	1752★Araijo Ernesto 232-2642 Rear Sorrells Wendell	2136 A B C Construction Co Inc geni eng contr 239-3428
1378 Koon Mildred E Mrs © 276-1571 TONOPAR ST INTERSECTS 1411 Gross Rob L © 275-1539 1412 Tarango Nellie D Mrs © 276-0745 1429 Genzalez Netzauhalpilli L © 1428 Smith John F © 276-0746 1428 Smith John F © 276-0746 1435 Kelly Paula Mrs 1435 Sow Clars M © 276-6474 1444 No Return BERVY ST BEJINS 1505 Salem Jos © 275-5992 1515 Peterson Rob C © 275-5992 1525 Ledesma Lauro mason © 776-7964 1525 Zenolek Walter S © 275-0796 1525 Ledesma Lauro mason © 776-7964 1525 Zenolek Walter S © 275-1045 277 ROBERTSON DR NORTH NASSAU DR −FROM 3600 ARAGON DR NORTH 278 CODE 92115 279 CODE 92115 270 CODE 92115 277 Robertson Hayden E Jr © 224-4690 275 Thormberg Rob W © 222-2446 276 Thormberg Rob W © 222-2446 277 Thormberg Rob W © 222-2446 275 Thormberg Rob W © 222-2446 275 Thormberg Rob W © 222-2446 275 T		1370★Phipps Jerry ②	4729 Lawton Chas @ 283-6614		2139 Sanchez Frank
1422 Grantset Netzanhalpill L @ 4755 Thornberg Robt W @ 232-4481 1775 Thornberg Robt W & 232-4481 1775 Thornberg		1378 Koon Mildred E Mrs © 276-1571	4737 Robertson Hayden E Jr © 284-6900	Rear Salas-Garcia Maria Mrs 234 4465	2142 Brown Henry F @ 234-7788
1435 Sow Clars M		1411 Gross Robt L @ 275-1539 1412 Tarango Nellie D Mrs @ 978.0788	4749 Filippi Carmel Mrs ©	Rear Vargas Ventura 230-1548	0147414 duid Discharto
144 Sow Clars M		1420 Gonzalez Netzauhalpilli L @ 1428 Smith John F @ 276-0946	4755 Thomberg Robt W @ 282-5446 4758 Noonan Jas M @ 282-5205	1775 S & H Tube 232-7117	2149#Alcaraz C M 231-8096
1444 No Return BERTY ST BEGINS 1505 Salem Jose © 276-2499 1515+Peterson Rob. 16 275-5092 1525 Ledesma Lauro mason © 276-7964 1525 Led		1436 Kelly Paula Mrs 1443 Snow Clara M @ 276-6474	4761 Simons Diane B 284-2348	1776 Tropic Ice Cream Co whol 232-8641	2153 Diaz Frank Jr 239-4045
1525 Ledston Role 2 1525 Ledston R	I	1444 No Return BERVY ST BEGINS	. 177	Rear Lopez Rosalio M 1786½ Aguillera Rafaela Mrs ©	2156*Aguilar A 2156* Bricens Francisco L 239-0753
1809 Chicano Community Health Center 234-817 NASSAU DR — FROM 3600 ARAGON DR 1806 The 1807 T	성	1505 Salem Jos © 276-2499 1515★Peterson Robt © 275-5092	NATCHEZ AV FROM 4900 IROQUOIS AV	1792 Rudy's Service was sta 217-9042	2157*Alcaraz Francisco 235-6552 2159 Aleman Armando
1809 Chicano Community Health Center 234-817 NASSAU DR — FROM 3600 ARAGON DR 1806 The 1807 T	2 S S S S	1525 Ledesma Lauro mason @ 276-7964	ZIP CODE 92117	1793 Amador Jr Market 233-6911 BEARDSLEY ST INTERSECTS	2161 Lira Arnold 2162 Ramos Antonio 235-0064
NASSAU DR —FROM 3600 ARAGON DR NOTH NORTH 2IP CODE 92115 3609 Bender Donaid I. © \$83.2675 3612 Stefanski Theideus S ⊕ 3112 No Return 3113 Stefanski Theideus S ⊕ 3112 No Return 3113 Stefanski Theideus S ⊕ 3112 No Return 3114 Stefanski Theideus S ⊕ 3114 Childs Geneva J 276-4127 3612 Stefanski Theideus S ⊕ 3114 Childs Geneva J 276-4127 3613 Hartmon John J ⊕ 582.0448 3623 Andrews Albert M ⊕ \$35.5120 3624 Hardin John B ⊕ 582.7466 3629 Hardin John B ⊕ 582.7466 3620 Taylor Ross W ⊕ 312 Kheiske Eimer W ⊕ 276-962 3630 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3630 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3640 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3652 Khatasau Mich J 286-8247 3653 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3654 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3655 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3656 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3656 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3657 Taylor Ross W ⊕ 3127 Scheiske Eimer W ⊕ 276-962 3658 Taylor Ross W ⊕ 3128 Mc 276-962 3658 Taylor Ross W ⊕ 3128 Mc 276-962 3659 Taylor Ross W ⊕ 3128 Mc 276-962 3650 Taylor Ross W ⊕ 3128 Mc 276-962 3650 Taylor Ross W ⊕ 3126 Mc Neil Charles E ⊕ 276-962 3650 Taylor Ross W ⊕ 3126 Mc Neil Charles E ⊕ 276-962 3650 Taylor Ross W ⊕ 3126 Mc Neil Charles E ⊕ 276-962	2		3103 Schwieger Eliz Mrs © 276-2966 3105 Tipton Barbara R 276-2522	1809 Chicano Community Health Center 234-8171 American Cancer Society 233-9172	2164 Oroseo Dani
3612 Steinaki Theideus S	SAND	NORTH	3109 No Return	1820 Coronado Miguel	2169 Marine Industrial Clinic med clinic 239-9148
3612 Steinaki Theideus S	SA	ZIP CODE 92115	*Patel Kanoo 276-8133	1822 No Return 1827 Rodriguez Upholstery & Sewing 236-1929	2177 Milanese Margarita Mrs © 2178 Rostro Francisco 235-8617
Sei8 Hartmann John J © 582-0448 Si15 Primmer James L © 276-6151 1832 Vacant Rear Vacant Sei23 Andrews Albert M © 583-5120 Si20 Thurmer Martha R © 1833 Brackett Chea A 234-4589 2190 Ruin Geo Liquor Store 237-9565 Si21 Hylosanava Thomas 275-0949 1836 Vacant 2193 Rour Geo Liquor Store 237-9565 Si21 Hylosanava Thomas 275-0949 1836 Vacant 2193 Howell's Service auto repr 232-2419 Si25 Hylosanava Thomas 275-0949 1839 Vacant 2193 Howell's Service auto repr 232-2419 Si25 Hylosanava Thomas 275-0949 1839 Vacant 2193 Howell's Service auto repr 232-2419 Si25 Hylosanava Thomas 275-0949 1839 Vacant 2193 Howell's Service auto repr 232-2419 Si25 Howell's Service auto repr 232	1	3612 Sledzinski Thuddeus S ⊚	3113*Davidson Thomas C 275-5396	1830 Vacant	2178% Vacant 2183 California Metal Forming fabricator 239-6361
3624 Hardin John B @ 582-7566 3121 Nonanava Thomas 275-0949 1836 Vacant 2193 Howell's Service auto repr 232-9419 3629 Mikalsky Ronald J @ 582-2874 3122 Adams Dell M 1839+8eron Alejandrs 239-3836 2194 La Popular Tortilleria food products 3630 Taylor Ross W @ 3126 Mc Neil Charles E @ 276-962 1841 Vacant 1841 Vacant 276-964 1841 Vacant 1859-86247 1876-8648 1876 Charles W @ 276-9488 1876	ı	3618 Hartmann John J @ 582-0448	3115 Primmer James L @ 276-6151	1832 Vacant	Rear Vacant
3630 Taylor Ross W 9 3126 Mc Neil Chartes E 9276-7862 1841 Vacant prepared 237-3564 36354-Chartaeu Michi J 286-8247 3127 Scheiske Elmer W 9276-9489 Lift Conveyor 231-0057	1	3624 Hardin John B @ 582-7566	3121 Noanaya Thomas 275-0949	1836 Vacant	2193 Howell's Service auto repr 232-9419
3636 Childers Doyle C ⊚ 5824561 3128 Hollingaworth Bruce B ⊚ 2766766 1842 Vacant 316	į	3630 Taylor Ross W @	3126 Mc Neil Charles E @ 276-7962	1841 Vacant	prepared 237-9564
	g.	3636 Childers Doyle C ⊕ 582-4561	3128 Hollingsworth Bruce B @ 276-6766	1842 Vacant	316
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Source

R. L. Polk & Co.

TONOPAH ST 1984

TOMMY DR—Contd
5*Dion Paul
6*Trushell Agnes 466-9512
7*Schrimer Frauk
8*Marriott Olga
9*Waters David 461-0669
10*Eghal Mis
11 Campbell M
12*Kittel Water 461-3347
13*Fastein Manuel
14*Oltman Jack 469-9463
15*Copy Water J 436-1634
16*Waffa Virginia
7800 Spring Hill Townhomes condominiums
462-5170
7803 Apartments 2693 Chandler Ann L Mrs @
2704 Vullings Joseph
2705 Koch Charles J 274-3222
2716 Fredrickson Harley C @
2717+Pores Michi @ 483-2390
2726 Klat Casimir @ 274-3374
2729+Kaske Edward @
EPINETTE AVE INTERSECTS
2738 Brown Robt A @ 272-333
2747 Cuprys Lawrence M @ 483-032
2748 Norman Karen
2757 Winstanley Gerald @ 273-2029
2767 Pearce Wm T @ 273-3494
2768 Schulz Jack O 273-2718 7803 Apartments
64 Vans Israel 697-9062
65 Ansing J
66*Rose F S 698-2244
67*Pruett Janet ® TONY DR -FROM 6965 CONDON DR NORTHWEST TONY DR — PROM 8885 CONDON DR NORTHWEST

ZIP CODE 92122

3403 Vandenberg David L © 453-0994

3404 Sugium Shoichi © 465-8772

3410 Gardner Cherie Min © 455-0796

3410 Fechan Eag © 453-084

3419 Fechan Eag © 453-084

3419 Fechan Eag © 453-084

3421 Linderman M J © 453-084

3422 Linderman M J © 453-247

3422 First B 453-0256

3434 Balnis James J ©

3435 Harmelings Henry 453-0549

3440 Morris Rodney

3441 Sandoval David A © 453-0712

3446 Robbins Fred W © 453-033

345 River Market Carole S Mr No 453-033

346 River Market Carole S Mr No 453-033

346 River Market Carole S Mr No 453-033

347 Robbins Fred W © 453-910

3481 Dr Redney Jeral © 453-910

3491 Dixon Howard R © 453-910

3491 Scholch Carole S Mr © 453-031

3491 No Rotled Carole S Mr © 453-031

3491 River Mr No 6/#Fruett Janet ⊕
Apartments
23 Ross
24 Weil Cathy 697.7665
24 Weil Donald G 469-2305
269-Codot) Jos 966-2348
27 Roan Martha M ⊕ 466-4974
28 Chrissoff Chris A 461-6636
29 Varsant
30 WebCitelli Vince 697-1269 7804 Siva Botticelli Vince 697-1268
Apartments 58 Newman C © 68 Huntington V 484-0444
69 Judeen Gery 597-2007
70'H Hodge Walter © 71 Kriger Joel M 461-2091
Apartments
55 Mauer Tom 463-6716
72 Peterka F 460-4628
73 Karl P K 697-2359
Apartments 7805 TOMPKINS ST -FROM 201 34TH ST EAST ZIP CODE 99102

WABASH FRWY INTERSECTS

3450 Mendock Winfield © 239-6233

3458 Robinson Earline 239-2461

3451 Baggett Roffing & Sup Co 231-0961

3571 R & M Bar-BQ restr 233-1627

3519 Fage Mattie M Mrs © 239-5594

3524 Cole Roberta B Mrs 239-3700

3527 Waldon John

3529 No Return

3530 No Return

PARDEE ST INTERSECTS

WABASH BLVD INTERSECTS

WABASH BLVD INTERSECTS Apartments
15 Walker R
16 Epstein Albert A @ 469-6498
21 Vacant
22 Kirwan Paul C 463-3443 Apartments
51*Newman Michael R 698-5104
51*Newman Michael R 698-5104
52 Vaissus Joseph © 697-2726
53*Kessler Wm 466-4530
74*Suits Maria 697-7521
75 Vacant
76*Geudtner Joel S © 8201 Salway Gladwin P ⊕ 469-9781 83072-Ebright Jeffrey N 465-5155 8314 Lucas Walter B ⊕ 8315 Reeher Harold E ⊕ 469-8418 8225±Ward Roy ⊕ 8227±Gavin Marine ⊕ 469-8430 8335 Miller Joseph P J ⊓ 946-0266 8335±Castleberry Richd 8550 Ampelsa Tony 697-8265 8551 489-835 Tony 697-8265 76*Geuanner
Apartmenta
56 Chun W ©
57*Kleinberg Jacob S © 697-6104
59*Barnia Clarie M 697-7663 WABASH BLVD INTERSECTS 3562 Vacant 3566 Tanabe Ernesto © 233-5012 3569 Onlivero Humy R © 239-1614 3580 Sanchez Valentin S © 234-8673 3674 ST INTERSECTS 3604 Vacant 3606 Conningham Lilin 9 3606 Conningham Lilin 9 3606 Onlingham Edward 10 298-8982 TOOLEY CIR —FROM 8984 TOOLEY ST SOUTH A CUL DE SAC 7812 Apartments
17 No Beturn
18 Dodds M F 460-9118
19 No Return
20 Sanna Judy 462-1056
7813 Apartments ZIP CODE 92114 1770 No Return 1777 Vonderahe Bob 1780 Krebs Bill F 1787 Watson Earnest L 263-3819 1787*Porterfield Johnnie 262-2367 20 Sanna Judy 462-1066

7813 Apertments
50 Mann K L @ 697-1583
61 Vacant
62 Mc Even F
63 Longstein M

7816 Apertments
7 Spicrakie C @
7 Spicrakie C @
8 Pollock E 469-5941
9 No Return
10* Malkin Airik E 469-7437
11* Parks Richd 698-4120
12* Felbacher Bernard H @ 469-0523
13 Curry S A
14 Nieto Manuel E 460-5350
7619 Apertments \$351 Haber Harry © \$461-7424
\$352 Hache Harry © \$461-7908
\$352 Vacanus
\$353 Hache Harry © \$461-7908
\$353 Crossberg Harry © \$461-7908
\$353 Crossberg Harry © \$461-7908
\$354 Dr. Gloropic Vincent © \$463-7403
\$354 Dr. Gloropic Vincent © \$463-7403
\$358 Kamelhar Mara № \$463-6904
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\$359 Kamelhar Mara № \$468-6929
\$350 Freas Malcolm J © \$460-6904
\$351 Drink Mareta № \$469-9228
\$411 Mulway Joseph © \$469-9228
\$412 Brink Mareta № \$469-9228
\$412 Brink Mareta № \$469-9228
\$413 Brink Mareta № \$469-9278
\$425 Brink Mareta № \$469-9278
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\$449 Vacant
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\$450 Phoenix Reginald © \$465-847
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\$450 Phillips Geo L © \$465-5592
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\$450 Phillips Geo L © \$465-851
\$450 Phillips Geo L © \$465-851
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\$450 BarLev Zev © \$465-811
\$450 BarLev Zev © \$465-811
\$450 BarLev Jew & \$465-811
\$450 BarLev Green & \$465-811
\$450 Lacho Alfred M © \$465-811
\$550 Harvey Joseph E © \$462-3718
\$550 Harvey Joseph E © \$462-3718
\$550 Harvey Joseph E © \$462-3718
\$550 Endower Grace & \$662-264
\$551 Kirby Alf J © \$463-353
\$513 Johnson Kenneth M © \$451-965
\$525 Howel Grace & \$662-264
\$535 Brownell Steven M © \$465-907
\$540 Brownell Steven M © \$465-907
\$550 Wanner Ledw & \$461-577
\$541 Brownell Steven M © \$465-908
\$550 Wanner Ledw & \$461-757
\$541 Brownell Steven M © \$465-908
\$551 Falley Donald H © \$650-907
\$550 Wanner Ledw & \$461-905
\$557 Falley Donald H © \$650-907
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5919*Dahl Lee 478-8791
5949*Allen Arth R 267-6162
5959*Me Vay Odell S 470-8002
5959*Me Pay Odell S 470-8002
5959*Me Pay Ronald L 478-6749
6040 Tonawanda Water Co bulk water als
478-2244
Dwiere Harlan J © 475-2244 ZIP CODE 92114
57474*Stewart Ronnie 283-0771
57574*Sheppard Carol Mrs 282-2168
5767 Ransome Clarence S © 264-1390
5777 No Return
5767 See Velisia ©
5777 No Return
5767 See Velisia ©
5797 No Return
5839 Tougas Thos © 283-5342
5319 Fhilips Prank W © 963-8435
5319 Fhilips Prank W © 963-8435
5319 Fhilips Prank W © 963-8435
5329 Vacant
5339 No Return
5339 No Return
5349 How Return
5349 No Return
5349 Evolus Hermon
5359 Smith Ronnie ©
5359 Smith Ronnie ©
5358 Smith Ronnie ©
5358 No Return
5359 Pletche Bernard
5368 Valor J C © 263-198
5379 Fletche Bernard
5379 Fletche Bernard
5388 Medeirre Raleigh J © 264-4051
5388 Medeirre Raleigh J © 264-4051
5388 Medeirre Raleigh J © 264-4051
5388 Medeirre Raleigh J © 264-405
5390 Telles Frank
5391 No Return
5392 Tale No Return
5392 Osborne Charles C ©
5322 Osborne Charles C ©
5322 Osborne Charles C ©
5322 Osborne Charles C ©
5324 Tate Andrew L ©
5325 Garrett Eliz 284-8526
5349 Woodard Ronnie © 282-9144
5354 For Win K © 264-1833
5556 Felton Otts L
5964 For Lee 264-1833
5557 Felton Otts L
5964 For Lee 264-1831
5965 For Return
5968 Lambert Kempton © 284-080
6042 Kepner Albert B ©
5607 Felton Otts L
5964 For Lee 264-1831
5965 For Lee 264-1833
5965 7819 Apartments
37 Graham N
38 Weathers S
39*Schmuckie Anthony J 697-4931
40 Mc Kenrie D 133 TONOPAH ST —PROM 2300 LIETA ST SOUTHEAST 399*Schmuckie Anthony J 697-493'
40 Mc Kenrie D
41 Kattern Berty J 469-7320'
42 Case K M 646-7992'
Apartments
1-Moskowick Murray F 697-6741
254*Chron Marian © 698-2042
4 Shapiro Michi 465-7126'
5 Mann Ralph O 462-3763
6 Chandra Udaya A
Apartments
35 Girard E
369*Benjamin Edward © 464-0857
439*Martines R A 464-1339
44 Thill R
45 Schuster E
46 No Return
Apartments SOUTHEAST

ZIP CODE 92110
FRANKFORT ST INTERSECTS
FRANKFORT ST INTERSECTS
4504 Hagen Iva F Mrs © 276-1436
4512 Rachmanow Andrew A 276-1977
4520 Chavarria Thos H © 276-7138
4522 Browne Frances M Mrs © 276-2175
NASHVILLE ST INTERSECTS
4626 M Glenn Patrica E © 276-5712
4626 M Glenn Patrica E © 276-5712
4626 M Glenn Patrica E © 276-5712
4626 M Glenn Miguel T ©
4636 Keller Donald R ©
4636 Garcia Frank A © 276-4435
4636 American Miguel T ©
4636 American Miguel T ©
4637 Hold Farrar Roch E 276-3531
4710 Hochkies F © 276-3801
4710 Hochkies R © 276-380
4729 Khopunan Ken © 7821 TONTO WAY --PROM 4850 MONOGAHELA ST EAST ST EAST

ZIP CODE 92117
2905 Dillon W A @ 274-8024
2612 Vigil Nick @ 378-8711
2515 Taylor Roth S 270-4403
2522 Switzer Wm L @ 274-4318
2525 Kolibe Delbert W 276-6709
2532 No Return
2536 No Return
2536 No Return
2542 Schafer Esther B Mrs @ 273-4003
2645-belnsoon Dennis @ 272-1507
2552 Parish Wm C @ 272-1507
2552 Parish Wm C @ 272-2509
2562 Machiel Hanty @
2572 Bain Wm L @ 274-1338
2572 Bain Wm L @ 274-1338
2572 Bain Wm L @ 272-0000
2552 Mc Queeney John A @
2553 Thursby Nock @
2563 Delancy Michi J @ 270-2004

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MORENA BLVD 1980

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N	AORENA BLVD —FROM 4263	276-8842	41 Herbstritt Cletus E 276-1757	F★Schott Mike D	
	TAYLOR ST NORTH	NAPLES ST ENDS DORCASE ST INTERSECTS	42 Hancock Richmond 43 Fournier Esther	G Stocker Michl 276-8113 H∗Diehl Gerry	
	ZIP CODE 92110	1201 P & L Barber Shop 276-1888	44 Mc Vane Walter	1451 Thomas Ray Furniture ret 276-0663	1
	INTERSTATE 8 CROSSES SAN DIEGO RIVER CROSSES	1206 El Camino Auto Court 1211 Comcast Music Network Inc inst	45 Riso Domenick J 276-3104 46 Pinochett John E 276-3104	1452 Apartments A No Return	F
	LINDA VISTA RD INTERSECTS	background mus sys 275-1842	47 Mc Cleskey Dorothy E 275-0376	B Connevey Nancy E	
	45 Vacant 55 Tops Cleaners 295-4720	1218 Vinta Gilbert 276-0603 1219 Quick Print offset printing 276-1551	48 Arney V I Mrs 49 Hendricks N E Mrs 275-2215	C*Davis Robt R 275-0278 D Taylor Janet A 276-5586	B
	Rug Doctor Rents (Rental Sta)	1227 General Electric Small Appl	50★Hult Stanley	1454 Apartments	I F
	NAPA ST BEGINS	Servicenter 276-5823	51 Mc Gee Hazel F Mrs 276-5802 52 Williams Mae M Mrs 276-3589	A Thompson Eliz B Vacant	155
g	SHERMAN ST ENDS 09 American Bakeries (Cake & Cookies	1229 Validity Corporation computer software 275-1480	53 Rohrbach Lucille 276-7907	C No Return	P
	Div) whol 296-2882	1231 Martha Baker Exceptional Chocolate	54 White Charles A 276-1736	D★Strecker Bob	C
	Sunbeam Bakery surplus baked goods whol 295-0657	candy mkrs 275-2524 1235 Vacant (1285-1241)	55 Kader June 57 Anderson Daphne A 276-3197	1456 Apartments A Vacant	1 4
	Langendorf Bakeries whol 296-2882	1249 Sandwich Emporium The restr	59 Koon Rose E Mrs 276-7420	B★Tempke Robt W	1 -11
9	20 Dalton-Coles furn 291-4350 California Pacific University 297-3880	275-2116 1259 Image House photo finishers	60 Hatcher Treva M Mrs 276-5069 61 No Return	C*Kaltschmidt Donald Jr 275-4545 D Vacant	1 1
9	99 Dyno Shop The auto repr 299-4926	275-1212	62 Gould S Jay 276-3964 63 Enyart Vivian	1457 Stroud Tackle fishing tackle 276-4822	
	Reynoso Auto Detail body repre-car	1272 Sanfric Incorporated property management	63 Enyart Vivian 64 Saling Elvira Mrs 276-8095	Stroud Wm © 276-4822 1458 Brennan Viola Mrs	
	wash 291-1100 W MORENA BLVD BEGINS	1274 Hydrotronics Incorporated eng servs	65 Asbury Earl E 276-6038	1460 Architectural Coating Products Inc	E
1	001 Witherow Roofing roofing contra	underwater tech 276-5800 1276 Dictating Systems Co Inc dictating	66 Romero Manuel B 67 Ziegler Everett	protectives 276-4141 Hanco Home Improvement Co Inc	1 11
î	297-4701 004 Stellar Fish Co whol sea food	mach sls & serv 276-4000	68 Lacher La Vonne Mrs 276-0197	genl contrs 276-2636	1 11
•	299-5900	Stenorette Sales & Service Co	69 Michaelson Harriet E Mrs 276-5988	Sunroll Industries Inc security shutters als ret 275-4400	1 11
1	Union Fish Co whol 299-1570 013 Hauser Furniture 291-1013	dictating mach sls & serv 276-4002 1277 Jarco Auto Parts & Warehouse	70 Gough Dorothy A 275-0559	1464 Apartments	1 11
1	019 Crowley Casket Co Inc 295-5107	276-8141	71 Filina Ellen Mrs 276-5108	★Fordham Rosemary Mrs	IN
1	022 Raffee's Carpets Unlimited ret sls 275-3032	1278 Monroe Calculator Co (Div Litton Industries) sls & serv 276-8920	72 Le Levier Robt 73 Dague Donald A 276-3187	A Barber Saeko H B Mewborn Adela Mrs 275-1665	
,	Double Space Corp whol ret wallbeds	1280 Technical Support Associates Inc	74 Johnson Marion	C★Barber Patricia Mrs	
14	275-0531	data processors 276-3780 1287 Hoover Company The vacuum cln sis	75 Nerlinger Jacob J 276-4745 76★Walter Robt	D Hurtado Patricia 275-2670 E Ferrer Nancy A 276-0084	1
	Conlin Brothers Sporting Goods sporting goos whol mfrs 275-0670	& serv 276-9560	77 Quick Orlo H 276-3604	1465 Ninternan Constn Co Inc 276-5810	Di
	Shutter Mart Of California shutters	1291 Electric Maintenance & Repair 276-2384	78 Martine James 79 Pusich Martha Mrs 276-5794	1471 J L H Wallcovering wallpaper sls & installation 276-9610	
	custom mfrs 276-6722 Tile Mart tile ceramic dlrs 276-0271	1292 Puppy World Aquarium Pet Centers	80 Hart Otis	Kibbey Gerald S & Associates real	
	045 Morena Boulevard Market 296-1623	pet shop 275-4267 1295a San Diego Valve & Fitting Co Inc	81 King Mary 82 Waugh Fred 276-7414	est appr 275-0967 Berger Mark real est appr 275-0967	4
	070 Vacant 076 Alex Foreign Car Service repr	276-1122	83 Hanson Mildred Mrs 276-1367	Godwin Harold A Jr real est appr	
	276-4274	1295b Vacant 1296 Al's Place tavern 275-0826	84 Williams Agnes Mrs 275-0792 85 Kinder Rachel Mrs	275-0967 Nordstrom John G real est appr	1 11
	083 Aztec Self Service gas sta 276-9106 090 Smith Auto Improvements engine	VIOLA ST BEGINS	86 Stoddard Cecil 276-9587	275-0967	8 .
•	rebldg 276-4900	1310 O'Connell's Sporta Lounge 1314 Prissy's Beauty Salon 276-5345	87 Edwards Ronald 276-8412 88 Schnick Fred A 276-8836	Olson Phillip real est appr 275-0967 Porter Gordon real est appr 275-0967	4
	San Diego Engine Balancing 276-4900	1315 Hi Lo Motor Lodge 276-9182	89 Brown Earl C 276-4271	Tatreau Douglas real est appr	- I II
	MORENA PL BEGINS	Forbes Dale E	90★Crawford James 91 Graham Robt 276-8755	275-0967 Bowen Steven L Realty 275-4210	<u>-</u>
	102 Bay Park Pet Clinic 276-1616	1316 Gun Co The guns & ammunition ret 1319 Morena Club tavern 275-1224	92 Giaccone Maria 276-3873	Mutual Realty 276-7020	.
i	103 Fotomat Corp (Whse) 276-6775 104 Shirley Silkscreen sign & card wrtrs	1325a Vacant	93 Nyrup Eleanor 276-3954	Components Corp electronic equip sls 275-3433	
	276-1616	1325b Full Circle Fashions custom women's clo 276-1543	94 Leiser Frank 95 Holding Norene	1476 Bonn John J Co flexible instrument	1
	105 Brink's Inc armored truck serv	1327 Western Towing Service 276-5481	96★Di Leo Peter A 275-0995	hose mfr 275-0242	
1	106 Dolphin Enterprises marine furn	Reeves Towing Service 275-0802 Robert Allen's Specialty Towing	97 Mogul John 276-8972 98 Scott Richd W 275-1970	Hopkins Manufacturing Co flexible instrument-hose mfr	1 41
	275-3910 L & G Enterprises food serv sups	560-1247	99 Johnstone Jessie Mrs 276-0942	NASHVILLE ST BEGINS	
	equip whol 275-3912	San Diego Jet Ski Rentals boat rentals 276-9200	100 Blair Stuart 101 Guyette Margt 276-8020	1502 Mc Donald Geo S Painting Contr 276-6362	
	1108 Williams Richd H archt 276-1794 1122 Bowen Auto Body paint & body shop	1330 Sea World Shell Service gas 276-3663	102 Vacant	1501a Whirligig Of Mission Bay party sup	
	276-0840	TECOLOTE RD INTERSECTS 1364 Three M Business Products Sales Inc	103 Harm Louise 276-3528 104 Rees Sarah 275-2697	275-2614 1510b Vacant (1510b-1510e)	3 7 1
1	1123 Fiesta Publishing Co Inc newspaper publ 276-4820	duplicating mach 276-8000	105 Zeiss Jerome 275-3109	1510f Appliance T V Warehouse Co ret	
	El Informador sch newspaper	1395 Morena Mobile Village trailer park 276-5699	106 Edwards Raymond 276-9174 108 Presser Julie Mrs	sls 275-1379 1510 Central Credit Union Of San Diego	
	276-4820	1 Harter Melvin H Rev 275-1398	110 Waldron John 276-7913	276-8054	
	1125 Tulio's Auto Enterprises auto reprs 276-3262	1a Lhotka Clarence V 276-5171 2 Hooker Kath T	112 Kunath Verna	1515 Krommenhoek Mc Koewn & Associates archts 276-7710	
	BUENO AV INTERSECTS	3 Cattoor Virginia Mrs 276-7176	133	1525 J C Company petroleum equip	
	1129 Sardina's Italian Restaurant 276-8393 1134 Clairemont Plumbing Service plmb	4 Munday Ora B 276-1029 5 Jack Wesley T 276-5253	KNOXVILLE ST INTERSECTS 1405 Al's Electric Motor Repair 276-5170	275-0180 1535 Utotem Market No S22 276-9120	
	contr 276-1397	6 Marcille Hazel E Mrs 276-2440	1407 Vacant	1540 Morena Pet Hospital 276-2112	10.
1	1151 Vacant 1152 Iveron Pacific Corporation electronic	7★Postok Michl 276-3053 8 Hadaway Wayne	1411 K & L Liquor & Market (Whse) 1413 K & L Liquor & Market 276-1662	1550 Morena Boulevard Arco gas sta 276-7581	
	8y8 2/0-1000	9 Hurley Charles R 276-4453	1420a Autobahn The used car als 275-0221	FRANKFORT ST BEGINS	
1	1154 T D J Company Inc electronic parts mfrs 276-5920	10 Lucas Geo . 11 Merchant Laura Mrs 276-3046	1420b Hobbs Auto Service 275-2615 1420c King's Auto Body repr_276-7282	1579 Coastal Trailer Villa 276-0612 ★Martin C L 276-0612	
j	1155 Bowen Auto Repair 276-8530	12 Martinez Gilda	1426 Moore's Mike 24-Hour Towing &	SPACES	
1	1156 Affiliated Premium Consultants 276-0360	14 Archambeault Eliz 15 Emmons Cecil V 275-0818	Road Service 276-3483 1430-a Cal West Dental Ceramics dental	1★Volker Norman 3 Staples Ralph B ⊚ 276-0190	
1	1162 Southwestern Picture Framing & Art	16 Hill Elmer D 276-0022	laby 276-0212	5 Barnes Wm @ 276-7889	\mathbf{p}
9	275-0715 L163 Coast Glass Co glass installers	17 Harpham Alf B 276-3149	1430-b Moore's Mike 24 Hour Towing & Rd Serv (dispatch ofc) 276-3483	7 Purvis E A Mrs ⊚ 9 Baldwin Libbie Mrs ⊚	
	565-0382	18 Walsh Yvonne Mrs 276-0393 19 Vacant	1430c A Better Answer answering serv	11 Leffler James ◎	
1	1164 Morris Furniture Co (Design Studio)	20 Wilkins Clara H 276-3120	275-3481	A13 Garrett Aris © 275-0351 15 Vacant	
	1165 Dawson Richd S Co pumps 276-5552 1167 Sunshine Supply Co Inc constn bldg	21 Pusich Richd W 276-3442 22 Lucas Edith B 276-3395	1430 Imperial Mirror Door Co 276-5975 1430-d Kodmur Service Agency 276-1102	17 Kotlinek Ann B Mrs © 276-4599	
	matls 276-7442	23 O'Brien Lorraine Mrs	1430d Public Service Consultants 276-7595	A19★El Zapeda Roy ⊚ 275-3775 1 White Gloyd M ⊚ 276-5504	8
	1169 Zaznebar tavern 276-9146 1172 Community Congress Of San Diego	 24 Lawhorn Carrie B Mrs 276-4932 25 Naas Lenora 276-3214 	1430 Feingold Association Of San Diego serv for hyperactive kids 275-2283	B2 Jones Grace Mrs © 276-8419	
	The pub serv nonprofit orgn	26 Dick Isabel Mrs	1433 Merchant's Center Garage 276-0721	B3 O'Connell Raymond 276-4170	
	275-1700 1176 Morris Furniture Co 276-2661	27★Green Lloyd 28 Davidson Ruby	1437 Keg & I tavern 275-0770 1437½ Burnett D D	. B4 Murphy Jack ⊚ B5 Hill Gary	. 7
	1180 San Diego Rattan furn 276-2480	29 Miller Kristen 375-2609	1440 Vacant	B6 De Juhasz Pete @	d
	R & H Management Inc management consultants 276-2480	30 Allen Robt 31★Dolstad Florence M Mrs	1440½ Jurgensen Larry 1442 Brown E Pat 275-2639	B7 Gutsch Eva Mrs © 276-5040 B8 Pollard Greg S 275-2001	
	1181 Peninsula Bank Of S D 276-5851	32 Herring Al	1444★Hammer Diane	B9 Johnson John S ©	
	1183 Accuprint offset printrs 276-9766 1185 European Performance Components	33 Sibyk Clara Mrs 276-4934 34 Sanborn Eliz Mrs	1446 Konecny C P 276-9037 1448 Israel Betty R	B10 Trudersheim Blanche Mrs ⊚ 276-3256	
	foreign auto parts whol & ret	35 Grey Charles	1450 Apartments	B11★Garcia Jessie	2
	276-2850 1187 Pella San Diego windows & doors ret	36★Kuhn Clara Mrs 276-4893 37 Greene Grace 276-8722	A★Gundlack Robt B★Don Joan	B12 Bender Clifford J © 276-0452 B13 Mc Bride James ©	
	sls 275-0200	38 La Rocque Gilbert E 276-5514	C★Deer Cath	. B14★Waddell Geo	
1	1189 Pointe West Realtors Inc 276-7400	39 Brooks Joe 276-3218	D★Holmes Chris	B15 Walsh Rose 275-2467	9

MORENA BLVD 1980

MORENA BLVD—Contd B16 Baker Florence Mrs © B17*Lesicka Sally B18 Maddox Lett © 275-3261 B19*Davis Bernard B19* Davis Bernard
B20 Vacant
1*Barber Ralph
C2 Rodarte Manuel © 275-2188
C3 Vacant
C4 Roth Benj © 276-3040
C5 Hood Paul © 275-1879
6 Strattman Allan P 275-1744
C7 Westlake Edgar © 276-0363
8 Vacant Cr westlake Edgar © 276-9780
C9 Terry Frank E ⊚ 276-9780
C10*Sowa Adam
C11 Bradley D Patk ⊚ 276-7935
C12*Lovejoy Mary ⊚
C13 Pugh Bill ⊚ 276-8819
C14 Mairson Helen Mrs ⊚ 276-2388
C15 Cooper M D ⊚
C16 Priseler Wassa © 276-3774
C17 No Return
C18 Considine Virginia K Mrs ⊚
276-6917
C19*Lamonte Eug
C20 Dunn Mary Mrs ⊚ 276-1312
C21 Keeney Hazel G Mrs ⊚ 276-1439
C23 Wolfe Ruth V ⊚ 276-0924
D1*Newton Craig D1*Newton Craig
D2 Barber Frank 276-8476
D3 Beckfield Lucille L © 276-9223
D4 Saba Jud R 276-5889
D5*Morrisson Harold
6 Hale Bob © 6 Haie Bob ⊕
D7 No Return
8 Thomson Frank J ⊚ 276-9404
D9 Delaney Ruth ⊚
10 Bedford Robt I ⊚ 276-2276
D11 Sefcyk Anthony F 276-9253
D12 Vacant D12 Vacant
D13 Worley Virginia Mrs ©
D14 Geisler Ken 276-3524
D15 Hill Russell ©
D16 Kuehl Helen Mrs ©
D17 Clark Dorothy S © 276-8170
D18 Dornhafer Helen © 276-4373 D18 Dornhafer Helen ◎ 276-43 D19 Huffman Gertrude Mrs ◎ 276-4311 D20*Doyle Steven D21*Moore Margt D22*Adams Sylvia A 276-2154 23 Grier J Robt ◎ 276-1566 23 Grier J Robt © 276-1566
D24 Vacant
D25 Roberts John ©
E2 Wrona John J 276-4852
4 Ogie Grady © 276-8246
E6 Allen Clement ©
E8 Ward Paul ©
E10 Vacant
E12 Jakaboski Donald © 275-3144
E14 Morissey John ©
E16 Castle Vickie
E18 Hass Margt D ©
E20 Belles Douglas W © 276-0211
E22 Hastings Paul ©

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E20 Belles Douglas W @ 276-021
E22 Hastings Paul ©
E24*Weber Dorothy L 276-7549
E26 Coughlin David P ©
1623 Carter Walter H 276-5329
1639 Bailey Pauline Mrs
1641 Kinney Ronald
1643*Bitto Betty 275-4206
1645 Israel Margarita Mrs
1655 Vacant OFFICE BUILDING
SUITES
100 Phone Shops Of San Diego The

276-9939
200 Bio Ceramics Dental Laby dental laby 276-6671
201 State Farm Ins Co 276-9830
202 Caduceus Instrument Co med instr repr 275-2405
203 Roberts Construction Co 276-9892

204 Vacant 205 Giacalone Remodeling 275-2340

205 Giacalone Remodeling 275-2340
206 Phone Shops Of San Diego The
(Sub Ofc)
1717 Musicians Assn Of San Diego Local
No 325 labor ong 276-4324
Musicians Credit Union 275-0121
1735 Four Day Tire Co sls & serv
275-0561
ASHER ST BEGINS
1801 La Giois Italian Imports Deli &
Food To Go 275-0460
Usnik Anna M 275-1187
1813 Pink Panther beer tuvern 276-9958
1815 Red Carpet Realtors 276-7850
1817 Bay Building
Rooms

C Williams Edwin K & Co bkpg serv & business mgmnt 276-3161 E Bromac Insurance Agency 276-0782 G Williams Edwin K & Co (Stge)

business mgmnt

H Coffman Wm J genl ins 276-4361 1845 A B A Recovery Service auto recvy serv & colln agcy 276-7394 Sunset Detectives 276-7394 1849 Campbell Jessie E Mrs 276-6227 1851 Collins Ivy 1863 Ray Gladys E Mrs 276-1485 1855-We Pola Kath 276-7686 1857 Vacant 1859 Hagood Margt C 1861 Moss B J 275-3758 1863 Vacant 1865 Schrock Inc bldg & genl contr 276-6300 LITTLEFIELD ST BEGINS 1901 Creighton Auto Sales used auto sla 276-2297 276-2297
1903 Vacant
1903a Allen John D Jr lwyr 275-3073
Decker Ronald C lwyr 275-3073
1905*Clark Thos A 276-3533
1909 Roach Michelle 276-3154
1911 Romano Arth F Jr 276-8027
1915 Bunker Hill Medical Group weight
reduction clinic 275-1471
San Diego Nautilus Fitness Cntrs
corp ofcs 275-2303
L C M Corp business management
275-2303
1923 Andersen Axel B chiro 276-2768 275-2203

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275-2203 1955 Bacis Italian Cuisine restr 275-2094 1959 Vacant ASHSTON ST BEGINS ASHSION ST BEGINS 1975 Kentucky Fried Chicken 275-2584 NAPIER ST BEGINS 2005 Terzian Exxon Service 276-6030 Andi Service Chtr auto repr 275-1370

Andi Service Cntr auto repr
275-1370
2027 Bay Park Apartments 276-9325
*Bristow Kirt
2027½*Gorman Tom
2029 Ascherl Thomas F 275-2123
2029½*Scoles Barry
2031 Brown Dave
2031½*Christopher Sam G
2033 Pasqual Menna 275-1958
2033½*Armstrong Harriet
2035½*Harris Mike
2035½*Wallake Sandy
2037¼*Genough Harold T 275-0139
2037¼*Gamez Manuel
2041 Hampton Bill J 276-1564
2041½*Paulk Chas 276-8573
2043 Aguilar Upholstery Service furn
uphol 276-8971
Montessori Training Center (Sub Montessori Training Center (Sub Ofc) 2045 Hobbs Andrew C 2047*Hopkins Danl T Jr

2051 Vacant 2053 Luzadder John 2053 Luzadder John 2055★Jones John M 276-8240 2057 Alsup Evelyn W Mrs 275-1381 2059 Haigh Douglas O acct 276-0222 2061 Rocha Joseph D Jr 276-3881 2063 Bishop Bart E acct 276-0690 2065★Romero Ronald J 2069 Apartments 2069 Edward Art 2069b No Return 2069c Shaffron Buddy 276-2401

2069d No Return
2069e No Return
2075 Realty World-Bay Park 275-1431
Quinns Shooting Waters amusement
machines leasing 276-2632
2111 City Chevrolet 276-6171

MILTON ST BEGINS 2205 City Chevrolet (Truck Sales) 276-6171 2221 Silver Spigot Cocktail Lounge. 276-1030

276-1030
2229 Silver Dragon restr 276-6344
2231 La-Z-Boy Showcase Shoppe
275-1523
2239 Dane Richd Realtor 276-6080
2241 Singer Income Tax Service 275-3570
2243 A-Action garage doors & openers
276-1222

2253 Ore Felice Italian Restaurant 275-4440 LISTER ST BEGINS A Saba Donald G dentist 276-2145 B Jaynes Real Estate 276-7575 2311 Nationwide Pest Control 275-4321 Corky's Pest Control 270-4401 2313 Walker Joe C 276-0647 2315 Durfee Melvin J 276-7262

2317 Vacant 2319 Smith J Anthony © 276-7262 OFFICE BUILDING SUITES

UITES
A Arical Mortgage Co
A Southern California Business & Investments real est broker 275-2204
B Meeting Management convention mgmnt 275-0650
C Matlock Edie Real Estate 275-2033
D Darfee International Inc real est 275-0774
E Vacant
F Metro Realty 275-0711

Metro Realty 275-0711 Troyer Samuel S chiro 275-2002 Vacant

J Vacant
M Mitel electronics mfrs 276-3421
2335 Old Trieste Restaurant 276-1841
2343 House Beautiful real est 275-4560
2351 Leitch Art S Realtor Inc (Clairemont
Morena Br) 276-1631
KANE ST BEGINS

2405 Mission Escrow Co Inc 276-0020 2415 Office Bldg Rooms

Rooms
A Peul Reginald F Realty 276-4222
B Kinney Brothers Of California wall coverings ret 276-581
C Autohaus used car dirs 270-6703
D Morey Ken Realty 276-6711
E Johnson Jack D int dec
F Beckerman TV tv repair 275-0390
Brown & Weston Plumbting 274-1020

H Fuller Brush Co 276-0590 I Mc Kinnon Associates real est 275-1740

J Ace Window Cleaning jan serv 276-0446 2423 International Institute For Urban & Human Develop educ & human factor research 275-2820

Building 431 Building
SUITES
Ia Woodbury Realty 276-6212
Ia Grady Daniel F realtor 279-8880
Ia Homestead Realty 275-1921
Ic Vacant

Vacant
 Digelow Investments real est
 counselors 276-8662
 Tri-City Landscape Inc landscape
 contr 275-2720
 Tag International Inc consultants
 275-0280
 Landschinese Refugee Assistance
 Decision of the Control of the

2a Indochinese Refugee Assistance
Project non profit social welfare
org 275-3522
B Head Start Plus non-profit educ
organ 275-3163
105 Solamar Realty 275-2340
200 Capital Gains Development real
est 275-4251
JELLET ST BEGINS

2505 Go-Lo Self Service gas ata 276-9117 2521 Liquor Locker The liquor store 276-5055

2523 Home & Office Machines 275-3340 2525 Vacant

2525 Vacant
2555a- Petricca's Italian Food 275-2555
2555 Dean's Photo Service photo fnshrs
276-0080
2555c Hair Design hairdresser 276-3720
2555c Hair Design hairdresser 276-3720
2555c Mc Kinnon Associate real est
275-1740
INGULF ST BEGINS
2655 Jeak LThe Box Deiter They press

2605 Jack-In-The-Box Drive-Thru restr 276-9132

276-9132 CLAIRMONT DR BEGINS 2727 Villa Laredo Condominiums 101 No Return 102 Vacant

103 Fritsch Pearl M Mrs 104 Billings Gretchen G © 275-2267 105*Epler J

105 ★ Epler J 106 No Return 107 Blair Randie 276-9815 108 Carreil Christina Mrs 275-1176 109 Baron N 201 Sladavic Joseph © 276-5405 202 No Return 203 Ingram John R 275-1773 204 Womack J C ⊚ 275-1667

205 * Erickson D A 275-1677
206 Moore B
207 Vacant
208 Villallobos R
209 No Return
302 * Mancini Mark E 275-4534
303 Groh J
304 No Return
305 * Fenton D
306 Wolf Eliz C Mrs 276-8281
307 Crosby V
308 Lejarraga Victor

307 Crosby V
308 Lejarraga Victor
309 No Return
ZIP CODE 92117
GESNER ST BEGINS
2805 Cooney Realty 276-6441
Bayview Towers apts
1 Masse H S R
2*Donovan James 276-8098
3 Moore D
4 Berg I.

3 Moore D
4 Berg L
5*Monagan C
6 Ryan Shirley 276-5597
7*Leone G 275-2108
8 Thompson Alice B 276-7623
9 Guerrero D
10 Dray Robt
2821 Casa Del Morena Apartments
276-7013
1 Sheetz Geoffrey M 275-3888
2*Sciarra A B 276-7550
3 No Return
4 Beal A

4 Beal A 5 Vacant 6 No Return

7*Lopez A 275-4177 8 Kobey J 9 Kaylor Gayle 276-9274 10 Buchanan C 11 Pettersen H

12 Dumbaski

12 Dumbaski W
13 No Return
14 Bennett Michl C 276-0851
15 Berg Victoria A
16 Wilson K
17*Mallette Gerald D 276-0613
18*Fuller M A 276-8867
19*Weeks Tammy 275-2127
20 Broch Chuck A 276-8439
2827 Finnegan Colleen E
2829 Schubert Craig 276-7970
2831 Paul Adolph 276-4412
2865 Vittier Pierre
2871 Holloman Floyd W © 276-1668
2877 No Return
2885 No Return
2883 Vacant

2885 No Return
2893 Vacant
MC GRAW ST BEGINS
3303 Darby James O © 273-2285
3309*Dumler Angeline
3315 Graber Raymond B © 274-4604
3321 Roberts Bahia M Mrs © 276-6499
3329 Beehler Ellen A Mrs © 273-8042
3337 Fein Lester © 276-0918
3345 Gruber Marie K Mrs © 270-6912
3351 Gotfredson Dianne 272-2777
3359 Enriquez Louis Jr © 273-9952
3367*Butchart Harold ©
3375 Espinosa Emigdio © 273-6731
3385*Simpson Gary G 274-2288
BAKER ST BEGINS
3435 Sarno Romulo Jr

3435 Sarno Romulo Jr Sarno Pelcyida 273-4595 3441 No Return 3441 No Return TICONDEROGA ST BEGINS 3515 Moran Pedro R © 273-5490 3627 Vacant 3535 Marzec Stephanus © 274-2640 PAUL JONES AV BEGINS

BALBOA AV INTERSECTS 3776 City Dept Of Utilities 236-5664 City Dept Of Genl Serva (Equip Div) 236-6289 City Dept Of Genl Servs (St Mtce Div) 236-5620 City Dept Of Genl Servs (San Div) 236-5653 AVATI DR INTERSECTS

4060 Innovative Data Technology digital . tape drive recorders 270-3990 Sym-Tek (Wiring Dept) 270-7600 Enerdine Vitamin Corp mail order of vitamins 272-8843 4090 Morena Business Corp. vitamins 272-8843
4090 Morena Business Chtr
Art Ways 276-3220
4090a Fredericks E R Co Inc mfg rep
272-6900
4090b Trecor Inc instl air traffic control

sys 483-1300 4090e Smith Engineering & Contract Services Inc 270-6620

✓

FRANKFORT ST 1980

画 432 624 Thiel Elly F Mrs © 454-2237
629 Holloway Janine M © 454-4296
637 Murray Kathryn D Mrs © 459-1894
WAVERLY AV INTERSECTS
702 Childrens Learning Laboratory
reading improvement 454-7083
711*Clarke Thos L 465-60774
714 Mc Gee Barney T © 459-8638

*Mc Gee Linda G Mrs bldg contr
718 Vacent
721 No Return
726 No Return 4070★Espisito Sam 4081 Salonius Wm D 275-3676 D Vacant 291 Hobson Robt N ⊚ 239-5472 FORUM ST —FROM WEST OF AUBURNDALE ST EAST FOX PL -FROM 4200 MORAGA AV 184 ZIP CODE 92111 FRANCIS ST S -FROM 3400 WEBSTER AV SOUTH 217 CODE 9711 A ©
6501 Ericson Bertil A ©
6502 Warath Robt G © 277-5517
6521 Countryman Jean L © 279-6720
6522 Ellertson Robt D © 277-7772
6531 Sanders Gerald R ©
6542 No Return ZIP CODE 92117 3310 Rogers James D © 273-0337 3311 Ellis Lowell V 270-1378 3333 No Return ZIP CODE 92113 202 Dews Eleanor Mrs ⊚ 203 Cummings Gertrude V Mrs 233-0221 203a*Dunn Edw K 234-1398 5501 Sanders Of Patt N €

6542 No Return

6551 No Return

6562 Baldasari Nilo J ⊚ 277-5281

6561 Giles Lawrence W ⊚ 278-8056

6582 Brown Mark S ⊚ 279-7704

6603 Rose Vern I ⊚ 560-9769

6604★Sterling Bill ⊚ 278-5017

6619 Tappen Beryl P Mrs ⊚ 278-7755

6624 Hall & Hall Inc elec contr 279-3892

Hall Walter E ⊚ 279-3692

6639 Winslow Martha J Mrs ⊚ 278-7066

6644 Laux Laurance J ⊚ 278-3719

6664★Ota Peter I ⊚ 277-7090

6684 No Return

AUBURNDALE ST INTERSECTS

6706 No Return

6706 Roby Robt E ⊚ 278-1289 203a★Dunn Edw K 234-1398 209a★Baldwin Reginald 211★Brown Harston 212 Amerson Phillip © 234-5267 213 Hutchinson Louise Mrs 215 No Return 217★Haylo Audrey 218 Mata Bros Painting pntr contr 234-0492 726 No Return BELLEVUE AV INTERSECTS 731 Cracroft Davis L @ 458-5492 3334 Buffington Richd @ 274-8487 3353 Bigler Clarence V @ 483-1241 Berner Herman D 454-7358 752 Griffin Edwin J @ 459-5650 764 Langston Richd B @ 454-9465 FOXWOOD RD —FROM 7950 LANDON PL NORTH 78 Swanser Bernard A 33 Robertson J TAFT AV INTERSECTS ZIP CODE 92126
10710 Nichols Wm © 566-6146
10711 Gilbert Engineering Co Inc
electronic component mfr 578-2272
Flink Howard B © 578-1659
10720 Gordon James R © 271-4445
10730 Beede C 566-9726 Mata Augustus © 234-0492 219 Weeks Floriel Mrs 234-8998 TAFT AV INTERSECTS
802 Mc Quilken Annabelle K Mrs ©
454-5718
808 Pelosie Gerald M ©
812 Vones Robt C © 454-5480
818 Corrin L 454-7749
824 Stein Martin © 459-4689
LINDA ROSA AV INTERSECTS
838 Hingoley Joseph B © 454-6614
846*O Hara Mary L Mrs © 459-3519
850 Anderson Wm H ©
851 Young Dorothy M Mrs © 454-4951 224 Apartments 4 Vacant 227 White Ruby L Mrs © 233 Cortez 233½ No Return AUSURINDALE SI INTERSECTS
6705 No Return
6706 Roby Robt E © 278-1289
6735 Barsoom D ⊚ 565-2656
6736*Lange Rae M 277-7921
6765 Nelson Wm D ⊚
6766 Settecasi Joseph ⊚ 292-7395
6807 Stuyck Rene H ⊚ 279-2842
6836 Shaklee Products hith food 279-7038
Bell Dan L ⊚ 292-1695
6837 Mayes James D 292-5240
6866 La France Marc P ⊚ 278-2518
6867 Zagami Jerry W ⊚ 565-0047
6896 Ferraro Nico ⊚ 277-4482
6897 Helle Doug 278-8271 10730 Beede C 566-9726
10735 Mills Maxwell E © 271-5477
10740 Bivens Mark 566-7539
10747 Biggs Geo E ©
10750*Guillen Thos © 578-4040
10759 Glancy Michl T © 566-3729
10760*Smith Coy M
10770 Garcia Victor © 566-637
10771 Bennett Dorothy P Mrs
10783 Lindsey Vivian E
10783 Compton Robt L © 578-5217
10790*Bagwell Roy W 578-3586
GOLETA RD INTERSECTS 234 Apartments 1 Vacant 242 Francis St Apartments motel ತ 305 Asero Henry ⊚ 323 Adkins Lorenzo ⊚ 231-2730 329 Harris Mack H ⊚ 232-1305 FOSTER ST —FROM IMPERIAL AV EAST 3 NORTHEAST OF LISBON ST San FRANCISCAN WAY —FROM 1 WEST OF MARYLAND ST NORTH 3 EAST OF KNOXVILLE ST ä 6867 Zagami Jerry W ⊚ 555-0047
6896 Ferraro Nico © 277-4482
6897 Helle Doug 278-8271
6899 Borce Teofilo J ⊚
6910 Cobalovic Sulio © 279-5062
6929 Mc Ghee Henry C ⊚ 279-0336
6930 Henry Glenn A ⊙ 277-1457
6939 De Silva Martino P ⊚ 278-2826
6940 Patterson Donald J ⊚ 278-8254
6950 Johnson Claire R ⊚ 278-8478
6951 ★Clipper Melvin ⊚
6950 Vacant
6963 Harrison Robt E ⊚ 279-2614
6970 Rich Alf L ⊚ 278-2557
6975 Toups Wm C ⊚ 565-9536
6980 No Return
STRONG ST INTERSECTS
7012 Norby Rolf ⊚ 279-3973
7032 Griffin Jack B ⊚ 279-5274
7045 Clairemont Faith Center 292-0464
7052 Wilson Theo C ⊚ 279-7676
7062 Christy Donald O 278-3717
BIDDLE ST INTERSECTS
7121 Mc Naughton S E ⊚ 278-1416 ZIP CODE 92114 ZIP CODE 92116
1149 No Return
1154 Forshey Elma N Mrs © 296-4931
1160 Smith Ruby D Mrs © 296-1678
1160 Smith Berkley P © 296-4378
1234 Jackson Everett G © 295-2904
1234a Rogers Richd 294-9679
1250 Lydon Richd W © 295-1139
1250 Matthews Mona F Mrs
MARYLAND ST INTERSECTS
1404 Senterfüt Ann M Mrs © 297-1025
1411 Kalafer Michl E © 297-0663
1414*Stalwick Rion W
1419 Wagner Tom W 299-1785 Island FOUNTAIN ST —FROM 2250 REED AV NORTH FOYLE WAY -FROM 4500 BLK CANNINGTON DR EAST ZIP CODE 92117
6511 Laurenzana Louis G
6521 Rojo Nelson ©
6521 Rojo Nelson ©
6531 Lisk John © 279-2395
6534 Sylvester Richd R © 279-2912
6541 Slagle James © 268-4185
6550 Guy Ronald © 571-1655
6550 Ho Return
6560 Henning Robt H © 279-2891
6561 Doyle Joe © 277-3134
6570 Hiorna Ronald F © 279-2820
6571 Lawrence Ron L © 277-7409
6581 Becker Bruce C © Harbor ZIP CODE 92109 4260 Goings Melvin L 270-9555 4270*Smith Jay 274-7914 4288 Texas Van 270-2819 4290 Reagan Lawrence 272-5617 FOUTZ AV —FROM 2200 OLIVER AV SOUTHEAST ZIP CODE 92109
2223*Hickborn Bonne G 483-3138
2223 Alexander N R 272-7419
2239 Ensminger John T 273-8236
2240*Bunge John R 274-5374
2247 No Return
2248 Wolfe Donald N 722-8121
2255 Stine Donald R 272-6225
2260*Smith Allen 458-4633
2265 Sawka John M 270-0159
2270*Atienza Eduardo 483-4946
2271*Roberts Charles
2279 Reichard Jimmie W 270-869
2287 Gallegos P 483-2427
2295 Valois John E 270-0320 ZIP CODE 92109 1.93 FRANKFORT ST -FROM 1540 MORENA BLVD NORTH ZIP CODE 92110 1325 Ott Mary E Mrs © 276-1534 1331 White Ora L © FRAKES ST -FROM 3500 ATOLL ST 7121 Mc Naughton S E © 278-1416 7122 Davis Charles W © 278-7927 7129 Randall John E © 278-8141 1331 White Ora L ©
1339 No Return
1347 French Larry L
1345 Lampe Edw L © 276-1899
1363 Groth Walter J © 276-4406
1369 Arthur Richd E © 276-5089
1377 Tarango Y Salvador T © 276-0650
TONOPAH ST INTERSECTS
1404 Archibeque Michl A
1412 Tollerton Ella Y Mrs © 276-2688
1420 Piazza Lawrence H ©
1428 Osborne Wm E © 276-1230
1431 Murphy Gerald 276-3693
1436 Lawrence L A ©
1444 No Return
GALVESTON ST BEGINS
1452 Duran Antonio B © 276-7974
1453 Gleeman Fern T Mrs © 276-8645
1459 Hickey Helen ZIP CODE 92111
7102 Papier Maurice J II © 277-6626
7112 Murphy Naomi Mrs ©
7113 Leibrand Joseph G © 560-0369 7129 Randall John E © 278-8141
7130 No Return
7137 No Return
7138 Campbell Charles ©
7145 Schmidt Robt J © 292-9597
7146 Binggeli Ernest Jr © 277-4423
7153 Halsbuk Rudolph K © 277-0347
7154 Springett Harold E ©
7161 Michael Milton D © 277-5090
7162*Keller Darlene ©
7169 Harris James L © 565-2607
7170 Romero Tomas E 571-0835
7177 Barge Arth F © 277-3938
7178 Clark Raymond L © 277-9870 7113 Leibrand Joseph G © 560-034
7122 Robinson Kenneth C ©
7123 Reeves Curtis H © 279-175
7132 Trego Michl P 279-1951
7133 Robertson D B © 279-0822
7142 Anaya Roger A ©
7143 Fowler Wallace © 278-1464
7152 Harber David J 277-0534
7153±Costello Ruth 278-9758
7162 Rangel Manuel G 571-1393 (921 FOWLER DR —FROM 6750 DOTI POINT EAST 3 ZIP CODE 92139 DIEGO, 7162 kangel Manuel G 571-1993
7163 Vernon Norvin F ⊚
7172 Dempsey Leon C ⊚
7173 Arias Manuel F III 278-6042
7182 Porsche Locators auto 277-5460
Ito Robt 279-6059
7183 Dunlap Earl F ⊚ 278-0473 7178 Clark Raymond L © 277-9870 7185 Hutchings Lucia M Mrs © 277-0879 7186 Kunze Alma W © 277-3808 2140 Mindez Jesus 479-3361 2143 Johnson Eddie L @ 475-6702 2146 Parlade Robt B @ 479-8700 2146 Parlade Robt B © 479-8700
2152 No Return
2153 Mason Lenord L ◎ 475-9046
2158 Kelley Loran 475-1804
2163 Kim Sungane Rev ◎ 475-9991
2164 Benke Ralph 475-9913
2170*Thompson Mike R ◎ 479-4435
2173 Mainland Michl L 267-1539
2182 Bihis Freddie B ◎
2183 Burdeos Redentor O 475-5898
2188 Montoya Paul R 479-6631
2193 Burch Michl A ◎ 479-8434
2196 Lambdin Robt B ◎ 475-7327 1453 Gleeman Fern T Mrs © 276-9646
1469 Hickey Helen
1460 Bucy Wayne W ⊚
1465 Gillooly Christine Mrs ⊚ 276-0907
ASHER ST BEGINS
1503 La Gioia Mario A ⊚ 276-4674
1504 Ciston Melanie A ⊚ 275-1504
1511 Sanchioli James © 276-3649
1512 Powell Dorothy L Mrs ⊚
1519 Rubio Frances K Mrs
157045Ne Gran Teoric C 276 1440 FORWARD ST (LA JOLLA)—FROM 2 BLKS WEST OF 5600 LA JOLLA BLVD EAST ZIP CODE 92037

310*Barbour J R

316 Aldrich James H ⊕ 454-0765

320 Nietfeld Wm D ⊕ 454-0878

322 Hill M Kathryn Mrs ⊕ 459-7089

328 Kuetzing Walter ⊕ 454-0581

354 Nixon John N ⊕

366 Stewart Marie W Mrs ⊕ 454-2689

LA JOLLA BLVD INTERSECTS

416 Durst R F ⊕ 454-0914

420 No Return

427 Mc Coy Paul B ⊕ 459-6820

LA JOLLA HERMOSA INTERSECTS

504 Sherman Eric H ⊕ 454-6813

510*Mc Farland K 459-3967

516 Hollenbeck P 458-8724

527 Kahn Donald Å ⊕ 459-3031

528 O'Conner Steve ⊕ 459-9420

Rear Huguenard G 454-3683 FRANCIS ST N —FROM COMMERCIAL ST NORTH 2 EAST OF S 34TH ST ZIP CODE 92102 215 Bell Willow 219 Newton Harvey C 231-4737 1520 Shaffer Terry G 276-1149 1527 No Return 1528 Belt M Dale © 276-1544 1528 Beit M Dale © 275-1544
1535 Jones Bruce © 275-3018
1536 No Return
1543 Bathgate Virginia H Mrs ©
276-0938
1549 Maly Joseph 276-4984
LITTLEFIELD ST INTERSECTS
1705 Smith Edw D ©
1709*Hendrick Wm
1719 Vegent 2210 Vacant 2220 Abiad Gil P 479-6855 2230 Tomas Mario 2240 Blakely Earl L @ 475-9053 JAMIE AV INTERSECTS 221 Vacant
223 Vacant
223 Vacant
223 Gilbert Pamela A Mrs
231 Vacant
235 Fernandez Gracia Mrs
L ST INTERSECTS FOX AV —FROM 4200 MORAGA AV 273 Wabash Terrace Apartments 1709#Hendrick Wm
1719 Vacant
1720 Larrabee Earl T ⊚ 276-3986
1730#Esquivel Robt 276-5089
GARDENA AV INTERSECTS
1804 Atkiason Frank G ⊚ 276-2425
1805 Johnson Ruth M Mrs ⊚ 276-1415
1810 Estrada Ernie A contr
1811±Preha M A 276-7643 B Vacant C Smith Lois A Mrs D Russell Marzella D Mrs ZIP CODE 92117 4010 Vincent Raymond J 273-5647 4020×Navarro Pedro Jr 270-1618 4030 Hendrix Arth D ⊚ 272-2384 4040 Ransom Walter D 4050 Tsacousis Geo ⊚ 4060 Franklin Louis R ⊚ 273-4637 275 Vacant 275 Vacant 277 Moore Melody L Mrs 232-6020 283 Apartments A Dixon Frances M Mrs 231-9604 B Parker Dorothy J C Smith W C 239-5830 528 O'Conner Steve © 405-9420 Rear Huguenard G 464-3683 BEAUMONT AV INTERSECTS 608 Vacant 612 Blantin Bruce J © 454-5420 618 Puffer Earl E © 459-5947 1811*Prsha M A 276-7643 1821 Lansdown Eliz G Mrs ⊚ 276-0459

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MORENCI ST 1980

MODENIA BLUD. C	000 B) B B B		
MORENA BLVD—Contd 4090f Miller Hadley Antiques & Imports	308 Big Four Building Maintenance Co 272-2161	MORENCI ST —FROM 4200	10 11
273-5400 4140a Sym-Tek Systems Inc electronics	309 Artisans Du Bois antique restoration 483-4020	TONOPAH ST NORTHEAST	12★ MORI
270-7600	310 Cunningham Furniture & Wood	ZIP CODE 92110	2302 M
4170a Freemarc Designs whol furn 273-3080	Products 272-4493 312 Seams Unusual animal mfr	1403 Wettach Bradley A 275-3563 1496 Van Orshoven Joseph L ⊚ 276-0188	1 ★ 7
4170b Designers Express (Showrm) whol	272-4992	1413 Brooke Robt D land inv ⊚ 276-4726	3 ★ I
womens clo 297-5215 Cabrillo Floor Coverings whol floor	313 Pacific Magnetic Structures Inc	1414 Lonn Marc A ⊚ 275-1917 1425 Rudasili Geraldine A Mrs ⊚	4 N 5 S
covering 483-1125	electro magnetic recording 270-4631	276-4146	6★4
4170c Silver Mort Associates sportswear mfrs 270-9900	314 Tauber Electronics Inc 274-7242 316 Advance Saw Works Inc tool	1426 Quick Terry M 276-4273 1428 Hammack Jeanne L ⊚ 276-7691	2304 Ar 7★J
4170e Charlotte Russe womens clo	distr 270-1290	1431 Mavis John K © 276-0310	8 N
483-0420 4170f Cleator Furniture whol furn	318 Bunker-Ramo Corp electronic equip 272-7422	1436 No Return 1437 Tuggey Glen E ⊚	9 C
274-6510	319 Coast Graphics Inc 275-2400	1441 Nygard Curtis	11*
Harris S & Company Inc whol fabrics 272-5600	320 Skinner Productions motion pictures 298-3180	1444★Cole Michele D 275-1462 1451 Bracy Lucile E Mrs ⊚ 276-2696	12 2312 Yo
4250a Material Handling Supply forklift sls repr & serv 483-1705	321 Design Synthesis furn mfr	1451 Bracy Lucile E Mrs © 276-2696 1452 Hicks Harry C © 276-2678	2318 Te 2320 Ce
4250b Pindler & Pindler Inc whol fabric-	272-7443 322 T A F Distributors whol imports	1460 Larriva Francisco R © 276-1426 1461 Robbins James	2322*M
furn 270-7611 Kreiss Collection whol furn	272-1280	ASHER ST INTERSECTS 1502 Mala John M © 276-0422	2324★B: 2332 Ke
270-8422	322 Acme Importers whol imports 272-3230	1507 Thomas Edith M Mrs @ 276-5167	2334 Ri
4250c Draperies By Picazo whol drapery mfr 270-5130	323 Multi Audio Visual Inc audio	1514 Wilson Lee Mrs ⊚ 1517 Callaway Irene ⊚ 276-5797	2336 Pe 2338 M
4250d Showroom IV whol furn sis	visual equip 270-6685 323 Foto I coml photographers	1522★Forrey Michl G @ 275-4259 ·	2348 Yu
272-5110 4250e Accurate Products Div Lear Siegler	270-4082	1523 Klein Irvin J ⊚ 1526 Turner Rita T ⊚	2350 ★F5 2352 Ve
Inc rubber goods 273-6331	324 Amodeo Mtce Service 270-9390 325 Group Two computer & electronic	1527 Williams John C ⊚	2358 Co
4250f Duplicating Specialists Inc duplicator sls & serv 275-0444	furn 270-6201	1531 Martinez Rena 276-9013 1532 Bartolini Norma © 276-5021	(I 2362★Sr
4330 J & M Wholesale Sporting Goods	401 Magic Wind wind chimes mfrs 272-6821	1541 No Return	ULRI
whol fishing sup 275-1345 Reel Sales Company Inc sporting	402 Air Pollution Technology Inc air	1549 Good Dale E ⊚ 276-2374 1550 Trotman K C 275-2824	***************************************
equip who sls 275-1347	pollution research & dev 272-0050	1559 Gilliland Hugh @ 276-7971	MORLE
4360 Gestetner Corporation duplicators sls & service 275-1960	406 Jubilee Reflections antique	145	WEST
4411 Rose Canyon Racquet Club 272-3111	illustrations	MORLAN ST -FROM 5000 BLK	ZIP C
4429 Tuesday Productions Inc coml musical prod 272-7660	406 Sonadya wn's sportswear mfra 270-7891	GAYLORD DR EAST	
Network recording products als	406 R C B Graphics graphic artist	ZIP CODE 92117	MORLI
272-2011 4455 Bay Ho-Ofc Bldg	272-7412 407 Amex Systems Inc electronics	3601 Bulman Raymond B © 273-4215 3602 Woskow Ronald M © 274-9368	BLVI
American Diamond Co inv & sls	serv 272-7534	3609 Berger Russell @ 272-3582	ZIP C
483-2100 4491 Balboa Roofing Co 274-1411	409 Vacant 500 Total Concepts Inc automated	3610 Gaus Henry J ⊚ 3617 O'Hagan John F Jr ⊚ 273-7415	FLOR 2221 Ci
Wilbok Co whol roofing supplies	cabt equip 270-6550	3618 Dave Narmad M @ 274-3649	Ba
275-0910 -4605 Solar Div Intl Harv Co (Rose Canyon	600 A & A Distributing Co light fixtures whol 273-4363	3625 Morefield Kenneth A ⊚ 273-1577 3626 Lee Cecil S 274-4576	M - 2223 Te
Facility) 238-5500 Stewart James Co bldg mtce	700 Vacant	3633 Smith 3634 Markham James C ⊚ 273-6393	I: Fo
272-2531	701 K-H Cams mtrcycle parts mfg 483-1051	3641 Morrison Elaine N @	p
Price Co genl mdse whol-ret 275-1213	701 Flow-Rite Systems race car parts	3642 Martinez Frank @ 3649 Taylor Ken W @ 272-4386	Lo
4627 Rose Canyon Self Storage rental stge	702 Di Donna's For Children	3650 Thornton James L @ 273-7316	Sa
spaces 483-2000 ★Bubnash David G 272-3674	children's clo 270-5800	3657 Villarroel Rosario © 270-7624 3658 Herold Robt E © 273-0182	o Li
4645 San Diego Periodical Distributors	801 Otis Elevator Co elev sls & serv 270-2940	3665 Sparks John A @ 272-2629	Po
books & magazine distr 275-3090 4677 Solar Rose Canyon Plant solar	802 California Coast Alarms Inc	3666 Boxberger Eleanor A Mrs ⊚ 3673★Scheibl Howard	Sa Sa
turbine mfr 238-6521	alarms sls & serv 804 Bekins Building Maintenance bldg	3674 Schmidt Matthew J @ 274-2040	c
*Newborg Wm J 270-1482 4695 Vacant	mtce & jan serv 270-6360	3683 Gauker Pamela A 274-1086 3684 Giret Albert P 272-1471	ALAB MISS
JUTLAND DR BEGINS	804 Ace Pest Control termite & pest control 299-7300	3693 Johnson Harold D 273-2739	 LOUI
ARIANE DR ENDS 4901 Rose Canyon Business Park ofc bldg	806 Fluid Systems Div Of U O P	3694 No Return	TEXA
SUITES	water purification r & d 299-9920	137	
101 Validity Corp test eval-sys analysis 272-7703	809 Perfect Pan The hse furnishing	MORLEY ST —FROM 2200 COMSTOCK ST NORTH	MORNI 8800
106 American Counsel Of Athletics	274-7131 811 Vacant	9.	
non-profit organization 273-5371 113 Vacant	901 General Thermionics Corp	ZIP CODE 92111 2202 Land Equality & Freedom Orgn	ZIP (3101★W
114 Sunburst Homes Corp genl contr	capacitor mfrs 483-0560 904 Custom Crafts plastic vaccum	social serv orgn 571-8411 Rear San Diego Foundation For Older	3102 V
272-4773 114 Collings Company Inc real est	forming 270-4000	Americans Inc social serv agey	3103★D 3104 Se
developers 272-3901	1001 Lucky Line Products keytags whol 270-0153	565-6531	3105 To
115 Hanigan Business Forms Inc business forms who! 275-2020	1100 Vacant	★Maehren Eva A 2204★Lukpetris Paul P 278-4839	3106 Cc 3107 R
120 Vacant	1101 Horizon Harvest Inc farm laborer serv 274-6042	2206*Flores Benny 279-2804	3108 V
130 Decision Science Inc research & dev 273-2922	1102 Apple Graphics designers	2208★Magale Aurora 2216★Willaims Arth	3109★B 3110 Ei
200 Vacant	272.7920 1102 La Jolla Lithographers Inc	2218 Vacant	3111 H 3112 U
201 Vacant 203 Video Information System	275-1123	2220★Ogata Jodi ⊚ 2222★Garzon Richd	3112 D
computer adv sys 270-6202	1104 Thermo Materials Inc roofing material mfr & distr 272-0061	2226*Navarro Ysidro 2228 Lewis Rosalin 277-6580	3114★D 3115 D:
204 Vacant 209 Verac Incorporated scientific	STREET CONTINUED	2230 Barringer Edmund W chiropractor	3116 M
research & dev 272-1360 211 Vacant	127	277-3057 Democratic Central Committee Of	3117 V 3118 A
211 Vacant 213 Vacant	MORENA PL -FROM 1103 MORENA	San Diego County 268-3366	3119*S
215 Vacent 221 Vacent	BLVD SOUTHEAST	2232 Faitan Lene 2240*Loymon Sandra	3120 V 3121★R
221 Vacant 224 Vacant	ZIP CODE 92110	2242 Vacant	3122 V
230 Vacant	5145 L & L Printers Inc 276-0010 Salini Joseph M coml artist 276-0012	2250 Apartments 1 Archibold Emma B Mrs 278-4963	3123★L 3124 V
232 Applied Radiation Protective Services 275-1096	Lem Roland Lettering Studio design	2 Conery Cath Mrs 279-2589	3125*C
234 Vacant	lettering 276-0013 5151a Vacant	3 Kohr Geo T 560-6738	3126 L
301 Chart Hous The (Stge) 272-4860 303 Commercial Carpet Cleaners	5151b Thomas Rick 276-4034	4★Brockrog Barbara 5 Berry Barbara	3128 St
273-1300	5151c De Fresco Philip J 275-3148 5171 Bridge Center The 275-0343	6 Tracy Tim 277-6430 2252 Apartments	3129 H 3130 D
304 Information & Computer System Inc 270-6200	5181 Brentwood Custom Pictures &	7 Legg Karen K 277-5626	3131 V
307 Nittan U S A Inc importer .	Gallery 276-8260 CUSHMAN AV INTERSECTS	8★Mc Farland M L 9 Faigan Lenny V 279-6395	3132 ★ G 3133 Va
272-6113	COMMAN AV INTERSECTS	o raigan Lenny V 210-0000	0.00 Y
			-

10 Bueno M
11 Anderson Amy 565-1949
12*Largent Le Roy 565-0468
MORLEY WAY INTERSECTS
2302 Mesa Linda
1★Tyerina Raymond
2 Chavarrias Rita 279-8364 3★Phonialkhom Thongdon
4 No Return
5 Spradling A
6*Allwood Robt 569-1951
2304 Apartments
7*Jarrett Robt 56-9855
8 No Return
9 Cluchey Lillian S. 560-9069
10★Rueda Ernesto 279-0585
11★Fiore Anthony 292-4951
12 Wenholz Lester 565-0499
2312 Yoakum Vivian 277-4553
2318 Tester Sandra L Mrs 277-1517
2320 Cervantes Jose 560-8792
2922★Moffitt Nora 2924★Brady Kevin
2332 Keynes John L 292-8019
2334 Richardson Ronald L 565-9802
2336 Perez Lionel F 268-3415
2338 Morris Peter C 279-0013
2338 Morris Peter C 279-0013 2348 Yunkers Hazel D Mrs © 277-4799
2350*Fierro Evelyn 277-4057
2352 Vacant
2358 County Human Resources Agey
(Project 86) 565-6033
2362*Smith Louis 571-0183
ULRIC ST INTERSECTS
MORLEY WAY —FROM MORLEY ST
WEST 1 NORTH OF COMSTOCK ST
MEST I NORTH OF COMMITTOR ST
ZIP CODE 92111
ZII CODE SZIII
. 92
MORLEY FIELD DR -FROM PARK
BLVD EAST 1 SOUTH OF UPAS ST
ZIP CODE 92104
ELUBIDA DE INTERESTA

GIRARD ¥

LA JOLLA (92037)

600 B St., Şuite 1340, San Diego Federal Bank Bldg.

DRIDA DR INTERSECTS City Municipal Pool 296-2811 Balboa Park Tennis Club 298-6345 Morley Field Snack Bar 232-5421 Morley Field Snack Bar 232-5421 Tennis Patrons Asan Of San Diego Inc Folsom Wilbur Tennis Center non profit information center 288-0820 Love's Tennis Center pro shoptennis instruction 574-0255 San Diego Tennis Dist non profit orgm 288-0920 Little League Snack Bar Pony League Snack Bar Pony League Snack Bar snack bar 296-1164 San Diego Velodrom Asan bicycle club 298-1870 ABAMA ST BEGINS SSISSIPPI ST BEGINS UISANA ST BEGINS UISANA ST BEGINS

NING WAY (LA JOLLA)—FROM VILLA LA JOLLA DR WEST

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CODE 92037
Worcester Bruce A 453-1525
                        Worcester Bruce A 450
Vacant
Davis Terry 453-9256
Sell T E 453-0669
Top John J
Coker Joe 452-8105
Russell Jacob 453-7588
                        Vascant
Bishop Vanessa 457-2299
Eisenman Gerald © 453-1968
Hendricks Philip A 453-1746
Under Constn
Burton Bonnie 455-6788
                          Diamond Ferne © 453-0154
Drake
Meana Gary © 453-9031
                          Vacant
Alkazin Thos M ⊚
Stanford B Scott 455-5623
                          Vacant
Robinson Sidney 455-6169
3121 ★Robinson Sidney 465-6169
3122 ★Vacant
3123 ★Lowther Joseph 457-2789
3124 ∀acant
3125 ★Cardiner Gerald ⊚
3126 Land Tahnee 455-6843
3127 ∀acant
3128 Steriotis Dean J ⊚
3129 Hayes Joan E 455-6916
3130 Dunn Bernard J 452-9949
3131 ∀acant
3132 ★Guerra John J 453-7348
3133 ∀acant
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CRECORY SCOTT REAL ESTATE

- 12 N

NASHVILLE ST

Laboratory and the second seco
NARRAGANSETT AV—Contd
306★Santagoda R 223-9136
307 Lindberg H
5107 Apartments
101 Johnson N B 222-6787
102 Goetz Irene M Mrs 222-0926
103 Leake Lorna M
104 Johnson N 201 Berning Paul W 222-1314
201 Berning Paul W 222-1314
203*Chopp C 223-4707
203*Chopp C 2234707 204 Toliver Phyllis C 222-3271 301 Larkin Chris
301 Larkin Chris
303 Bolduc R 222-1475
304 Marshall Douglas A 223-0810
5116 Silver Spray Apartments 223-8186
A Ahlers Sheryl
B★Fickle H 223-7781
C*Miller J R 222-9070
D★Ceruti Marion G 222-9173
1★Bishop Michl J 224-7394
2 Campo Robt
3★Mc Gregor D M 224-9053 4 Ellersdorfe Vern
5 Vacant
6*Currier E M Mrs 222-6912 7*Trantham Robt W 223-2043
8 Forsyth Doris Mrs 9★Fierro Andrew
10 Masterson Larry
11 Hauver Robt
12+Vitale Robt H 223,7740
12★Vitale Robt H 223-7749 13★Zudick Carter 224-7907
14 Broe Steve
15 Vacant
16 Vacant
18★Maitland Richd 226-1865
21 Tobin Edw
23 Griffin Michael
24★Nickerson John C 222-4728
28*Thomas C 224-8524
39*Lorenz Ann E 223-9587
40 Vacant
41 Vacant
42★Wilkin Royie B 226-1054
43 Vacant
44 Vacant
45★Roll F Steph
46±Johnston Elmer A 224-4936
47 Vacant (apts 47-49)
50★Allen Mike 223-3430
51★Cline Pamela A 223-7332 52★Forsythe Doris Mrs 225-1503
b2★Forsythe Doris Mrs 225-1503
53 Vacant (apts 53-79)
80*Rodriquez Lesly 222-6023
81 Vacant
82*Oaxaca Octavio F 226-8602
83 Vacant (apts 83-85)
86*Sena Raymond 224-6495
87 Vacant (apts 87-89)

= 274-

278-6450,

Es.

DVILW OL RUCOR

77

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Santa

4770

565-1222

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EMONT

2478

NARRAGANSETT CT -FROM 4100 NARRAGANSETT AV NORTH

ZIP CODE 92107 1837 Hagar Ben W © 222-3542 1838 No Return 1843 Goldsmith Gano C © 222-2135 1844 Symanski Pauline V © 222-9904 1849 Anderson Walter H 224-8692 1850*Bailey Walter 222-5942

133 NASHVILLE ST —FROM 1400 BLK MORENA BLVD NORTH ZIP CODE 92110 ZIF CODE 92110
SPORTS ARENA BLVD INTERSECTS
1323**Don Carlos 276-2705
1325 Mc Guirk Hazel M Mrs © 276-2153
1326 Palmer James R © 276-6270
Mc Attee Mary M Mrs 276-2939
1332 Hansen Jolly R © 276-5703
1333 Coleman Art ©
1339 Ford Evylena Mrs ©
1340 Redden David C conatn wkr ©
1340 Redden David C conatn wkr © 1340 Redden David C constn wkr ⊚ 276-3302
1347 Don Ruben T
1348 Fordham Wm L ⊚ 276-2194
1361 ★Napier Corky
1352 Ormsby Foster P
1355 Brown Eunice H Mrs ⊚ 276-4905
1366 Collins R
1357 No Return
1364 Vacant 1370 Kromer Robt © 1371 White Arth C © 1378 Koon Mildred E Mrs © 276-1571 TONOPAH ST INTERSECTS
1411*Gross Robt L 275-1539
1412 Tarango Nellie D Mrs © 276-0755

1420 Gonzalez Netzauhalpilli L © 1428 Smith John F © 276-0946 1436 Kelly Paula Mrs 1443 Snow Clara M © 276-6474

1444 No Return

BERVY ST BEGINS 1505★Salemi Jos © 276-2499 1515 Winder Clarence C © 276-7018 1525 Ledesma Lauro mason © 276-7964 1526 Zmolek Walter S © 276-1045

NASSAU DR -FROM 3600 ARAGON DR NORTH

DR NORTH

ZIP CODE 92115
3609 Bender Donald L © 583-2675
3612 Sledzinski Thaddeus S ©
3617 Hunt Robt L ©
3618 Hartmann John J © 582-0448
3623 Andrews Albert M © 583-5120
3624 Hardin John B © 582-7566
3629 Mikalsky Ronald © 582-2974
3630 Taylor Ross W ©
3635 Remy Joyce 286-7862
3636 Childers Doyle C © 582-4561
Independent Order Of Odd Fellows
Lodge 153 286-1592
3641 Bender Clarence W © 286-0236
3642 Mc Laughlin Wm J © 582-8981
3648 Schultz Ernest S ©
3653 Pena Alf A © 582-8921
3648 Wright Ernest J © 582-7812
3659 Goeney Michl © 287-1416
3660 Gist Joseph H © 583-3447
3665 Cobb Donald M © 286-1892
3666 Rambeau Robt H 582-7094
3672 Lindquist Helens Mrs ©

3665 Cobb Donald M © 286-1892 3666 Rambeau Robt H 582-7094 3672 Lindquist Helene Mrs © 3675 Benson Jesse M © 3678 Crews Lorraine S Mrs © 286-0237 3702 Peters James P © 582-4915 3703 No Return
3708 Baxter Lucile Mrs © 582-0559
3709 Norton Michl V © 286-1896
3714 Ellis John ©

3715 Pepin Arth J bookkeeping sarv © 582-3460 582-3460

7720 Stegman Albert P ⊚ 582-8072

3721 Allmann Richd G 287-1479

3726 Helton Rex C ⊚ 582-3063

3727 Hathaway Daryl L ⊚ 588-8705

3732 Martin Thos J Jr ⊚ 287-4031

3733 Danfield Audrey B Mrs ⊚ 287-4959

3738 King Alf J ⊚ 582-8631

3743 Vacant

3744 Camacho Joe ⊚ 583-6896

3750 Hotz Al Contractor bldg contrs

583-8818

583-8818

583-8818
Hotz Albert ⊚ 583-8818
3751 Quality Trees whol nursery 287-3585
Freeland Robin ⊚ 287-3585
3756 Gamble Donald G ⊚ 582-3140
3762 Browne Galen E ⊚ 583-7571
3770 Blair Keith G ⊚ 582-4651

NATALIE DR -FROM 4509 NORMA DR NORTH

ZIP CODE 92115
4507*Morris Lewis © 280-1811
4511 Hurtado Edw © 281-0112
4514 Miles Audrey B © 284-0900
4515*Rice Thos J © 281-1718
4519 Kroepel Julia S © 282-9341
4522 Welsh Vernal C © 284-6454
4525*Ross Stanley H 283-4814
4526 Eigemann Henry © 282-2797
4531 Johnston Vesta R Mrs ©
4534 No Return
4536 Mc Cuistion Celsus P © 284-4744
4537 Pasto J R © 280-9333
MADISON AV INTERSECTS
4602 No Return
4603 Doctor Albert A © 284-7658

MADISON AV INTERSECTS
4602 No Return
4603 Doctor Albert A © 284-7658
4607 Baker Geo W ©
4610 Green Hilka D Rev © 281-3273
4611 Farrell Mabel S Mrs © 284-1887
4616 Nelson Mary L Mrs © 281-655
4617 Lee Jan © 284-8548
4622 Campbell Wm C © 282-6807
4623 Reinicke Vertus E © 281-4803
4630 Petrone Maybelle A Mrs ©
4631 Benoit Rosemond J © 282-8845
4637 Horowitz Judy
4642 Dietz Fredk H © 284-2593
4648 Whittaker Victor III © 280-8485
ADAMS AV INTERSECTS
4651 Bailey Wm C © 284-0580
4654 Levens Miriam 283-4174
4660 Polzer Jacob A © 284-5258
4666 Dale John A © 281-0471
4671 Rabin Allan H © 284-8790
4672 Campbell Rose M Mrs ©
4677 Patterson Helen L Mrs ©
4678 Quiroga Edw © 281-1149

4677 Patterson Heien L Mrs © 4678 Quiroga Edw © 281-1149 4683 Kern John P © 280-1285 4684 De Sure Ann S Mrs © 282-0046 4689 Eng Donald C © 280-1278 4690★Siuta Jack R © 282-9309

4700 Strack Joseph M © 4705 Skiles Lois J Mrs © 281-6766 4710 Kratz Agnes Mrs © 284-5465 4715 Williams Myrel A Mrs © 284-6613 4718 Vacant

1980

4721 Vacant

4721 Vacant
4724 Hoag Cyrus C ⊚ 284-0878
4725 Weber Harvey G ⊚ 284-3581
4728 Culbertson Margt F ⊚ 282-9613
4729 Smith Carrie M ⊚ 281-7189
4733 Shaw Floyd L ⊚ 281-8689
4733 Robertson Hayden E Jr ⊚ 284-6900
4743 Peterson Karl G ⊚ 281-7315
4749 Filippi Carmel Mrs ⊚
4752 Evans Norma W ⊚ 284-0928
4755 Thornberg Robt W ⊚ 282-5446
4758 Baxley Thos L ⊚ 282-8439
4761 Simons Diane B 284-2348
CONSTANCE DR INTERSECTS

CONSTANCE DR INTERSECTS NATCHEZ AV —FROM 4900 IROQUOIS AV NORTH

ZIP CODE 92117 3103 Schwieger Eliz Mrs © 276-2966 3105 Tipton Barbara R 276-2522 3106 Evans John © 276-1207 3109 Onweiler Allen S III 275-1886 3109 Onweiler Allen S III 275-1886
3112 No Return
3114 Childs Geneva J 276-4127
3115 Primmer James L © 276-6151
3120 Thurmer Martha R ©
3121+Furlong Morgan B 275-2571
3122 Adams Dell M
3126 Mc Neil Charles E © 276-7962
3127 Schelske Elmer W © 276-9489
3128*Höllingworth Bruce B © 276-6766
3133 Nicholas Earl J ©
3136 Abat Gene F © 276-6269
3139 No Return

NATIONAL AV -FROM 150 12TH AV SOUTHEAST

ZIP CODE 92101 IMPERIAL AV INTERSECTS 13TH ST INTERSECTS 1313 San Diego Machine Co engine rebidrs 236-1608 1344 Pell Mell Supply Co indl fasteners 238-1633

ZIP CODE 92113 ZIP CODE 92113
147H INTERSECTS
1430 Reliable Pipe Supply Co Inc whol industrial sup 233-0118
15TH ST INTERSECTS
COMMERCIAL ST INTERSECTS
1501 Olson Building ofe bldg
City Housing (Rehab Program)
236-6607

236-6607 STREET CONTINUED 1521 Chanslor & Lyon Automotive Warehouse (Whse) 1526 Reliable Pipe Supply Co Inc (Yd Ofc

& Whse)
1531 Graybill Oil Terminals petroleum distr 233-5560

distr 233-5560
1540 Robertson Geo M Co Inc genl contr 235-5528
16TH ST INTERSECTS
1603 Central Meat & Provision Co Inc whol 239-1391
1605 Central Meat & Provisions Co (Stge)
1629 American Auto Wrecking 232-4747
1635 Vacant
1636 Quality Cabinet & Fixtures Co (Stge)
1637 Vacant

1637 Vacant 1638 Vacant

1639 Summerville Bessie M Mrs © 234-5875 1643 American Auto Wrecking (YARD) 232-4747 1659 Radford Overhead Doors mfg 239-8558

239-8558

239-8558

1665 Smolan Industrial Supply (Whse)
1667 Smolan Industrial Supply 233-6141
1668 Triad Marine & Industrial Cleaning
Corp cin serv 239-2024
1673 Castaneda & Sons tailors 233-9447
Castaneda & Sons tailors 233-9447
Castaneda Vicente 233-9447
1675 Castaneda Cecilia 234-5384
1677 Castaneda David
1678 Rodriguez Josephine Mrs 232-8334
1682 Vargas Luis 234-0638
1686 Carlos Cleaners 239-3793
1686½ Cruz Ruth V 233-3002
1689 National Liquor House 237-9567
Hikel John L
SIGBEE ST INTERSECTS
1701 National Bakery 239-4043

1701 National Bakery 239-4043 1705 Business Bookkeeping Serv 234-4805

1709 Business Advisory business consultants 234-4805 Rear A-One Radiator repr 239-5661 1709½ Rios Jose J 231-4898 1711 Torres Jose G 233-3713 1713 Vacant

1713 Vacant 1715 Zavala Faustino 1719 Model Ex-Offenders Inc rehab orgn for ex convicts 234-6191 1720 American Auto Wrecking (Storage

1722 Barajas Hilario 234-7053 1722½ Reigo Consuelo Mrs 234-9547 1723 No Return 1724 Agudo Vicente 231-0868 1727 Campos Gilbert 239-1817 1728 Fores Luis ©

1729 Vacant

1729 Vacant
1731 Ramirez Ruben 235-4461
1733 Campos Barber Shop 232-0239
1735 Fraser's Boiler Serv (SHOP) 233-0195
1736 Vacant
1738★Velez Joseph ◎
1738¼ Velez Joseph
1743 Vacant
1744¥Cota Ramon L 239-7976

1744*Cota Ramon L 239-7976
1744\bar{W} Vacant
1746\bar{W} Neturn
1746\bar{W} Anguiano Consuelo Mrs 232-3915
1748 Soltero Elena
1750 Ojeda Manuel 234-6931
1750\bar{W} Ojeda Joe 235-8691
1752 Vacant
Rear Sorrells Wendell
1754 Neighborhood Cafe restr 237-9566
1754\bar{W} Miranda Cruz
Sergas Benj
Rear Salas-Garcia Maria Mrs 234-4465
1759 Villalobos Ramon 235-0193
Rear Vargas Ventura 230-1548
1764 Vacant
1775 Atlas Iron & Wire Works 232-7115

1764 Vacant
1775 Atlas Iron & Wire Works 232-7115
Jordan Steel Co 232-7115
1776 Tropic Ice Cream Co whol 232-8641
1786 El Porvenir tortilla mfr 239-5756
Rear Lopez Rosalio M
1786½ Aguilera Rafaela Mrs ⊚
1789 I M P A C T consultants 239-3881
1792 Rudys Service gas sta
1793 Amador Jr Market 233-6911
BEARDSLEY ST INTERSECTS
1809 Chicano Community Health Center
234-8171
American Cancer Society 233-9172

American Cancer Society 233-9172
1818 Gonzales Isabel Mrs © 239-6395
1820 Coronado Miguel 1822 Vacant 1825 Vacant 1825½ Vacant 1827 Rodriguez Upholstery & Sewing 236-1929

1828 Gomez Tax Service 231-6737 1830 Vacant 1831 Gonzalez Guadalupe Mrs 232-5659 1832 Vacant

1833 * Brackett Chas A 234-4539 1836 Vacant 1841 Camass Co boiler repr 239-1338

1842 Corona Wm 1852 Ginglardy & Sons Welding Works 232-3285

1853 Lomeli Francisca Mrs 233-5817 1853 ¼*Juarez Aristeo 1854 Ace Radiator Service auto radiator 1854 Ace Radiator Service auto rad repr 239-5225 1855 Vacant. 1855 Welayo Fred 235-0906 1857 Diaz Mary Mrs 1857¼★Ballazar Gabino 236-0740 1859 Gutierrez Mary Mrs 232-1095

1861 **Cruz Ramon
1863 Coast Ship Supplies industrial
chemistry 239-7158
Ramirez Marcus R 239-7158
Ramirez Marcus R 239-7158
239-4175

239-4175
239-4176
231-9212
1865 '4-Y-'Ulalobos Catalina
1867 Mendoza Senovio 239-5593
1867-16 Cuzman Maria Mrs
1869 Lopez Delfina Mrs 232-8037
1869-14 Medina Martin V 234-7623
1873 Vacant
1875 Mendoza Maria Mrs 234-2490
1875-14 Rodriguez Tony Mrs 239-4552
1877-48 Ramirez Maria T Mrs 233-4262
1877-14 Sasso Juanita N Mrs 233-0262
1879-4Tirado Victor
1880 Bettencourt Auto Paint & Body
(Stge)

(Stge)
1882*Alcala Francisco 233-3328
1884 Flores Rosale Mrs
1885 El Sarape Cafe
Rear Penney Lucille Mrs ©
1897 Ponderosa Market 235-4501

TONOPAH ST 1980

TOMMY DR—Contd
1*Sadatrafier Rahim 698-2598
2*Mutwkil Mohammad H 463-6881 3#Elliott Jack 4*Baker Paul 4*Baker Paul
5*Anderson Greg
6*Pignatiello James A 460-9939
7*Faucher Mark
8*Faucher Mary Lee
9*Tilaro Rene 10 Martinez David 11*Campbell M M 12*Faso Doyle E R 464-4391 13*Torres Michl A 13* Offers Mich Jack 14*Ottman Jack 15* Wright Bruce W 462-0629 16*Schalht Keith A 463-4125 7800 Spring Hill Townhomes condominums 462-5170 7803 Apartments 64*Vans Israel 697-9062 65*Ansing J 66 Williams Harry L 465-5314 67*Steel C 460-7097 7804 Apartments 23 Ross 24*Weil Cathy 697-7565 25*Skinner Wm 461-7925 26*Coduti Robt 27*Roan M. 466-4974 28 Christoff Chris A. 461-0635 29*Handelsman Jay 462-7192 30 Eades Shirley 7805 Apartments 58*Newman C 68 Huntington V 464-0444 69*Juleen Gary 697-2007 70*Lewis Donald 464-2307 71 Kriger Joel M 461-2091 No Return 7 Apartments 54 Drew Roger W 461-8301 55 Mauer Tom 463-6716 72*Peterka F 460-4628 73 Karl P K 697-2359 No Return 7808 Apartments 15★Walker R 16★Epstein Albert A 469-6498 21 King Gary 462-3803 22★Kirwan Paul C 463-3443 22*Kurwan Paul C 463-3443 No Return 7809 Apartments 51*Dorion R 52*Vaisanso Joseph 697-2726 53 Roject Richd P 697-9343 74 Ritchie Arth 75*Geudtner W 697-9006 76*Gray S 462-4722 No Return No Return
7611 Apartments
56 Chun W
57 Klinberg Jacob S 697-6104
7612 Apartments
17 Bloom Allen R 462-1463
18 Boods M F 460-9118
19 Bosak Robt 463-5867
20 Sanna Joanne M 462-1056
7813 Apartments
60 Mann K L 469-8045
61 Bodga Vernon L Jr 469-7988
62 Mc Ewen
63*Longstein M
7816 Apartments
7*Napierskie C 5 Apartments
7*Napierskie C
8 Pollock E
9*Daun John 465-7577
10 Dancer Zales
11 Long L 462-3069
12 Morrison Robt 13★Curry S A 14 Nieto Manuel E 460-5350 7819 Apartments 37*Graham N 38*Weathers S 39★Brown S 40★Mc Kenzie D 41 Katten Betty J 469-7320 42★Case K 464-7992 7820 Apartments 1 Shortreed H 697-8504 2★Tallarida V 3★Shyaddin J 3*Spradlin J

4*Shapiro Michl 465-7126

5 Mann Ralph O 462-3763

6 Chandra Udaya A

1 Apartments

35*Girard E

36★Scott Betty A 464-0572 43★Christi Janet

44 Thill R
45*Schuster E
46 Burer Alice H 697-8156
7823 Apartments
31 Bacher Louis 461-4918

44 Thill R

32*Crawford A

33*White M
34 Cooper Allen
46*White Alan 463-4233
47 Cantor Larry M 466-0749
49 Pollack J W 460-9097
50 Kilpatrick P J 697-8017
7905 Purcell Paul J 469-3808
7919 Mc Farland Stanley H ◎ 465-2725
7922 Hughes Michl E
7931 Freireich Ritchd E ◎ 460-5725
7940*Cook Thos L ◎
7943 Kelly David G ◎
7955*Adams Marla ② 463-6130
7956 Whiting Albert 469-5910
7955*Head Roemarie Mrs ◎ 697-5800
7956 Cosmakos Geo ② 461-8106
7975 Otto Phyllis Mrs ◎
7980 Uyema Henry ◎
7980 Uyema Henry ◎
7985 USuna Erna S Mrs ◎
7995 Knorr Harold T ② 469-3380
BALLINGER AV INTERSECTS
8001 Best Geo ◎
8011 Schneider Herman ◎
8014 Wheelus Wm D ◎
8021 No Return 8014 Wheelus Wm D ◎
8021 No Return
8024 No Return
8031 Macy Edwin G 465-3465
8034 Lee Joan Mrs 469-4938
8041 Johnston Loyal D 466-4041
8046 Fisher J Reed © 462-8883
8051 Rogers Paul E ◎
8058 Rogers Jeff B ◎ 460-0839
8061 O'Neal Paul L ◎ 466-7190
8070 Baker Wm 8006 O'Nesi Jeft B © 460-0389
8061 O'Nesi Jeft B © 466-7190
8070 Baker Wm
8071 Maynard Roy L © 460-3345
8080 Celiey Robt F ©
8081±Rayburn Rodger
8090 Hanna Antoine © 461-0445
8101 Marcroft B Harridd 460-7544
8104 Fesler Geo J © 466-8860
8111 Van Buskirk Robt A 466-8118
8114 Quardiji Nayef 461-9539
8121±Randolph John P 462-2388
8124 Trevino Manuel R © 465-5293
8131±Feldman Alex 461-6497
8141±Tarin Tohy 469-6815
8148 Beagtailey Gary E © 465-4464
8151 Connolly Eliz A 469-8766
8154 Rodgers M J 463-1521
8161 Hardeman Leone 460-8463 8161 Hardeman Leone 460-8463 8164 Armstrong Robt 460-1240 8171 Cieszinski Robt D 171 Cieszinski Robt D
171 Gillette Lou 462.0977
1811 Logan Ronald © 461-5069
1814*Neff Paul ©
1819 Mc Donald - Yvonne J © 462-8809
1819 Gooding Douglas
BARDONIA ST INTERSECTS
18201 Henson Alvin 461-6274
18215 Martin Wm © 462-0762
18227 Moxley Wm L Jr ©
18239 Perez Allen © 462-4862
18240 Hunt Wm G 464-8377
18260*Villaseonor Juan A
18251 Hogus Robt A 8251 Hogue Robt A 8262*Swank Don 8263 Vacant 8274 Murphy Gerald O @ 465-7877 8275 Crow Hurben W @ 469-5676 8284 Neas Keith A @ 469-7616 8225 Pemberton Clyde J © 8295*Struven Katie 8296 Storm Doris C Mrs © BOULDER LAKE AV INTERSECTS 8301 Salway Gladwin P @ 469-9781 8302 Vacant 8314 Lucas Walter B @

8314 Lucas Walter B ⊚
8315 Recher Harold E ⊚ 469-8418
8326 No Return
8327 Baker Raymond M ⊚ 461-3068
8338 Miller Joseph P Jr ⊚ 465-0266
8339 Wheelhouse Compass marine
instrument reprs 460-9581
8350*Ampelas Tony 697-8826
8351 Zbytniewski Kenneth A ⊚ 460-6469
8362 Vacarly 3851 Zbythiewski Kenneth A ② 4604
3852 Vacant
3853 Hachte Harry ◎
8374 Grossberg Harry ③ 461-7998
8375 De Orio Henry J ③ 464-4061
8384 Di Giorgio Vincent ③ 468-7403
8385 Kamelhar Max A ③ 460-6094
8394 St Denis R P ③ 466-4229
8395 Dress Malcolm J ⑤
8401 Fisch Robt J ⑤ 462-2395
8402 Boyd Denn E ⑥ 465-0234
8411 Mc Hugh Mic
8414-*Mulvey Joseph ⑤ 460-9827
8426 Brink Mareta F ◎ 460-9827
8426 Stout Lloyd G ⑥
8437 Dorrance Gary D ⑥ 462-7636
8438 Carpenter Lyle R ⑥ 465-8947
8449 Vacant

8450 Phoenix Reginald ◎
8459 Westermier Charles M ◎ 465-4719
8459 Westermier Charles M ◎ 465-4719
8460 Philips Geo L ② 465-3592
8469 Nicholas Harold L ② 463-0715
8470 King Ann Mrs ③ 469-1915
8477 Adams Dieu Viem Mrs ④ 465-6736
8478 #\$Bar-Lev Zev ⑤ 465-6113
8487 Barker John A Ø 462-5004
8488 #Reid David G ◎ 466-1581
8495 Lattman James H ◎ 463-180
8496 Lord Ida Mrs ⑥ 466-5157
BISBY LA AV INTERSECTS
8501 Harvey Joseph E ⑥ 462-3718
8502 Lacho Alfred M ⑥ 465-4017
8509 Murphy Othilia L Mrs ⑥ 469-0219
8510 Kennedy Ken
8517 Kirby Alf J ⑥
8518 Johnson Kenneth M ⑥ 461-9666
8525 Hoover Grace V ⑥ 469-2578
8533 Payne Merrill W ⑥ 466-7280
8534 Gardner Jess ⑥ 464-1757
8541 Brownell Steven M ⑥ 463-5087
8542 Durham Wm H Ø 465-9987
8549 Yip Chas ⑥ 460-3735
8550 Wunner Edw T ⑥ 460-3522
85573 Van Hasselt Geo H ⑥ 462-8244
8562 Leyva Richd ⑥ 465-4696
8557 Vacant 8585 Vacant 8602★Koll Mark S 465-2088 8603 Tauf Jack M ⊚ 464-0585 8612 No Return 8612 No Return 8613 Wexler Sandra Mrs © 465-7819 8622 Smith Amy Mrs © 461-2804 86224 Vo Sum © 469-4065 8632 Vacant 8633 Smith Helen F Mrs © 8642 Krumholz Geo B Jr © 464-0315 8643 No Return 8632 Vacant

8633 Smith Helen F Mrs ◎
8642 Krumholz Geo B Jr ◎ 464-0315
8643 No Return
8662 Balas Stephanie Mrs ◎
8663*Todd Mike ◎
8663*Todd Mike ◎
8664 Benitez Paul ◎ 460-4335
8671 Dunne Joyce E Mrs ◎ 463-6935
8676*Bottiger Harry L ◎
8695 Barton Theresa Mrs ◎ 465-3665
8679 Coffee Robt
8686 Walk Richd W ◎
8695 Barton Theresa Mrs ◎ 465-3665
RENOWN DR INTERSECTS
8701 Luitjens Alvin H ◎ 465-4810
8702 Ball Sum D ◎ 466-7961
8703 Lacher Sebestian S ◎ 489-0952
8710*Sealzitti Aŭgust ◎ 498-4745
8717 Boyce Eva E Mrs ◎
8718*Johnson Kenneth
8725 La Pointe Thos L ◎ 460-5351
8726 Manss Robt W Rev ◎ 461-6610
8733 Odor Donald R Ø 460-9633
8734 Kennedy Barbara Mrs ◎ 465-2655
8741*Brownell Steven M ◎ 463-5083
8742 Kanel Gordon ◎ 463-7551
8749 Christian Gregg
8765 Shea Michl C ◎ 461-6944
8757 Little John W ◎ 464-8854
8758 Deeb Samir ◎ 465-913
8758 Ches Samir Ø 466-513
8758 Poeb Samir Ø 466-513
8758 Repes Paul E ◎ 466-3067
8774 Turner Wilbur D ◎
8782 Upshaw Jim L ◎ 461-3389
8789*Vanach
8797 Vacant
8798 Swellenberger Will, ◎

TOMPKINS ST -FROM 201 34TH ST EAST

ZIP CODE 92102 WABASH FRWY INTERSECTS 3450 Murdock Winfield @ 239-6238 3468 Robinson Earline 232-2461 ovot roomson Earline 232-2461
3481 Baggett Roofing & Sup Co 231-0951
35TH ST INTERSECTS
3507 R & M Bur-B-Q restr 233-1627
5518 Page Mattie M Mrs © 239-5594
3524 Cole Roberta B Mrs 239-3700
3527 Waldon John
2509 Walder Parkir Mrs 2608-2627 3529 Waldon Pechola Mrs 232-8807 3530 Carrasco Eloisa Mrs ⊚ 232-8807 PARDEE ST INTERSECTS WABASH BLVD INTERSECTS 3562 Vacant 3566 Tanabe Ernesto © 233-5012 3569 Ontiveros Henry R © 239-1614 3580 Sanchez Valentin S © 234-8673 36TH ST INTERSECTS 3604 Baker Nathaniel M 3605 Cunningham Lilian

3606 Yepiz Herman J ⊚ 3609 Melero Jose H ⊚ 239-8982

ZIP CODE 92139

TONAWANDA DR —FROM VALLEY RD SOUTH 1 EAST OF REO DR

ZIF CODE 92199
59494-Leonard Linley L 267-3341
59594-Stopp Robt L 475-7567
6012 Vacant
6040 Tonawanda Water Co bulk water sls
475-2244
Dwiere Harlan J @ 475-2244

TONOPAH ST —FROM 2300 LIETA ST SOUTHEAST

ZIP CODE 92110 ZIF CODE 92110
FRANKFORT ST INTERSECTS
4504 Hagen Iva F Mrs ② 276-1436
4512 Rachmanow Andrew A 276-1977
4520 Chavarria Thos H ③ 276-1138
4528 Browne Leonárd K ③ 276-2175
NASHVILLE ST INTERSECTS
4626 Mc Glenn Patricia E ③ 276-5712
4629 Runde Kevin P ②
4636 Keller Donald R ③
4636 Carris Farak A ③ 276-4428 4649 Garcia Frank A © 276-4435 4669 Amezcua Miguel T © 4689 Rioja Tony G © 276-4800 LEHIGH ST BEGINS LEHIGH ST BEGINS 4704 Deitzler Edw L ⊚ 275-3370 4705 Farrar Robt E 275-3631 4715*Hotchkiss R 4718*Bond Robin ⊚ 4725*Stevens Dey ⊚ 275-4198

TONTO WAY —FROM 4850 MONOGAHELA ST EAST

447

MONOGAHELA ST EAST

ZIP CODE 92117
2605 Dillon W A © 274-8024
2612 Vigil Nick © 273-5711
2615 Taylor Robt S 270-4403
2622 Switzer Wm L © 274-4318
2625 Koibe Delbert W 276-6709
2632 No Return
2635 No Return
2635 No Return
2642 Schafer Eather B Mrs © 273-4003
2645 Sazama G P © 272-1508
2652 Parish Wm C ©
2653 Lamotte Z M 274-3990
2662 Bieritz Curtis Jr © 273-3333
2663 Gratteau Joseph E ©
2672 Bein Wm L © 274-1384
2673 Carter Wm B © 272-080
2682 Mc Queeney John A ©
2683 Junhke Walter B © 270-4449
2693 Chandler Ann L Mrs ©
2704 Vullings Joseph
2705 **Coch Charles J 274-3222
2716 Fredrickson Harley C ©
2717 Marshall Larrx R © 270-192 2705-Koch Charles J 274-3222
2716 Fredrickson Harley C ⊗
2717 Marshall Larry R ⊗ 270-7192
2726 Klat Casimir ⊚ 274-3374
2729 Hengst Elwood A genl bldg contr ⊗
EPINETTE AVE INTERSECTS
2738 Brown Robt A ⊚ 272-3938
2747 Cuprys Lawrence M ⊚ 270-9291
2748 Norman Karen
2757 Winstanley Gerald ⊚ 273-2029
2767 Pearce Win T ⊚ 273-6494
2768*Schulz Jack O

TONY DR --FROM 6955 CONDON DR NORTHWEST

ZIP CODE 92122
3403 Vandenberg David L ©
3404 Sugiura Shoichi © 455-5272
3410 Gardner Cherie Mrs © 455-0796
3411 Peckham Eug © 453-8181.
3416 Hood John C © 453-2994
3419 **Clerberic Gary T, © 455-7450
3422 Linderman M J © 453-6216
3427 Kobrak Hans © 452-6447
5428 **First 1 452-0796
3431 Bulbin James J **
3435 **Harmelings Henry 343- Hallin James J 60
3435-#Harmelings Henry
3440-*Morris Rodney
3443 Sandoval David A @ 453-6712
3446 Robbins Fred W @ 453-0053
3451 Couch Ronald L @ 452-8164
3452 Korbelak Carole S Mrs @ 463-0395
3458-#Zaidman Terry H 452-8172
3461 Treadway Jerald @ 453-5910
3464.Dixon Howard R @ 463-4902
3470 Scofled David D @ 453-7027
3471 No Return
3481-#Kemper Wm P 452-8126
3491 Allmach 3491 Allmach 3511★Sevier. Dale

R. L. Polk & Co.

MORENA BLVD 1975

1471 S & M Electric Co Inc contr
276-1560
1476 Bonn John J Co flexible instrument
hose mfr 275-0242
Hopkins Manufcaturing Co flexible
instrument-hose mfr
NASHVILLE ST BEGINS
1502 Mc Donald Fainting & Decorating Co
contr 276-6562
1515 Honeywell Inc (Br) temperature
control mfg 276-5761
Honeywell Inc (Industrial Products
Div) 276-6890
1524 Carter's Wood Yard fire wood sls
276-5329
Carter Welter H 276-5329
1525 Blue Ribbon Meats meats
1535 Uotem Market No 522 gro-ret
276-9120
1540 Morena Pet Hospital 276-0612
Ellis Daymon 276-8177
Hart Otis ©
3 Staples Ralph B © 276-0190
5 Barnes Wm © 276-7889
7 Purvis C E ©
9 Baldwin Libble Mrs ©
11*Moneypenny E C ©
A13 Wallace Wm A © 276-5778 2111 City Chevrolet 276-4171 City Chevrolet (Uned Cars) 276-2632 City Lessing & Flort Sie auto leasing 276-5680 MORENA BLVD—Contd 60 Hatcher Treva M Mrs 276-5068 61 H.ynn Ernest 62 McGould Jay 63 Enyart Vivian 64 Saling Elvirs Mrs 276-8095 65 Asbury Earl E 66 Romero Manuel B Storehouse Survival Foods dehydrated foods 276-5060 1717 Musicians Asan Of San Diego Local No 325 labor org 276-4324 Musicians State Credit Union MILTON ST BEGINS
2205 City Chev (Annex)
2221 Silver Spigot Restaurant & Cocktail
Lounge 276-1030
2229 Silver Dragon restr 276-6344
2231 Nelson Auto Parts Store No 7
276-2011
2241 A-Advanced Products Co garge
door opening equip 276-1222
2233 Lefty's Pizzs 276-5866
LISTER ST BEGINS
2305 Jaynes Real Est 376-7878
Parkman Realty 376-7040
Spreng Chartes B Real Est real est
376-7676
2311 Architectural Associates archts 276-5222 423 1735 Four Day Tire Co als & serv 275-0561 oo Asbury Earl E
66 Romero Manuel B
67*Long Sydney
68*Lacher La Vonne Mrs
69 Michaelson Harriet E Mrs
70 Schumsker Marie
71: Fillina Ellen Mrs 276-5108
72 Hanka Arth E 276-532
73 Dague Donald
74 Klund Alma K Mrs
75*N'erlinger Jacob J 276-4765
76 Manno Vincent
7 Quick Orlo H 276-3604
78*Kleckner Eunice
9 Pusich Martha Mrs 276-5794
80 Lhocka Clarence V 276-5171
81 King Mary 275-0561
ASHER ST BEGINS
1801 Morena Store 276-0890
Usanit Edw 275-0890
1813 Pink Pauther beer tavern 276-9958
1813 Pink Pauther beer tavern 276-9958
1815 Red Carpet Realtors 276-7850
1817 Bay Building A pay busing Rooms C Mc Henry Jim And Co bkpg serv & bus mgrmt 276-3161 C Westward Escrow Co 276-0861 C Williams Edwin K & Co management 276-3161 E Bromac Insurance Agency 276-0782 F Mc Henry Jim & Co (Conference Room) Parkman Realty 276-7040
Byrong Charles B Real Est real est
2311-76-7676

2311 Architectural Associates archia
2312 Walker Joe C 276-0847
2313 Walker Joe C 276-0847
2315 Smith Anthony J © 276-0868
2317 Vacant
2321 Busy B Realty 276-0800
Burns Beatrice B Mrs
23319 Durfes Malvin
2321 Busy B Realty 276-0800
Burns Beatrice B Mrs
2335 Usit of Architectural Calcium Clairemont
Morena Bir 276-1631
AND ST BECINS
2468 Mission Escrow Co Inc 276-020
2415 Office Bidg
Rooms
A Paul Reginald F Realty 276-4222
C Vacant
D Morey Ken Realty 276-8711
E Vacant
F PV Core Hen Realty 276-8712
2422 Vacant
A Fuller Brush Co 276-0590
J Mc Kinnon Associates real est
276-1820
2423 Vacant
276-1820
C Richardson Neal genl ins agt
276-1820
C Gieler Mel & Associates land
surveyor 276-3283
E Vacant
A Marko Development Corp genl
contr
A Sean Builders Inc genl contr management 276-3161

B. Bromac Insurance Agency 278-0782
F. Mc Henry Jim & Co (Conference Room)
G. Herttue Dick & Associates genl ins 276-6350
H. 76-6350
79 Pusich Martha Mrs 276-6794
80 Lhocks Clarence V 276-5171
81 King Mary
12 Kwaugh Fred
83 Mc Cracken Neillie Mrs 276-3008
84 Kösevers Matie
85 Kinder Geo L
86 Stoddard Ceell 276-9587
87 Boyles Beulah
88 Schnick Fred A
88 Brown Earl C 276-4271
90 Gebhardt Robt L 276-8469
91 Graham Robt 276-3873
93 Nyrup Ellinos 276-3874
94 Leiser Frank
95 Marshall Vern Mrs 276-3874
96 Norcott Maude F Mrs
97 Mogle Douglas H 276-8972
98 Bright Geo 276-1216
99 Johnston Jessie Mrs 276-0942
100 Hall Grace M Mrs
101-KGystet Margt
102 Doistad Florence M Mrs
101-KGystet Margt
102 Doistad Florence M Mrs 276-4395
104 Breakey Freda Mrs 276-1453
108 Presser Julie Mrs
110 Waldron John 276-7913
112 *Kunath Verna Darmes Win 2 10-10-085

Pauris C E ©

9 Baldwin Libbie Mrs ©

11*Moneypenny E C ©

A13 Wallace Win A © 276-5778

15 Quick Daisy O Mrs © 276-0860

17 Kotlinek Ann B Mrs © 276-4589

18*Motchell David R © 276-4599

1*Mitchell David R © 276-4599

B3*Compare Thes ©

B4 Murphy Jack ©

B5 Sowa Adam P © 276-1810

B6*Clo Juhasz Pete

B7 Gutsch Eva Mrs © 276-5418

B9 Johnson John S 180 Trudersheim Blanche Mrs ©

276-3268

B11*Freeland Laura Mrs ©

B12 Bender Clifford J ©

B13 Mc Brick James ©

B14*Henning Geo ©

B14*Les John R ©

B17*Leum Mary ©

B16 Clement A C ©

B19 Welch C P

B2D Donaghy Chester © 276-5684

1*Ruckles John L ©

22*Marti James F © 276-5303

C4 Roth Benj © 276-5303

C5 Hood Paul © 275-1879

6*Suttevant H M ©

776-846 E Dgar © 276-0363

C8 Crowley Loretts J Mrs ©

276-856 E 9 276-780

C7*Westlack Edgar © 276-0363

C8 Crowley Loretts J Mrs ©

276-856 E 9 276-780

C10 Cleaver Charles D © 276-876 KNOXVILLE ST INTERSECTS 1405 Al's Electric Motor Repair 276-5170 1407 Vacant 14074 Vacant 1409 Ace Window Cleaning 276-0446 14074 Vacant 1409 Ace Window Cleaning 276-0446 1411 K & L Liquor & Market (Whae) 1413 K & L Liquor & Market 276-1662 1420 Vacant 1420a Verble's Auto Body Shop repr 276-7282 1919 Vacant 1921 Clark R L Lessing auto & truck lessing 276-8771 1923 Andersen Axel B chiro 276-2768 1929 Handley Arven B ⊚ 276-6130 1931 Clark Dennis 1933*Florcrak Joseph 1420s Verble's Auto Body Shop repr
276-7382
1430b Vecant
1426 More's Milee 24-Hour Towing &
Road Service 276-3483
1430-a Aurum Laboratories dental laby
1430-b Vecant
1430-d Resulcik Ruth Realty 276-0640
1430-d Kodmur Service Agency air
conditioning 276-1102
1433 Merchant's Center Garage repr
276-0721
1437 Boulevard Inn tavern 276-9107
1440 Reliance Real Est Co 276-7751
1440 Reliance Real Est Co 276-7751
1440 Reliance Real Est Co 276-7751
1440-Reliance Real Est Co 276 1923 Andersen Axel B chiro 276-2768
1929 Handley Arven B © 276-6130
1931 Clark Dennia
1933*|Florack Joseph
1935 Vacant
1937 Clark Gerald W 276-0670
1939 Graves Mildred J Mrs 275-1509
1939 Graves Mildred J Mrs 275-1509
1939 Graves Mildred J Mrs 275-1509
1939 Graves Mildred J Mrs 275-166
1941 Johnson Hildur
1943 Cochran Martha P Mrs
1945*Adney R J 276-0868
1945*Adney R J 276-0868
1947 Sasse Robt E 276-4978
1951 Lölls Lamar Insurance Agency
276-1281
Farmers Ins Group (Clairemont SMore Mildred Martha P Mrs
1955 Golden Key Beauty Salon 278-5100
ASHTON ST BEGINS
1975 Pierce Fred Chevron Service
276-6030
2007 Bay Park Apartments
★Bowen D L
2075*★Squilar C J 275-1971
2025*★Lew New J 275-1971
2025*★Lew New J 275-1971
2025*★Lew New J 275-1971
2025*★Lew New J 275-1971
2035*★Veson Linda S
2031*★Nelson Lin Contr A Sean Builders Inc geni contr B Vacant 2c Vacant 276-6846

C3 Terry Frank E © 276-9780

C10 Cleaver Charles D © 276-8576

C11 Walsh Cyril

C12 Green Lloyd ©

C13 Souder Albert T Jr © 276-9084

C14 Mairson Helea Mrs © 276-2388

C15 Jacobeon John A © 276-1479

C16#Cleadedrogno Ethel

C17 Palmer Bill ©

C18*Considine Virginia © 276-6917

C19 Bucharan Virginia Mrs 276-6405

C20 Duan Bert © 276-1312

C21 Keeney Hazel Mrs ©

C22 Vacant

C23 No Return

D1 Johnson Clarence E © 276-0904

D2 Simons Geo W © 276-370

D3 Beckfild Lucille L © 276-9223

D4 Sabe Jud

D5 Campbell Fred ©

8#Liale Bob ©

D7 Souder Albert T © 276-2460

8 Getes Donald W Jr © 276-5261

D9 Delaney Ruth ©

D1 Jenkins Harry © 276-0897

D11 Perry Della Mrs ©

D13 Worley Virginia Mrs ©

D14 Menogue M F ©

D15 Hill Russell ©

D16 Kuehl Helen Mrs ©

D17 Clark Dorothy S © 276-8170

D18 Dornhoffer Wm J © 276-64373

D19*Smith W K ©

D20*Doyle Steve © 276-936

D22 Vacant

23 Grier J Robt © 276-1566

D24 Barber Ralph O © 276-9628

D25 Tallman Margt Mrs ©

D20*Doyle Steve © 276-086

4 Ogle Grady © 276-68246

E6*Allen Clement ©

E10 Noble H D ©

E12 Capps Orville E © 276-0242

E28 Shalle Royand

E28 Shalle Royand

E28 Shalle Royand

E48 Shalle Royand

E48 Shalle Royand

E48 Shalle Royand

E58 Shalle Royand

E64 Shalle Royand

E65 Ward Paul ©

E10 Royand

E64 Shalle Royand

E64 Shalle Royand

E64 Shalle Royand

E65 Shalle 2d Stacer Richd K lwyr 276-4260 JELLET ST BEGINS 2505 Morena Gulf Service gus sta
274-2521
2519 Vacant
2521 Liquer Locker The 276-5055
2526 Mission Bay Mortgage Co 276-9450
2526 Mission Bay Mortgage Co 276-9450
2556 Petricae's Italian Food
Dean's Photo Service photo fnahrs
276-0960
INGULF ST BEGINS
2605 Jack-In-The-Bax Drive-Thru restr
276-4342
CLAIRMONT DR BEGINS
2772 Villa Laredo Condominiums
101 Fogg John R
102 Vacant
104 **Billings Glen A ®
104 **Bullings Glen A ®
104 **Bullings Glen A ®
106 **Warain Bill ® 276-8727
106 Vacant
1074 **Gelillett Charles ®
108 Morita Jan
1074-De Beck John
Vacant
203 Vacant
204 Vacant
204 Vacant
204 Vacant
204 Vacant
205 Vacant
204 Vacant
204 Vacant
205 Vacant
204 Vacant
205 **Shinzaki Karen
206 **Frigen G
207 Pierson Mel ®
208 Vargas Alfonso ®
208 Vargas Alfonso ®
208 Vacant
303 Tallerday Ollie N Jr ®
304 Vacant
305 **Fenton D
306**Wolfe D
307 Baldwin Larry ®
308 Vacant
309 Vacant 2505 Morena Gulf Service gas sta 276-2521 2519 Vacant From Decar 276-9631 C Edwards Raymond H Vacata Raymond H Vacata Raymond H Vacata Raymond H Vacata Raymond Robert Raymond Rober C Vacant
D Vacant
1456 Apartments
A*Giese Wm A 276-0934
B Vacant
C Vacant
D Vacant
1457 Stroud Tackle fishing teckle 276-4822
Stroud Wm © 276-4822
1458 Brennan Viola Mrs
1469 Architectural Coating Products Inc
coating-protectives 276-3141
Hanco Home Improvement Co Inc
geni contrs 276-2636
American Bidg Contrs Assn-Natl
Home Imprivant Cncl 276-1670
1464 Apartments
A No Return
B Meuborn Adela Mrs
C No Return
D Hurtado Patricia Mrs
E Ferrer Fred S 276-0084
H Newsom Richd
1465 Ninteman L J Constn Co Inc geni
contr 276-5810 3 No Return
4*Crowe C J
5*Martinez Tom
6*Olson Bob
7 Daley D M 276-4977
8*Williams Jack 275-1691
9*Hankins Don
10*Dray Robt
GRANT ST INTERSECTS

FRANKFORT ST 1975

2214 Wight Howard M @ 276-3708 2221 Molyneaux Earle C @ 276-2184 2224 **Horn Edw H 276-7617 2227 Sherrill Gail E Mrs 276-2846 2222 Johnson David A @ 276-8838 235 Vacant 243 Garcia Roberto E @ 276-1756 2525 Mayo Donald A @ 276-5467 LISTER ST INTERSECTS 2032 Schede Pater J @ 276-1541 2184 Vacant
2191 Perkins Steve 239-1449
2194 Turner Mayme
SAMPSON ST INTERSECTS
2203 Walton Dessie M Mrs 239-5258
2204 Noble Wiley 234-7671
2211 Vacant
22154 Gonzalez-Ponce Patricio ®
933-1271 FRANCISCAN WAY-Contd 3021★Zenor Vigil Mrs 234-9825 3021½ Vacant 3022 Mc Claron Henry © 233-3304 3022 Mc Claron Henry © 233-3304 3027 Vacant 3029*Lodge Belinda Mrs 239-6935 3029½±Garcia Israel 236-9574 3030 Vacant 3031*Richards Jean FRANKFORT ST -FROM 1540 MORENA BLVD NORTH ZIP CODE 92110
1325 Ott Mary E Mrs © 276-1534
1331 White Ora L ©
1339 Inlow Clarence W © 276-8543
1347 Frias Genevieve D Mrs ©
1355 Lumpe Edw L © 276-1899
1363 Groth Walter © 276-4406
1369 Arthur Richd E © 276-5089
1377 Tarango Y Selvador © 276-0650
TONOPAH ST INTERSECTS
1404 Archibeque M V 276-5953
1412 Tollerton Ella Y Mrs © 276-2688
1420 Piazza Lawrence H © 276-6817
1428 Osborne Wm E © 276-129
1431 Ward Robt A 276-5103
1436 Brown Fredk A © 276-1996
1444 Vacant
GALVESTON ST BEGINS
1452 Duran Antonio B © 276-174 ZIP CODE 92110 2252 Mayo Donaid A © 276-3467
LISTER ST INTERSECTS
2303 Sobeck Peter L © 276-1541
2311 ★Cuzzone Tito ©
2314 Masser John © 276-2094
2319 No Return
2324 Obodzinski Tadeusz © 276-8745
2327 No Return
2328 Sherman Le Roy V © 276-7666
2333 Rowland Ronaid G © 276-9436
2338 Rowland Ronaid G © 276-9436
2338 Bowland Ronaid G © 276-9436
2338 Bowland Ronaid G © 276-9436
2346 Babine Walter J ©
KANE ST INTERSECTS
2411 Eden Robt D © 276-1570
2414 Taylor Clair E ©
2421 Eden Robt D © 276-1570
2414 Taylor Clair E ©
2423 Bierman Charles Jr © 276-0048
2426 Canfield Wayne F © 276-3882
2430 Kovacs Peter © 276-1026
2435 Whermik Anthony G ©
2436 Campbell Robyn M © 276-1797
2443 No Return
2444 Brown Harold A © 276-0214
2451 Strong Wayne G © 276-6618
JELLETT ST INTERSECTS
2503 Quinn John M © 276-4160
2507 Dani James © 276-1023
2512 Douglas Logan E © 276-052
2522 Knowles Walter S © 276-0627
2522 Vaccant 2216 Gonzalez-Fonce Patricto ©
233-1271
2218 Mallory Hatley M © 234-7821
2220 Stewart Geneva B Rev Mrs ©
239-6789
2221 Vacant
2227 Vacant
2235 Craig Saml C © 234-6956 3031/x+Frice Frances Mrs 3031/x+Frice Frances Mrs 3033 Wyatt Cloteal K Mrs 233-7917 3033/x+Evans James 3036 Coleman Eddie R 3037+David Ed 239-0703 3039+Holloway Mae H Mrs 3041 Vacant 3039*Holloway Mae H Mrs
3041 Vacant
3041 ½*Allen Jeweri Mrs 233-1078
3043 Love Herman 233-4458
3043 Love Herman 233-4458
3045 Vacant
3044 Booker Johnny
3045 Laurent Augustus 232-3548
3060 Vacant
3062*Burnett Carol A ◎ 238-0488
3055 Wiley Lucille Mrs ◎ 233-0214
3057 Vacant
3067 Seventh Day Adventist Church
recrestion hall
3078 Harris Kosciusko ◎ 232-8392
3088 Cofey Dan ◎ 235-9730
3088*Remble Clarence 232-5330
3094 Vacant
S 31ST ST INTERSECTS
31005 Welker Clara Mrs 233-4465
3105 Johnson Ruth E Mrs
3110 Jackson Harriett M Mrs
3111 Williams Evona M Mrs ◎ 234-5718
3113 Vacant S 28TH ST INTERSECTS 2803*Ross Emma Mrs 236-9091 2812*Walton Brenda Mrs 234-9231 2813 Carter Cassie J Mrs 232-5432 2816 Vacant 2816*Wells Leroy 2814 Vacant 2818 Vacant
2824 Nueza Dolores Mrs
2825 Moreno Fred V ⊚ 232-3719
2825a Esparza Edw
2825b Vacant
2828 Kary Helen G Mrs 234-0540
2831 *Alexander Fred 235-9930
2834 Johnson Lillian Mrs 233-0258
2837 Vacant
2838 Sherman Charles G 282-1828 | 1452 Duran Antonio B © 276-7974
| 1453 Gleeman Fern T Mrs © 276-8645
| 1459 Hickey John G © | 1460 Bucy Wayne W © | 1465 Gillooly Christine Mrs © 276-0907 ASHER ST BEGINS | 1503 La Cloia Maria A © 276-4674
| 1504 Maxwell Douglas B © 276-6640 | 1511 Sanchiol James © 276-3649 | 1512 Fowell Dorothy I. Mrs © 276-2725 | 1519 Lujan Nellie 276-1873 | 1520 Vacant | 1527 Hohlweg Charlotte E © 276-5943 | 1528 Belt M Dale © 276-1844 | 1535 Saint Clair Lois K Mrs © 276-2715 | 1519 Lujan Nellie 276-1873 | 1529 Vacant | 1527 Hohlweg Charlotte E © 276-5943 | 1528 Belt M Dale © 276-1844 | 1535 Saint Clair Lois K Mrs © 276-2816 | 1543 Bathgate Virginia H Mrs © 276-5116 | 1543 Bathgate Virginia H Mrs © 276-5116 | 1543 Bathgate Virginia H Mrs © 276-5116 | 1549 Don Ruben T LITTLEFIELD ST INTERSECTS | 1705 Smith Edw D © 1709 Rowe Sandra S © 276-7877 | 1719 *Komestan Patsy L Mrs 276-9284 | 1720 Larrabee Earl T © 276-3986 | 1730 *Price Charles © GARDENA AV INTERSECTS | 1804 Atkisson Frank G © 276-2425 | 1805 Johnson Ruth M Mrs © 276-1415 | 1810 Gonzalez John © 276-9785 | 1811 Weddle Duane | 1821 Lansdown Eliz G Mrs © 1822 Marquis Thos N © 276-2596 | 1827 Moreno Drema 276-5803 | 1832 Toohey Paul T © 276-6833 | 1837 Jones Horsee M © 276-1507 | 1845 Manzano Fred N © 276-1509 | 1845 Winter Blanche M Mrs © 1856 White Blanche M Mrs © 1861 Mizzlee Clarence E © 1866 Norvell Harry © 276-9338 | 1877 Duncan Loma A Mrs © 276-1503 | 1879 Close Daul H © 276-9308 | 1879 Close Daul H © 276-9309 | 1879 2838 Sherman Charles C 236-1060 2840 Vacant 3110 Jackson Harriett M Mrs
3111 Williams Evona M Mrs © 234-571
3113 Vacant
3113 Vacant
3113½ Vacant
3115★Garcia Mabel Mrs 233-5083
3117 Saavedra Julian R 235-6707
3120★Alexander Carroll Mrs
3126 Woodson Harry J © 232-9033
3130 Williams Albert 234-4867
3132 Forrest Elsie Mrs
3134 Williams Albert 234-4867
3134 Williams Mary Mrs © 234-3831
3134½ Mc Clain Helen M Mrs
3136 Vacant
3159 Mc Kinley Thos E Jr ©
3140 Vacant
3155 Fowler Willie J 234-7838
3165 Vacant
3159 Grisham Marie Mrs © 232-0532
3167 Dickens Joseph D © 233-0387
3163★Cummings Dave 232-0380
3163 Romero Ruth S Mrs © 233-6787
3181 Williams Jadye 233-3472
3180 Vacant
3188 Vacant
3188 ★Robinson Charles E 233-8694
S 32D ST INTERSECTS
3212 Johnson Maggie Mrs 233-3965
3214 Vacant
3216 Shannon Richd 234-9560
3217 Williams Kath M Mrs © 232-1885 2520 Knowles Weiter S © 276-0627 2521 Vacant 2529+Phillips Robt D 276-9812 2530+Braun Barbara 2535 Vacant 2536 Jackson N Ethel Mrs © 276-2360 2543 Anderson Harry N 276-7510 2544+Hannon Robt L ⊚ FRANKLIN AV --FROM 1610 COMMERCIAL ST SOUTHEAST ZIP CODE 92113 2005 Johnson Martha R Mrs © 2010 Garcia Juan 2005 Johnson Martha R Mrs ⊚
2010 Garcia Juan
2011 Custom Cabinet Co cabt mkrs
239-2796
Wasser Construction Co genl contr
239-2796
2014 Vacant
2020 Williams Marilynn Mrs
2021 Vacant
2026 Williams Odell Mrs 232-0680
2029 Watkin Beatrice 238-0751
2031 Ewings Ora Mrs
2035 Green Theima Mrs
2041 Gonzalez Miguel
2043 Isunsa Maximo
2048 Eason Mack 232-3985
2049 Wright Ada B Mrs 233-0626
2049½ Cervantes Frank A ⊚ 239-4762
2050 Jones Mildred Mrs
2055 Vacant
2060 Bartlett James 232-5693 3214 Vscant
3216 Shannon Richd 234-9560
3217 Williams Kath M Mrs ⊚ 232-1885
3226 Butler Lævernec J ⊚
3228 Jackson Johnnie B Mrs 232-8235
3230 Williams James ⊚ 239-5585
3231 Vscant
32311 Vscant 2055 Vacant
2060 Bartlett James 232-5693
2060 Porter Wm 239-3728
2061 No Return
2065 Vacant
2067 Vacant
2068 Garrett Ada F Mrs © 239-0579
2071 Robinson Mildred Mrs 236-1760
2075**Langley Sandra Mrs
2076 Vacant
2076 Vacant 3231½ Vacant
3238 Brown Lonnie 235-9568
3240 Wilson Elvin ⊚ 239-7209
3240½ Vacant
3241 Apartments
A Moore John F 233-0793
B Colley Vanessa
C*Mason Dwayne 239-9927
D Vacant
E Vacant 2902 Church Or God Evening Light Sain 239-8750 2909*Mims Beulah Mrs 2912*Mc Adams Thos 2914 Williams Joseph © 239-8974 2916 Vacant 2919 Lewis Lula M Mrs 232-2401 2922 Butler Jonathan 232-5649 2925 Weaver Cornelia M Mrs 239-4918 2928 Vacant 2928½ Vacant 2939 Dobbs Mary E Mrs © 232-1762 2940 Bell James © 2941 Vacant 2942 Shoemaker Clyde 232-803 2942½*Hermosillo Delgado M 233-0047 2944 Vacant 2946*Vacant 2946*Vacant 2946*Vacant 2948*Docant 2940*Docant 2940*Doca 2075 **Langley Sandra Mrs
2076 Vacant
2085 **Shannon Bertha
2085 **Shannon Bertha
2085 **M Wilson Wm Jr © 235-4671
2086 Hibbit Tom 234-3801
2096 Mrbitt Tom 234-3801
2095 Martinez Aurora Mrs 233-0205
2096 Compton's Market 232-0325
EVANS ST INTERSECTS
2103 Dickens Orville E © 239-8697
2104 Harris Ernest © 239-5831
2110 Doucette Traville ©
2111 Wallace Joseph © 232-26028
2118 Colema Abel
2119 Holloway Alice P Mrs 232-5841
2121 Millan Angel © 239-4746
2128 Taylor Elmo © 232-1785
2131 Gutlertez Ramon 239-4722
2134 Vacant
2131 Gray Fred I © 232-8246
2142 Buggert Helen Mrs © 234-4791
2137 Gray Fred I © 232-8246
2142 Buggert Helen Mrs 239-6905
2151 Voss Saml © 233-0664
2152 Stolte Rosa M Mrs © 232-2207
2154 Vacant
2156 Cooper Rosie Mrs ©
2158 ½ Vacant
2151 Doxey Rudojh V 239-4650
2162 **Xeant
2162 Vacant
2162 Vacant
2162 Vacant
2162 Vacant
2162 Vacant 184 BANCROFT ST INTERSECTS 3560 Mc Afee Ruth A Mrs 234-4405 37TH ST INTERSECTS
ZIP CODE 92113
37194Andrews N L 262-8362
3720 Moore Mary P Mrs 262-5103
3727 Ryles Doris Mrs 264-5418
3728 Harris Johnny © 263-1810
3729 Richardson Elma G Mrs 264-9817
MLBRAE ST INTERSECTS
3754 Gilbert Wm Jr 263-7437
3765 Kilgore Charlie
3771 Oisen Beverly Mrs
3776 Faison James 263-1893 44 2946*Vazquez Cervando 239-2545
2948 Vacant
2950 Vernon Clara V Mrs 234-2052
2952 Vacant
2953 Robins Theo © 233-3027
2954 Harris James E © 232-282
2961 Crossley Charles R © 239-0536
2962 Vacant
2968 Robinson Altha Mrs 232-0910
2969 Vacant
2970*Abram Abs 239-1762 2968 Robinson Altha Mrs 232-0910
2969 Vacant
2970⊁Abram Abe 239-1762
2974 Henderson Birdie L Mrs 235-0655
2975 Martin Earl A 236-0200
2976⊁Partida Jose 233-3480
2978 Taylor Maggie Mrs
2980 Arreola Anastacio 234-3747
2982 Mc Creary Rodessia Mrs
2982½★Rivas Martha Mrs 233-9282
2984 Miller Harris B ⊕ 232-2361
2987 Watkins Charles E ⊕
2995 Green Henry L 239-0644
S 30TH ST INTERSECTS
3012 Davis Wilford 236-0690
3014 Ballard Dora T Mrs 235-4581
3015 Vacant
3015 Lambert Naomi 234-6830
3017 Vacant 38TH ST INTERSECTS
3817*Bonillas Jose M 264-7069
3820 Bonillas Arturo A ② 264-0838
3825 Vacant
3826 Corley Sylvester ③ 264-8012
3831 Collins Easter ② 264-8017
3835*Nevila Della Mrs 263-2712
3840 Payne Emma Mrs ③ 263-4248
3841 Apartments
1*Guymon James
2*Chambers E M
3 No Return
3 *No Return
4 *No Return
5 *No Return
5 *No Return
6 *No Return
7 *No Return
8 *No Return
9 *No Retur 188 2162 Vacant
2162 ½★Martin Lovie Mrs 234-9436
2164 Vacant
2166 Wooten Joseph J Rev © 233-8763
2167 Vacant
2168 Hiter Herman J ©
2174 Vacant
2176 Vacant
2176 Vacant
2181 Lopez Victor 239-0613 MILTON ST INTERSECTS

MORENCI ST 1975

MORENA BLVD—Contd 2821 Casa Del Morena Apartments 276-7013 1*Kaestner Betty 2 Godman Sally 3 Vacant 3 Vacant
4*Garrett Delvin
5*Johns Paul
6*Yorston Richd
7*Burleson John C
8 Bunch John W
9 Kaylor Gayle 276-9274
10*Brant Walter 11★Farmer Donald 12★Lessner Philip 12*Lessner Philip
13*Cadet Victor
14*Fiorella Eug
15*Novy Phyllis
16 Gehlhaar Joe K 276-6199
17 Duke Nancy
18*Indin Scott
19*Cohelan Timothy
20*Grose Paul
2827 Hofmann Fanny P Mrs
2829 Vacant 20%Groes Paul
2827 Hofmann Fanny P Mrs
2829 Vacant
2831 Paul Adolph
2865 Smith James M 275-0090
2871 Christenson James A © 276-9439
2871 Kotas Michells
MC GRAW ST BEGINS
3303 Darby James O Jr © 273-2285
3309 Kelly Craig
3315 Graber Raymond B © 274-4604
3321 Roberts Behia Mary Mrs 272-5414
3329 Beehler Chester A © 273-9042
3337 Fein Lester © 276-918
3346*Gruber Marie K Mrs © 270-6912
3351 **Holloway Wm © 273-985
3367 Sloan Richd J © 274-4531
3375 Espinosa Emigdio © 273-6731
3385 Smith James O 270-4764
BAKER ST BEGINS
3435 Stilson Bird Farm parakeet & finch
breeders 273-4596
3441 Stilson Mabel Mrs © 272-5220
TICONDERIGGA ST BEGINS
3516 Moran Pedro R © 273-6490
3527 Kothlow Jack F 273-0568
3535 Marzec Stephenus © 274-2640
PAUL JONES AV BEGINS

BALBOA AV INTERSECTS
3775 City Dept Of Utilities 236-6289
City Dept of Pub Wks-Street (Mtcc
Div) 236-5620
City Dept Of Pub Wks Sanitation
Div 236-5830 AVATI DR INTERSECTS

4491 Balboa Roofing Co contre 274-1411
4605 Rohr Industries Inc (Rose Canyon Facility) 276-8310
Solar Div Intl Harv Co (Rose Canyon Fcty) 4695 Vacant
JUTLAND DR BEGINS
4901 Rose Canyon Business Park ofc bldg
112 Institute For Scientific Analysis
non-profit orgn 272-9311
114 R G I S Inventory Specialists
270-1350

270-1350
115 United Retirement Centers Inc developers & oprs 270-0070
120 Rome Development Corp property mgrs 276-9340
201 Starline California Graphics Inc prntrs 270-5880
205 Computervision Corporation edp 270-7800

200 University Of California Extension Div college 452-3405
211 Technical Research In drug research 272-0270
310 Sail Laundry Service sail clas 270-2151

311 Gus' Carpet Service carpet clns 272-7521

313 Pacific Magnetic Structures Inc magnetic research laby electro m 270-4631

314 Creative Carpentry cabtmkrs 270-4631 316 Advance Saw Works Inc tool

distr 318 Vacant

onstr
318 Vacant
319 Tepco of San Diego air
purifications sys 270-6940
320 J C & Company swing seat
270-4100
320 Jensen Enterprises swing seata
270-4100
321 Los Angeles Times newspapers
270-0431
322 Packing & Seals Inc pkg & seal
distr 276-0681
401 Thermo Materials Inc thermal
insulation mfr 272-0061
402 Air Pollution Technology Inc air
pollution research & dev
272-0050
405 Silver Mort & Associates clo mfr

Mort & Associates clo mfr

407 Vacant
409 Litton Medical Systems med &
hosp sup 270-4311
500 Total Concepts Inc automated
cabt equip 270-8550
600 A & A Distributing light fixtures
whol 273-4363

whol 273-4363
700 Vacant
801 Vacant
804 Bekins Building Maintenance bldg
mtce & jan serv 270-6360
806 Fluid Systems Div Of U O P

water purification r & d 299-9920

809 Noland Paper Company whol 276-6820 811 Graber Ray mach shop 273-3661

902 Vacant 904 Good Business Enterprises

904 Good Business Enterprises
holding co 2704000
904 G B Custom Crafte Ltd plastic
vaccum forming 270-4000
ARIANE DR BEGINS
1001 K-Tube Corporation hypodermic
needle tube mfr 272-1430
1100 Formula Tire Distributor racing
tires-whol 272-1940
1101 I S Shoe Corporation imports
270-4711
1101 Jute-King imports 270-4711
1101 Weaver-Hay Industries real est
inv 270-7350

MORENA PL —FROM 1103 MORENA BLVD SOUTHEAST

ZIP CODE 92110
5145 L & L Printers Inc 276-0010
Salini Joseph M comi artist 276-0012
Lem Roland Lettering Studio design lettering 276-0013
5161 Broutin Andre L © 276-1863
5171 Johnson & Sons Inc carpets & drapery 276-1524
5181 Vician Inc electronic components mfrs 276-9470
CUSHMAN AV INTERSECTS

MORENCI ST —FROM 4200 TONOPAH ST NORTHEAST

ZIP CODE 92110 ZIF CODE 92110
1403 Sala Christopher V 276-3753
1406 Van Orshoven Joe L © 276-0188
1413 Brooke Robt D land inv © 276-4726
1414 Cole Raymond L © 276-188
1425 Rudasill Robt E © 276-4146
1426*±Jelley Ernest E © 1426*±Jelley Ernest E © 1428 Schillinger Paul J Jr © 276-7691
1431 Mavis John K 276-0310
1436 Gisbriel Jorge E © 276-9332
1437 Tuggey Glen
1441 Van Estenberg Robert J
1444 No Return

1437 Tuggey Glen
1441 Van Estenberg Robert J
1444 No Return
1451 Bracy La Forest R ◎ 276-2696
1462 Hicks Harry C ◎ 276-2678
1460 Larriva Francisco R ◎ 276-1426
1461 Vacant
ASHER ST INTERSECTS
1502 Mala John M ◎ 276-0422
1507 Thomas Louis ◎ 276-5167
★Brooks Bernard A Jr 276-1678
1514 Wilson Lee Mrs ◎ 276-5797
1522 Fontanares Inocencio ◎ 276-1080
1523 WKlein Irvin J ◎
1526 Norlin John C ◎ 276-2096
1527 No Return
1531 Georgian Thos C ◎
1532 Bartolini Norma Mrs ◎ 276-5021
1641 Nicoll Geo ◎ 276-1355
1496 Good Dale E ◎ 276-2374
1550 Stillmam Geo A ◎ 276-1411
1569 Gilliland Hugh ◎ 276-7971

MORLAN ST —FROM 5000 BLK GAYLORD DR EAST

ZIP CODE 92117 ZIP CODE 92117
3601 Bulman Raymond B © 273-4215
3602 Woskow Ronald M © 274-9368
3609 Hotze Wm R 270-0584
3610 Gaus Henry J ©
3617 O'Hagan John F Jr © 273-7415
3618 Dave Narmad M © 274-3649
3625 Morefield Kenneth A © 273-1577
3626 Lee Cecil S 274-4576
3633 Vacant
3634 Markham James C © 273-6393 3634 Markham James C © 273-6393 3641 Vacant 3642 Martinez Frank @ 3649 Vacant

3649 Vacant
3650 Thornton James L © 273-7316
3657 Vacant
3658 Herold Robt E ⊚ 273-0182
3665 Vacant
3666 Boxberger Eleanor A Mrs ⊚
3673 Scheible Howard
3674 Schmidt Matthew J ⊙ 274-2080
3683 Euper Joyce © 274-3465
3684 £

MORLEY ST -FROM 2200 COMSTOCK ST NORTH

ZIP CODE 92111
2202*Wilson Cameron D 279-5205
2204*Delgado Joseph R 292-7609
2206 Mc Crary Carmen M Mrs 279-2804
2206*Paulson Carl
2216*Hubbell Claudia J Mrs 565-7867
2218 Reeves T V
2220 Lukpetris Paul P © 278-4839
2222 Murphin John H
2226 Chadwick J D
2228*Mc Cardell Patricia
2230 Barringer Edmund W chiropractor
277-3057
2232*Walker Joe

3694 Mc Grath Matthew J @ 273-5578

2232*Walker Joe 2242 Burks Nathl W Jr phys 279-4540

2242 Burks Nathl W Jr phys 279-4540
2250 Apartments
1 Archibald Emma B Mrs 278-4963
2*Tait Wm M 560-7979
3 Vacant
4 Wolford Richd M 278-1166
5*Norris Larry
6 Tracy Tim 277-6430
2252 Apartments
7 Hulen Ada Mrs 277-4335
8*Kohr Geo T 560-6738
9*Sharp Margt
10 Martinez Nazarro A 277-5626
11 Vacant
12*Cummings Benj F 279-7029

11 Vacant
12*Cummings Benj F 279-7029
MORLEY WAY INTERSECTS
2304 Mesa Linda Apartments
1 No Return
2 Chavarrias Rita 279-8364
3*Woods Travis
4*Luce Hung D 278-835
5 Whitehead John
6*De La Torre Dorado F 277-2409
7*Dhein Dorothy E Mrs 565-2536
8 Vacant

7*Dhein Dorothy E Mrs 568-8 Vacant 9*Cluchey Lillian S 560-9069 10 No Return 11*Duncan Pondora Mrs 12*Wenholz Lester 565-0499 2312 Yoskum Vivian F 277-4553 2318*Frey Dennis D 560-7747 2320*Cervantes Joes 560-8792 2322 No Return 2324*Martineez Maria ⊚ 2338 Kelly Arvis L.

2324 Martineez Maria ⊚
2332 Kelly Arvie L
2334 McJaham G 278-3296
2338 McJul Deborah Mrs 560-8453
2348 Yunker Ralph V ⊚ 277-4799
2350 McJul There are a constructed by the construction of the construction o

565-6032
2360 County Human Resources Agency
(Project 86) 565-6033
2362 Bayside Settlement House pre sch &
family counseling 278-0771
ULRIC ST INTERSECTS

MORLEY WAY —FROM MORLEY ST WEST 1 NORTH OF COMSTOCK ST

ZIP CODE 92111

ZIP CODE 92139

2303 No Return

92 MORLEY FIELD DR --FROM PARK BLVD EAST 1 SOUTH OF UPAS ST

ZIP CODE 92104 FLORIDA DR INTERSECTS City Municipal Pool 296-2811 Ray's Bob Tennis Shop tennis instruction 295-5362 Salboa Park Tennis Clubhouse North Park Little League San Diego Archers Club 236-0736 MISSISSIPPI ST BEGINS

MORNINGSIDE ST —FROM 5700 BLK POTOMAC ST SOUTHEAST

ZIP CODE 92139
2203 Magill Robt F ©
2212 George Nellie Mrs © 474-1023
2213 Lozano C Philip 474-3406
2217 Vacant
2219 Jones Lonnie M ©
2220 Barrett Juanita © 477-9622
2227 Davis Wilbern D © 477-1543
2228 Carney Aloysius J © 477-0660
2235 Castro Arth © 477-9103
2236 Rice Patk 474-2813
2243 Walker Soct 474-1095
2243 Walker Soct 474-1095
2244 Bryant Harold G © 477-6595
2251 Hinds Thos © 477-1827
2252 Salta Jerald A ©
2260 Watley Otha T © 474-2752
2261 Hinds Andrew T © 475-3939
2267 Padilla Andrew
2268 Peterson Doris R Mrs © 477-471
2275 Vacant
2275 Vacant ALBERMARLE ST INTERSECTS

2308 Coombs Kenneth 477-0251 2311 Blackwell Richd E 475-1530 2319 Vacant 2319 Vacant
2327 Thrasher Vernon 475-1138
2328 Vacant
2335±Wright Kenneth J ⊚ 479-3544
2343 Freeman James R Rev ⊚ 475-1704
MIDWICK ST INTERSECTS
2351 Purdy Edw E ⊚ 479-3561
2359 Downing Herbert ⊚
2367 Wargenorgt John B ⊚ 275,1882 2367 Wozencraft John B © 275-1582 2375 Simpson Robt R © 475-2416

CUMBERLAND ST INTERSECTS 2404★Swan W W 479-9574 2405 Stribling Winfred D © 475-1416 2412★Buchanan Gordon © 3412*Buthanan Gordon ©

2415 Vacant

2420 Loth Wayne E ©

2422 Callanan Jack J ©

2428 Romeno Gilbert G © 475-4172

2431 Bane John R © 475-3876

2434 Smith Jack A @ 475-3386

2437 Wilson Ed © 475-199

2444 Kile Wayne E © 475-199

2444 Kile Wayne E © 475-1642

2451 Drew Louis R

2452 No Return

2453 Powless Lloyd 475-2590

2454 Dumas Michl D 475-0884

2459 Vacant

2460 #Gonzalez Jose B

2461 Henderson Janice Mrs ©

2461 Henderson Janice Mrs ©
2468 Tom Rose C Mrs © 475-1853
2476 Orbke Raymond I © 475-4865
WINCHESTER ST INTERSECTS

2476 Orbke Raymond 1 ⊚ 475-4865
WINCHESTER ST INTERSECTS
2504 No Return
2515 Carter Carl W ⊚ 475-4681
2521 Young James B ⊚ 475-3879
2527 Fettars James B ⊚ 475-3879
2527 Fettars James B ⊚ 475-3879
2528 Bonilla Pedro J ⊚
2568 Salazar Walter P ⊚ 475-1930
2573 Delgadillo Danl V ⊚
2576 Sarati Felipe T ©
2605 Saint Timothy Lutheran Church
475-1575
2606 Adams Gary R ⊚ 475-1662
2610 Reyes Apolinario
26388*Sarmiento John
2660 Molloy Valdemar H ⊚
2670 Young Joe P Jr 475-2982
2675 Murphy Archie ⊚
RANCHO HILLS DR INTERSECTS
2686 Vacant

CALLE CASAS BONITAS INTERSECTS 2706 Holloway Wm J @ 475-4455 2715 Vitollo John @ 475-2752

CALLE CASAS BONITAS INTERSEC 2706 Holloway Wm J ⊕ 475-4455 2715 Vitolio John ⊕ 475-4752 2724 Vacant 2725 Caligagan Richd M Jr ⊕ 2740 Vacant 2725 Caligagan Richd M Jr ⊕ 2740 Vacant 2753 Coath Geo ⊕ 475-2553 2768 Fox Wm A ⊕ 475-8092 2773 Coath Geo ⊕ 475-2563 2768 Fox Wm A ⊕ 475-3092 2773 Coath Desmond A ⊕ 475-4726 2782 Pastoral Jay J ⊕ 2783 Scott Irms R Mrs ⊕ 475-4517 2792 Charbarneau Audrey M Mrs ⊕ CALLE SALIDO DEL SOL BEGINS 2802 Vacant 2807 Fleming Robt ⊕ 2808 Espinosa Vicente N ⊕ 475-1403 2815 Bernard Walter R ⊕ 475-4684 2821 Fugere Donald A ⊕ 478-1227 2826 Easter Richd ⊕ 475-3261 2827 Bernesthy Eldon C ⊕ 2833 Gore Charlie M ⊕ 475-4196 2841 Redmer Russell W ⊕ 475-2873 2847 Vacant 2875 Martinez Severo 479-1933 2876 Pearson John R 2880 Neely Horace H ⊕ 475-4951 2886 Giesbrecht John D ⊕ 475-2508 2891+Thornton Albert 2894 Gonzales Cath S Mrs 479-5370 CALLE CASAS BONITAS BEGINS 2910 Carl Joseph W ⊕ 479-6171 2818 White Arth R ⊕ 2850 Cabullo Bienvenido D ⊕ 2850 Cabullo Bienvenido D ⊕ 2857 Cadena Salvador ⊕ 479-8801 2958 Gulliver Faye Mrs ⊕ 2950 Cabullo Bienvenido D ⊕ 2957 Cadena Salvador ⊕ 479-8801 2958 Gulliver Faye Mrs ⊕ 2966 Cupers Cyictor R ⊕ 475-2393 2990 Wise Myrtle L Mrs 475-2311 2893 Largey Joan M Mrs ⊕ 475-2190 2970 Ihrig Eliz T Mrs ⊕ 475-3371 2999 4750ms J ⊕ 2000 5 Ende Donald ⊕ 3009+85kelton David L ⊕ 475-3822 3015 Henderson Robt L Jr ⊕ 479-1810 3009+85kelton David L ⊕ 475-3822 3015 Henderson Robt L Jr ⊕ 479-1810 3009+85kelton David L ⊕ 475-2867

MORRELL ST —FROM 3900 CROWN POINT DR NORTH

ZIP CODE 92109 3976 Crown Point Apartments 270-2952

4391457.4 Page: A18

SHITE 250

1870-007

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NASHVILLE ST 1975

284-1669

NARRAGANSETT AV—Contd 304 Richardson Glen E 224-0224	144
304 Richardson Glen E 224-0224	144
305 Haight Raymond 224-9908	150
307*Welch Walter E 224-8342	151
306#Lake Raiph H 224-9547 307#Weich Walter E 224-8342 308 Kitrell Wm E Jr psychologist	152
223-1266	152
5075 Casa Marina Apartments 101★Hanson Larry	
102 Dorr Norman B 224-4427	L
103★Dillarg Maxine	
104*Morrison Mark P 225-1907	
105★Inman Janner	NA
106 Vacant 107 Sorrell Neil R 223-8683	1
108 Vacant	7
109 Pruett Walter L 224-4237	360
110★Golson David	361
111 Angeloff David 222-2750	361
112*Casey Sandy 222-0056 201 Latham Richd E 224-4372	361 362
202 Fricon Ross	362
203*Donovan Donnie 223-0033 204*Martone Kenneth E 224-0504 205*Cairons Nancy 222-3724	362
204★Martone Kenneth E 224-0504	363
205 Cairons Nancy 222-3724	363
206*Vetter Mike D 225-1944 208*Weeks John	363 364
209* Horton John	364
209*Horton John 210*Baker Richd 211*Block Thelma	364 364
211★Block Thelma	364 365
212*Souers Franklin E 222-9176 STREET CONTINUED	365
STREET CONTINUED 5083*Kierulff Wm	365 365
5085 Sompletsky Blanche J Mrs 224-4898	366
5087 Mc Donough John K	366
5085 Somplatsky Blanche J Mrs 224-4898 5087 Mc Donough John K 5089 Surfaide Apartment Motel *Roberts Terry 224-9128	366
*Roberts Terry 224-9128 50891 Vacant	367 367
5091 Vacant	367
5091¼★Smith Erric	370
5093★Jaeger Fred 224-5894	370
509314*Koontz Melba Mrs OCEAN FRONT ST INTERSECTS	370
5101 Apartments	370 371
205 Hiltz Laura R Mrs	371
206★Pearson K C	• • • • • • • • • • • • • • • • • • • •
207*Shoemaker Gary W 224-0571 305 Richey Richd C 224-1019	372
305 Richey Richd C 224-1019	372
306★Humiston Susan 307★Sprinkler Leland 222-0768	372
	373
101 Johnson N B 222-6787 102*Mc Kee Ernest 103*Reardon Patricia 222-7183	378
102★Mc Kee Ernest	373
103★Reardon Patricia 222-7183	374
201 Berning Paul W 222-1314 202 Vacant	374
203★Cashion Wayne	378 378
204 Vacant	378
301★Blecksmith Gerald W	376
304*Burke Leland J	37
5116 Silver Spray Apartments Hotel & Cottages 223-8186	-
West Charles	NA
	1
49	
NARRAGANSETT CT -FROM 4100	
NARRAGANSETT AV NORTH	450
ZIP CODE 92107	45
1837 Hagar Ben W @ 222-3542	45
1838 Magnuson Dennis C @ 222-4166	45
1837 Hager Ben W © 222-3542 1838 Magnuson Dennis C © 222-4166 1843 Goldsmith Gano C © 222-2135 1844 Webb Thos S © 223-6972	45
1044 WeDD Thos S @ 223-6972	45

1531 Johnston James C © 282-2021 ## 1531 Johnston James C © 282-2021 ## 1536 Mc Cuistion Celsus P © 284-4744 ## 1536 Mc Cuistion Celsus P © 284-4744 ## 1537 Cummins Emerich J © 281-9196 ## 1536 Mc District A © 284-7658 ## 1536 Mc District A © 284-7658 ## 1537 Sundron John 281-1729 ## 1537 Sundron John 281-1729 ## 1537 Sundron John 281-1729 ## 1537 Sundron John 281-1873 ## 1538 Sundron John 4534 No Return

```
3103 No Return
3105 No Return
3106 Evans John © 276-1207
                 3106 Evans John © 276-1207
3109 Jones Peter
3112 De Leva Vincent
3114 Childs Geneva J 276-4127
3115 Primmer James L ◎ 276-6151
3120 Thurmer Martha R ◎
3121±Kim Calvin Y 275-0157
3122 Adams Dell M
3126 Mc Neil Charles E ◎ 276-7962
3127★Gilmore Linds K Mrs 275-1835
3128±Thomas Ralph F 275-2296
3133±Nicholas Earl J ◎
3136 Millikan James A ◎
3139 Mc Andrew Ralph E 276-1901
                    NATIONAL AV -FROM 150 12TH AV SOUTHEAST
                   ZIP CODE 92101
IMPERIAL AV INTERSECTS
13TH ST INTERSECTS
1313 Pee Gee Parts Inc whol auto parts
236-1363
                     1344 Vacant
                   ZIP CODE 92113
14TH INTERSECTS
1430 Reliable Pipe Supply Co Inc whol
industrial sup 233-0118
15TH ST INTERSECTS
COMMERCIAL ST INTERSECTS
                   COMMERCIAL ST INTERSECTS
1501 Olson Building ofe bldg
National Marine Engineers 235-6484
Olson Development Co genl contr
235-1684
Siayen Ervin A real est 238-0118
STREET CONTINUED
1521 Vacant
1528 Reliable Pine Sunnly Co Inc (Yd Ofe
164
                     1526 Reliable Pipe Supply Co Inc (Yd Ofc
                     & Wheel Stappy Co Int (14 Okt & Wheel Stappy Co Int (14 Okt & Wheel Stappy Co Inc genl contr 235-6528
                     230-6028
1551 Fusecote Div C M Corp custom
epoxy coatings 229-5656
16TH ST INTERSECTS
                      1603 Central Meat Co Inc whol 239-1391
1605 Vacant
1629 American Auto Wrecking 232-4747
1636 Vacant
                       1638 Vacant
                       1639 Summerville Bessie M Mrs ©
                      234-5875
1643 American Auto Wrecking (YARD)
1651 Campos Alfonso 239-9942
1659 Radford Overhead Doors mfrs
                     1659 Radford Overhead Doors mfrs 239-8558
1663*Luque C Jessica Mrs 232-3965
1665 Cornejo Mario
1667 Smolan Industrial Supply 233-6141
1668 Ortiz Concrete Construction Inc contr 238-0535
1673 Castaneda & Sons tailors 239-8425
*Castaneda Vincente 239-8425
1675 Alvardo Eloisa 233-7028
1677*Marez Aurelio
1678 Radfriguez Josephine Mrs 232-8334
                       1678 Rodriguez Josephine Mrs 232-8334
1682 Vargas Luis
1686 Carlos Cleaners 239-3793
                     1686 Carlos Cleaners 239-3793
1686½ *Carcia Raquel Mrs
1694 National Liquor House 238-8567
Hikel John L
SIGBEE ST INTERSECTS
1701 National Bakery 239-4043
1702 B I G Tire Co 233-3006
1709 Business Bookkeeping Service
bookkeeping serv 234-4805
```

```
1709½ De Martinez Humberto 235-8745
1711 Sandoval Ramon D 239-2548
1713*Martinez Delores M
    1715 Vacant
1719 Model Ex-Offenders Inc rehab orgn
for ex convicts 234-6191
1720 American Auto Wrecking (Storage
Yd)
Rear*Rios Rosa 235-4156
1722*Garcia Ramire 232-9687
       1723 Cornist Glenn
1724 Vacant
1724 Vacant
1724½ Vacant
1727‡Villegas Ramon
1728‡Flores Luis
1729‡Lopez Rafael G 232-9792
1729*Flores Luis
1729*Lopez Rafael G 232-9792
1739*Lugo Juan
1735 Balboa City Steel Co (SHOP)
1736 Vacant
1738 Cota Ramon L
1738 Vacant
1743 Balboa City Steel Co (Stee) S-2965
1744 Pena Carmen Mrs
1746*Cota Commen Consulo
1746*Auguert Martha B
1746*A Anguiano Consulo
1746*Auguert Martha B
1746*A Anguiano Consulo
1750*Ojeda Reynoldo
1750*Ojeda Reynoldo
1750*Ojeda Reynoldo
1750*Ojeda Reynoldo
1750*A'Ojeda Juan
1752 Araujo Guadalupe Mrs © 232-2642
Rear Sories Wendell
1754 Neighborhood Cafe 238-8566
Rear*Castaneda Ramon
1759 Villalobos Ramon 236-0193
Rear Ruiz Francis J
1775 Atlas Iron & Wire Works 232-7115
1776 Atlas Iron & Wire Works 232-7115
1776 Tropic Ice Cream Co mfrs 232-8641
1786 E Porvenir tortilla mfr 239-5758
Rear*Lopez Rosalio M
1786*A Squilera Rafaela Mrs ©
1789 I M P A C T consultants 239-3881
1792 Bob's Mohawk gas sta
1793 Amador Jr Market 233-691
1809 Chicano Free Clinic 234-8171
Chicano Free Clinic 234-8171
Chicano Free Clinic 234-8171
1818*Gonzales Santos Mrs 239-6395
1820 Vacant
1822*Pena Ignacio
       1822 Vacant
1825 Vacant
1825 Vacant
1825 Vacant
1828 Vacant
1830 Vacant
1831 Garum Neda
       1831+Garum Neda

Rear Vacant

1832 Robinson John

1832¼ Vacant

1833 Brackett Charles A © 234-4539

1836 Trillas Jusnita Mrs

1841 Camass Co boller repr 239-6340

1842★Corona Wm ©

1848 Noe Bryan L

1852 Ginglardy & Sons Welding Works

232-3285

1853★Lomeli Francisca Mrs 233-5817
       235.3285
1853*Lomeli Francisca Mrs 233-5817
1853*Lomeli Francisca Mrs 232-2841
1854 Ace Radiator Service auto radiator representation of the service auto radiator representation of the service auto radiator representation of the service autoration of 
           1863 Coast Ship Supplies 239-7158
Ramirez Marcus R.
1864 Saver B A Steel Co new & used
steel & machy 234-7733
Seawear Of San Diego mail order
hase 239-7372
                Turner Wilbur L
1865 A-Action T-V telev repr 233-9197
1865½ Perez Jose C 239-8730
1867*Gonzales Manuel
                1869 No Return
1873★Miranda Jose
1875★Mendoza Maria Mrs 234-2490
              1875% No Return
1877% Vacant
1879 Ramirez Maria Mrs
1879 Ramirez Maria Mrs
1880 Vacant
1882 Mendoza Cenobio
              1884 Flores Rosalie V Mrs ©
1885 El Sarape Cafe rostr 238-8570
Rear Penney Lucille Mrs ©
1887 Rosarita Market 234-4247
CROSBY ST INTERSECTS
                                                                                                                                                                                                                                                                                                                                                                                          16
                                   CROSBY ST INTERSECTS
              1901 Put Putt Shop (Transmission Shop)
232-5061
1902 Archibald's Andy Arco Service gas
storage 292 2020
```

1844 Webb Thos S © 223-6972 1849 Naso Nellie G Mrs © 222-2121 1850 Bailey Walter M Jr © 222-5942

NASHVILLE ST —FROM 1400 BLK MORENA BLVD NORTH ZIP CODE 92:110

SPORTS ARENA BLVD INTERSECTS
1323 Don Carlos J 276-2788
1325±Cubillos Conrad © 276-2153
1326 Palmer James R © 276-6508
1332 Hansen Jolly R © 276-6508
1332 Hansen Jolly R © 276-6703
1333 Coleman Art ©
1349 Ford Evylena Mrs ©
1340 Redden David © 276-3302
1347 Pribyl Eulalia Mrs © 276-2367
1348 Fordham Wm L © 276-2367
1348 Fordham Wm L © 276-26194
1351 Moss Bruce © 276-1868
1355 Brown Eunice M Mrs © 276-4905
1356±Buchanan Jim 276-9987
1357 Larson Clarence W © 276-5232
1364 Barrett Jason P ©
1370 Wallace Wayne W © 276-2426
1371 White Arth C © 276-3019
1378 Koon Edw R © 276-63019
1378 Koon Edw R © 276-671
TONOPAH ST INTERSECTS
1411 Shoemaker Leonard J © 276-1991
1412 Tarango Ignacio O © 276-0785
1420 Gonzalez Netzauhalpilli L ©
276-8233
1428 Gaines Harold E © 276-0281 ZIP CODE 92110 1428 Gaines Harold E ⊚ 276-0281

4700 Strack Joseph M © 284-2133 4705 Skiles Lois J Mrs © 281-6766 4710 Gutz Wm N © 283-9421 4715 Williams Myrle A Mrs © 284-6613 4718 Laverty Wm J Jr © 283-4664 4721 Mc Lauchlan Frieda M Mrs © 3 Snow Thos C © 4*Nee Louis M BERVY ST BEGINS BERVY ST BEGINS D5 Wood Louise A Mrs ⊚ 276-3967 15 Winder Clarence C ⊚ 276-7018 25 Ledesma Lauro ⊚ 276-7964 26 Zmolek Walter S ⊚ 276-1045 284-1669

284-1669

284-1669

4724 Hoag Cyrus C © 284-3581

4728 Weber Harvey G © 284-3581

4728 Culbertson Margt F © 282-9613

4728 Culbertson Margt F © 282-9613

4729 Smith Walter C © 281-188

4733 Shaw Floyd L © 281-8689

4737 Robertson Hayden E Jr © 284-6900

4743 Peterson Karl G © 281-7315

4749 Filippi Carmel Mrs ©

4752 Evans Norma W © 284-0928

4755 Thornberg Robt W © 282-5446

4758 Vuksanovic Dusan © 280-5652

4761 Simons Helen V Mrs © 284-2348

CONSTANCE DR INTERSECTS A SALLE ST INTERSECTS ASSAU DR —FROM 3600 ARAGON DR NORTH IP CODE 92116 P CODE 92116

Bender Donald L ⊚ 583-2675

Sledzinski Thaddeus S ⊚

Hunt Robt L ⊚ 583-1985

Hartmann John J ⊚ 582-0448

Andrewa Albert M ⊚ 583-5120

Hardin John B ⊚ 582-7566 NATCHEZ AV -FROM 4900 IROQUOIS AV NORTH Callaban Carl @ 286-7368 Taylor Ross W ® 5 Vacant
6 Childers Doyle C © 582-4561
1 Bender C W © 286-0236
2 Mc Laughlin Wm J © 582-5671
7 Shelton Wm D © 582-891
8 Schultz Ernest S ©
38-1990 September Septembe ZIP CODE 92117 Rambeau Robt H 682-7094
Williams Richd D ©
Benson Jesse M ©
Crews Lorraine S Mrs © 286-0237
Peters James P © 582-4915
Roby John C © 583-4254
Baxter Wayne B © 582-0559
Davidson John F © 5 Pepin Arth J bookkeeping serv © 582-3460 10 Fepin Artn J Bookkeeping serv © 582-3460 20 Stegman Albert P © 582-8072 21×Holmquist Earl W 583-4632 226 Helton Rex C © 582-3063 27 Finch Shirley A 32×Martin Thos Jr © 287-4031 33 Danfield Audrey B Mrs © 287-4959 38 King Alf J © 582-8631 43 Chambers Kenneth L © 582-6148 44 Camacho Joe © 583-6896 50 Hotz Albert bidg contr © 583-8818 51 Johnson Dennis C © 287-2251 56 Gamble Donald G © 582-3140 62 Browne Galen E © 583-7571 70 Blair Keith G © 582-4651 TALIE DR —FROM 4509 NORMA IP CODE 92115 ZIP CODE 92115
4507 Morse Phoebe J Mrs © 284-2218
4511 Hurtado Edw © 281-7256
4514 Miles John A © 284-0900
4515 Brown Christian N © 281-8261
4519 Kroepel Raymond G © 282-9341
4522 Bagi Julius 282-4287
4525 Hart Lynn N © 284-3289
4526 Eigenmann Henry © 282-2797
4531 Johnston James C © 282-2021
4534 No Return

TONOPAH ST 1975

TOMMY DR—Contd 8414 Coleman Frank H Rev 462-1587 8425 Brink Henry E © 460-9827 8426 Mc Kinnon Mikal A 466-5952 8414 Coleman Frank H Rev 462-1587
8425 Brish Henry E © 460-8927
8426 Mc Kinnon Mikal A 466-5952
8437 Vacantt
8438 Carpenter Lyle R ◎ 466-8947
8448 Carbone John T ◎ 469-1925
8450 Baker Harold M ◎ 461-9042
8459 Westermier Cherles M ◎ 465-4719
8460 Phillips Geo L ② 465-5929
8469 Jewell Gerald L ◎ 460-4227
8470 King Ann Mrs ◎ 469-1915
8477 Vacant
8478 Tomasulc Michl ◎ 460-854
8487 Chandler Albert E 469-2293
8488 Reddick Robt W ◎ 462-6586
8487 Chandler Albert E 469-2293
8488 Reddick Robt W ◎ 462-6586
8495 Lattman James H 463-1860
8496 Lord Ida Mrs ◎ 466-5157
BISBY LA AV INTERSECTS
8501 Paul Kenneth L 462-7009
8502 Susag Gary R ② 465-1880
8509 Murphy Raymond J ◎ 469-0219
8510*Fredricks James
8517 Kirby Aimee B Mrs ◎ 469-3353
8518*Cole Maureen K 464-5373
8525 Hoover Grace V ◎ 468-22849
8526 Liggett Gene S ◎ 469-278
8533 Payne Merrill W ◎ 466-7280
8534 Gardner Jessie ② 460-8996
8541 Brownell Steven M 463-5087
8542 Durham Wm H ◎
8559*Hastings John ◎
8559 Kleby H Neal ◎ 468-9391
8566 Bening Richd N 460-3522
8573 Ulmer Phillip H ins agt ◎ 463-7155
8582 Leyve Richd ◎ 465-4896
8585 Nichols Maurice H 460-5652
8602 Rogers John
8603 Vacant
8612 Lexcen Robt J 460-554
8613 Whitt Saml P ◎ 460-0039
8622 Van Winkle Alf ◎ 465-4926
8633 Carpenter Oliver A ◎
8632 Rogers John
8663 Thomas Frank H Jr ◎ 466-5140
8654 Hastings John ②
8653 Hosting Richd N 460-3622
8673 Whitt Saml P ◎ 460-5038
8682 Leyve Richd ② 465-4926
8683 Thomas Frank H Jr ◎ 466-5140
8684 No Return
8671 Dunne Aubrey B ◎ 463-6935
8676 No Return
8671 Dunne Aubrey B ◎ 463-6935
8770 Meterm Rown H ② 466-5745
8770 Luitjens Alvin H ② 466-8742
87870 Luitjens Alvin H ② 466-8742
8790 Lacher Sebastinn S ◎ 469-0752

RENOWN DR INTERSECTS
8701 Luitjens Alvin H @ 485-4810
8702 Rhodes Robt L 464-7593
8709 Lacher Sebastian S @ 469-952
8710 Medawar Geo E @ 465-2574
8717 Boyce Eva E Mrs @ 460-55462
8718*Babcock Steph W @ 460-1194
8725 La Pointe Thos L @ 460-6351
8726 Quinn Joe @
8733 Whitaker Gary L
8734 Kennedy Barbara Mrs @ 465-2655
8741*Burnett Victor G @ 460-3953
8742 Nicholas Harold L @ 463-0715
8749 Vacant
8750 Shea Michl C @ 461-6944

8749 Vacant
8760 Shea Michl C © 461-6944
8760 Shea Michl C © 462-0935
8763 Eyetch Edw T © 466-7677
8765 Salway Martha A Mrs © 465-3912
8766 Lynn Eliz © 460-5913
8773 Rogers Paul E © 466-3067
8774 Turner Wilbur D ©
878145tevens Ted E 463-8259
8782 Upshew Jim L © 461-3389
8789 Temple Wm A 469-8534
8790 Modugno Arthur A © 466-5155
8797 Walther Elmer O © 461-6797
8788 Deines Lowell O © 465-4221

TOMPKINS ST -FROM 201 34TH ST

ZIP CODE 92102 3450 Bell Louise Mrs 239-6238 3468 Jackson Iona M Mrs 3470 Vacant 35TH ST INTERSECTS 36TH ST INTERSECTS
3503 Vacant
3506 Battle Moving & Storage 232-0835
3503 Vacant
3506 Battle Moving & 239-3594
3524 Cole Roberta B Mrs ⊚ 239-3700
3527±Waldron Stephanie 235-9874
3529 Walker Wm
3630 Carrasco Eloiaa Mrs ⊚ 232-8807
PARDEE ST INTERSECTS
WABASH BLVD INTERSECTS
3562 Vacant
3562 Vacant
3568 Canterseto ⊚ 233-3835
3569 Chiveros Henry R ⊚ 239-1614
3580 Sanchez Valentin S ⊚ 234-8673
36TH ST INTERSECTS
3604 Vacant
3606 Vepiz Herman J ⊚
3609 Melero Jose H ⊚ 239-8982

TONAWANDA DR —FROM VALLEY RD SOUTH 1 EAST OF REO DR

ZIP CODE 92139 2017 CODE 32103 6012*Yegler Gerald 6040 Tonawanda Water Co bulk water sis 475-2244 Dwiere Harland J ⊚ 475-2244

TONOPAH ST —FROM 2300 LIETA ST SOUTHEAST

ZIP CODE 92110 FRANKFORT ST INTERSECTS
4504 Hagen Iva F Mrs © 276-9582
4512*Rachmanow Andrew A plmb contr 4512*Rachmanow Andrew A plmb coni 276-1977 4520 Chaverria Thos H ⊚ 276-7138 4528 Browne Leonard K ⊚ 276-2175 NASHVILLE ST INTERSECTS 4626 Mc Glenn Patricia E ⊚ 276-5712 4629 Kennedy Richd F ⊚ 276-9582 4636 Keller Donald R ⊚ 4649 Garcia Frank A ⊚ 276-4435 4669 Amezcua Miguel T ⊚ 4689 Vacant LEHIGH ST INTERSECTS 4704 Doitzler Edw L ⊚ 276-3476 4705 Vacant 4715*Ceiger Carol M Mrs 4705 Vacant 4715 ★Geiger Carol M Mrs 4718 Cobern Charles V © 276-1064 4725 ★Wilson Pearl Mrs 276-9416

TONTO WAY -FROM 4850 MONOGAHELA ST EAST

MONOGAHELA ST EAST

ZIP CODE 92117
2605 Dillon W A © 274-8024
2612 Vigil Nick R 273-8711
2615 No Return
2622 Switzer Wm L © 274-4318
2625 Heimberg Marilyn Mrs © 274-4710
2632 Montgomery Wm V Rev © 270-4475
2635 Peterson Grant H 272-3607
2642 Schafer Esther B Mrs © 273-4003
2645 No Return
2652 Peterson Jerry R ©
2653 La Motte Darrell A ©
2652 Bieritz Curtis Jr © 273-3333
2646 Gratteau Joseph E © 274-3450
2672 Bein Wm L © 274-1384
2673 Carter Bill B © 272-0080
2682 Mc Queeney John A ©
2683-Munker Bill S © 270-0449
2692 No Return 2692 No Return 2692 No Return 2693 Chandler Ann L Mrs 272-4019 2704 Vacant 2705*Durham Gerald L 272-4923 2705 Durham Gerald L 272-4923
2716 Fredrickson Harley ©
2717 Isom Vaughn O ⊚ 274-9452
2726 Klat Casimir © 274-3374
2729 Hengst Elwood A © 270-2182
EPINETTE AVE INTERSECTS
2738 Brown Robt A ⊚ 273-7856
2747★Handel Franklyn D ⊚
2748 No Return
2757 Winstanley Gerald ⊚ 273-2029
2767 Paarce Wm T ⊚ 273-6494
2768 Dornan Marvin M ⊚ 273-2718

TONY DR —FROM 6955 CONDON DR NORTHWEST

NORTHWEST

ZIP CODE 92122

3403 Vandenberg David L ◎ 453-0994
3404 Newman Garrick W ◎ 453-2972
3410 Rodgers John M 453-7553
3411 Peckham Arth ◎ 453-1731
3416 Hood John C 453-2994
3419 Barton James M ◎ 453-8997
3422 Linderman M J ◎ 453-8216
3427 Kobrak Hans ◎ 453-2988
3428 Monahan Harry E ◎ 453-1230
3434 Brocks Douglas G ◎ 453-7421
3435 Rogers Robt F ◎
3440 King Edw G ◎ 452-8929
3443+Young Howard
3446 Robbins Fred W ◎ 453-0053
3451 Robinson Richd L ◎ 453-6816
3452 Korbelak Robt M ◎ 453-0353
3451 Robinson Richd L ◎ 453-6910
3464 Dixon Howard R ◎ 453-6910
3464 Dixon Howard R ◎ 453-4902
3470 Scofield David D ◎ 453-9027
3471 No Return 3470 Scofield David D @ 453-7027
3471 No Return
3481-KLych James R 453-7627
3491 Stages Steven W @ 453-1819
3511 Martin Norman C @ 453-6494
3516+Knab D H
3625+Perreira Nolan G @ 452-9654
3526 Allman Harry @
3542-KZiff Joshua J 453-0822
3543 Edwards James M @ 453-8476
3555 Bygrave Henry W phtr contr @
453-1897
3667 Godwin John @ 453-1947
3570 No Return
3581 Lambert Barrett @ 452-0131 3581 Lambert Barrett @ 452-0131

TOOLEY ST -FROM 1800 60TH ST NORTH

ZIP CODE 92114 6042 Kepnier Albert B @ 264-9872 EGRET ST INTERSECTS 6109 Under Constn 6115 No Return 6131 Hatch James @ 6132 Kreigled Charles E 264-6776 6132 Republic Paris 6115 No Return
6131 Hatch James ◎
6132±Reid Charles E 264-6776
6136 Berryman Paul
6137±Ozier Bill ◎
6141±Petrausch James 263-4235
6142 Under Constin
6152 Winetzer Wm D ◎
6165±Hogan Edmund B 263-6452
6156±Hogan Edmund B 263-6452
6176*Davis Lee H ② 262-5851
6177 Carson Clifford C ② 264-8688
FULMAR ST INTERSECTS
6186 Fromang Gilbert L ② 262-6929
6139 Shannon Dorothy T Mrs ◎ 264-4065
REFUBLIC ST INTERSECTS
6204 Holley Josephine P ◎ 263-1873
6210 Dodero R Ed ② 262-7689
6215 Morrison Wm H ◎ 264-1503
6219*Bergman Don 262-1573
6220 Sarazin Ervin H ◎ 264-1503
6219*Bergman Don 262-1573
6220 Sarazin Ervin H ◎ 264-6364
WINNETT ST INTERSECTS
6303 Lucas Herbert S ◎ 262-6417
6303 Lucas Herbert S ◎ 262-6901
6309 Mc Cormac Cecil ◎ 263-1814
6305 Lucas Herbert S ◎ 262-6901
6309 Mc Cormac Cecil ◎ 263-1814
6316 Trent John J
6322*Beran Joyce E Mrs 264-580
6328*Deces Wm
6333 Morrow Willie L
6341 Hastings June Mrs
6344 Jones Margt E 264-8517
6347 Fenn Doris L Mrs ◎ 262-501
ORIOLE ST INTERSECTS
6352 Moore Walthall R ◎ 263-5922
6365 Harris Kemper ◎ 264-5711
6362*Martin Harold
6365 Hatcherson Moses J 263-3511
6366 Pike Patricia A 264-2686
6372*Renne Steph
6372*Renne Steph
6380 Hacafway John D ◎ 262-7055
6387 Haight Van V ◎ 264-8007
6391 Vacant
6392*Mc Farlene J L 263-4767
5WAN ST BEGINS

6391 Vacant 6392*Mc Farlane J L 263-4767 SWAN ST BEGINS

SWAN ST BEGINS
6404 Vacent
6416 Nickelson James M 262-8568
6421*Champion Linda @
6435*Wilson Alan
6445 Alvord Donald L @
PARADISE ST INTERSECTS
6456*Bourgault Michl 264-5884

TOPAZ LAKE AV -FROM 6381 LAKE LUCERNE DR EAST

ZIP CODE 92119
7552 Zenor David H @ 461.7645
7562 No Return
7572 Ciccat Louis @ 460.9186
7582 Sellers Thos J Jr 460.9878
7592 Curtis Richd M @ 469.3255
LAKE LOMOND DR INTERSECTS
7618 Voss Paul L @ 463.0486
7628 Gift Deryl E @ 469.1992
7638*Hedge Jack 468.5663
LAKE LEVEN DR INTERSECTS
7648 Vacant
7658 Huntress Donald L @
7668 General Business Services income
Lax preparation 466-6181
7669 Shulkind Aubrey M @ 469.9992
7678 Arnold Alf A @ 466-6181
7678 Buxton Willard C @ 463.3187
TWIN LAKE DR INTERSECTS
7702 Matheny Virgil J @ 465-5247
7712 Hixon Lee R @ 460-6895
7717 Pearson Darryl E @ 463-2750
7722 Lovelady Jerry D @ 461-1810
7727 Adams Anthony @
7732 Ross James E @ 466-639
7737 Skeech Phyllis L Mrs @ 465-3749
7742 Harmon Richd L @ 463-8496
7747 Deutschman Robt A Jr @ 465-4332
7752*Stump James E
7757 Pardoe Wm D @ 466-1584 ZIP CODE 92119

7762★Goff James L 7767★Tonelli Walter

7767*Toneli Walter
7772 No Return
7772 Vacant
7782 Gross Joseph J ⊚ 463-4121
7787 Leffler Truman L ⊚ 469-7085
7804 Vacant
7811 De Marino Thos V 463-8761
7816 Giard Paul M Jr ⊚ 463-0105
7823 Heidemann Robt J ⊚ 463-4976
7828 Eickhoff Robt F ⊚ 466-1396
7831 Boynton David G ⊚ 466-6767
7840 Williams A R Jr ⊚
7843 Boughton Lloyd N Jr ⊚ 465-8936

7852 Wagner Gustaf ⊚ 469-3521 7853 Westlund Gerald B ⊚ 465-0077 7863★Ratner Milton ⊚ 460-3336 7863-WRATERER MILION © 480-3336 7864 No Return 7876 Doherty Russel E @ 460-4315 7877 Korty Wn R @ 468-2524 7887 Seaborns John P @ 465-3745 7888 Nielsen Oswald @ 465-0278 COWLES MOUNTAIN RD INTERSECTIS

COWLES MT BLVD INTERSECTS
7906 Harrison Eug @ 465-5593
7912 Orantes Joseph M @ 465-5350
7918 Lee Mary E @
7924 Yale Richd T @
7930 Wowczuk Steph @
7930 Marshall Bruce C @
7942 Davis James E @ 460-6545
7960 Tweed Robt F @ 460-7346
7966 Nishida Terry @ 460-7347
7966 Nishida Terry @ 460-4229
7976 Rose Ronald 463-8553
7976 Rose Ronald 463-8553
7966 Bramer Richd G @ 469-9149
CRYSTAL LAKE AV INTERSECTS
8002+Parlogan Andrew 8018 Vacant 8034 Fishing Stephanie J © 463-5270 8056 Riesland Stanley F © 466-0088 8068 Anderson Richd L © 463-3277 8090*Aller John R © 468-1235 8094 Webb Gordon K © 463-1235

TORCA CT -FROM 10519 LA MORADO DR NORTHEAST

643

ZIP CODE 92124 ZIP CODE 92124
5850 Autrey Allen J Jr © 565-6804
5851 Weinsheim A Gene © 277-1601
5860 Elizalde Leo ©
5861 L'Heureux Peter © 292-5804
5870 Bua Sal ©
5871 Corder Sidney V 565-6974
5880 Pitkin Joan © 278-0610
5881 Foliot Rene L ©

TORERO PL -FROM 11170 ZAPATA AV EAST

AV EAST

ZIP CODE 92126
8226 Wagoner Robt W © 271-9106
8257-¥Hall Cheryl 271-0758
8263 Mendoza Lupe © 271-5493
8268 Hayward James D © 271-7258
8269 Rhinesmith Robt M © 271-9175
8274 *Pēterpon Gary 271-9080
8275 Kenney Wm R © 271-6493
8279 Volpe Leonard P © 271-8325
8290-¥Pēlletier Alex
8283 Sparks Charles M © 271-9283
8283 Sparks Charles M © 271-9283
8290-¥Harris John E © 566-4752
8291 Wayman Margt J Mrs ©
8303 Lohner Wm A © 271-8372
8304-¥Macaloucy Bob ©
8309 Livengood Claude © 271-9061
8311 Martz Fredk L © 271-6409
8317 Vacant
8320-*Koch Thoe M © 271-6011 8317 Vacant 8320±Koch Thos M © 271-6011 8325±Les Chun 271-6304 8328 Walker Wm M © 271-6405 8333 Svenson Jay F © 271-6535 8336 Kolk Andrew R © 271-6720 8341 Papulas James T © 271-672 8344±Allen Calvin P 271-1105

TORRANCE ST -FROM 3637 DOVE CT WEST

CT WEST

ZIP CODE 92103
628 Lomac Jean E ⊚ 298-5290
Rear Schopper Charlotte 298-2671
642 Allen Howard R 298-0892
644 Ludwig Edmond J ⊚ 295-1071
649 Callas Nick J ⊚ 295-7981
649 Callas Nick J ⊚ 295-7981
654 Griffith Naomi N ⊚ 297-2613
655 Henderson Weyne B ⊚ 296-0582
656 O Holley Thos ⊚ 295-347
EAGLE ST INTERSECTS
715 Royal View Apartments 296-3914
Steele Eug 295-3944
717 Carnazza Harold 298-1888
719 Vacant
721 Beach Edna 295-6237
723 Vacant
725 Dickinson H W 121 Vacant
122 Vacant
125 Dickinson H W
126 Fraser Hail Convalescent Hospital
286-2175
298-2175
298-2175
33 Ford Clement M
135 Mc Grath Richd E 298-3152
137 Vacant
1398-Goldman Donald 299-4685
1465 Vacant
1391-145-145
145-145-145
1501 Vacant
1502 Vacant
1503 Vacant
1503 Vacant
1505 Mellos John 291-9288

<u>Source</u>

R. L. Polk & Co.

MORENA BLVD 1966

677 1452 APARTMENTS A RANKIN CAROL 276-4176 B BONE DOROTHY D 276-0036 C BARTLEY WAYNE F 276-5882 D VINES WM 276-3072 1189 VACANT MORAGA PL--CONTD 1201 P & L BARBER SHOP 276-1888 3306 MOLER WM F • 273-5629 3316 MESSERSMITH BARRY 274-2251 3326 KIRBY CHARLES W • 274-2619 1206 EL CAMINO AUTO COURT MOTEL 276-2706 276-2706
MASTER CLEANERS (BR)

1211 BELL & HOWELL MICRO DATA DIV
SLS & SERV 276-5711
DITTO DIV OF BELL & HOWELL
CO OFC SUP & EQUIP 276-0931

1218 VINTA GILBERT • 276-2706

1219 FIEDLER STEEL CONSTRUCTION 3336 FIRST CHARLES W 2/4-6619 3336 FOXWORTHY LEON C 0 273-4705 3346 BANCHARD WM P 0 273-7622 3355 HUBBS ERNEST L 0 273-7273 3356 FORTMAN KENNETH D VINES WM 270-3072
1454 APARTMENTS
A DREHLING DAVID
B WESTBERRY HARRY P 276-3567
C WRIGHT JOHN L 276-5597
D SHOEMAKER CAROL 3365 DAMICO ERMONDO • 276-5243 3366 SALIERI SERGIO • 274-3574 3375 DUPREE ARMAND 1456 APARTMENTS A MORRIS JAMES
B LOPEZ BEN C 276-5415
C GIBBS ARTH F JR 276-2454
D SCIFRES JOHN
1457 CURRIER PATK G 276-2377
1458 VACANT CO (ARMCO) PRE FABRICATED STEEL BLDGS 276-2535 3376 WOOD KIRBY W . FIEDLER WALTER E INC GENL CONTR 276-2535 1230 GROGAN MARION C MRS . MORENA BLVD -FROM TAYLOR NORTH 1 276-1344 1235 FINK BENJ • 276-2976 SOUTH OF SAN DIEGO RIVER 1460 HANCO INC GENL CONTRS 1245 FINK BENJ # 2/6-29/6 1241 CLAIREMONT PLUMBING SERVICE INC CONTR 276-1397 1244 O'HARA HELEN E MRS 276-5476 1249 MONTEREY FOODS FROZEN FOODS 276-2636 814 HOMECRAFT SUPPLY CO LBR RET 1461 STATE FARM INSURANCE CO'S 296-3733 276-3884 845 DER WIENERSCHNITZEL RESTR 855 TOPS CLEANERS 297-1516 909 AMERICAN BAKERIES 1464 APARTMENTS JONES HELEN MRS 276-4611 276-4511 1259 HAYES L E PAINT & BODY SHOP AUTO REPR 276-5261 1272 BUILDING REPAIRS INC GENL CONTR 276-2539 A GOWLOVICH AURORA MRS INC-LANGENDORF DIV WHOL 276-5044 297-0224
999 HOWARD'S TIRE CO WHEEL
ALIGNMENT 297-2856
1001 WITHEROW J P ROOFING
CONTRACTORS 297-4701 B NIELSON PATRICIA MRS C SCESNY JAMES 276-2372 D GILSON ROBT C 276-1883 1277 SAMPO LOUIS A TRACTOR & EQUIPMENT CONTR RENTAL E HEYN LOUIS J 276-5596 1465 NINTEMAN L J CONSTN CO INC CONTR 276-5810 276-1032 1278 BUTLER EDWIN T 276-1390 1285 LYNCH GOLDIA MRS 1287 VACANT 1291 FELD DONALD 1004 LINDE CO (DIV OF UNION CARBIDE) COMPRESSED GAS 1471 S & M ELECTRIC CONTR 298-8388 276-1550 1013 HAUSER WROUGHT IRON
FURNITURE 291-1013
1019 CROWLEY CASKET CO INC (GFC 6
SHOW ROOM) WHOL 295-5107 1476 MC ATEE LAURENCE W 276-1274 1478 KILBURN FLORENCE 276-3409 1292A DO-NO'S MFR DONUT BAKERY WHOL 276-6111 1502 VACANT 1506 FORREST HOWARD J 276-6095 1292B VACANT 1045 MORENA BOULEVARD MARKET GRO 1506% KINNEY RAY 276-6197 1510 DUPONT JOSEPHINE MRS 1294 UNIVERSAL FELLOWSHIP ORG 296-1623 1070 CRIST R A CO GENL CONTR 276-1421 276-2352 1295 STEWARD WM V 276-2784 1296 DIAMOND INN TAVERN 276-9127 276-3924 REAR VACANT 276-1421
1076 TONY'S FOREIGN CAR SERVICE
REPR 276-3242
1083 MORENA DOUGLAS SERVICE GAS
STA 276-9106
1090 SPASORS ELECTRONICS CORP 1515 HONEYWELL INC TEMPERATURE 1305 VACANT CONTROL MFG 276-4668 MICRO-SWITCH DIV OF 1309 VACANT 1310 ZARDI'S COCKTAIL LOUNGE HONEYWELL INC ELECTRONICS
PARTS MFG 276-4668
1524 LAGACE OSWALD J • 276-9192 1312 GERRY'S CUTE & QUAINT SHOP BEAUTY SHOP 276-5435 EQUIP & SUP 276-5530 1102 BAY PARK PET CLINIC ANIMAL 1525 BAY PARK TRAILER SLS 276-0945 1314 VACANT HOSP 276-1616 1315 HI LO MOTOR LODGE MOTEL 1103 KING VAN LINES INC MOVING 276-0840 1540 MORENA PET HOSPITAL 276-2112 1550 BOULEVARD INN TAVERN 276-9107 276-9182 RENGER HENRY 276-2060
1316 TRANE CO THE AIR
CONDITIONING SLS & SERV 1104 CONTROL COMPONENTS VALVE MFRS 276-1934 276-9107
TRIANGLE BARBER SHOP
1579 COASTAL TRAILER SLS 276-0612
COASTAL TRAILER VILLA
TRAILER CT 276-0612
O'CONNELL LAWRENCE
1623 FOUCERON GERTRUDE O MRS MFRS 276-1934
DONLEY MIKE CO MFRS AGT (IND SPECIALTIES) 276-1934
DONLEY MYRON P MFRS AGT (AUTO GLASS) 276-1934
MARSH INSTRUMENTS GAUGE MFRS 276-1102 1316 CARPET FAIR RET 276-3050 1319 MORENA CLUB TAVERN 276-9151 1323 CRISP-LANDI FURNITURE U 276-5391 276-1934 1105 BRINK'S INC ARMORED TRUCK 276-0563 1639 JENNINGS ETHEL R 276-2189 1641 COLLINS WM 276-1518 1643 CONNELL ORA E MRS 276-0065 1645 VACANT 276-0563 1337 SYLVESTER RAYMOND L MACH REPR 276-2552 1339 VACANT SERV 276-0489
1106 U S FEDERAL ENGINEERING & 1345 MORENA AUTO BODY SHOP AUTO REPR 276-4704 MFG INC MECH ENGS 276-1552 1108 COBAR INDUSTRIES INC MFG ADV 1655 OZZIE'S MUSIC INC RENTAL 1395 MORENA MOBILE VILLAGE TRAILER PARK 276-5699 SPECIALIST 276-6454
1122 MORENA BOULEVARD SHELL
SERVICE GAS STA 276-1382 276~5060 1717 MUSICIANS ASSN OF SAN DIEGO LOCAL NO 325 LABOR ORGN BENDINELLI DONALD 276-0583 1123 VACANT 276-4324 H & H CHEVRON SERVICE GAS MUSICIANS CREDIT UNION STA • 276-0218 REAR H & H GARAGE AUTO REPR -KNOXVILLE ST INTERSECTS 276-5222 1777 EL PUEBLO APARTMENTS 1405 GREAT WESTERN UPHOLSTERER 276-4780 276-0218 1129 LAURETTA'S CLEANERS 276-1536 276-1376 276-1376
TAYLOR BETTY M MRS 276-4503
VAN HORN ERIC H 276-4506
2 GRAY HELEN MRS • 276-1376
2A AAMOTT STANLEY
3 MC KENZIE EDW P 276-3359
4 MC CUNE LYDIA H MRS
276-0670 RUDY'S LAWNMOWER SHARPENING 276-4780 TYGER LAURETTA P 276-1536 1133 GENE'S BARBER SHOP 276-5211 1134 VACANT 1142 VACANT 1407 VACANT 1407% VACANT 1151 BISHOP BARTLETT E ACCT 1411 AL'S ELECTRIC MOTOR REPAIR 276-5170 276-0690 CARMEN ANTIQUES PAINTINGS VACANT 5 WATKINS LOUIS J 6 NEWMAIER FRANK 7 VACANT 1413 K & L MARKET GRO 276-1662 1426 LOFTIS CHARLES H • 276-08. 1433 MERCHANT'S CENTER GARAGE 1151A VACANT 1152 CIMRON DIV-LEAR SIEGLER INC ELECTRONIC RES & DEVELOPMENT 276-3200 ---ASHER ST BEGINS 1801 MORENA LIQUOR STORE 276-0890 REPR 276-0721 1437 VACANT 1155 FREY AUTOMOBILE & RADIATOR
SERVICE 276-2712
1163 MEAD ENGINEERING ELECTRONIC USNIK EDW 276-0890 1813 PINK PANTHER TAVERN 276-4820 1440 REMINGTON MARY E MRS . 276-0851 1815 VACANT 1817 OFFICE BUILDING 1440 B BLUEMEL B BRUCE 276-3742 1442 ESFLINGER CARL 1444 NANCE PHILIP G 276-3306 1446 KELLY VIOLETTA MRS 276-1725 1448 LEVINGER HARVEY R 276-5664 276-3890 1165 PICKER X-RAY OF SOUTHERN ROOMS CALIFORNIA INC EQUIP SLS A VACANT 276-2161 1167 PICKER X-RAY DF SOUTHERN CALIFORNIA INC 1169 ZAZNEBAR TAVERN 276-9146 VACANT C HUFFMAN RAY L BLDG CONTR 276-5410 1450 HI-LO APARTMENTS A VACANT B BRIER MAY VACANT 1176 MORRIS FURNITURE RET E MANUFACTURING OPERATIONS SERVICE ENGINEERING 276-2661 D VACANT 1180 SAN DIEGO RATTAN FURN RET 276-3002 276-2480 VACANT WOLFE JACK MOORE VERNE C 276-5369 1187 UNIVERSAL JET INC TOOL MERS G VACANT 276-3920 THAXTON BERYL

FRANKFORT ST 1966

1916 VACANT 452 WOOLFOLK WM W FRAKES ST--CONTD 1919 HEYNAR GEO ● 276-0854 1924 FRIEDRICHS HAROLD E ● 453 DAUGHTERY GEO 7143 FOWLER WALLACE E # 278-1464 7152 VACANT 276-5893 1927 WESTON ROBT B @ 276-4320 7153 BOUNDS JAMES C • 278-7895 7162 BARNES FRED E • 278-1462 FRANCISCAN WAY -FROM 1 WEST OF MARYLAND NORTH 3 EAST OF 1930 TOOHEY PAUL 1933 GONDECK MITCHELL F . 7163 WINGERT HANNIA MRS • 7163 WINGERT HANNIA MRS • 7172 DEMPSEY LEON C • 278-1781 7173 NEAL JUSEPH A • 278-1584 7182 BRAZELL EMORY N • 279-0026 7183 DUNLAP EARL F • 278-6971 276-1874 1936 MASON CHARLES W • 276-1132 KNOXV ILLE 1149 CREEL KENNETH E • 295-8485
1154 FORSHEY EUG • 296-4931
1160 SMITH RUBY D MRS • 296-167B
1166 SMITH BERKLEY P • 296-3777
1234 JACKSON EVERETT G • 295-2904
1234A GREGORY DANL P 298-9043
1250 LYDON RICHD W • 295-1139
1280 LIMDLI BENEDICT L • 297-1251
---MARYLAND ST INTERSECTS 1943 BEATON RALPH E • 276-4087 1946 WERNER WM E • 276-5795 1951 GRASSMANN MERLE R • 1954 BECKMAN ALBERT W • 276-0953 1961 WILKINSON DAVID E • 276-0456 WILKINSON JAMES E FRANCIS ST N -FROM COMMERCIAL NORTH 2 EAST OF S 34TH 1962 LAMONT DAVID R • 276-2547 1969 AKIYAMA SHIZUO • 215 HALL CLOLEAL MRS 1972 DRAKE NORA A MRS ● 276-5993 1975 BOYER LLOYD ● 219 DICKSON W A 234-1713 221 HALL ALBERT 229 BANKS ARLENE E MRS 1404 SENTERFITT ANN M MRS . 1978 BERNARDING EREDDIE T . 297-1025 1978 BERNARDING FREDDIE T • 276-2796

1985 WAREHM A J • 276-1835

1990 HARRIS WM A • 276-1754

1991 FILLEY FREDK R • 276-2236

1996 TODD JEAN W MRS • 276-2489

--ORTEGA SI INTERSECTS

2001 WALLACE WM A 276-5778

2006 TILLMAN FLORENCE G MRS • 1411 NISSEN ASTOR 0 • 296-0402 1419 WARNER OHMER H • 295-0456 JOHNSON JOSEPH W JR 232-1893 273 APARTMENTS A BREWER SAML 239-6537 B RICHARDSON ROBT L C MOORE ARCHIE JR
D BEATTY JOE N 233-3706
275 SMITH MELVIN L
277 GERARD ROBT J 239-6371 FRANKFORT ST -FROM MORENA BLVD NORTH 3 EAST OF KNOXVILLE 1325 OTT JOHN # ● 276-1534 276-1577 283 APARTMENTS 2015 POLLETT CLOYD D • 276-5887 2016 RESNICK JOSEPH J • 276-5725 2024 BALLATORE BATISTA • 276-2206 1331 WHITE ORA L • 276-0802 1339 WATTS GERTRUDE M MRS • A BATES LOUIS G 234-5339 B VACANT C JOHNSON WAYMAN H L 276-5007 276-5007

1347 FRIAS RAUL A • 276-0737

1355 LAMPE EDW L • 276-1899

1363 GROTH WALTER • 276-4406

1369 DOMIANO CARMELO E • 276-0189

1377 TARANGO Y SALVADOR •

276-0650 2025 GERARD DAVID L 276-5183 2034 VACANT D BELL ALICE C MRS 291 HOBSON ROBT N 239-5472 2035 DIVINELL PAUL P • 276-4806 2043 LITTEN WALDO C • 276-1374 2044 OLF ABR ---NAPIER ST INTERSECTS 2107 SPENCER CONRAD J • 276-2275 2121 DE FANT DAVID L • 276-0836 FRANCIS ST S -FROM WEBSTER SOUTH --- TONOPAH ST INTERSECTS 1 WEST OF 35TH 1404 VACANT 1412 PHILLIPS GEO E 276-3926 1420 TRACY WM A ● 276-3708 1428 OSBORNE WM E ● 276-1230 1431 GONGORA JULIAN 276-4214 2124 VACANT 8 VACANT (8-12) 2135 WHITLOCK G CURTIS . 12 JACKSON WILLIE M 18 DAVIS EARLY L 232-3484 202 GALLOWAY ELEANOR L MRS 2136 DUNCAN HELEN J MRS 276-1024 2144 COCHRAN DRVILLE M • 276-1847 2145 SULLIVAN MARTIN W • 276-0408
2152 SERRAND RICHD D • 276-0986
---MILTON ST INTERSECTS
2221 MOLYNEAUX EARLE C • 276-0360
2227 NO RETURN 1436 MITCHELL PHILLIP R • 276-1996 ---GALVESTON ST INTERSECTS 232-6096 203 LYKAKIS INEZ L MRS 239-6415 203A CLARK ERNEST 234-6000 1444 SMITH ROBT L • 276-0660 1452 NO RETURN 203% ELEY WILLIE P 234-8933 209 CARRILLO FRED F @ 239-7965 2227 NO RETURN
2232 WARNER ROBT E •
2235 BLUT LOUIS J • 276-2522
2243 GARCIA ROBERTO E • 276-4899
2252 MAYO DONALD • 276-5467
---LISTER ST INTERSECTS
2303 SOBECK PETER L • 276-1541
2311 CUZZONE TITO A •
2314 MASSERA JOHN • 276-2094 1453 LOSOYA ROBT E • 276-0881 1459 HICKEY JOHN G • 276-1252 211 FUENTES JOSE 212 AMERSON PHILLIP ● 234-5267 213 WAINES FRANK 232-0704 215 COX EVON L MRS 232-2532 217 BANKS ORA B MRS 232-8472 1460 BUCY WAYNE W . 1465 VACANT 1405 VACANI
---ASHER ST INTERSECTS
1503 LA GIDIA MARIO A ● 276-4674
1504 VACANT
1511 SANCHIOLI JAMES ● 276-3649 218 MATA AUGUSTINE 233-0492 219 CARLIN MICHL 239-2890 219 CARLIN MICHL 239-2890 225 ADAMS FRANK E 227 SHORT WAYNE S 233 CORTEZ LEO V ● 233-3592 234 WABASH APARTMENTS APTS 233-7637 1512 POWELL DOROTHY L MRS ● 276-2725 2319 MASSE EDWIN F ● 276-1273 2324 VACANT 2327 CORREIA MAURICE •
2333 ROBERTS ROBT E 276-0509
2338 JOHNSON NORMAN W • 276-1824
2346 ALKIRE E RUSSELL • 276-3645
---KANE ST INTERSECTS 1519 LOUD ROBT G ◆ 276-5257 1520 KINSLEY FRANCIS J ◆ 276-0674 1527 HOHLWEG CHARLOTTE E ◆ 1 BAKER ALF F 2 TANNER EDW H 232-5575 276-5943 1528 BELT MEARLIN D • 276-4449 1535 PARTIN JAMES E 276-4118 3 WHEAT JOHN E 4 BALBONABO ELMER J 232-8286 2411 EDEN ROBT D ● 276-1570 2414 TAYLOR CLAIR E ● 1536 VANDERPOOL RAYMOND D 242 WABASH MOTEL & APARTMENTS 233-7637 276-5116 2423 BIERMAN CHARLES JR . BRADLEY ORLAN L • 233-7637 305 ASERO FORTUNATO • 239-4078 1543 MURPHY THOS G JR . 276-2476 276-0048 276-0048

2430 JELLISON JOHN J •

2435 WHERNIK ANTHONY G •

2436 CAMPBELL ROBIN M • 276-1797

2443 EPPERSON ROBT E • 276-0159

2444 BROWN HAROLD A • 276-0214

2451 PLUMB ARTH G 276-4243 1549 GRINSTEAD DE LOSO L 276-1315
---LITTLEJOHN ST INTERSECTS 323 SHAW WILLIE C 234-2631 328 SPERRY CLARENCE L • 232-8343 329 HARRIS MACK H • 232-1305 334 DAVIDSON L B • 232-1577 ---LITTLEJUHN ST INTERSECTS
1705 HERRICK NORMAN E 276-5903
1709 HERRELL ROBT L 276-2998
1719 FAUST WOODROW 276-3184
---GAROENA AV INTERSECTS
1720 LARRABEE EARL
1730 VACANT 334 DAVIDSON L 8 • 232-1577
335 BELL NORMAN L 234-0043
337 VACANT
339 WASHAM ROSA MRS
341 DIZON LARRY • 232-8596
342 JONES SAML J •
347 PONTANARES LUCIO S • 234-4864
---FRANKLIN AV INTERSECTS
404 SMITH HERMAN • 233-1054
406 COLEMAN HERBERT
407 TSUIDA MOTDSIKE • 232-2303 --- JELLETT ST INTERSECTS 2503 QUINN JOHN M . 276-4160 2507 DANI JAMES . 276-2799 1804 ATKISSON FRANK G ● 276-2425 1805 JOHNSON RUTH M MRS ● 2512 DOUGLAS LOGAN E • 276-0756 2520 KNOWLES WALTER S • 276-0627 276-1415 1810 ACKLEY MONA A MRS 276-5772 2521 DARE EDNA V MRS 276-3867 2529 VACANT 2530 OLSON STANLEY D • 276-3460 1811 GARDNER RICHD C ● 276-0348 1821 VACANT 1821 VACANI 1822 MARQUIS THOS N • 276-2596 1827 ROMERO ROBT A • 2535 SAKATANI TOM 0 276-0543 2536 JACKSON N ETHEL MRS 0 407 TSUIDA MOTOSUKE • 232-2303 408 FRANKLIN BENJ 410 CONNOR ARCH M 234-1937
412 DONALDSON OLIVIA E 234-3019
414 ELEGADO BENIGNO © 232-3586
415 PEREZ JOSEPH C 234-4219
421 GUERRERA JESUS ©
424 ATIENZA LUCILLE M MRS © 1832 HUST JACK ● 1837 JONES HORACE M ● 276-0744 276-2360 2543 TORRESCANO PAULA MRS 1842 ALEXANDER WALTER L • 276-1707 1845 POLLACK MARY MRS
1850 BURGER LEOPOLD R •
1855 WHITE HAROLD E • 276-3263 232-1243 FRANKLIN AV -FROM 1610 COMMERCIAL 434 GIBSON WILLIE H . 1861 MIZZLES CLARENCE E . SOUTHEAST 435 LONON ELMA A MRS •
444 BROOKS ROBT L • 239-3276
448 JOHNSON JEWEL J • 239-7252
449 ADAMS HELEN MRS 276-6768 1866 NORVELL HARRY • 276-3148 1870 FLEET RALPH M 276-3976 1871 DUNCAN FRANK L • 276-0523 1879 CLOSE DANL H • 276-0992 2005 JOHNSON MARTHA R MRS . 234-6069 2010 CALLAHAN CHARLES 234-1956 449%A GROFF ROSIA L MRS 232-2506 449%B EDWARDS JAMES L 451 COX ROY # 234-4538 2011 VETERAN ROOFING CONTRS 234-1202 --- ASHTON ST INTERSECTS 1915 FILDES ROY C 276-0875 2014 WARNER THOS

1966

MISSION BAY DR

1928 MONTEE JESS F 298-2585 1931 GEIST T W ● 295-7939 MIRAFLORES DR--CONTD MISSION BLVD -FROM ENTRANCE TO MISSION BAY NORTH ALONG THE 5615 PATTERSON LAURA @ 264-5409 5616 SEYMOUR CLARENCE A . 1934 HARRINGTON JOHN E ● 295-7229 1935 MC INTYRE RENA MRS ● 262-8470 295-5276 1940 VACANT 5633 VACANT 5633 VACANT
---LES FLORES TER INTERSECTS
5705 COSGROVE JOSEPH L ● 262-1805
5717 HARRIS JOHN W ● 262-6853
5722 BASON ROBT L ● 264-2988
5725 DURANT C JAMES ● 262-0513
5735 DAVIS BERLINE L ● 262-5787
5745 COMBS RONALD L 262-1427 2613 CARIBBEAN APARTMENT MOTEL ---FLORIDA ST INTERSECTS 2005 HALE EDITH B MRS 295-4033 2011 FUSON VIRGINIA J MRS ● 488-2244 HELVEY PAUL W 2660 CHANNEL SHORES APARTMENTS 2011 CROTHERS SARAH MRS • 295-4650 2027 SCOTT HELEN A MRS • 295-4650 2028 WILKINSON HELENA MRS • 1 REGGINS DENVER 2 DARNAUD ROBT L 5 DARNAUD ANDRE W 488-9869 6 VACANT 7 VACANT 5755 HAYNES EVELYN G MRS . 296-3084 2030 VACANT 5762 SWEPSTON JAMES V . 264-3081 8 VACANT 2030 VACANI 2036 AWERKAMP ROBT J 291-3086 2044 HUSTLER ALBERT ● 296-2066 2672 WELLS JEANNE 2674 VACANT 2676 BROSCIOUS RUSSELL MIRAMAR AV (LA JOLLA)-FROM 1 BLK SOUTH OF 1350 PEARL NORTH 2679 HUNTER JAMES A 2681 VINSON KATH 488-5381 154 -- AL ARAMA ST INTERSECTS 7444 MURRAY M E MIRIAM 459-5061
7455 PHIPPS PARK • 459-2213
7501 RENN FRANK G • 454-5810
7507 STADLER REUBEN L • 454-1678
7515 PRENTICE PHILIP B • 454-7955
7516 BERTHELET JUSEPH T •
459-5819 2105 EDWARDS BEAUTY STUDIO 295-7477 2682 O'ROARK DONALD D • 488-5191 2683 COOK DIXIE C 488-5695 2684 VACANT
2685 WINN MALCOLM G ● 488-3655
---ASBURY CT INTERSECTS
2688 VACANT
2695 VACANT 2107 RAINBOU REVA A 2115 HUGHETT ALLEN 2119 KREPPS CELIA G MRS 298-3376 2121 NO RETURN 2126 BERNEKER LUCY M MRS • 2696 HARRIS KENDALL A • 488-4822 296-1469 2127 CARDO GLEN V • 298-2978 7525 FINLAYSON HELEN M MRS . 454-1581 7533 HANSEN F LYLE W • 454-4543 7547 BUSEK LYDIA F • 454-1783 2132 VACANT 2133 UPSON INEZ F MRS • 298-5871 213 UPSUN INEZ F MRS © 298-5 --MISSISSIPPI ST INTERSECTS 2201 VEUGER JULES © 295-5735 2207 STAAL B J 295-8769 2217 EDWARDS GERTRUDE A MRS © 7555 RICHARD MARY L MRS • 459-5766
7563 GINN MAURICE E • 454-7376 MILLAK 2719% VACANT 2721 RUSS EDW J ● 2722 RICHEN JAMES W ---AVALON CT INTERSECTS 2745 VACANT 2746 VACANT 7595 ROY MAURICE R . 459-1641 297-2038 2218 VACANT 2218 VACANT
2221 WHITE LORAIN F MRS 295-9200
2227 JOHNSON HOWARD W • 298-9776
2233 VETTER REGINA C MRS 295-2272
2235 LASWELL RUBY D MRS 298-3271
---LOUISIANA ST INTERSECTS 70 -BALBOA CT INTERSECTS MIRA MONTE PLAZA (LA JOLLA)-FROM VISTA DE LA MESA EAST 1 NORTH OF LA CANADA 2755 MODRE PHILLIP R 488-3974 2756 VACANT 2757 SAIRS LEONARD J 488-4159 2758 SLOAN MARY J 488-3262 2762 DOUGLASS DARLENE 488-0115 311 WOODHEAD J FINCH ● 454-5306 315 BLATZ ALBERT C ● 454-7224 ---LA JOLLA HERMOSA AV INTERSECTS ---LA JOLLA BLYD INTERSECTS ---BEAUMONT ST INTERSECTS ---SHIRLEY ANN PL INTERSECTS
---MADISON AV INTERSECTS
4612 ANDERSON LILLIAN E MRS • CY5-6462 4620 CORCORAN E JAMES 298-9110 4620 CURCURAN E JAMES 298-9110
4626 GILLESPIE WADE L 298-2266
4630 KELLY WALTER C ● 296-6057
4646 BACHIONI HENRY ● 296-2536
4654 LUNSFORD HENRY A ● 298-4030
4666 PORTER WENDELL J ●
---TEXAS ST INTERSECTS 621 GRAVES ORVILLE M JR . 2785 O'DONNELL JAMES A ● 488-3307 2787 VACANT 2788 COLEMAN MARGT E MRS ● 488-8803 --- WAVERLY ST INTERSECTS 488-8803
---CAPISTRANO PL INTERSECTS
2810 GREEN JOHN T 488-3646
2813 GRADY WALTER H
2825 FLORANCE JAMES E 278-3891
2826 GAMMA KEE APARTMENTS 220 MISSION AV -FROM 4400 PARK BLVD NORTHEAST 1801 HOSKINS WALLACE M JR MISSION BAY DR -FROM MISSION BLVD WEST 1 NORTH OF SAN FERNANDO 296-3437 1805 VACANT 1 VACANT (APTS 1-7) 8 JOHNSON WANDA MRS 1805 VACANT
1807 HERTEL LAURA J MRS 295-3618
1809 PAVEL BERTHA MRS 297-1929
1812 THORNE LESTER C JR 295-7252
1814 VASSEN JOHN A
1816 VACANT
1817 VACANT
1823 NO RETURN
1834 PENARD POLICE ARAPIMENTS 2827 VACANT 2831 VACANT 2842 ROSS JAMES 2842 PETERSON RONALD E 488-7885 812 HECK'S MID-WAY LIQUOR STORE 488-6191 814 MARAND'S DRIVE-THRU RESTR 488-7335 826 VACANT 2844 GILPIN GERTRUDE V MRS 830 HARTLEY CO THE REAL EST 488-0585 488-2318 2846 VACANT 1834 RENARD ROUGE APARTMENTS 295-8011 2040 VACANI ---CORONADO CT INTERSECTS ---DEAL CT INTERSECTS 2850 KALAK P S 488-8736 832 VACANT 834 MODRE MARY C MRS 836 HAUGHTELIN BEATRICE MRS ANDERSON H J 1 ANDERSON H J 2 GOSTUN ERWIN 3 FOX FREDK D ● 295-8011 4 WILLIAMS THOR 298-1802 5 POE CHARLES JR 295-9145 836% EAST MARIAN K MRS 2851 ZINTEL J C 488-4977 2852 BLISS GEO 838 VACANT 840 VACANT 842 VACANT 2856 VACANT 2862 STOVER CLARENCE W 488-5021 2863 MARSH GARY L 2864 WILLIAMS JOHN 488-3801 2866 WEISS RON P 488-6852 VACANT JOHNSON CLINTON A 295-0282 842% NO RETURN 844 BEACHCOMBER THE TAVERN BUTLER ZELDA 298-6489 VEAZEY BARBARA A 295-8638 468-9228 850 NO RETURN 10 LOUISELLE JACQUELINE 11 HOUCK ARTH W JR 295-9945 12 CHALMERS BEVERLY J 2867 MONROE ROBT 2868 BOWMAN CHARLOTTE MRS 998 BAHIA THE HOTEL 488-0551 1551 MISSION BAY BOAT BROKERAGE BOAT DLRS 224-3547 MISSION BAY SPORT FISHING 2869 NO RETURN 2875 CALDWELL IRIS M MRS 488-4078 2877 BAIN DONALD 298-4034 13 HILL SANDRA 298-8945 BOAT RENTALS 222-1164 MISSION BAY YACHT LANDING 224-3541 14 COFFIN DONNA J 15 HARMON JOHN C 298-0279 16 CRAFT ROGER G 17 DANZES LEE 2879 BRAZEL MICHL L 488-6791 2881 VACANT 2885 MISSION MARKET 488-3541 2886 GARY ENTERPRISES SELF SERV MISSION BAY YACHT SALES 18 DAVIDSON ROBT L 19 LLACER M JULIA MRS 224-3451 LNDRY 488-5240 2886% SOUTH END HOTEL QUIVIRA BASIN ENTERPRISES BOAT LANDING 224-3541 QUIVIRA MARINA (SHELL FUELING DOCK) 224-3451 BRANN PHILIP
2888 C & G VARIETY STORE 488-2996
2892 ACE LIQUOR STORE 488-3868
2893 PENNANT THE TAVERN 488-1671
2893 % GOLDY HENRY •
---SAN GABRIEL PL INTERSECTS 295-5255 STREET CONTINUED
---GEORGIA ST INTERSECTS
1919 SANCHEZ IRENE A MRS 19198 VACANT 1921 VACANT 1921% GONZALES ARTH A MISSION BAY DR E -FROM DE ANZA RD SOUTH 1 WEST OF HIGHWAY 2903 AL'S BEACHCOMBER TAVERN 488-9371 2907 HARDON REALTY 488-4333 2907% SPEED A M 2909 GEORGE'S CAFE RESTR 1921 RONKALES ANN A 1922 CARMICHAEL MARJORIE E MRS • 295-8966 1923 FISHER PAUL E 1923 B GOSET JAMES N 298-4525 1775 HILTON INN HOTEL 276-4010 BARRETT C THOMAS 276-4010 2909 WICKES STEVE

MORENCI ST 1966

678 4491 BALBOA ROOFING CO CONTRS MORENA BLVD--CONTD OFFICE BLDG--CONTD CITY CHEVROLET CO USED CARS 274-1411 276-6005 2205 PETITTE'S UNION SERVICE GAS H BRADFORD JAMES W STRUCTURAL STA 276-1233 ENG 276-4005 1829 ANZA ENGRAVERS 276-0761 2221 SILVER SPIGOT THE TAVERN 276-1030 MORENA PL -FROM 1103 MORENA BLVD NICKLES WM C 276-1120 1831 WEDDING BELL FLORIST SOUTHEAST 1 WEST OF SAVANNA 2229 VACANT 2231 BAY PARK AUTO PARTS 276-2011 2239 SCHROCK CONSTN CO INC GENL 276-3490 1845 MORENA BOULEVARD AUTO SLS 5145 L L PRINTERS INC JOB PRNTG CONTR 276-5331 276-0010 USED CARS 276-6151 SAN DIEGO COUNTY FARMERS INC FARM LABOR ASSN 276-2262 SALINI JOSEPH M COML ARTIST 276-0012 2241 VACANT 2243 MARMET REALTY CO 276-2812 2253 LEFTY'S PIZZA RESTR 276-5656 LEM ROLAND R DESIGN
LETTERING 276-0013
5151 BOYD JACK D ARTIST 276-0605
BROUTIN ANDRE L • 276-1863 1849 VACANT ---LISTER ST BEGINS 2305 MARANTO ANTHONY • 276-281 1851 GONZALES ROBERTA MRS 276-6292 2311 STATE FARM INS CO 276-0911 2313 WALKER JOE C 276-0647 2315 SMITH ANTHONY J 276-0668 1853 RAY WM J 276-1485 1855 VACANT 5181 JOHNSON & SONS INC CARPETS WHOL 276-1524 1857 MOSS BETTY J MRS 2315 XMITH ANTHONY 3 270-0000 2317 KLITGAARD NIELS C 276-0226 2319 SERRAND LOUIS A 276-3434 2321 BUSY B REALTY 276-0300 2335 OLD TRIESTE RESTR 276-1841 1859 HAGOOD MARGT 1861 VACANT 1863 VACANT MORENCI ST -FROM 4200 TONOPAH 1865 LYTLE ART REALTY 276-4656 NORTHEAST 2343 TROYER SAML S CHIRO 276-2731 2345 VACANT 1867 VACANT 1901 MORENA MEDICAL GROUP CLINIC 1403 FLORES NORMA MRS 276-3367 2351 LEITCH ART S REALTOR 276-1631 1406 VAN ORSHOVEN J LEO ● 276-0188 276-3030 1903 SABA DONALD G DENTIST 276-2145 -KANE ST INTERSECTS 1413 BROOKE ROBT D • 276-4726 ---TONOPAH ST INTERSECTS 2405 MISSION ESCROW CO INC 1909 VACANT 276-0020 1915 WATERS & ASSOCIATES REAL EST 1414 RICE DONALD F @ 276-1898 2415 OFFICE BLDG 1416 RICE DURALD F 0 276-1898 1425 RUANE FRED 0 276-3797 1426 MODRE HOYT B 0 276-1200 1428 CAMPBELL EDW L 0 276-3261 276-2540 1917 WILLIET LAND CO BLDG CONTR ROOMS PAUL REGINALD F REALTOR REAL EST 276-4222 2 MC COTTER INSURANCE AGCY 276-2643 276-2304 1923 CLAIREMONT CHIROPRACTIC CENTER 276-2768

1926 ANDERSEN AXEL B 276-2768

1929 RHOAN RICHD 276-1539

1931 BONHAM JANICE MRS

1933 MC MILLIAN TOMMY A

1935 VACANT 1431 PECK LOUIS . 1436 HOUSE MELVIN 1437 LOTT CLARENCE • 3 RADELOW GUNTER K REAL EST 1441 HANSEN GERALD L ● 276-3947 1444 ANDRIEN JULES T 276-4053 1451 BRACY LA FOREST R ● 276-2696 1452 HICKS HARRY C ● 276-2678 4 LEE'S CARPETS AC4-3568 5 VACANT 1937 VACANT 1939 GRAVES MILDRED MRS 276-1509 6 HAMILTON STONE ASSOCS FOOD 1460 LARRIVA FRANCISCO R • 276-1426 BROKERS 276-3613 1939 GRAVES MILDRED MRS 276-5059 1941 POTTER YVONNE 276-5840 1943 COCHRAN ARTHA P MRS 1945 REYNOLDS HAROLD H 8 WASHER MAINTENANCE & REPAIR 1461 VACANT 276-0339 ASHER ST INTERSECTS 2423 WRIGHT HERMAN J • 276-2204 2431 ACE WINDOW CLEANING 276-0446 1502 MALA JOHN M © 276-0422 1507 COVEN PEARL MRS © 276-5167 1514 WILSON BOB © 1947 LUDWIG DHU H MRS 276-2089 1951 LOLLIS LAMAR INSURANCE AGCY CRAWFORD CORDA MRS • 276-5028 1517 WOJEWSKI TRENE A MRS ● 276-5797 276-1281 STEPHENS REALTY 276-0731 2445 CHUCK'S SERVICE CENTER GAS STA 276-2177 1522 FONTANARES INOCENCIO 1955 GOLDEN KEY THE BEAUTY SHOP 276-1080 276-5100 1526 VACANY 1531 MARTINEZ JUAN M • 276-1243 1532 VACANT 1541 NICOLL GEO • 276-1355 1975 DU BOSE B L CHEVRON SERVICE
GAS STA 276-4487
---ASHTON ST INTERSECTS
---NAPIER ST INTERSECTS
2005 FELDMAN SIGNAL SERVICE GAS -CLAIREMONT DR INTERSECTS 2500 GENERAL DYNAMICS 273-1 2505 EYE PAUL GULF GAS STA -8000 276-2521 1549 GOOD DALE E • 276-2374 1550 WOFFORD LLOYD • 276-4971 1559 EDWARDS DARRELL D 276-5016 SAN DIEGO FERTILIZER CO MFG 5 DISTR 276-0513
2519 TASTE T DONUTS 276-4646
2521 SPEEDEE MART GRO 276-9121
2523 BAMFORD REALTY 6 MANAGEMENT STA 276-9166 2027 BAY PARK APARTMENTS 276-0811 ZYMANSKI WM A 2027% REED ROSA L MRS 276-0288 2029 FRANCHINI AUG CO 276-5373 2525 LIQUOR LOCKER THE LIQUOR DLR MORLAN ST -FROM GAYLORD DR EAST TO GLASGOW DR 1 NORTH OF 2029% BROWN WM E 276-0253 2031 VACANT 2031 % VACANT 2033 KELLY WM 276-5055 MERRIMAC AV 2555 CHAMPION SERVICE GAS STA 2033 KELLY WM
2033% FOLLETT LAWRENCE W 276-4593
2035 SPARKS JAMES M • 276-3873
2035% WALLACE JOHN W 276-4667
2037 SANDERS ROBT
2037% KURZ ADOLF 276-5880
2039 CONLEY MARTIN 276-6014
2039% ABLE FORREST
2041 61850N JOHN 276-1126 3601 BULMAN RAYMOND B . 273-4215 2605 JACK-IN-THE-BOX DRIVE-THRU RESTR 276-4342 3602 NORDICK DANL N • 273-1140 3609 AUSTIN CHARLES E JR • 2827 HAFMANN RICHD ● 276-3755 2829 STAROSTA LEOPOLD R 273-7191 3610 GAUS HENRY J • 3617 O'HAGAN JOHN F JR • 273-7415 2831 PAUL ADOLPH 3309 TOMBURELLO VINCENT J . 3618 DAVE NARMAD M 273-5405
3315 BRYANT WILMA S MRS 273-8197
3321 JOHNSON DAVID A 273-3784
3329 BEEHLER ELLEN MRS 0
3337 FEIN LESTER 0 274-1471
3345 BARBOUR WM N 0 273-9963
3351 HOPKINS EDW A 0 273-2436
3359 ENRIQUEZ LOUIS JR 0 273-9952
3367 MURTHA LEO P 0 273-1641
3375 ESPINOSA ENRIQUE 0 273-6731
3385 SUES ARTH F 0 273-3821
---BAKER ST BEGINS 273-5405 3625 MOREFIELD KENNETH A . 2041 GIBSON JOHN 2041 MACKIEWICZ HELMUTH 273-1577 3626 TALLENT CLAUDE R • 273-3702 2043 BARBER DELIA C MRS ● 276-2115 3633 CIARDELLO CARMEN A 273-1259 3634 CULTRERA JOHN @ 274-4584 3641 COURTWAY RICHD K @ 273-6913 2045 VACANT 2047 BOSTICK GROVER C 3642 JOHNSON VIRG D . 274-6975 2051 HACKMAN GEO 3649 VACANT 3650 THORNTON JAMES L ● 273-7316 3657 TOMASIELLO SYLVESTER 2053 VACANT 2055 SUVA RUTH MRS 2057 LE MAY JUTINE A 276-4078 273-6692 3658 HEROLD ROBT E • 273-0182 ---BAKER ST BEGINS 3435 VACANT 2059 VACANT 2061 HANSEN HAROLD D 276-6386 3665 PREMONT RICHO L • 274-5669
3666 BOXBERGER JAMES D • 273-1455
3673 SCHIEBEL HOWARD A • 273-6420
3674 SCHMIDT MATTHEW J • 274-2040
3684 BELL FREDK • 274-0630 2063 GINGERICH JAMES 2065 WHITE PAULINE MRS 2069 APRITHENTS 2069A MOYER JAMES W 2069B FISCHER LEE 2069C VACANT 2069D WATERS HARRIET MRS 3515 MORAN PEDRO ● 273-5490 3527 KOTHLOW JOHN F 273-0568 3693 MC NALLY LAWRENCE J 3535 VACANT 3561 VACANT 273-9641 3694 MC GRATH MATTHEW J • 3691 VACANT
---BRANDYWINE ST INTERSECTS 2069E VACANT 273-5578 2069 FISCHER LORRAINE M 2073 JADHAV KESHAVRAO B 276-4978 2075 AHERN JANICE M 276-0651 MORLEY ST -FROM COMSTOCK NORTH 1
WEST OF LINDA VISTA RD ---MILTON ST BEGINS
2111 CITY CHEVROLET CO AUTO DLRS ---BRANDYWINE ST INTERSECTS 4490 RICE ENTERPRISES LAND 276-6171 DEVELOPERS 273-1181 2202 RAMIREZ HIGINIO 278-3933

1966

4616 NELSON BEN L . 281-6055

NASHVILLE ST

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703
NARRAGANSETT AV--CONTD
CASA MARINA APTS--CONTD
                                                                                          3434 BILL'S RADIO & TV SERVICE
                                                                                         REPR 224-5546
THOMAS WM G @ 224-5546
3453 VAINE GEO H @ 223-6553
3454 HARTMAN GEORGIA MRS
         203 HARLESS J B
         204 MARTIN WM E
205 VACANT
206 BALLINGER JOHN P
                                                                                         3454 HAKIMAN GEURGIA MRS
3456 VACANT
3457 TOWNSEND LARRY
---WESTERN ST INTERSECTS
3458 TURNER HARDLD
3459 VACANT
M SUHT YARUGNAS 6705
5085 SOMPLATSKY BLANCHE J MRS
5087 MC DONOUGH JOHN K
                                                                                           3461 WHISENHUNT RICHD
5089 SURFSIDE APARTMENT MOTEL
222-6540
                                                                                          3465 LDUDEN GERTRUDE L MRS @
                                                                                          222-5823
3471 HALSAVER GEO A 224-5946
5093% HENDERSON ROBT C 9 222-6540
    -OCEAN FRONT ST INTERSECTS
                                                                                          3473 KLATT DUANE H 222-7573
3475 BUTLER DANL
5103 VACANT
5107 PRIETO ALICE MRS
5116 SILVER SPRAY APARTMENTS
HOTEL & COTTAGES 223-8186
CLOCHESSY WM 223-8186
                                                                                          3477 DAVIS VERA L MRS . 224-3055
                                                                                           34778 VACANT
            GALINDO JOHN @
            LITE FLOYD
                                                                                          NASSAU DR -FROM ARAGON DR NORTH 1
NORTHEAST OF COLLEGE AV
                                                                        49
                                                                                          3609 BENDER DONALD L . 583-2675
NARRAGANSETT CT -FROM
NARRAGANSETT AV NORTH 1 EAST OF
                                                                                          3612 SLEDZINSKI THADDEUS •
3617 KUEHN HENRY E •
3618 HARTMANN JOHN J • 582-0448
    CATALINA BLVD
                                                                                         3618 HARTMANN JOHN J • 582-0448
3623 POLLARD JAMES R •
3624 HARDIN JOHN B • 582-7566
3629 DWENS GEO R • 582-6596
3630 PALSER JAMES A • 286-1257
3635 STROHAUER JOHN B • 582-5132
3636 CHILDERS DOYLE C • 582-4561
1837 HAGAR BEN W • 222-3542

1838 TYC EUG D • 232-4837

1843 GOLDSMITH GANO C • 222-2135

1844 WEBB THOS G • 223-6972

1849 NASO NELLIE G MRS • 222-2121
1850 BAILEY WALTER @ 222-5942
                                                                                          3641 VACANT
                                                                                         3641 VACANI

3642 MC LAUGHLIN WM J © 582-8126

3647 SHELTON WM D © 582-6463

3648 JANSON LAWRENCE W © 582-6463

3653 ALBANESE ROBT L 582-9610

3654 WRIGHT ERNEST J © 582-7812

3659 GODFREY HUGH E © 582-4834
NASHVILLE ST -FROM MORENA BLVD
    NORTH 2 WEST OF KNOXVILLE
1323 JENNINGS ETHEL MRS
1325 MC GUIRK HAZEL M MRS
                                                                                         3660 GIST JOSEPH H © 582-4834
3660 GIST JOSEPH H © 583-4347
3665 MATTOX GEO L © 582-5669
3666 MARTINEZ ANTONIO © 582-7094
3672 GODWIN LLOYD W REV ©
583-4449
            276-2153
 1326 VACANT
1332 HANSEN JOLLY R 0 276-5703
1333 COLEMAN ART 0
1339 FORD EVYLENA MRS 0
                                                                                         3675 BENSON JESSE M @ 582-6888
3678 NO RETURN
1339 FORD EVYLENA MRS •
1340 REDDEN DAVID •
1347 RIVAS BERT 276-1871
1348 FARME JOHN R • 276-0328
1351 HOLMES RHEA MRS • 276-1866
1355 BROWN J OTIS • 276-4905
1356 PETERSEN VERL 276-3736
1357 LARSON CLARENCE W • 276-5232
                                                                                          3702 PETERS JAMES P @ 582-4915
                                                                                         3703 GARDNER ROBT D 582-0912
3708 BAXTER WAYNE B @ 582-0559
3709 CHAPRALIS JOHN M @ 582-8791
                                                                                         3714 CLARK AARON B 583-2715
3715 PEPIN ARTH J © 582-3460
3720 STEGMAN ALBERT P © 582-8072
3721 SCHURTZGEBEL RICHD REV
 1364 VACANT
 1371 WHITE ARTH @ 276-3019
1378 KOON EDW R @ 276-1571
---TONDPAH ST INTERSECTS
                                                                                                       582-8849
                                                                                          3726 HELTON REX C 9 582-3063
                                                                                         3726 HELION MEX C © 582-3003
3727 FINCH JAMES C © 582-0103
3732 BERCUSON BERNARD 582-6253
3733 LOWER RONALD W © 582-4457
3738 KING ALF J © 582-8631
3743 CHAMBERS WM D © 582-7656
3744 HENDERSON LEO H 583-7724
 1411 SHOEMAKER LEGNARD J .
             276-1991
 1412 TARANGO YGNACIO 0 9 276-0755
1420 HAYS LOREN W 0
 1428 GAINES HAROLD E @ 276-0281
1436 WOOD DONALD E
                                                                                          3750 HOTZ ALBERT BLDG CONTR 9
583-7219
1443 POLSON WADE 276-4777
1444 HAWLEY DRON F @ 276-5025
1505 WOOD GROVER C @ 276-3967
                                                                                          3751 DRAGONETTI JOSEPH T 583-7595
                                                                                          3756 GAMBLE DONALD G @ 582-3140
                                                                                          3762 BROWNE GALEN E • 583-7571
3770 BLAIR KEITH G • 582-4651
 1515 KUCHENBECKER JAMES H
              276-1294
1525 VACANT
1526 ZMOLEK WALTER S @ 276-1045
                                                                                          NATALIE DR -FROM 4509 NORMAN DR
                                                                                              NORTH
     -PACIFIC HWY INTERSECTS
3301 VACANT
3345 HOM BOK S @ 223-1974
                                                                                          4507 MORSE PHOEBE J MRS @
                                                                                          284-2218
4511 CHECKHART ETHEL I MRS .
3345 GEMENY JOSEPH R 0 223-164

3359 GRAALFS DAIL J

3362 SEMENY JOSEPH R 0 223-6361

3363 TAVANI ARTH J 0 223-1849
                                                                                                      282-6903
                                                                                         282-9403
4514 MILES JOHN A © 284-0900
4515 BROWN CHRISTIAN N © 281-8261
4519 KROEPEL RAYMOND G © 282-9341
4522 MAC DONALD STELLA R MRS ©
 3365 VACANT
 3370 ROSALES JOSEPH 222-9392
                                                                                          284-9190
4525 HART LYNN N @ 284-3289
3380 VACANT
     -LA SALLE ST INTERSECTS
                                                                                         4525 HART LYNN N ● 284-3289
4526 EIGENMANN HENRY ● 282-2797
4531 JOHNSTON JAMES C ● 282-2021
4534 LANE HUMPHREY P ● 284-1850
4536 HOFFMAN MELVIN J ● 282-7869
4537 AMSTUTZ M L 284-8514
---MADISON AV INTERSECTS
4602 KEMMEER ANTOINETTE F MRS ●
3403 VEGA OSCAR 222-5101
3409 HIDALGO JOSE I • 223-1374
3410 FABABIER ESTRING P
3416 EVANS ETHELDREDA MRS
222-3006
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284-8738

4603 DOCTOR ALBERT A ● 284-7658 4607 HAIZLIP HAZEL D MRS ●

284-8110 4610 BENNETT HUGH M JR • 281-3630 4611 FARRELL THOS H • 284-1887

3417 WHITEHEAD JOYCE N MRS 222-5747

3424 COSTA ROBT C

3418 HEWEY PAUL L 3423 TYLER CHARLES 3423% WOLFE ALBERT G 222-7755

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284-4405
4631 BENGIT ROSEMOND J 9
4637 BEED ROY R •
---ADAMS AV INTERSECTS
4642 DIETZ FREDK H • 284-2593
4648 TUCKER GRETCHEN R MRS •
284-6655
284-0555

4651 BAILEY WM C 0 284-0580

4654 FOX GEO L 283-4121

4660 POLZER JACK A 0 284-5258

4666 STITNON GLENN I 0 281-4307

4671 JOHANNESSEN KAARE J 0
283-7603
4672 CAMPBELL ROBT A © 284-4652
4677 SALISBURY MARY S MRS ©
284-2768
4678 QUIRDGA EDW .
4683 EILERTSEN JOHN L . 284-4321
4684 DE SURE SAML © 282-0046
4689 ENG CLAUDE D © 284-5482
4690 CHRISTIAN BERT H © 281-0585
4700 STRACK JOSEPH M © 284-2133
4705 SKILES FLOYD L © 281-6766
4710 LANGSTON F AUBREY 9 281-6217
4715 WILLIAMS J RAY 9 284-6613
4718 ROWCLIFFE MERWIN L e
282-9162
4721 EMMONS ARTH K • 284-8214
4724 HOAG CYRUS C • 284-0878
4725 FRISBIE PAULINE B MRS •
284-2618
4728 CULBERTSON MARGT F &
282-9613
4729 SMITH WALTER C • 283-2628
4729 SMITH WALTER C • 283-2628
4733 SHAW FLOYD L • 281-8689
4737 FRIEDLAN JAMES W • 282-2097
4743 ARKLEY DOROTHY G MRS •
284-4100
4749 FILIPPI CARMEL MRS •
281-2132

4752 EVANS NORMA W # 284-0928

4755 THORNBERG ROBT W # 282-5446

4758 LODPER QNN # 284-6570

4761 SIMONS HELEN V MRS #
               284-2348
   -- CONSTANCE DR INTERSECTS
NATCHEZ AV -FROM 4900 IROQUOIS AV
NORTH 1 WEST OF CLAIREMONT DR
3103 SCHWIEGER CHARLES W 6
276-2966
3105 BECK V FAYE MRS
3106 EVANS JOHN • 276-1207
3109 COLEMAN MALCOLM H • 276-9261
3112 VACANT
3114 COURTNEY BERHARD C 276-3706
3115 JENNINGS RICHD W 276-4592
31120 DEE LEO L ● 276-4346
3121 SHOEN WM E ● 276-2391
3126 GUTHRIE TERRY L ● 276-5954
3127 JENNINGS DONALD L 276-4592
3128 REVA PETER R © 276-3984
3133 NO RETURN
3136 BECKER GEO J JR © 276-1282
3139 MC ANDREW RALPH E © 276-1901
NATIONAL AV -FROM 150 12TH AV
1226 HANSEN E COOPERAGE CO
234-1469
---IMPERIAL AV INTERSECTS
---13TH ST INTERSECTS
1313 VACANT
1335 VACANT
1344 CONSOLIDATED CLEANING &
---14TH INTERSECTS
1430 RELIABLE PIPE SUPPLY CO INC
WHOL INDUSTRIAL SUP
              233-0118
     -15TH INTERSECTS
1521 UNION OIL CO OF CALIFORNIA
              233-3144
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<u>Source</u>

R. L. Polk & Co.

TONOPAH ST 1966

8401 VACANT 8402 SATTLER GERALD 465-4884 8411 PETRICK WM R • 469-2726 -35TH ST INTERSECTS 3505 BATTLE MOVING & STORAGE TOMMY DR -FROM BISBY LAKE WEST 2 NORTH OF NAVAJO RD 232-0835 3518 PAGE MATTIE M MRS @ 239-5594 3524 COLE ROBERTA B MRS @ 8414 VACANT 8425 VACANT 7905 KING VINCENT R 8426 RUTHERFORD MASUN B 0 463-2110 239-3700 7919 MC FARLAND STANLEY • 465-2725
7922 BECOREST VICTOR H • 465-5714 239-3700 3527 OROZCO RUBEN 232-3912 3529 WHITING ARTH L ---PARDEE ST INTERSECTS 3530 CARRASCO ELUTRIO ● 232-8807 8437 VACANT 8438 CARPENTER LYLE R 465-8947 7931 CATANZARO BARTOLO S . 8449 VACANT 463-6830 3562 ANDREWS SAMMIE 3566 DOUGHERTY LEAH N MRS • 7940 COMSTOCK WM G @ 465-1249 7943 KELLY DAVID G @ 8460 PHILLIPS GEO 1 465-3592 7955 ROBERTSON TONY L • 463-0474 7956 MURPHY WM F • 7965 STUBBE FRED W • 465-4641 8469 VACANT 8470 KING CARLTON J • 465-1629 232-0693 3569 ONTIVEROS HENRY R • 239-1614 8477 AMERICAN HOUSING GUILD SALES INC REAL EST 465-4523 3580 SANCHEZ VALENTIN S • 234-8673 7966 PEACOCK JOHN D • 465-6597 7975 RIBB CLYDE M JR • 466-3511 ---36TH ST INTERSECTS
3604 REEVES BERNICE 234-4897
3605 ANDERSON WILLIE T JR 8478 TALLEY EDELINE MRS 460-2310 8487 VACANT 7910 MC CREEDY ROBT K ● 465-5975 7985 MOAG EUG R ● 463-3936 7995 KNORR HAROLD T ● 469-3380 84 88 SHEPPARD DONALD L 466-0944 84 96 LORD ANTHONY N • 466-5157 8501 KEREKES JOHN J • 460-3123 234-7514 3606 YEPIZ HERMAN J • 8001 STEWART ERNEST • 467-5859 8011 SCHNEIDER HERMAN T • 8502 GABRIELSON LYLE F 469-8064 8509 JACKSON RICHD W • 465-2307 8510 SCHWENK WM H JR 463-5241 3609 MELERO JOSE H @ 239-8982 465-0605 8014 VACANT 8014 VACANT
8021 DVERSTREET JAMES • 469-4264
8024 ANDERSON CARL R • 465-3521
8031 MACY EDWIN G • 465-3465
8034 LEE GARRY J 469-4938
8041 HITE WALTER C JR • 463-1688
8046 FREUND JAMES J • 463-8583
8051 MOHRMANN PETER E • 466-2778
8058 ROGERS JEFF B • 460-0839
8060 VACANT
8061 TARBEIL LAWRENCE R • 8517 VACANT TONAWANDA DR -FROM VALLEY RD SOUTH 1 EAST OF REG DR 8518 NELSON DEVONA MRS • 8525 HOOVER GRACE V MRS • 469-2849 8526 LIGGETT GENE S • 469-2578 8533 PAYNE MERRILL W 466-7280 8534 KNORR TERRY L • 465-1053 8541 SLINGSBY JAMES T 466-6781 8542 SANDOUIST ROBT D • 466-6372 133 TONOPAH ST -FROM 2300 LIETA SOUTHEAST 8549 SHUFFLER EDGAR B JR . 8061 TARBELL LAWRENCE R • 465-5302 466-5191 8550 WUNNER EDW T 469-0650 4504 HAGEN HARRY C ● 276-1436 4512 NO RETURN 4520 MORGAN CORINNE M MRS 8070 GRUBER ROGER 8 •
8071 CARTER JAMES R •
8080 NELSON DONALD • 465-2146
8081 CROMWELL CHARLES L • 8557 VACANT 8558 PASAS STEVEN F • 465-4207 276-2776 4528 BROWNE LEONARD K • 276-2175 8565 SELVEY H NEAL • 466-9391 8566 NELSON MARVIN W • 463-8258 8573 ULMER PHILLIP H • 463-7155 8582 LEYVA RICHD • 465-4696 4620 NO RETURN 8090 PHIPPS LESTER L . 465-9757 4626 MELONOPOULOS CHARLES J . 8101 VACANT 8104 BARDSLEY WALTER E • 465-1406 276-2646 8585 JONES ROBT K . 469-0094 8111 STOLLSTEIMER KEENE D . 4636 LAWRENCE PAUL D • 276-5063 4649 GARCIA FRANK A • 276-4435 4669 AMEZCUA MIGUEL T • 276-3631 8602 VACANT 463-5359 8603 BELKNAP WALTER E 463-1861 8114 HONKANE RUDY 465-4520 8121 ROSS MYRON J 465-0196 8612 MOLINA DANL • 465-5119 8613 VACANT 4689 VACANT 8124 TREVIND MANUEL R • 465-5293 8131 WYLIE MARGT MRS • 465-7495 8613 CARPENTER LYLE R • 465-8947 8632 ROGERS JOE R • 465-3902 8633 JOHNSON WM H • 465-1189 8642 VANDERHOOF RAY R • 463-9077 4704 EISNAUGLE ELLA MRS 276-2605 4705 KELLER DONALD R 276-5669 4715 TUDOR DONALD C 276-0505 4718 COBERN CHARLES V ● 276-1064 8134 JACKSON GENE L . 8141 MC PHERSON SHIRLEY MRS . 465-1941 4725 REMKE NORMA G MRS . 276-1760 8643 FORTH LEGNARD R . 8652 VACANT B144 VACANT 8144 VACANT
8151 NO RETURN
8154 NO RETURN
8161 WEITZEL RAYMOND L •
8164 ARMSTRONG GEO R 465-5296
8171 CAYLOR RUSSELL M •
8174 FERNANDEZ THOS R 460-2601
8181 MC ADAMS KEITH • 466-0996
8184 DE NARDI DENNIS J •
8193 LEYENDECKER BERNARD J •
463-8395 8653 HOPPER JASPER C •
8663 LINZEY RAWLEY G • 469-1753
8664 STEIRER FRANK A • 465-8044 TONTO WAY -FROM MONOGAHELA EAST 1 8671 DUNNE AUBREY 8 • 463-6935 8676 BOTTIGER HARRY L • 466-0169 8679 BARTLETT OAVID • 469-5643 8686 WALK RICHD W • 469-7945 NORTH OF HAVASUPAL AV 2605 GILMORE JOHN J 2612 VIGIL NICK JR • 273-5711
2615 VACANT
2622 SWITZER WM L • 274-4318
2625 DAWSON JOHN C 273-3136
2632 PENDER WM J JR MASON CONTR • 8687 ROJAS EDW J 8695 BARTON LEONARD L 463-4214 463-8395 8701 LARISON TOMMY F 8702 COLLIER CLIFFORD L • B196 VACANT 8201 ROBERTSON FRANCIS C . 274-0564 2635 HANSON JACK 469-4816 463-5655 8215 LACY ROBT H JR ● 463-3900 8709 LACHER SEBASTIAN 463-3787 2635 HANSON JACK ●
2642 SCHAFER KENNETH R ● 273-4003
2645 BOHAN WM B ● 273-6355
2652 HORNE BONNIE MRS ● 273-5692
2653 LA MOTTE DARRELL A ●
2662 BIERITZ CURTIS JR ● 273-4348
2663 GRATTEAU JOSEPH E ● 274-3450
2673 ALTLAND CHARLES U ●
2682 VACANT
2683 HAYDEN THOS G ● 274-3177
2692 GARD RAYMOND K ● 273-9878 8710 MEDAWAR GEO E • 465-2574 8717 MYERS RALPH L 469-8551 8718 SMITH BOB H • 469-6313 8227 BUTTERFIELD DEVON R . 466-7195
8239 FOX RAYMOND S •
8240 STOCK RONALD R • 463-6263
8250 PARSONS JAMES T • 463-9682
8251 BUTZ RICHD J 465-4724
8262 BERRY JOHN J • 465-3908
8263 VACANT
8274 MURPHY GERALD 0 • 463-0665
8275 CROW HURBEN W • 469-5676
8284 VACANT
8285 PEMBERTON CLYDE J • 466-900 466-7195 8725 BILLINGS CAROL A MRS ● 469-8577 8726 FLETCHER KENNETH H . 8726 FLETCHER KENNEIH H • 465-0607
8733 WOLGAST JOHN A 469-5756
8734 KENNEDY PETER S 465-2655
8741 NEGRETE HIRAM J 469-3381 2692 GARD RAYMOND K • 273-9878 2693 STEWART THOS W • 273-5475 8742 NICHOLAS HAROLD L • 463-0715 B749 HAINES COLLINS H 8285 PEMBERTON CLYDE J . 466-9009 2704 VACANT 2705 KNOBLOCH WM F ● 274-6765 2716 FREDRICKSON HARLEY C ● 8285 PEMBERTON CLYDE J • 466-900' 8295 LEHOTSKY JOHN JR • 466-8701 8296 JONES MARSHALL J • 463-9001 8301 MONROE JAMES • 463-8004 8302 BUECHNER PAUL J 8750 TAIT FRED C 4 463-0718 8757 VACANT 8757 VACANT
8758 SPETCH EDW T • 466-7677
8765 VACANT
8766 EVERETT KENDALL E
8773 WILBER DONALD R 469-9745
8774 TURNER WILBUR D • 465-7325
8781 HOWELL PAUL J • 469-8327
8782 ARMITAGE SCOTT J 463-0619 273-3285 2717 ISOM VAUGHN • 274-2361 2726 HARRIS BENJ F • 273-6852 8315 REEHER HAROLD E • 469-8418 2729 COUILLARD ANDRE R • 277-8900 2738 BROWN ROBT A • 273-7856 2747 DUDLEY CLARENCE F • 274-6833 8326 ORTIZ ALBERT • 463-3640 8327 DANIELS KEITH L • 463-8402 2748 DUNARDS JDE D 274-3912
2757 MAHADEVAN P 273-2998
2767 PEARCE WM T ● 273-6494
2768 DORNAN MARVIN M ● 274-1264 8338 VACANT 8338 VACANT
8339 DALEY ROBT J ●
8350 LACKI CARL C ● 463-5606
8351 CLEVELAND SIDNEY A 460-3489
8362 ENNIS DUANE J ● 463-9518
8363 PEREZ MANUEL 463-8732
8374 JOYNT WM E ● 465-1489
8375 LEITCH ALAN R ● 466-0724
8384 BURKHARDT JAMES A JR ●
469-0778 TOMPKINS ST -FROM 201 34TH ST 3450 VACANT 3452 JOHNSON JAMES E 232-7240 3468 JACKSON IONA MRS 232-5678 TOOLEY ST -FROM 1800 60TH NORTH 469-0778 8385 PRUITT CLAYTON H • 463-1853 6042 HARMON JUHNSON B • 262-0121 6131 HUFF HARVEY F • 262-2317 6137 TUNG P P 262-2558 3470 MORGAN ROBT R 8394 BELL TROY R • 463-5482 8395 HOLLINGER JACK D • 463-8434 3481 FOOTE ALBERT F

TP.

R. L. Polk & Co.

MORENA BLVD 1961

	ro urpreum rreurre prug.	7/S • CIDSO	
		554	
MORA	GA PL—Contd	1314. Vacant	1861 Vacant
	Blanchard Wm P @ BR3-7622	1318 Bendix West Coast Div Bendix Corp aircraft parts mfg BR6-3430	1863 Dory Opal T Mrs BR6-3061 1865 Lytle Art Realtor BR6-4656
	Irons Donald A @ BR3-5021 Bennett Jas D @ BR3-5306	1323 Cape May Homes genl contr	1867 Howell Arth L
	Damico Ermondo @ BR3-2042	BR6-2848	1903 Derrick Frank V dentist BR6-2145
3366	Stenger Howard W @ BR3-1389	1337 Full Gospel Mission Ch 1339 Vacant	Littlefield intersects 1907 Morena Medical Group Clinic
	Hottel Jennings B @ BR4-3493 Pannell Henry J jr @ BR3-4656	1345 Ted's Paint & Body Shop BR6-1441	BR6-3030
		1395 Morena Mobile Village trailer park	1909 Cresap Jo BR6-2856
MODE	· 127	BR6-5699	1911 Kraft John J 1915 Reed Chas R BR6-3949
	ENA BLVD—From Taylor north, 1 uth of San Diego River	Knoxville intersects	1917 Lessard Ken P
814 H	Iomecraft Sup Co lbr CY6-3733	1407 S & M Elec Co contrs BR6-1550 1409 Vacant	1923 Ballard Wm P BR6-0440 1929 Davies Isaac E BR6-1721
	Palm 5 Minute Car Wash CY5-8295	1411 Al's Elec Mtr Repr BR6-5170	1931 Brooks Gene
	Barnacle Bill's restr CY6-3503 Morena Barber Shop	Al's Washer & Dryer Repr BR6-3395	1933 Vacant
915 V	acant	1413 K & L Mkt gro BR6-1662 Ray's Butcher Boy Meats BR6-1662	1935 Garrick Ed D 1935 Sizemore Alvin
1004	Linde Co (Div of Union Carbide) CY8-8388	1426 Loftis Chas H to BR6-0814	1937 Ardolino Gavin C BR6-4524
1013	Morena Rentals equip rentals	1433 Merchant's Center Garage repr	1939 Vacant
	CY7-2396	GR6-0721 1435 Thomas Chas E	1939½ Bentsen Raymond W BR6-4724 1941 Cahoon Ruby A Mrs BR6-0276
1018	Crowley Casket Co Inc ofc & show rm CY5-5107	1435½ Smith Art Signs oil paintings .	1943 Temms Alice R Mrs
1045	Morena Blvd Mkt gro CY6-9452	1437 Morena Blvd Cabt Shop BR6-5537	1947 Edelman Mabel Mrs BR6-2825
	Tait's Mkt CY5-6543	1440 Remington Mary E Mrs © BR6-1331 1440 Perkins H R	1951 Lollis Lamar Ins Agey BR6-1281 Stephen's Realty BR6-0721
	Crist R A Co genl contr BR6-1421 SD Dor-Chek Co hdw mfg BR6-1191	1442 Vacant	1955 Charle's Hair Stylists BR6-0521
1083	Lerch's Self Serv gas sta BR6-9106	1444 Innman Robt A BR6-2551	1975 DuBose B L Chevron Serv gas sta
1090	Microdot Inc electronic equip	1446 Vacant 1448 Gray Joseph C © BR6-264	BR6-4487 Ashton intersects
1109	BR6-3020 Bay Park Pet Clinic BR6-1616	1450 Reinert Geo A BR6-4548	Napier intersects
	King Van of SD BR6-0840	1457 King Robt E @ BR6-2063	2005 Bay Dark Signal Samy BR6-0888
	Fielder Walter E Inc genl contr	1458 Hannah Robt M BR6-2637	2027-41½ Bay Park Apartments BR6-0811
1106	BR6-2535 Kierulff Electronics Inc equip	1461 Loch-Crane & Assoc archt BR6-4500 State Farm Ins Co's BR6-3884	2027 Borsa Emily F Mrs
	BR6-3334 ·	1464 Apartments	2027 Loyd Joseph J BR6-0370
	Richmond Paper Co whol BR6-3801	(A) Jones Ernest D BR6-0447 (B) Bigadza Gregg R BR6-2002	2029 Sheckler Solange P Mrs BR6-5506 2029 Clarke Ronald C BR6-5590
1122	Morena Blvd Shell Serv gas sta BR6-1382	(C) Hoover Robt R	2031 Kirk Wm
1123	H & H Garage @ BR6-0218	(D) Sampo Geo BR6-2626	2031 Rolfs Nancy
	H & H Serv Sta gas	(E) Smith Mancil J	2033 Vacant 2033½ Wessell Genn
1129	W-L of Morena auto parts BR6-2441. Lauretta's Clns BR6-2765	1465 Ninteman L J Constn Co Inc BR6-5810 1471 SanDiego Ceramics BR6-0771	2035 Cummings Lucille Mrs
	Gene's Barber Shop BR6-0364	1476 Vacant	2035 Baiter Carl L BR6-4510
1134	Bishop Bartlett E acct BR6-0690	rear Bailey Donald L	2037 Reddy Wildemac Mrs
1142	Priddy Howard O acct BR6-0697 Clevenger W C	1502 Frocks John M BR6-4564 1506 McAtee Lawrence W BR6-5429	2037½ Cline Patricia Mrs BR6-1949 2039 Sparks James M @ BR6-0811
1151	Old Town Shoe Shop repr	1506½ Vacant	2039 Reed Rosie L Mrs BR6-0288
	Ramirez Joe R .	1510 Manning Fred T	2041 Collins Tom 2041 Snook Rex B
	Cimron Corp research.BR6-3200 Frey Auto Radiator Serv repr	1515 Micro Switch electrical equip mfrs BR6-4668	2043 Barber Delia Mrs @ BR6-2115
	BR6-2712	Minneapolis Honeywell Regulator Co	2045 Cantrell Jas S
	Morris Furniture Co BR6-2661	temp contr mfg BR6-4660	2047 Smith Austin G 2051. Vacant
	Vacant Vacant	1525 Bay Park Trailer Sls BR6-0945	2053 Harris Wm T
	Colorama Paints No 5 BR6-3212	1540 Morena Pet Hosp BR6-2112	2055 Vacant · 2057 LeMay Gordon BR6-4078
	Picker Xray of Southern Cal Inc	1550 Boulevard Inn restr BR6-9107 George's Used Furn BR6-5599	2059 Justice Allen C
1167	equip BR6-2161 . Nees J C Turf Sup Co BR6-0502	Triangle Barber Shop	2061 Laxson Theo R BR6-2549
	Zaznebar Tavern BR6-9146	1579 Coastal Trailer Sls BR6-0612	2063 Sampson LaDale H BR6-3133 2065 Tillman Nadine L
	Ingram Howard E @	Coastal Trailer Villa BR6-0612 Mendenhall Fred T	2073 Murray Thos B
	Vacant LaJolla Rattan Manufacturing Co furn	1623 Fougeron Augustus F ©	2075 Erwin Paul C
	BR6-2480	1639 Ray Adam R	2103 Lefty's Pizza Parlor restr BR6-5656 2105 Ye Olde Public Hse tavern BR6-5656
	Merrill Ted F Co bldg contr BR6-3131	1641 Savage Andrew F BR6-1930 1643 Vacant	2107 Circle Realty Co BR6-4112
1189	C P Concrete Equip Co contrs sups	1645 Peters Helen O Mrs	2109 C V Auto Parts BR6-1377
1201	BR6-5609 P& L Barber Shop BR6-1888	1655 Ozzie's Music Inc BR6-5060 1717 Musicians Assn of S D Local No 325	2111 Bay Shore Mtr Court BR6-2373 Bay Shore Grocery BR6-2373
	ElCamino Auto Court @ BR6-2706	BE6-4324	Milton begins
1218	Master Clns (br) Vinta Gilbert © BR6-2706	Musicians Credit Union BE6-4324	2205 Guerrero I Union Serv BR6-1233
	Bentsen Ejnar © BR6-0665	1751 Sogo Aizo @ BR6-2765 1765: Falls Joe D	Bay Park Auto Parts BR5-2011 2221 Silver Spigot The tavern BR6-1030
1230	Grogan Marion C Mrs @ BR6-1344	1767 Porter V L	2239 Smith Park E @ BR6-0668
	Holtman Abbie E Mrs © BR6-0937 Fink Benj © BR6-2976	1777 ElPueblo Apartments	2241 Moreno Ernest BR6-0946 2243 Smith Kenneth P BR6-4174
1241	Clairemont Plmb Serv BR6-1397	BR6-1376	2253 Pied Piper The restr BR6-0730
1244	O'Hara Helen E Mrs BR6-5476	1 Lindsey Sally 2 Gray Helen Mrs © BR6-1376	Lister begins
	Wakeley's Mkt gro BR6-9112 Elit Body Shop auto repr	3 McKenzie Edw P	2305 Moranto Anthoný ⊚ BR6-2814 2311 State Farm Ins Co's BR9-0911
	BR6-0049 .	4 McCune Lydia H Mrs BR6-0670	2311 State Farm Ins Co's BR9-0911 2313 DeBey Dora Mrs BR6-2810
1272	Buck's Lawnmower Mart & Saw.Wks	5 Watkins Geo A 6 Newmair Robt BR6-5401	2315 Smith Anthony J
	BR6-2512 Buck Alf C © BR6-2512	7 Vacant	2317 Klitgaard Niels C BR6-0226 2319 Serrano Louis A BR6-3434
	Buck Chas	Asher begins	2321 Siegel Realty Inc BR6-0300
	Sampo Louis A @ equip rentals	1801 Morena Liquor Store BR6-0890 Usnik Edw BR6-0890	2335 Satellite The restr BR6-1841
1278	BR6-1032 Vacant	1813 Klippers The barber shop BR6-5211	2343 Argus Trophy Co Inc BR6-3939 2345 Pinkes David B @
1279	Vacant	1815 Waters & Assoc real est BR6-2540	2351 Dieckhoff Hank Realty BR6-1631
1285	Lynch Lorraine G Mrs BR6-3665	1829 Turrill Alton P BR6-5572 1831 Wheel King-Clairement auto repr	Kane intersects
	Vacant No Return	BR6-5572	2405 Mission Escrow Co Inc BR6-0020
1294	Vacant	1845 SD County Farmers Inc BR6-2262	2415 Delux Constn bldg BR6-4288 Dial Realty BR5-1144
1295	Wilder LeRoy W BR6-0918	1849 Vacant	McCotter Ins Agey BR6-2643
	Diamond Inn tavern BR6-9127	1851. Vacant 1853. Ray Wm J BR6-1485	Ozmun Wm R coml artist BR6-4042
1208	Vacant	1855 Camacho Gwen L	Timemaster Bus Forms prntrs BR6-3556
1298 1305			
1305 1310	Vacant	1857 Vacant 1859 Vacant	Veesmith Studios music tchr BR6-3457

FRANKFORT ST 1961

348 2060 Alforque Casiano
2061 Young Arth BE2-1401
2065 Byrd Queenie Mrs
2067 Sterns Margetta Mrs BE9-5457
2068 Garrett Ada F Mrs © BE9-0579
2071 Island John W BE2-3666
2075 Murry Israel © BE2-3986
2076 Culverson Virgil
rear McGee Hollie
2077 Gray Iventon 1924 Friedrichs Harold E BR6-5893 1927 Weston Robt B @ BR6-4320 1933 Gondeck Mitchell F @ BR6-1874 1936 Urso Albert @ BR6-0966 FRANCIS S-Contd 421 Guerrero Jesus © BE3-3814 424 Atienza Fortunato G © BE2-1243 434 Gibson Willie H © BE2-0250 435 Lonon Wm © 1936 Urso Albert © BR6-0966
1943 Beaton Ralph E © BR6-4087
1946 Bacon Irene Mrs ©
1951 Christman Eug R © BR6-2511
1954 Beckman Albert W © BR6-0953
1961 Wilkinson David E © BR6-0456
1962 Lamont David R © BR6-2547
1969 Akiyama Shizuo ©
1972 Gardner D Harris © BR6-2026 435 Lonon Wm ©
444 Brooks Robt L @ BE9-3276
448 Johnson Jewel J @ BE9-7252
449 Cox Roy @ BE3-0228
449a Calvier Frank
449½ Groves Ervin
451 Tucker Horace jr BE2-1507.
452 Woolfolk Wm W @ BE9-6334 ≘ 2077 Gray Iventon Miller Joseph 2085 Randolph Elber T @ BE9-4991 2085½ Vacant 2086 Compton Louis @ BE4-7776 2094 Salazar Manuel R @ BE4-2445 1975 Vacant 1978 Bernardino Fred T © BR6-2796 453 Vacant 1976 Bernardino Fred T © BR6-2796 1985 Caldwell Harold E © BR6-4561 1990 Harris Wm A © BR6-1754 1991 Filley Fredk R © BR6-2236 1996 Koch Gene R © BR6-3327 Ortega intersects 2095 Hunter Jas FRANCISCAN WAY—From 1 west of Maryland north, 3 east of Knoxville 2096 Roman's Market gro BE2-0325 Cuevas Rosa Mrs 1149 Creel Kenneth E @ CY5-8485 Evans intersects 1149 Cree! Kenneth E @ CY5-8485 1154 Forshey Eug @ CY6-4931 1160 Smith Ruby D Mrs @ CY6-1678 1166 Smith Berkley P @ CY6-3777 1234 Jackson Everett G @ CY6-1038 1234a Starkey Craig 1250 Lydon Richd W @ CY6-1139 Maryland Intersects Evans intersects
2103 Dickens Orville BE9-6697
2104 Thomas Robinson @
2110 Doucette Traville @ BE2-8688
2111 Wallace Jos @ BE2-8028
2118 Sheppard Bennie BE9-4982
2119 San Martin Josephine Mrs @
BE2-0811 2001 Kellerby Barbara L © 2006 Tillman Florence G Mrs © BR6-1577 2015 Pollett Cloyd D © BR6-5887 2016 Pienkowski Adam © BR6-2314 2016 Plenkwish Adam © BR6-2314 2024 Ballatore Batista © BR6-2206 2025 Goodwin Olive I Mrs © BR6-1688 2034 Yungblut Chas W BR6-1988 2035 Dwinell Paul P © BR6-1987 2043 Litten Waldo C © BR6-1374 1404 Senterfitt Arnold D II © CY7-1025 1411 Nissen Astor O © CY6-0402 1419 Warner Ohmer H © CY5-6345 Johnson Leonard 2131 Gutierrez Flora Mrs @ BE9-0560 2131 Gutierrez Flora Mrs @ BE9-05
2133 Vacant
2134 Wise Theodora Mrs BE3-1094
2135 Graw Rella F Mrs @ BE4-4791
2137 Gray Fred I @
2142 Buggert Wm F @ BE9-6905
2143 Apartments
1 Fallen Estella BE4-1629
2 Vacant
3 Vacant
4 Colter Theola Mrs BE4-4357 2044 Olf N M Napier intersects Napier intersects
2107 Spencer Conrad J © BR6-0275
2121 DeFant David L © BR6-0836
2124 Schutzbier Henry H © BR6-4976
2135 Whitlock G Curtis ©
2136 Duncan Helen J Mrs © BR6-1024
2144 Cochran Orville M © BR6-1847
2145 Sullivan Martin W © BR6-086
Milton intersects
2221 Molyneny Earle C © BR6-086 FRANKFORT-From Morena blvd north, 3 east of Knoxville

1325 Ott John F @ BR6-1534

1331 White Ora L @ BR6-0802

1339 Allen Bernard F @ BR6-1465 1333 Allen Bernard F © BK6-1465
1347 Frias Raul A © BR6-0737
1355 Lampe Edw L © BR6-4183
1368 Stewart Danl D © BR6-0669
1369 Louden Earl R © BR6-0725
1377 Tarango Y Salvador © BR6-0650
Tonopah intersects Colter Theola Mrs BE4-4357 Chappel Mattie Mrs Brown Waverly M BE4-7864 MILLION INTERSECTS

2221 Molyneux Earle C © BR6-0360

2227 Velasquez Ida C Mrs © BR6-5970

2232 Miller Jean L © BR6-3828

2235 Blut Louis J © BR6-0751

2252 Daschle Val C © BR6-1733

Lister intersects

2303 Soback Patro L © BR6-173 Greers Columbus Tonopan intersects
1404 Archibeque Marjorie L Mrs
BR6-2495
1412 Everts Ford L BR6-2671
1420 Baker Wm F BR6-0542
1428 Osborne Wm E @ BR6-1230
1431 Jones Horace P BR6-0496 Vacant Vacant 10 Gilliam Chas BE4-7507 11 Masters Ann 12 White Glenn 2303 Sobeck Peter L © BR6-1541 2311 Treffenger Chas H © BR6-1865 Massera John © BR6-2094 13 Vacant 14 Vacant Street continued 1436 Mitchell Phillip R © BR6-1996 Galveston intersects Masse Edwin F @ BR6-1273 Smith Wm B BR6-3369 2146 Johnson Geo H @ BE3-0765 2151 Holloway Albert D 2152 Womble Elden @ BE2-2207 2154 Hidkins Jim E 2158, Vacant 2327 Correia Maurice G © 2333 Allwardt Victor L © BR6-0880 2338 Johnson Norman W © BR6-1824 2346 Snyder Victor E © BR6-2040 Kane intersects 1444 Smith Robt L @ BR6-0660 1452 Miller Lewis © BR6-2954
1453 Simonds Virgil D © BR6-1021
1459 Hickey John G © BR6-0564
1460 Bucy Wayne W ©
1465 Carothers Francis B © BR6-2878 ıt 2158 ½ Aucant
2158½ Murray Hazel
rear Brown Angus
2161 Coffey Audrey Mrs
2162 Dykes Danl BE9-8619
2162½ Chamberlain Geo H BE3-6824
2164 Palmer Hugh BE9-8673
2166 Wooten Jos J Rev ® BE3-8763 Kane intersects
2411 Edwn Robt D ® BR6-1570
2414 Taylor Clair E ® BR6-2703
2423 Bierman Chas jr ® BR6-0048
2430 Jellison John J ® BR6-1695
2435 Whernik Anthony G ®
2436 Campbell Robin M ® BR6-1797
2443 Epperson Robt E ® BR6-0159
2444 Brown Harold A ® BR6-0214
2451 Hudson Henry ® BR6-2184
Jellett intersects Asher intersects 1503 LaGioia Mario A © BR6-4674 1504 Hill Clasford T © BR6-0323 1504 Hill Clasford T @ BR6-0323
1511 Vacant
1512 Powell Dorothy L Mrs @ BR6-2725
1519 Cannon Karl N BR6-1035
1520 Kinsley Francis J @ BR6-0674
1527 Rost John L
1528 Pearce Wm T @ BR6-2405
1535 Wendzel Frank @
1536 Day Curtis A @
1543 Murphy Thos G @ BR6-2476
1549 Haynes Wm D BR6-5629
Littlefield intersects
1705 Thomas Frank K @ BR6-1628 2167 2168 Canady Etheleen Mrs BE3-6854 Hiter Herman 2168 Hiter nerman 2174 Vacant 2176 Avery Wilson jr BE3-0417 2179 Flake Otis L 2181 Logan Tennessee Mrs © 2184 Crowel Willie BE9-4608 2451 Hudson Henry © BR0-2104 Jellett intersects 2503 Albert Norman A BR6-1908 2507 Dani Jas © BR6-2799 2512 Douglas Logan E © BR6-0756 2520 Knowles Walter S © BR6-0627 2191 Davis Wilbur 2194 Cassius Ever K Mrs @ BE2-0231 2520 Knowles Watter S © BR6-0627 2521 Dare Bernice 2529 Copeland De Frantz G 2530 Becker Bruce C BR6-3845 2535 Sakatani Tom © BR6-0543 2536 Jackson N Ethel Mrs BR6-2360 Littlefield intersects
1705 Thomas Frank K ⊚ BR6-1628
1709 Vacant
1719 Phillips Geo E BR6-3926
Gardenia intersects
1720 Barr Wm D ⊚ BR6-2451
1730 Markowski Barbara J Mrs ⊚
BR6-5368
1804 Atkisson Frank G ⊚ BR6-2425
1805 Johnson Ruth M Mrs ⊚ BR6-1415
1820 Ackley Mona A Mrs ⊚ BR6-3518
1811 Follansbee Frank F ⊚ BR6-3765
1821 Lansdown Ian S ⊚
1822 Marquis Thos N ⊚ BR6-2596 2194 Cassins Ever K Mrs © BE2-0231 Sampson intersects 2203 Towles Gertrude A Mrs © BE2-1485 2204 Thomas Eliza Mrs © BE4-5083 2211 Pena Grace L Mrs © BE3-6815 2215 Peterson Dorothy Mrs 2218 Mallory Hatley M © 2543 Prescott Joe BR6-5147 2544 Olson Stanley D BR6-3460 2220 Stewart Geneva Mrs @ BE9-5789 2221 Vacant 2221 Norwood Lelia Mrs © BE3-8529 FRANKLIN AV-From 2610 Commercial FRANKLIN AV—From 2010 Commercia southeast 2005 Johnson Martha R Mrs © 2010 Wallace Lloyd V 2011 Veteran Roofing contrs BR9-6882 2014 Holder Owen D BE9-3407 2020 Grant James 2223 Ellis Ruth 2227 Green Wilbur F @ BE3-6067 2233 Eames Mary Mrs 2235 Matthews Oliver @ BE9-3048 1821 Lansdown Ian S ⊚
1822 Marquis Thos N ⊚ BR6-2596
1827 Fisher Vernet A ⊚ BR6-0556
1832 Nassauer Roy E ⊚ BR6-1224
1837 Jones Horace M ⊚ BR6-0744
1842 DeVolld Robt A ⊚ BF6-3905
1845 LaCoste Raymond L BR6-3944
1850 Landis Ronald V BR6-2153 26 2021 Mitchell Marrick @ BE9-7842 2803 Townsend Arth @ BE9-4344 2811 Vacant 2026 Archie Carl 2029 Davis Vivian O Mrs @ BE9-8773 2029 2 Southern Simon 2812 Wilson Lessie B Mrs BE9-4059 2813 Carter Cassie J BE2-5432 2815 Edwards Philip H BE9-7292 2816 Earl Beulah Mrs BE9-4097 1855 Kelly Francis D @ BR6-1623 1861 Cook Hershel D @ BR6-5752 2031 Vacant 2031 Vacant 2035 Flowers Sam J © BE4-2498 2041 Roberts John H BE3-6993 2043 Washington Osephine 2048 Sutton John BE2-5207 2049 Rdders R D BE4-7922 2824 Rodriguez Delores Mrs © BE2-3977 2825 Moreno Fred V © BE2-8933 1866 Norvell Harry ⊚ BR6-3148 1870 Carr Jim 1871 Duncan Frank L @ BR6-0523 1879 Purdue Norman H BR6-2001 2825a Moore Irma Mrs 2828 Kary Marshall A @ BE3-1540 2381 Hines Wm H @ BE2-8646 2834 Hydrick Allen J BE2-2807 2049½ Vacant 2050 Anderson Jas @ BE9-5778 Ashton intersects 1915 Fildes Roy C BR6-0875 1916 Tilbury Robt S © BR6-3243 1919 Gillespie Saml M © BR6-1707 2055 Nolan Andrew © 2056 Easton Mack 2836 Vacant Lucero Owen M @ BE9-2319

MORENCI ST 1961



NASHVILLE ST 1961

5021 Freeman Dennis O
Harmon Gerald D
Stahl Will C
5022 Backus Irene Mrs © AC2-9089
5023 Ross Gerald
5023 \$ Stuehm Eskil N Mrs
5024 Bowie Clara L Mrs AC2-1538
5025 Park Joe H AC2-1963
5025 Park Joe H AC2-1963
5025 Cembolish Ken
Rogers Garry
5026 Thompson Norman
5028 Voelker Rudolph H AC3-0624
6029 McArthur Duncan AC2-7192
5030 Torok Robt ©
Hartman Frank H AC3-7018
5031 Northrop David AC3-7629
5031 Reed Enid H Mrs
5031 Pewhurst Lee
5035 Tewhurst Lee
5035 Tewhurst Lee
5035 Tewhurst Lee
5035 Tewhurst Lee
5036 Southard Bill E
5037 Vewers J W
5037 Todd D E
5038 Hartman Frank H AC3-7019
5039 Ward Frank
5039 Ward Frank
5039 Ward Frank
5039 Todin Douglas P
5040 Wood Bill
5041 Braussard H L
Carpenter Richd
McQueen R G
5042 Sutton Paul T AC2-3804
5044 Stout Bobby
5045 Smith Clydell 571 NARRAGANSETT AV—Contd

4453 Mills John Y @ AC2-2531

4454 Dix Jas E @ AC3-8269

4460 Perkins Carl R @ AC4-2221

4461 Grove Robt L @ AC2-0239

4467 Seeburg Fred H @ AC2-6051

4470 Lauer Robt M @ AC2-6039

4476 Meeker Frank G @ AC3-7516

4477 Fanton Hugo M @ AC2-8666

4483 Preston Quinnie B @ AC3-0119

4484 Adamos Ralph @ AC3-0858

4494 Hammond Edgar T @ AC3-8002

Guizot intersects

4503 Harvey Kenneth M @ AC2-6812

4504 Ingersoil Fredk M @ AC3-1566

4511 Goeb John F @

4514 Gutowski Konstanty @ AC2-2466

4519 Roscoe Simon @ AC3-8425

4524 Grubb Heien M Mrs @ AC3-3833

4527 Whyte Virgil D @ AC2-4073

4530 Mathys Guy P @ AC2-8535

4535 Bone Jas H @ AC3-9910

4536 Jones I Arth @ AC3-7218

4534 Vacant

4544 DeLozier Ree B @ AC3-8319 Hall Donald W @ AC3-5269 Vacant Hinton Belle E Mrs @ AC2-1217 NARRAGANSETT AV-Contd 4768 Sunset Beauty Salon AC2-7172 4768 Milburn Jerry L 4791 Jerry's Barber Shop AC4-1355 4793 Milburn Lynn I © AC4-5014 4785 Milburn Jerry L
4791 Jerry's Barber Shop AC4-1355
4793 Milburn Lynn I © AC4-5014
Sunset Cliffs blvd Intersects
4805 Day & Nite Market gro
4820 Dadisman John AC2-6420
4821 Calvin Alice Mrs © AC4-5100
4822 Vacant
4830 Hager Jack © AC2-1954
4832 Fox Edgar J
4835 Hologe Ima Mrs © AC2-2886
4835 Pouncan Evelyn Mrs
4836 Foster Dorothy Mrs AC2-2886
4835 Pouncan Evelyn Mrs
4836 Foster Dorothy Mrs AC2-1786
4844 North Richd D AC3-5273
4845 Freeman Chas R © AC3-6187
4846 Horer Dorothy Mrs
4846 Travis Chas R AC2-4401
4851 Robb Hugh R © AC3-6146
4852 Ensley John AC4-1589
4857 Fitzgerald Wm M AC2-8853
4857 Fitzgerald Wm M AC2-8853
4857 Fitzgerald Wm M AC2-8642
4859 Vacant
4859 Vacant
4868 Cosgrove Martin C © AC2-6642
4861 Clack Ray F AC3-0797
48614 Eagur Evelyn C AC2-8252
4863 McGonegle Phyllis L Mrs AC3-8802
4863 Vacant
4868 Christiansen Thos AC2-6943
Corbin Jas L AC2-4938
Hall John
4870 Frazier Jack © AC2-9846
4871 Tucker Fredk J © AC4-5052
4872 Lambrecht Roth F
4873 Drennan Mary E AC2-0266
4875 Willingham Jos K
4876 McCusker Kenneth G AC2-9529
4877 Collins Margt T Mrs © AC3-0519
4880 Stuckey Loyd C © AC3-6846
4881 Boylan John P © AC2-4876
Cable intersects
4905 Hall Edith K Mrs AC2-4605
4911 Gilman Robh AC2-9832
4919 White Richd J
4925 Ferullo James F AC2-5281
4926 Vacant
4927 Vacant
4928 Cecil Sonnie L AC4-2624
4929 Milliman Beatrice G Mrs ©
AC2-1062
4930 Ware Francis
4932 Knoeger Walter L AC2-4356
4934 Charles Edw L AC4-2646
4936 Carpold T L
4937 Dunn Aletha A Mrs © AC2-2984
4949 Kleiva Victor A © AC2-4744
4950 Graybill Alpha C Mrs AC4-1531
4955 Lester Robt L AC4-5853 2536 Jones I Arth © AC3-7218
4543 Vacant
4544 DeLozier Ree B © AC3-8319
4551 Eger Herbert © AC2-3919
4554 Deve Marie V Mrs © AC3-6429
4557 Ripley David E © AC2-3587
4560 Berger Wm © AC2-5091
4562 Berger Warren W © AC3-0945
4571 Whipple Wayne E AC2-0153
4574 Wood Robt E © AC2-4469
4580 Wood Bly E © AC3-1498
4585 Bressette Marion Mrs AC4-5290
4587 Balent Albert AC4-1771 Carpenter Richd
McQueen R G
5042 Sutton Paul T AC2-3804
5044 Stout Bobby
5045 Smith Clydell
5046 Vacant
5048 Chapin Jim E
5049 Carpenter Wallace T AC3-6234
5050 Ryder Helen AC2-8474
5052 Gillson Mildred E Mrs AC3-7412
5054 Garcia Antonio AC2-7340
5056 Denton Harian R
50562 Vacant
5058 Moses John J
5062 Starmody Helen
5061 Vacant
5062 Costello Ed AC3-8310
5062 Melluman Rick R
5064 Vacant
5064 Vacant
5064 Vacant
5066 Menn Carl
5067 Vacant
5068 Henn Carl
5068 Henn Carl
5068 Henn Carl
5078 Nesen Laurence AC2-8346
5073 Naulsen Mary M Mrs @ AC3-8267
5073 N Vacant
5074 Wells Edw E
5075 Mocton Geo AC3-6536
5076 Sandusky Thos
5077 Vacant
5078 Vacant
5078 Vacant
5078 Vacant
5078 Vacant
5079 Vacant
5081 Teggarden Elaine Mrs AC3-0715
5083 Manning Paul C AC2-5147
5085 Peterson Emily Mrs
5087 Jones Anthony
5088 Surfside Apt Motel AC2-8540
Coean Front intersects
5103 Vacant
5107 Vincent John T AC3-6044
5116 Silver Spray Motel and Apartments Froude intersects
4602 Beaudry Wm W © AC3-9497
4609 Johnson Albert E © AC3-9039
4610 Wittis Robt A © AC2-1276
4611 Keegan Margt E AC2-3416
4617 Reed Clayton E AC4-1987
4619 McKenna Wm P © AC2-4755
4620 Moore Selbert H © AC2-3031
4628 Terry Clifford R © AC3-1528
4629 McDonald Scott A © AC3-9931
4631 Ellard Roy AC4-2553
4635 Hughes Larry
4636 Truchan Wm C © AC2-4920
4637 Johnson Gus
4642 Cramer Leona Mrs AC3-6139
4643 Donigan Paul E © AC2-8673
4644 Tewalt Bernard B AC3-8588
4646 Barth Vernon G AC3-0985
4648 Hopper Basit M AC2-1734
4650 Pation Clarence AC4-1207
4651 Geiger Sophie H Mrs AC3-0738
4652 Fargo Frank © AC2-1320
4656 Swanson Donald P AC3-0541 4656 Swanson Donald PAC3-0541 4657 Kovtun Jay © AC3-3725 4659 Vacant 4661 Peters Johana Mrs @ AC3-7830. 4661 Peters Johana Mrs © AC3-7830.
4663 Beam Russell A AC2-7922
4664 Donnelly Eliz Mrs AC4-2008
4665 Kussart Mason L AC2-8241
4669 Vassall Richd O AC3-7514
4675 Willoughby Faul R jr AC2-1801
4680 Merryman Judy AC2-9507
4684 Pattulio David H © AC2-4745
4686 Vacant
4692 McClure A Louise AC4-3073
Ebers intersects 4944 Fotter L Karl @ AC2-7355
4945 Bachant Walter A @ AC2-9783
4949 Kleiva Victor A @ AC2-9783
4952 Lester Robt L AC4-5531
4952 Lester Robt L AC4-5533
4953 Rabello Mary J Mrs AC2-1003
4954 Bushnell Louis F
4955 Joslyn Jos
4956 Vacant
4958 Thomas Konstan AC2-1723
4956 Marino John
4961 Frichtel Jos T AC3-6318
4962 Slagla Allen AC2-9008
4963 Michelson Herbert S
4964 Marlman Bianche R Mrs AC2-3041
4964 Erittian Wn L AC2-6772
4966 Brunette Robt F
4968 Vacant
4969 Hotka Geo W
4970 Durham Ronald
4971 Hendrie James N
4972 Vacant
4973 Robertson Gladys I Mrs
4973 Robertson Gladys I Mrs
4974 Henry James 4692 McClure A Louise AC4-3073 **Rbers** intersects
4704 Carew Eleanor Mrs ⑤ AC3-7348
4705 Hurlburt Richd E ⑥ AC3-6323
4711 Smith Robt A AC2-6191
4714 Barstow Kenneth G ⑥
4717 Vacant
4720 Hawkins Roy L AC2-1532
4728 Orn Max
4727 Fawcett Donald L AC2-6562
4728 Lester Jas A
4729 Shea Edw W ⑥ AC3-5342
4730 Peterson Jennie AC3-7027
4735 Peterson Jennie AC3-6921
4736 Finley Theo S ⑥ AC3-6921
4736 Finley Theo S ⑥ AC3-6921
4737 Reading Margt Mrs AC2-6188
4742 Schlhorst Robt AC2-6700 5107 Vincent John T AC3-6044 5116 Silver Spray Motel and Apartments AC3-8186 Roberts Bert L AC3-8186 NARRAGANSETT CT-From Narragan-NARRAGANSETT CT-From Narragainsett av north, 1 east of Catalina blvd
1833 Honchor Henry R © AC2-6667
1837 Hagar Ben W @ AC2-582
1843 Goldsmith Gano C AC2-2135 ©
1844 Wolsey Dorothy L Mrs ©
AC2-9693 4973 Hobertson Cladys I Mrs
4974 Henry James
4975 Wyman Rose M Mrs AC3-7351
4977 Andrade Raymond
4978 Cverby Mary L AC2-3413
4979 West Louis E AC2-8550
4984 Johnston Hester E Mrs ⊗ 1849 Milligan John H jr AC3-9691 1850 Bailey Walter @ AC2-5942 4739 Reading Margt Mrs AC2-9148
4742 Schihorst Robt AC2-6700
4742½ Zulkowski Adam AC2-7419
4743 Naggle Carl C ⊕ AC2-8508
4744 Ivory John E AC3-8203
4749 Christy John D ⊕ AC3-6418
4750 Schultz Donald
4751 Wise Jas C AC3-6833
4752 Land David AC3-8426
4754 Yarbrough Howard AC2-4518
4757 Tracy Mel ⊕ AC4-2834
4758 Pletcher Dorothy E ⊕ AC2-2317
4759 Vacant
4761 Sharp Leslie E AC2-3764
4762 Lux Helen Mrs ⊚
4763 Toschers Louis P AC2-2064
4766 Schneider Isabel Mrs ⊕ AC3-7901
4769 Hale Harry B ⊕ AC3-6782
47769 ½ Kosky Chas
4772 Wood Clarence F AC2-5275
4774 Orent Kenneth F AC3-8587 NASHVILLE—From Morena blvd north

2 west of Knoxville

1323 Blasingham Jay ©

1325 Phillips John R

1326 Rainwaters Benj F © BR6-1998

1332 Serkin Stewart C

1333 Coleman Arth ® BR6-0813

1338 Ford Evylena Mrs ® BR6-2825

1340 Griggs Carroll L ® BR6-2705

1347 Wallace Wm A ®

1346 Farmer John R ® BR6-0328

1356 Whitesell Wallace L BR6-2932

1357 Straume Arnolf F ® BR6-0772

1364 Monson Thos ® BR6-2884

1370 Whito Billy D ® BR6-2980

1371 Vacant

1378 Koon Edw R ® BR6-1571 AC3-5676 4985 Brennen Gladys I Mrs AC3-7409 4987 West Loren 4989 During Irma A Mrs © AC2-8376 Bacon intersects
5011 Tyrone Bernard E @ boat repr
AC2-2518 ВІ 5013 Vacant 5013 g Graham Chas W @ AC2-6949 5014 Hentzell Geo 5015 DeBardeleben Jay 5017 Balch Margt M Mrs AC2-0188 5018 White Marietta J AC3-0300 5018 g Marlette Frank AC2-5261 5019 Davenport Donald J AC3-3712

TONOPAH ST 1961

TOKALON—Contd
2640 Dale Richd C @ BR6-1737
2643 Brotherton Glen A @ BR6-3718
2652 Chaffin Emil E BR6-4858
2655 Georgens Gerald F @ BR6-4000
2666 Kritenbrink Geo A @ BR6-5905
2667 Sturtevant Hubert B @ BR6-4040
2678 Meyer Willard W @ BR6-4731
2702 Myers Dean L @ BR6-5713
2705 Liles G Jean color consultant
BR6-5431
Liles Robt O @ BR6-5431
2714 Adalac Steph A @ BR6-5749
2715 Martin Kenneth E @ BR6-0832
2725 Collins Wally V BR6-5335
2734 Folchi Joseph G @ BR6-4999
2735 Pimentell Tony L @ BR6-5774
2744 Kavanagh Evelyn Mrs @ BR6-377
2745 Ward John B @ BR6-5877
2755 Malloy Robt @ BR6-5897 3767 Johnson Johnie V @ BR3-1782 3775 Graham Velma Mrs @ BR3-2634 3780 Williams Marie Mrs @ BR3-1236 3783 Thompson Homer C @ BR4-2271 3789 Kirkbride Francis D @ BR3-6964 Beckhan C K © Doten Wm © HO9-8065 8502 8509 Hamilton Adrian L HO9-8019 8510 Schwenk Wm H jr HO3-5241 8517 Bremner Geo W © 8518 Vacant 3790 Culver Grover T @ BR3-3301 3795 Hinkle Daryl B @ BR3-1605 8525 Hoover Grace ¥ @ HO9-2849 8526 Liggett Jean © H09-2249 8526 Liggett Jean © H09-2578 8533 Payne Merrill H06-7280 8534 Jennings Raymond R © H09-1927 8541 Clayton Willard M © 3803 Kries Ernest E @ BR3-5395 3803 Kries Ernest E © BR3-5395
3804 Wright Chas R © BR3-7319
3809 Nielsen Torben A © BR4-3340
3810 Mitchell Laura Mrs © BR3-6766
3815 Maxwell Cyril W © BR3-2672
3816 Trenholm Robt J © BR4-5439
3821 Torres Herbert © BR4-607 OCAT-0 8542 Sandquist Robt D @ HO6-6372 8549 Shuffler Edgar B jr @ HO6-5191 8550 Wunner Edw T @ HO9-0650 8557 Hallstroms John HO9-5617 3821 Torres Herbert © BR4-4607
3822 Steed Guy L © BR4-1358
3826 Treat Clyde T © BR3-3298
3827 Benson Ralph H BR3-3903
3832 Mizzles Casco T © BR3-7517
3833 Brown Harvey A © BR3-3902
3836 Thompson Raymond A © BR3-0644
3839 French Wm A BR4-0597
3840 Smith Wm W © BR3-1075
3844 Wetherbee Geo H © BR3-0627
3845 Peter David J © BR3-6787 8558 Vacant 8565 Salvey H Neal @ HO6-9391 5616 Cox Clifford B @ HO5-241 0 8573 Morrow Gordon @ HO8-1218 8582 Donovan Harold @ HO6-1688 5585 Jones Robt K @ HO9-0099 8602 Clare Geo @ HO5-3712 2755 Malloy Robt © 2756 Sealey Dennis M © BR6-2344 BEAUD Gebhardt Robt E BR6-5219 8603 Oyos Herbert T © HO9-1460 8612 Molina Danl M © 2774 Eulberg Lawrence @ BR6-5178 3845 Peter David J @ BR3-6787 Vecera Wm J @ BR3-2143 8613 Madsen Robt W @ HO9-2619 8622 Vacant 3850 TOKAY—From south of Carmen northeast 2004 Whitfield Barney © CO2-2357 2011 Clark John B © CO2-1763 Sultana intersects **LACIFIC** 3851 3856 Headley Ira H @ BR3-6639 Linder Alf H @ BR4-3108 8623 Carr Denham © HO6-4425 8632 Rogers Joe © HO5-3914 8633 Paul Wm B © HO9-0093 8642 Amante Jose A © HO3-8746 8643 Rhoades Thos © 3857 Trussler Robt G @ BR4-0805 O'Connell Edw J BR4-5352 3862 2016 Davis James T © CO2-8326 2017 Kennedy Norman A © CO4-4549 3863 Osterhaus Merlin F @ BR3-3283 3869 Staats Joseph A BR3-5808 3874 Johnston Milton M @ BR3-4019 3875 Wion Paul N @ BR3-2405 8652 Vacant 8652 Vacant
8653 Earley Joseph © HO9-3426
8663 Lincey Rawley ©
8664 Shanahan John © HO3-1688
8671 Dunne Audrey B © HO3-6935
8676 Bottiger Harry © HO3-9779
8679 Bell Morley © HO9-1404
8686 Walk Richd © HO9-7905 TOLEDO DRIVE—From Alamo dr east, 1 3881 Hypnarowski Adam © BR3-6103 3882 Whitlock Wm N © BR3-2178 3885 Sympson Harry L © BR3-1139 3891 Kensinger Harlan L © BR3-6635 3892 Harris Martin © BR3-4445 3897 Spinney I redk M © BR3-5440 north of Patria dr 4531 Fowers Clarence @ JU2-0515 いろとう 4540 Cavallin David E © JU3-0544 4541 Wilson Robt E © JU3-0794 4544 Tavenner Ray O © JU3-2987 4549 Mix Alvin C © JU3-0327 8687 Rojas Edw © 8701 Larison Tommy F HO9-8071 4550 Bowman Elton L @ JU3-5574 4552 Vacant 246
TOMMY DRIVE—From Bisby Lake west, 2
north of Nauaho rd
8141 McPherson Wm ® HO5-1941
8144 Horlings Albert ® HO5-0534
8154 Jones Emmett A HO5-0632
8161 Willard Warren L ® HO5-0416
8164 Nyblelade Wm ® HO5-0317
8171 Vacant 8702 Collier Clifford L @ HO9-4816 8709 8710 Lacher Sebastian HO3-3787 Vacant Fellows Matthew L @ JU2-6146 4559 4565 Vacant 4573 Knight Warren G @ JU2-5839 4581 Schow Roy W JU2-1292 8718 Jikutz John @ 8725 Billings James P HO9-8577 8726 Fletcher Kenneth @ HO5-0607 8733 Wolgast John A HO9-5756 TOMAHAWK LANE—From 4600 Dakota dr north, 2 east of Clairemont dr 3503 Leake Kyle W © BR3-5376 3504 Williams Jas D © BR3-4950 3511 McLaughlin Kenneth M © BR3-4501 3512 Schroeder Henry O © BR3-0612 3519 Speed Richd S BR3-5507 3520 Gray Bryce W © RR3-4000 Koehler Richd E @ HO3-5363 8734 8171 Vacant
8174 Geradi Alf D @ HO9-6772
8181 Anthony Wm W @ HO9-3833
8184 Dougall Keith @
8193 Leyendecker Bernard J @ HO3-8395
8196 Pershing David R @ HO3-9635
8201 Robertson Francis C @ HO3-5655
8215 Reed Connant W @ HO9-3332 Vacant 8749 Miller Wm R © 8749 Miller Wm R © 8750 Tait Fred C © HO3-0718 8757 Fuller Robt R HO9-5731 8758 Vacant 8758 Vacant 8765 Quirk Kenneth E HO9-8533 8766 Vacant 8773 Isaak Merlyn HO9-8515 8774 Bishop Bernard © HO5-2771 8781 Howell Paul © HO9-8346 3519 Speed Richd S BR3-5507
3520 Gray Bryce W @ BR3-4000
3527 Brown Robt @ BR3-3405
3528 Gieser Richd W BR3-9505
3535 Montgomery Eliz Mrs @ BR3-7508
3536 Martin Kaye L @ BR3-2081
3544 Thomas Charley L @ BR3-5653
3545 Woods Frank @ BR3-6226
3552 Bowden Richd I @ BR3-7653
3553 Mabry Clifford E @ BR3-3295
3560 Briscoe Bubert M @ BR3-4188
3561 Whitcomb Leo D BR3-7155 Butterfield D R @ HO6-7195 Epstein Alf B @ HO3-0584 8227 8239 8240 Stock Ronald R @ HO3-6263 8250 Parsons Jas T @ HO3-9682 8782 Armitage Scott J @ HO3-0619 Kitto Reuben @ HO3-8445 8251 8262 Dumler Paul @ HO3-9651 8263 O'Keefe James M @ HO6-2237 TOMPKINS—From 201 34th east 3450 Stickney Doc Q BE3-1425 3452 Smith Pearlie Mrs BE9-7075 3468 Newbern Wendell C BE9-1918 8274 Murphy Gerald O @ HO3-0665 8275 Crow Hurben W @ HO9-5676 3560 Briscoe Hubert M @ BR3-4188
3561 Whitcomb Leo D BR3-7155
3568 Hinrichs Ray A @ BR3-5858
3569 Hernandez Benj R @ BR3-0663
3576 Mann Thelma M Mrs @ BR3-2336
3576 Mayph J D @ BR3-2540
3603 Vaughn J D @ BR3-2540
3603 Vaughn J D @ BR3-2540
3611 McGeady Robt P BR3-3768
3612 Gregory Donald L @ BR4-5197
3619 Lawrence Jack V @ BR3-2570
3620 Heath Estello M Mrs @
3627 Fisher Dwight S BR4-0676
3628 Williams Robt G @ BR3-2300
3635 Rogers Emmett M @ BR3-2954
3636 Campbell Lawrence W @ BR4-239 3468 Newbern Wendell C BE9-1 3470 Fields Wm H 3481 Porter Jesse D BE4-4285 8284 Neas Keith A © HO9-7616 8285 No Return 8295 Allen Joe C © HO3-4778 8296 Jones Marshall © HO3-9001 35th intersects 3505 Battle Moving & Storage BE2-0835 3507 Vacant Jones Marshall © HO3-8001 Buechner Paul © Parkerson Edw R © HO3-8078 Reeher Harold E © HO9-8418 Ortiz Albert © HO3-3640 Daniels Keith L © HO3-8402 Lombard Don © HO3-0842 8302 8314 3518 Page Fred L @ BE9-5594 3524 Cole Tressess @ BE9-4266 8315 8326 3527 Arellano Carolina Mrs Wade David W BE3-0798 8327 Pardee intersects
3530 Carrasco Elutrio © BE2-8807
3562 Hofacker Velma D Mrs © BE9-8959
3566 Dougherty Leah N Mrs © BE2-0693
3569 Ontiveros Henry R © BE9-1614
3580 Sanchez Valentine S © BE4-8673 osoo Lomberd Don @ HO3-0842 8339 Daley Robt J @ 8350 Lacki Carl C @ HO3-5606 8351 Solomon Clyde R @ HO9-9091 8362 Ennis Duane J @ HO3-9518 8363 Haddock Robt S @ HO3-9672 Campbell Lawrence W © BR3-2393 Bonham Doris B Mrs © BR3-1688 Haley Carl W © BR3-1475 Schiltz Alta R Mrs © 3636 3644 Joynt Wm ⊚ HO3-6509 36th intersects 8375 Leitch Alan R @ HO6-0724 8384 Davis Leonard A @ HO9-8313 3651 Schiltz Alta R Mrs ©
3652 Swenson Theo S
3659 Merrill Julius T © BR3-20738
3660 Gregory Farl T © BR3-2339
3667 Grunewald Margt R BR3-3503
3668 Simpson Orlo F BR4-5315
3703 Merrill Russell © BR3-8862
3704 Causse Robt F © BR3-5211
3711 Irving Jas H © BR3-7193
3712 Blaquiere Jos © BR3-2843
3719 Castillo Manuel R © BR3-233 3604 Vacant 3605 Doquiza Quinton © BE2-7243 3606 Yepez J Herman © BE3-3226 3609 Melero Jose H © BE9-8982 8385 Pruitt Clayton © HO3-1853 8394 Bell Troy R © HO3-5482 8395 Hollinger Jack © HO3-8434 8401 Vacant 8402 Wright Kenneth W @ HO3-6496 8411 Petrick Wm R @ HO9-2726 TONAWANDA DRIVE—From Valley rd south, I east of Reo dr 8414 Mulvey Joseph R @ HO3-9000 8426 Rutherford Mason B @ HO3-2110 3719 Castillo Manuel R @ BR3-1233 3720 Sprigg Danl K 3727 Moore Elmer L @ BR4-0143 3728 Steen Rolf @ BR3-3455 3736 Bryant Ralphine Mrs @ BR3-7836 Ute intersects 8438 Uhl Chas W @ HO5-0359 8450 Carson Robt R @ HO3-0641 TONOPAH-From 2300 Lieta southeast 4504 Hagen Barry C © BR6-1436 4512 Hoofard Wilber C © BR6-2138 4520 Morgan Corrine M Mrs © BR6-2776 4528 Browne Leonard K © BR6-2175 4626 Melonopoulos Chas J © BR6-2646 4629 Suters Chas E 8460 Phillips Geo © HOS-3592 8470 King Carlton © HO5-3908 8478 Jay Willard S © HO5-2874 8488 Rathburn Irvin D © HO5-0670 3759 Edwards Douglas © BR3-2167 3766 Blackett Nadine M Mrs © BR3-2733 8496 Lord AN @ HO6-5157

MORENA BLVD 1952





47 47

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```
A GOOD PLACE TO SAVE
                                                                                                                                                                                                                                                                                                                                                           1446 Eddy W. E., W 2147

1448 Agnew John

1452 Mitasoff K A @ W 5467

1457 King R E @ W 3049

1460 Lykins C M Mrs @ W 8-3193

1464 Westbrook T D @ J 1451

1465 McKenney G G @ W 4049

1471 San Diego Ceramics W 0409

1471 San Diego Ceramics W 0409

1502 Small L J @ W 8-2494

1506 McLuckte J B

1506 McLuckte J W 8-2494

1510 Bay Pk Traiter Sls J 8021

1510 Bay Pk Traiter Sls J 8021

1524 Ohisen D L, W 3255

1578 Costal Trailer Villa W 0847

B Brochek J C, W 8-3310

Cochrane Rose Mrs W 8-3437

Craighead T C

Delvida John, W 8-1075

Downs C H, W 8-2444

Dressler Jack, J 9696

Freed Clyde B W 8-2473

McMendenhall F T, W 0847

Sanchez G R

Shannon E W, W 8-3217

Starr E B Mrs J 4141

Stroud Claude, W 8-1501

Wall B C, W 8-2592

Wilkes C W, J 9574

Woods H J, J 4473

1623 Fougeron A F @

1767 Sandyik J M

1777 Actisen W G

1767 Sandyik J M

1777 Actisen W G

1777 Actisen 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Northwest Corner . . Fourth Avenue at B Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MORRIS—Contd
2421 Vacant
2422 Vacant
2422 Vacant
2422 Vacant
2423 Vacant
2424 Vacant
2429 Vacant
2438 Peterson J L
2438 Vacant
2438 Vacant
2449 Vacant
2449 Vacant
2449 Vacant
2440 Petry J R, F 9-3645
2441 Vacant
2442 Burgoon J R, F 9-3645
2446 Vacant
2440 Vacant
2441 Vacant
2442 Vacant
2442 Vacant
2442 Vacant
2443 Vacant
2444 Vacant
2445 Vacant
2450 Vacant
MORRISON—North from i bik
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3367 Multha L.P. ©
3375 Miller L.E. ©
3375 Outlaw R.G. ©
3345 Overton M. C. G. H. 8-8716
3435 White G.C. © H. 8-8716
3535 Plant J.L. ©
3541 Stilson Myron ©
3541 Stilson Myron ©
3541 Stilson Myron ©
3561 Cota A.J. Jr.
3633 Issacks S.J. H. 8-3981
3691 Steele E.S. © H. 8-55212
3735 Romo W.C. © H. 8-35342
MREFACL (North San Diese
       MOORE—Contd
3112 S D Overhead Garage Door Co
W 0496
3124 Camacho I R ® J 8243
3126 Huerta E A
3130 Dodson A J ®
3146 Anderson V R trucking
Riley Intersects
3212 Swanson Service gas sta
W 9370
3220 Welch Automative Service
          3220 Welch Automotive Service
W 1355
  3220 Weich Automotive Service
W 1835

M 0 O R L A N D DRIVE (Pacific Beach).—East from 3850 Frontera
1454 McConnell M H @ H 8-2618
1464 Dembatk S J, H 8-6742
1470 Murray C K @ H 8-2148
Hines begins
1530 Huntling W L
Smith K M @ H 8-252
1556 Duehn C O @ H 8-6337
1558 Edmondson C A @ H 8-7349
Promontory intersects
1564 Hardy Vincent @ H 8-2618
1604 Butcher Edma @ H 8-3976
1612 Graybill D A @
1626 Schmadel J L @ H 8-2688
1634 Steward L H @ H 8-5868
1676 Rigoll H R
1720 Cummings W M @ H 8-4419
MORENA BLVD (Old Town) —
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MORENCI (North San Diego)—
Northeast from 4200 Tonopah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MORENCI (North San Diego)—
Northeast from 4200 Tonopah

MORLEY (Linda Vista)—South
from Ulrit to Comstock, 1 w of
Lida Vistard
2202 Ramsey & J. W -2.762
2204 Bates & O. W 7-0497
2208 Colo N G
2208 Millum L D. W 7-0497
2216 Raber W S. W 7-1447
2218 Taylor C W, W 7-0896
2222 Hayes G C
2228 Lines & O. W 7-086
2222 Hayes G C
2230 Lee B W, W 7-0242
2233 Reese R V, W 7-2239
2242 Lichtenhelt J H phys
2302 Yoakum V F Mrs
2304 Taylor T E, W 7-4385
2318 Mandel J H, W 7-4253
2318 Mandel J H, W 7-4564
2322 Yunker R V, W 7-1003
2334 Palmer S D, W 7-1646
2336 Cook W F, W 7-3654
2338 Danlel G H, W 7-0432
2338 Danlel G H, W 7-4033
2348 Shea Stuart, W 7-268
2356 Yeargain E S
2358 Stalnaker C C, W 7-268
2360 Clulian H A Mrs W 7-1301

MORNINGSIDE (Paradise Hills)—
San Weithand City Street and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2151 Whatin L D, M 2214
2432 Vacant

MORRISON—North from i bik s of
4150 Market
411 Wahl S E ⊚ M 4-1282
421 McGee L W
441 McGleintock H W
442 Corbett W J
508 Malne Laurence
513 Inray J A
521 Smith G H, M 4-4283
521 Smith G H, M 4-4283
521 Smith G H, M 4-1055
621 Urednick Anthony ⊚
M 4-1547
632 Mattos Casimiro ⊚ M 4-1575
637 Gaboury L W ⊚ M 4-7124
640 Prince A F, M 4-4038
641 Lacko E E Mrs ⊚ M 4-1266
642 Staack S G ⊚ M 1-1306
709 Ruano S G ⊚ M 4-307
715 Urednick Anthony ⊚
709 Ruano S G ⊚ M 4-484
720 Tramel G W ⊚ M 4-6445
727 Moore O T ⊚ M 4-6445
727 Moore O T ⊚ M 4-2973
738 Biramontes F A ⊚ M 4-2973
745 Barnard D M ⊚ M 4-3947
744 Campbell H L
745 Barnard D M ⊚ M 4-3977
748 Alexander W R ⊚ M 4-2973
F Intersects
803 Shaw D L ⊚ M 4-5249
804 Nystrom Norman
               MORENA BLVD (Old Town) ---
North from 4000 Taylor to and
beyond Baker, I s of San Diego
  MORNINGSIDE (Paradise Hills)—
See National City Street and
Avenue Guide
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mauer John
McCune G R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        See National City Street and Avenue Guide

MORRELL (Pacific Beach)—North from 2 biks s of 2000 Pacific Beach dr 3976 Gee A M. H 8-4780 3994 Brown E N © H 8-47124 Fortuna av ends 4004 Harreson B W © H 8-4444 4012 Gwynn F H © H 8-2924 4013 Watermun A S © H 8-9604 4028 Alexander G S © H 8-5503 4927 Heed Ferdinand © H 8-7120 4034 Burt R L © H 8-4744 4042 Fassell J M © H 8-7578 4048 Royer LaVon C © 4051 Cook Leland ir © H 8-4717 4055 Miller Chas J K H 8-9198 4056 Eurkhalter J K H 8-9198 4051 McNamara T M © H 8-9798 4051 McNamara T M © H 8-8781 4089 Thompson D L © 4077 Linn R K © H 8-7814 4089 Brisbin H E © H 8-6891 4083 Bertagna A A 4088 Barks A E © H 8-5570 4090 Dawson E J © H 8-5833 4091 Morlsette E J ir © Pacific Beach dr intersects 4240 Holmes R F © H 8-7080 Reed av intersects 4240 Holmes R F © H 8-7080
                                                                                                                                                                                                                                                                                                                                                                                     McCune G.R
1836 Jeanne's Branding Iron
liquor W 1370
1849 Vacant
                                                                                                                                                                                                                                                                                                                                                                             Ashton interesect
bet Ashton and Napler Bay Park
1915 Hales W A @ J 8247
1917 Ely C F
Russell N N, W 8-1897
1923 Brodersen R K @ W 6728
1831 Farkas J A @ W 1845
Wilkinson Leona
1933 Dubols H
1935 Lewis C M Mrs, W 6998
1935 Halson M H
1939 Woodward W J, J 1443
1945 Shinn A F
1946 Boll R
1947 Root W L
1945 Shinn A F
1947 Root W L
1947 Root W L
1948 Barber C F @ J 9647
1947 Booth W A
1948 Barber C F @ J 9647
1948 Barber C F @ J 9647
1945 Brice W R, J 3734
1947 Booth W A
1948 Barber C F @ J 9647
1949 Booth W A
19516 W J P
1951 Bay Shore Motor Court
1951 W 9510
1951 May G L, W 9510
1951 Mock Geo
1951 Filman Alton
1951 Simble L Realtor W 8-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ashton intersects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Uliver av interseuts
4240 Holmes R F @ H 8-7081
Read av intersects
4266 Kleckner F H @ H 8-3391
4276 Meek J A
4278 Dockstader Doris, H 8-3444
Thomas av intersects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      891 Buttman D L ® M 4-2928

MORROW WAY—East from 4117
Maryland to Washington, ½ blk
n of Lincoln av
1422 Vacant
1422 Higley R H, J 4896
1440 Pounders Ernest
1434 Earlywine E B ® J 3964
1458 Preston D E, W 8-3822
1466 Seviour G W
1466 Sisk J M
Washington intersects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4278 Dockstader Dorls, H 8-3444
Thomas av intersects
4327 Bennett R E
4329 Lottes W A I
4330 Glwoski A J
4331 Glwoski A J
4331 Glwoski A J
4332 Glwoski A J
4334 Glwoski A J
4342 Jones McAdoo
4426 Barker D N @ H 8-6108
4430 Reisner R A
4465 Julian S G Mrs
4486 Ellery C C @ H 8-3294
6456 Flo's Pet Shop H 8-2622
4526 Peterson J R @ H 8-7681
4527 Bell J H @ H 8-7681
4527 Bell J H @ H 8-7681
4536 Gram R D @ H 8-0475
4565 ½ Shaw W W
Felspar intersects
4612 Littler J S @ H 8-3117
4614 Butler J B, H 8-1088
4626 Renas Allen @
4668 Winner J
4678 Reeves J W @ H 8-8095
4677 Head J D @ H 8-8216

MARRIS—North frem McCandless

MARRIS—North frem McCandless
Noble's Market gro W 9376

1211 Bunn Jonnie Mrs

Bunn Jonnie Mrs

Bunn Jonnie E

1227 Bentsen Ejnar ⑥ W 8-1273

1236 Grogan M C Mrs ⑥ J 1734

1235 Ware Juanita Mrs ⑥

1231 Holtman A E Mrs ⑥ J 5974

1235 Ware Juanita Mrs ⑥

1241 Eminger H F ⑥ W 8-2063

1242 Buck Knife Co W 6892

1277 Buck Knife Co W 6892

1277 Sampo Louis ⑥ excavating

1278 Tler! E U ⑥ W 5264

1285 Blakely H F. W 8-3631

1286 Vacant

1291 Gregory C G ⑥ J 1159

1287 Vacant

1291 Gregory C G ⑥ J 1159

1287 Vacant

1291 Gregory C G ⑥ J 401

1310 Coleman Serv gas sta W 2569

1320 Ott J F ⑥ W 0949

1325 Frey Auto Serv J 9141

Frey W R

1345 Doyle J W widt W 5739

1364 Blue Arrow Motor Court

Mrs. 2105

1375 O'Neal M Edw, W 4998

1442 Lottis C H

1433 Merchants Center J 6464

Merchant F R

Scott Ben Plmh J 2471

1444 Alexander & Goodwin nursery

1442 Holmes C W, J 6131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MORSE COURT (Linda Vista) —
West from Coolidge, i n of
Kramer
                                                                                                                                                                                                                                                                                                                                                                                                                                 Stom L R
Sutton J L
VanStelle L Realtor W 8-1121
Cota Jos
Smith P E ® W 8-3211
Wakeling C M, W 0449
Kiltgaard R D. W 2024
Maranto Anthony
Smith A J ®
Vacant
Stepzinski A J W 0449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kramer
6911 Baker N A. W 7-3208
6912 Gilstrap M F, W 7-0748
6912 Green F B J
6913 Anderson F W 7-2313
6931 Anderson F W
6932 McLaughlin J F, W 7-3446
6941 Gatton C H, W 7-0281
6942 Sanders M F
                                                                                                                                                                                                                                                                                                                                                                        2305 Maranto Anthony
2315 Smith A J @
2317 Vacant
2319 Stepzinski A J, W 0449
2345 Vacant
2345 Vacant
2351 Resea A F @ J 2768
2405 Sparks J M @ plmb
W - 1409
Sparks J M
2415 Handley C R @ W 0878
2423 Crawford Picture Frame Co
W 9987
Crawford G W @ W 9987
3303 Darby Jas O @ H 8-8554
3309 Kistler F E @ H 8-4222
3315 Harper P D
3321 Vacant
3329 Riso Jos ir @
3337 Clarke E P @
3335 Hopkins E A @
3359 Enriquez Louis.jr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOULTRIE AV (Pacific Beach)—
North from 3500 Ticonderoga
3540 Smith J D @ H 8-7448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3540 Smith J D @ H 8-7448

MOUNTAIN VIEW DRIVE E (Normal Heights)—Northwest from Madison av and Ward 4te 35th 4603 Cooper M C Mrs, T 9922 4609 Douglass M M @ R 1777 4613 VanCleef Irene Mrs T 1756 4615 Leace Dalsy F @ R 3490 4617 Ozga Frank, R 6637 4621 Evans J B @ T 5666 4631 Gibson J T @ 4634 Chouinard Gene, T 1-3930 4632 Neison Adeline Mrs T 0524 4643 Acton Walter @ R 0733 4644 West S C, T 9596 4644½ Castle H E, R 5143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MORRIS—North from McCandless
bivd, 3 w of Vesta
2401 Micelli A J
2402 Gloosby M L
2403 Childress B R
2404 Johnson J B, F 4833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2411 Vacant
2412 Pettyjohn J E, M 0694
```

intersects

FRANKFORT ST 1952

```
FORDHAM—Contd
2695 Washington L J
3117 Rodriguez R M
3118 Riesgo E A
3119 Lehman D E
3120 Hawkins A R
3121 Crevier A F
3122 Wack J M
3124 Cole L G
325 Dean M C
325 Dean M C
327 Vacant
326 Taylor B J, B 6236
317 WcCann J F,
3180 Cann J F,
3181 Cann J F,
3182 Gramazio A P
3181 Cream J F
3182 Gramazio A P
3182 Gramazio A P
3183 Gramazio A P
3184 Poileic Library br
7 Frontier Homes Housing
Profect Community Bldg
8 4921
3219 Midray Elementary Sch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1011 Ellsworth Mobil Service
W 0487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W 0487
Leadon Arth auto washing W 0487
W 0487
Miskovsky G E tire repr W 0487
Miskovsky G E tire repr W 0487

1021 Mission Hills Texaco Serv gas sta J 7776
Ibis intersects

1111 Ford J E tire repr J 3161
Mission Hills Automotive
Serv gas sta J 3161
Nicol Frank auto repr J 3161
1112 Bis Food Mart W 5081
1119 Hermiston W J Mrs
1120 Sutherland J F ⊚ W 6459
1120 Sutherland J F ⊚ W 6659
1130 O'Connell A E Mrs J 4682
1220 Mission Hills Congregational Church
1215 Hill A R ⊚ J 4662
1223 Ladway H J J 7719
1225 McClure Gale, W 2471
1227 Murphy Mary ⊚ W 0569
1228 Meads G W ⊚ J 5970
1301 Ross E M Mrs ⊚ W 1769
1302 Leet Ada Mrs ⊚ J 0219
1304 Stormson G P
1309 Pabst R J, W 2722
1318 Fisher L J ⊚ W 3229
1319 Woodmansee K M Mrs ⊚
1320 Bultz Grace ⊚ J 9413
Jordan W D, J 5881
Wallace Clara Mrs J 0350
1321 Taggart J R ⊚ W 1243
1330 Ricardson E E ⊚ W 8-1434
1410 Campbell R C Ne J 1935
147 Determann H F Mrs ⊚
1 J 5221
1420 Affleck W G ⊚ W 3793
1430 Smith T T ⊚ J 9261
1431 Jacobson L H ⊚ J 4670
Randolph intersects
1504 Moist Fred ⊚
1516 Wilson A E Mrs ⊚ J 2010
1520 Ruth E B Mrs ⊚ J 0475
1525 Antonicelli Frank
Mission Hills Nursery J 2808
1530 George Vera I osteo J 7772
Palmetto way intersects
1602 Golden Eagle Serv Stateness intersects
1609 Wicks A W ⊚ W 0642
1611 Mann E G ⊚ J 4212
1611 Mann E G ⊙ J 4212
1613 Lacks G L ⊚
1522 Stewart F © J 2347
Stephens intersects
           3240 Midway Elementary Sch
B 7107
## Midway Elementary Sch
## 7107

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## 71
               FORDHAM COURT (Frontier
Homes Housing Project)—North-
west from 3050 Fordham
   Homes Housing Project)—Northwest from 3050 Fordham
8601 Ramirez Dolores H
8602 Keeling Jas, B 0967
8603 Coberly K B, B 2-2875
8604 Jones E L, B 2-3748
8605 Arrequi E F, B 2-3978
8606 Kirkland David
8605 Arrequi E F, B 2-3978
8606 Kirkland David
8607 Martinez J S
8608 Auld F M
8609 Moore Caesar
8610 Runnels C R
8611 Grayer Robt
8612 Miller Roy
8614 Richardson R P, B 8949
8614 Richardson R P, B 8949
8615 Harper C A, B 2-2778
8616 Harris C H, B 2-2136
8617 King Ella Mrs B 1829
8618 Haffield Carson, B 6762
8619 Howard J L, B 8521
8621 Aerhart Russell, B 4791
8622 Haght R C
8623 Hight R C
8624 High R C
8625 Fenderson J W, B 4731
8625 Fenderson J B, B 4751
8626 Patterson Dale
8630 Johnson Ernestine E, B 0208
8631 Wilson A S, B 4156
8632 Patterson Dale
8633 Usilson A S, B 4156
8634 Guerro J C
8636 White Allie Mrs B 7743
8636 Hayse V J, B 8601
8644 Braswell J H, B 3176
8646 Braswell J H, B 3176
8646 Braswell J H, B 3176
8648 Evans H G

FORT STOCKTON DRIVE (Mission Hills) West from 4656 Feats
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stephens Intersects
1704 Lamb B D, W -1857
1705 Bittaker H F ® W 5187
Harper W W repr shop
1712 Parizot Frank ® W 3379
1715 Premo E G, J 0482
1719 Adams E E @ W 1075
1720 Vacant
1725 Martin E G Rev W 0600
1733 Moyer D D Mrs ® W 5192
1734 Whisler K R Ø J 0974
1737 Walden J W ® W 8-3486
1740 Portophese Nunzio Ø J 9800
1745 Fontana Lawrence Ø J 6564
1750 Isham A H Ø J 8934
1755 Chubbuck J S ® W 5931
Sunset blvd intersects
1760 Stockes G F @ W 4231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1755 Chubbuck J S © W 5931
1760 Stockes G F © W 4231
1770 Earnest L E © W 6094
1775 Plaza Jos © W 6581
1778 Wade Agnes E Mrs © W 5517
1779 Atchison W E © W 2370
1799 Kirk B Hope © J 6810
Lewis intersects
1800 Fincher B S Mrs © W 3310
1801 McConaughy L B Mrs ©
J 5363
1802 Wuldern F M © W 2688
1804 Wuldern F M © W 2688
1804 Russ E D Ø J 1028
1811 O'Connell T F © W 5495
1816 McIntire J Mrs © J 1472
1830 Smith J B, W 1729
1832 Waterhouse Emily, W 2963
1834 Dunkel C E Ø J 8538
1834 Eshon Rosa S Mrs Ø J 5797
1845 Howard C E Ø J 1026
1846 Jackson J T Ø W 1169
1854 Sandel E M Mrs Ø J 1726
1855 Boyle E F lawyer
1855 Boyle F A Ø J 0592
1859 Minna J B Ø J 0243
1860 Merchant G B Ø W 8-1807
1866 Wyatt Virgil Ø W 4282
1874 Fielding M V Mrs Ø W 8-2861
1883 Gapno Emma C Mrs, J 6413
1887 Hahn C F, J 0668
1903 Stephens J F, W 8-2797
1913 Mihm J J Ø
1914 Nettekoven E M Mrs Ø J 0454
1918 Buss W M, J 5162
           FORT STOCKTON DRIVE (Mission Hills) — West from 4050 Eagle,
                       74 Braend Amelia C © 12 Buchanan R G © J 6940 719 Ring Jack © W 1763 720 Wilson G F © W 2272 24 VanDusen F I © W 3283 727 Ullrich John © J 1073 Falcon intersects
                       S18 Gray E F
S18½ Mission Mineral Mart
mining engs J 8303
S20 Mission Hills Pet House
W 0588
                                                                                                                                                                                                                   Goldfinch intersects
                   Goldfinch intersects

Goldfinch intersects

Goldfinch intersects

Goldfinch intersects

Goldfinch intersects

Goldfinch intersects

110 Mission Hills Top Shop

Wells A N

111 Harn E M Mrs W 5175

Goldfinch intersects

111 Harn E M Mrs W 5586

Goldfinch intersects

112 Mrs W 973

Goldfinch intersects

113 Mrs W 973

Goldfinch intersects

114 Mrs W 973

Goldfinch intersects

115 Mrs W 973

Goldfinch intersects

115 Mrs W 973

Goldfinch intersects
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1919 Kammeyer E M
1920 Fort Stockton Grocery, J 5162
Fort Stockton Guality Meats
J 5162
1926 Fort Stockton Guality Meats
Allen rd begins
Hickory begins
Arden way ends
Canyon rd ends
2008 Cherry E S © J 9832
2015 Claytor Purl S, J 1164
2017 Curlis Olive E Mrs, J 1484
2019 Chatterton D B, W 6544
2020 Babb Mildred © J 5646
2025 Wold W D ©
2031 Lamdreth J F
2033 Jacob H W © W 6908
2015 Toris Olive W 18 W 1543
Pine intersects
2107 Mitchell H W Mrs © J 8645
2110 Grilli Antoney © W 8-3683
2114 Biderman L S © W 5230
2115 Archibald J Dean, J 1392
2121 Fern A J © J 7309
2124 Lee R F © W 2566
2127 Bradley John A ©
2138 Thornhill Stanley, J 9177
2139 Johnson F © J 1728
2147 Nolan J W © W 603
2151 Brown H C © J 0722
2154 T Odorica A I © J 6315
2203 Bopp Mabelle A Mrs © J 8078
2216 Faust F F © W 5353
2217 Okefe E T © W 3288
2227 Mead E B © W 3566
2228 Scarcella Nicholas © J 6486
2235 Strugo Salvo © W 3606
2235 Griffith G H © J 3607
                                                                                                                                                                                                                                                                                                                                                                                      FORWARD (LI)—Contd
764 Olstead J A Mrs, G 5-1578
778 Griffin D C ⊚ G 5-7417
783 Manar C W, G 5-3766
814 McGrath T H
820 Vacant
                                                                                                                                                                                                                                                                                                                                                                                      FRANCIS NORTH — North from
Commercial, 2 e of S 34th
145 Griffith Etta M Mrs @
148 Vacant
                                                                                                                                                                                                                                                                                                                                                                                             148 Vacant

215 Braz Casimero
229 Barba M V @ F 9-3202
230 Barnes R G @ M 9569
235 Hocking J H @ M 3926
238 Ryan P E, F 1027

L intersects
                                                                                                                                                                                                                                                                                                                                                                                             272 Araiza J F @ M 3205
                                                                                                                                                                                                                                                                                                                                                                              272 Araiza J F ⊚ M 3205

FRANCIS SOUTH — South from Commercial, 2 e of 34th
36 Stanford Fred ⊚ F 2044
209 Carrillo Fred F ⊙ F 9-7965
211 England J H, F 2039
219 Nishimura Shigeru, F 9-5735
233 Salmon Richd
rear Cortez Leo ⊚
233½ Salmon J J
328 Gunion Thoburn ⊚ M 9343
329 Harris Mack ⊚ F 5607
335 Bailey J H
341 Dizon Larry ⊚ M 9038
404 Smith Herman ⊚ F 1054
407 Tsuida Masaharu ⊚ M 2303
414 Elegado Benigno ⊚ M 3586
415 Perez Jose S ⊚
421 Guerrero Jesus ⊚ F 3814
424 Atienza F G ⊚ M 1243
434 Gibson Willie H ⊚ M 2872
435 Lonon Wm ⊙
444 Brooks R L ⊚ F 9-3276
449 Cox Roy ⊚ F 0228
449½a Calvier F S, M 1920
449 ½b Terry Wm, F 9-4030
452 Woolfolk Wm W ⊚ F 9-6334

FRANCISCAN WAY (Mission Cilifs)—Fast and west
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NASHVILLE ST 1952

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NARRAGANSETT AV (Ocean NARRAGANSETT COURT (Ocean Beach)—North from Narragan-sett av. 1 e of Catalina blvd 1837 Hager B W. B 2-3542 1838 Rodman L S @ B 6800 1844 Webber Al 1838 Rodman L S ⊕ B 6800

1844 Webber Al

NASHVILLE (North San Diego) —
Northeast from George, 5 se of
Phoenia from George, 5 se of
Northeast from George, 5 se of
Northeast from George, 5 se of
1232 Santebez Jose © J 6074

1235 Iamtekowski C J
1232 Rathmater B F ⊕ J 1027

1332 Partman J G ⊕ J 8553

1338 Ford Y Y ⊕ J 5743

1340 Chisenhall W V ⊕ J 9082

1347 Downs O G ⊕ W 2785

1348 Farmer J R ⊕ J 7463

1356 Allen J L ⊕ J 3546

1364 Monson Thos ⊕ J 3810

1370 McCall R L ⊕
1377 McCall R L ⊕
1378 Walker F D ⊕
1411 Shoemaker L J ⊕ W 1586

1412 Tarango Y O ⊕ J 5164

1420 Vasquez R E ⊕ W 8-2605

1428 Best G A ⊕
1434 McKinney Harmon ⊕
1444 Scott B J ⊕ J 5140

1565 Cole F J ⊕ J 7844

1565 Cole F J ⊕ J 7844

1565 Cole F J ⊕ J 7844

1565 Damizio Martin ⊕ J 9900

1525 Zenken C H ⊕ W 2802

1526 Marshall B F ⊕
1301 Ranglos P D ⊕ B 7982

1303 Rogers Jas

1305 Vacant

1319 Rodgers R H

Siegel F J

1 Upiter intersects

NATALIE DRIVE (Talmadge Park)
—North from 4509 Norma dr
4507 Morse G L © B 2218
4511 Checkhart J J © T 6903
4513 Scott E P ® R 1990
4515 Zottola Vido ® R 6267
4519 Recepte R G ©
4522 Regnier L A © R 4966
4522 Regnier L A © R 4966
4525 Munson N © R 2990
4526 Munson N © R 2990
4527 Regnier L A © R 4966
4526 Hoffman M J © T 7869
4536 Hoffman M J © T 7869
4537 Brown J L © R 848
4602 Kemmer J E © R 8738
4603 Jenson A A © R 4835
4607 Haizlip Paul © R 8110
4510 McGlocklin E D Mrs © R 6497
4611 Farrell T H © R 1887
4616 Teis Geo © T 1-7264
464 E N M C © R 4837
4622 Snith D C © R 4837
4622 Snith D C © R 4837
4623 Patton Dina G R 7605
4639 Patton Dina G R 7605
4639 Patton Dina G R 7605
4637 Ellingsworth J O © R 1825
4642 Waldron F M © R 2593
4642 Waldron F M © R 2593
4643 Manna sv Intersects
4648 Hahn Julius, R 7166
4651 Buchner H C © T 1-1122
4654 Barrack L M © T 1-2396
4660 Magee H L © T 1-17437
4666 Buckham H S © R 1819
4677 Deck M B Mrs © R 7401
4677 Martin J W © T 6839
4677 Leck M B Mrs © R 7740
4678 Martin J W © T 6839
4679 Martin J W © T 6839
4679 Martin J W © T 6839
4679 Martin J W © T 6839
4705 Killes F L © T 1-6766
4710 Langston F A © T 1-6757
4715 Lewis R L © R 6613
4718 Rowellffe M L © T 9162
4721 Hoag C C pistr R 0878
4722 Frisbie H L © R 76391
4723 Frizgerald F Ø © R 8607
4735 Seymour C W ir © T 6391
4727 Patton L H T 16504
4735 Looper On © T 6872
4746 Achley R W © T 5446
4758 Looper On © T 6872
4747 Achley R W © T 5446
4758 Looper On © T 6872
4747 Achley R W © T 5446
4758 Looper On © T 6872
4747 Achley R W © T 5446
4758 Looper On © T 6872
4746 Simons H W © T 5446
4758 Looper On © T 6872
4741 Simons H W © T 5446
4758 Looper On © T 6872
4746 Simons H W © T 5446
4758 Looper On © T 6872
4746 Simons H W © T 5446
4758 Looper On © T 6872 A751 Simons H V W H 2348

NATIONAL AV — Southeast from 150 12th av
1226 Hansen E Cooperage Co
M 8-1469
Imperial av intersects
1245 Fenton H G Material Co
F 6224
Pre-Mixed Concrete Co Inc
F 6224
Western Salt Co F 8107 Pre-Mixed Concrete Co Inc
F 5224
Western Sait Co F 8107
13th intersects
1301 Luque's Gilbert Union Oil
Serv M 7370
1310 Kents Serv Sta F 9-2401
1340 Actha Freight Lines (whse)
1344 Markcraft Mfg Co
14th intersects
1521 Union Oil Co of Cal F 3144
1526 Reliable Pipe Sup House
F 0118
1536 Midget Cafe M 6335
1538 Pepper Tree Liquors
1572 Danlels & Johnson's Serv Sta
M 0638
16th intersects

Slegel F J Jupiter intersects
33:59 Kinsel H T @ B 7802
33:70 Olson H T @ B 0305
33:00 Murray S B 34:09 Hidalgo J I @ B 1374
34:00 Delnoce D A 34:00 Delnoce

7th and K STS.

3434 Thomas W G @ 3453 Vaine G H @ B 6553 Western intersects 3458 Curtis E J @ B 6348 3458 Curtis E J @ B 6348 3474 Acana Acana M H, B 7081 1471½ Henderson M H, B 7081 Lapwai intersects

1572 Daniels & Johnson's Serv Sta M 0638

16th intersects 1603 Am Poultry & Provisions Co F 6688

1609 Vacant 1619 LaMichoacana gro M 7851
1621 Santos Ray 1623 Montejano Tina, F 7928
1623 Santos Raiph restr M 6395 McGarity G M 1625/4 Espinoza Rosa 1629 Santos Raiph restr M 6395 McGarity G M 1635 Stewart Jas 1637 Chrisman Zula M Mrs 1638 Summerville J W @ F 2875
1633 Santos Raiph, F 9-2628
1639 Summerville J W @ F 2875
1633 Sommerville J W @ F 2875
1633 Sommerville J W @ F 2875
1635 Raifo Service M M Mrs F 2928
1651 Collins M J Mrs 9 M 3676
1652/2 Moore G W F 9-3539
1659 Fadfo Service M M 1687
1688 Portillo M O. F 9-3830
1665 Torrescano J H, F 9-6397
1667 Crown Cookies, F 3672
1668 Silva Ernest
1672 Brown S E Martinez J G

1675 Lopez L G @
1675 Carbajai Frank
1678 Hernandez Arth
1678 Figurandez Arth
1678 Figurandez Arth
1678 Figurandez Arth
1689 Charca Victoria Mrs
1689 Charca Victoria Mrs
1689 Charca Victoria Mrs
1680 Charca Victoria Mrs
1680 Charca Victoria Mrs
1681 Cale W G Gay Chevren Serv
2672 Sas sta M 7922
1692 Brown Second Hand Store
1693 National Liquor House M 6208
1700 Parga's Baby Shop F 9-9068
1701 Colmencro Benj gro M 7513
1705 Jones T A photog
1709 W Scalor Virginia Mrs
1710 Mrs
1711 Guant C F F 9-4055
1711 Guant C F F 9-4655
1711 Guant C F F 9-4655
1711 Guant C F F 9-4655
1712 Bautusta L G, F 9-6650
1713 Edelevier R V
1714 Morales J C
1728 Roccoforte Vito, F 9-1077
1721 Brigham's Cafe Society
1723 Hotel Beston M 7783
1721 Dearle Robt, F 4475
1724 Motthell Wesley, F 9-6583
1728 Roccoforte Jacob © F 9-2690
1729 Walker Eddie
1726 Barnett Isabel
1727 Mitchell Wesley, F 9-6532
1728 Walker Eddie
1728 Barnett Isabel
1729 Halker Eddie
1729 Halker Eddie
1729 Halker Eddie
1729 Halker Eddie
1738 Gonwalez R R Mrs @ F 9-5932
1738 W Globa Lawrence
1738 Gonwalez R R Mrs @ F 9-5932
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1738 W Globa R R Mrs @ F 9-6593
1738 W Globa R R Mrs @ F 9-6593
1738 W Globa R R Mrs @ F 9-6593
1738 W Globa R R Mrs @ F 9-65

M 7880

1793 Amador M C fr @ gro M 7517

1809 Neighborhood House Assn
M 3958
Peifer Gertrude

1812 Martinez Antonio @ M 6024

1818 Gonzales S R @

1822 Cordova R L

1825 McNamars S J, M 6860

Stavent Velma Mrs

1825 McNamars S J, M 6860

Stavent Velma Mrs

1825 McNamars S J, M 6860

Stavent Velma Mrs

1826 Apples W L

1828 Hoyles W L

1828 Hoyles W L

1828 Hoyles W L

1828 Hoyles W L used furn F 0422

Hughes Electa Mrs

1831 Gutierrez Malario

1832 Monison E R @ F 9-8758

1833 Brackett W C Mrs @ F 4559

1835 Stangland E M Mrs F 7878

1836 Stangland E M Mrs F 7878

1839 Consuela Herbert

Torres Herbert

Torres Herbert

1841 Guintero Frances Mrs
F 9-8571

1842 Reed Eliza, F 4484

1855 Cown D L V, F 9-3751

DeGarmo Robi, M 9031

rear Baldavino Jecan

Spencer D G Mrs @

1855 Garand Robi, M 9031

rear Baldavino Jecan

Spencer D G Mrs @

1855 Garand Robi, M 9051

1855 Leptera Doro M 9961

1855 Leptera Doro M 9961

1855 Leptera Doro Monencio

1857 Leptera Doro Mrs M 9187

1857 Leptera Doro M 9961

1857 Leptera Doro Mrs M 9187

1857 Leptera Doro M

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219

226

220

260

26:

26: 26:

26:

26 26

26

NATIONAL AV—Contd

1859 Chavez Fred

1861 Ulloa J A, F 6792

1863 Tyarra Marcos

1865 Vacant

1867 Ming's Chop Suey Products

F 9-6728

1867½ Chavez I A, F 7209

1869 Morales Armando

1870 Aguirre Lupo ©

1873 Clark G J, F 5661

1875 Navarra Gulseppe © F 0824

1876 Chaum Telsufi, F 9-6631

1877 Navarra Ja, M 8-2731

1877 Navarra Ja, M 8-2761

1877 Navarra Ja, M 8-2661

1877 Shimada H H, F 6229

1879 Smeth Velpa

1882 Munoz I L © M 2280

1834 Flores Antonio © F 0559

1835 El Sarape Cafe F 9-2661

1836 Fire Dept Sta No 7

1896 Fire Dept Sta No 7

1897 LaBarca Market gro M 6684

Crosby Interesct

1901 Cisneros Carlos Rev ©

Flores J V

1396 Fire Dept Sta No 7

1397 LaBarca Market gro M 6684

Crosby Intersects

1901 Cisneros Carlos Rev ⊚

Flores J V

Location Flores J V

Location Flores J V

Location Flores J V

Location Flores J V

Location Flores J V

Location Flores J V

Location Flores J V

Location Flores J V

Location Flores Flores Flores

1925 Plana P C Mrs F 6017

rear Vacant

1935 Nicto Anastasio, F 9-3365

1936 Decensor E W ir auto parts

1941 Jackson Louiss Mrs M 8-1536

1943 Bouthern Chas, M 0582

1943 Rodriguez B Mrs M 6492

1971 Rubalcava J R L, F 9-7696

1975 Flores J L, F 5088

1983 Rodriguez Manuel ⊕ F 2056

1985 Rodriguez M M ⊕ F 2050

1985 Rodriguez M M ⊕ F 2050

1986 Rodriguez M M ⊕ F 2050

1987 Marine Electric Co F 4737

2001 La Central Market gro M 6341

2002 Bruening C M @ M 1388

2010 Buompensiero Francisco ⊕

F 8781

2011 Baird H N, F 9-2880

2017 Olah Nicolias ⊕ F 9-6279

2021 Kasis W J ⊕ M 9359

2022 Chase M M Mrs

Medar Ruth Mrs

2030 Vasquez C F

2031 Arroyo Jos ⊕ F 1042

2033 Killelea Frank ⊕ marine electron L P

Briton L P

Briton L P

2031 Arroyo Jos ® F 1042
2036 Killelea Frank ® marine electrepr
2037 Nigro Vito ® M 1791
Britton L P
Coultress R G
Moore R M
2039 Vacant
2039½ Parris J B
2045 Duquette Beatrice Mrs
F 9-4940
Duquette D L
2045 Cando Ramona
2048 Pierotti P T restr F 9-9035
2049 Sanchez Joe
2049b Sharpe E F Mrs ® M 3586
2051 Tadefa E C, M 8-2002
2055 Jones Jewell Ø F 9-5282
2059 Macias H A ® F 9-4413
2060 Williams E T Mrs M 9049
2068 Claramitaro Margt Mrs ®
2072 Segovia Jesus, M 8-1384
2074 Johnston A L ® F 9-1896
2081 Salazar Fila Mrs M 2341
rear Hagan O H putr F 2704
2085 Martinez J D ® M 2684
2090 Vacant

Evans intersecte
2104 Arterburn § F C o F 1766

Evans intersects

104 Arterburn C F Co F 1766
2113 Chinchilas Maria @ M 5771
2114 Carrillo Frank, M 9-4831
21143, Almanzo L S
2116 Vargas Peter
2119 Talamantez J N @ M 2335
2120 Wells L W, F 7843
2121 Talamantez Marcedes Mrs
F 5963
2126 Hurtado J J @ M 1505
2128 Rose Tony @ F 9237
2129½, Reyes Jos, M 1989
2130 Varela Anita Mrs
2131 Som Henry, F 9-5985
2133 Isom Henry, F 9-5985
2135 Betters M A
2137 Fowler Edw
2138 Schnekder G J @ F 9-7860
2142 Mollina F S @ M 0316
2145 Payne Etta Mrs @ F 9-3744
2149 Eppley W R
2155 Jacobs H G Mrs
2156 Alexander C H Mrs @
F 9-0503

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4459 Thrine Hugh S @ B 8462
4660 Rogers G S @ B 8365
4667 Lewis V E @ B 0089
4608 Benko Vlad P Rev 0524
4675 Young Wm F @ B 5637
Sunset Cliffs blvd intersects
4683 Wilkinson O D @ B 7470
4684 Saleebey Theo @ B 6647
4690 Mulrooney John E @ B 4054 6366 Hubley E V Mrs @ M 4-3218 6392 Dickson F B Mrs M 4-4407 Oriole intersects 6404 Garcia Alf @ M 4-2061 6416 Janes D H @ Paradise intersects | TITUS—Conid | 172 Ladd J M Mrs J 7921 | 1732 Ladd J M Mrs J 7921 | 1752 Ladd J M Mrs J 7921 | 1754 Might Muricle, J 1050 | 1754 Knight Muricle, J 1050 | 1754 Knight Muricle, J 1050 | 1758 Hughes Pr. W 8-2257 | 1791 Bartlett G P J 4590 | 1791 Shiver I G @ J 4590 | 1793 Shellenburger E T Mrs W 2635 | 1793 Emory Neysa Mrs J 0149 | 1793 Emory Neysa Mrs J 0159 | 1793 Emory Neysa Mrs J 0159 | 1795 Emory Neysa Mrs J 0159 | 1795 Emory Neysa Mrs J 0179 | 1795 Print L J 2807 | 1795 Print L J 2807 | 1795 Nather D G Mrs J 1775 | 1798 A Noble E T Mrs J 9176 | 1799 Natarre Doran W 6575 | 1798 A Noble E T Mrs J 9176 | 1799 Natarre Doran W 6575 | 1798 A Noble E T Mrs J 9176 | 1799 Natarre Doran W 6576 | 1814 Edwards S J Mrs @ J 8940 | 1820 Emory News Mrs & 1980 | 1820 Emory News Mrs & 1820 Emory News & 1820 TORREY PINES HOMES (LI)-ORNEY FIRES HOMES (LJ)—
Conid
51 Pollard D L
52 Shisler H G, G 5-1311
53 Hagen R A
54 Walburn G D
55 Cole J E, G 5-1391
56 Turner P L, G 5-3269
57 Bieri Robt, G 5-1685
58 Tyier H V, G 5-3542
59 Ferguson R R, G 5-3658
60 Marsh Ellison, G 5-1883
61 Roddy J H, G 5-6475
62 Spease R J, G 5-7563
63 Pierce D E Mrs
64 Byrne H C
65 Lambert M E Mrs
66 Dorlaque F D, G 5-7218
67 Sanford A B
68 Balzer Dale, G 5-6517
69 Farmer J L, G 5-6807
70 O'Neil John, G 5-4890
71 Hammer P L, G 5-3346
72 Perkins A J
73 Vargas Salvador, G 5-1825
74 Younger W G fr
75 Allen R S, G 5-1608
76 Warner Joyce E, G 5-1681
77 Hutton C W
78 Hassmer Russell
79 Morgan Raymond
80 Banks R L
81 Burton M E
82 Woodling W A
83 Phares G K
84 Walton W R, G 5-7337
85 Wozny S J, G 5-2463
86 Hendricks G R
87 Henslee A C, G 5-2379
88 Wald H B
89 Speck A R
90 Goodrich A B jr G 5-6989
91 Ruggles E P Mrs
92 Read Pamela Mrs
93 Hahl D C, G 5-1125
94 O'Dell Digger
95 Lewis D J, G 5-2532
96 Patterson R W
97 Daynes J C, G 5-7772
98 Belcher Jas, G 5-1805
100 Scriber Vernon
101 Wheeler J H
102 Morford J G
103 Lang C F
104 Hunt D D
105 Flebig Kenneth, G 5-1305
106 Jefnett Lonnie jr
107 Baker Raymond jr
108 Wacant
109 Martindale D M
100 McKaney Norman
Stone J F TORRENCE - West from 3650 Cur-TORRENCE — West from 3650 Curlew
628 Deaton O R @ J 3472
642 Heuermann M A Mrs @
W 3352
644 Rose F F, J 1368
649 LaMonte Wm F @ J 1124
654 Dolwa Jos K bldg contr
W 5781
855 Henderson W B @ phys
W 0582
655a Scheidler W E
660 Bodlen H T Mrs W 0556
Eagle intersects
726 Fraser Hall Hospital W 2175
810 Allen H P
812 Phillips M B Mrs @ W 3984
Reynard way intersects
1303 Funk Raymond O @ W 1535 TOKAY—South 1/2 block from approximately 5500 Grape
2004 Linnan Chas StC ©
2011 Mosglein C J, M 4-6547
2016 Hall M R © M 4-6108
2017 Goodall Harry © M 4-2814 TOLEDO DRIVE—East from 4566 Alamo dr to 67th, I s of Valencia Alamo dr to 67th, 1 8 of various dr 4531 Fowers Clarence @ R 2168 4540 Minnix P E @ T 1-5827 4541 Rice Alf C @ T 3-1314 4544 Chevelley Alf @ T 3-1314 4549 Mix A C @ T 1-3705 4550 Mueller G E @ 4552 Miller G E @ 4559 Fellows M L @ R 7231 812 Phillips M B Mrs @ W 3984
Reynard way intersects
1303 Funk Raymond O @ W 1535
1306 Soule F G ir @ W 8-2104
1312 Lutes C M @ J 7848
1313 Lippman R W @ J 3512
1319 Daney Eug ir @ J 8595
1322 Dick Jane Mrs W 8-1331
1327 Davis F H @ W 2076
1335 Barsz Walter @ W 8-2306
1336 Virgillo Frank @ J 0194
1260 O'Connor E M, W 8-3567
1370 Moore Eug R, W 8-3802
1405 Engler M E Mrs @ J 2078
1411 Morin H E @ J 6253
1437 Vacant
1516 Kipp V S @ J 2818
1600 Selars R C @ W 1596
1603 Brock Arth Mrs
1604 Galers G S @ J 3584
1614 Vurgason R A @ W 8-2266
1620 Hartsock A A @ J 5560
1636 James D A , J 7564
Webborn intersects
1650 Torvance C B Mrs @ W 3766 TOLMAN (East San Diego)—North and a from 5500 Fir and s from 5500 Fir

TOMPKINS—East from 201 34th at junction with imperial av
3450 Ramet C S, M 5775
3452 Genslar M L, F 4291
3481 Warrington H H, F 9894
35th intersects
3529 Domain Thos P @ M 2876
Pardee intersects
5530 Bochniak Jos @ M 1557
3562 Hofacker Carl @ F 9-8959
3566 Dougherty A J @ M 0693
3569 Fodge Nila Mrs @ F 8371
3580 Jackson Vaughn @ F 9-2922
3604 Vacant 3604 Vacant 3605 Doquiza Quinton @ M 7243 3606 Yepez Rosa Mrs @Fra 3226 3609 Archuleta Frank 3606 Yepez Rosa Mrs @Fra 3226
3609 Archuleta Frank

TONI LANE — North from 6850
Center to Tower, I e of 69th
4509 Webster L C @ H 6-5233
4510 Achter E A @ H 9-2412
4517 Taylor D E @ H 6-6783
4518 Belyea W M @ H 6-5392
4525 Tompos Steven @ H 6-6284
4528 Rowne Leonard K 4528 Browne Leonard K 4528 Rowne Leonard K 4533 Southard A L @ H 6-0986
4534 Orr Wm F @ H 6-0437
4541 Edmonds LeRoy @ H 6-8127
4542 Sarff G L @ H 6-1059
4549 Sanks Roy A @ H 6-6008
4550 Ballard R T @ H 6-7702
4557 Crofot Russel @ H 6-7101
4558 Grable E E @ H 6-4539
4557 H 6-6832
4573 Vacant.
4574 Wells G W @ H 9-2612
4581 Lessard G A @ H 6-3015
4582 Maddox R L H 6-2115
4607 Westenberger Wm III @
462083 Lestano Danl @ H 9-3112
4616 Strand C M @ H 6-1750
4623 Bartlett J P @ H 6-1015
4624 Benson C H @ H 6-4403
4633 Barbour J J Rev @ H 6-7504
4639 Thorsnes T A @ H 6-6750
4639 Barbour J J Rev @ H 6-7504
4639 Thorsnes T A @ H 6-64403
4631 Shadoin F C @ H 6-3051
4640 Stanton Wm F @ H 6-0782
4647 Bablek J D @ H 6-67504
4655 Clastino Danl @ H 9-3112
4616 Strand C M @ H 6-3453
4631 Shadoin F C @ H 6-3051
4640 Stanton Wm F @ H 6-0782
4647 Bablek J D @ H 6-67504
4658 Chillea F C @ H 6-6327
4656 Golombek Wm J @ 6-8771
4656 Golombek Wm J @ 6-8771
4656 Murray J P @ H 6-5380
4664 Wilson A H @ H 6-5991
4657 Killela F C @ H 6-5261
4668 Rettig E P @ H 9-3361

TONOPAH (North San Diego) —
Southeast from 2500 Lieta Welborn Intersects
1650 Torrance C B Mrs ⊚ W 3766
1669 Taylor F W ⊚ J 7929
1670 Payne L A ⊚ W 8-3388
1674 Grayson H W Mrs W 2313
Beebe Earl D
1677 Rittoff Jack ⊚ W 5437
1687 Douthat R C ⊚ J 6204

Andrews Intersects
1318 Smith Y H ⊚ J 3579
1824 Vacant
1829 Clark R F ⊚ J 5606
1834 Cary H F ⊚ J 5682 110 McKaney Norman
Stone J F

111 Taylor J T

112 Rergevin L W, G 5-3765

113 Kramer David, G 5-6703

114 Guthrie C M

116 McGuire J T

117 Moore J A

118 Minick J D

119 Cannon D H, G 5-2523

120 Callaway I A Mrs

121 Crippen J J ir G 5-2318

122 Bablit A K

123 Reeves R E, G 5-1903

124 Guillen R C

125 Winn R N

126 Jones D G, G 5-1242

127 Jones R L, G 5-2554

128 Basura R N

129 Steward M L

131 Herrin J C, G 5-1846

131 Fincke G F ir

132 Wagner J D

133 Morris J G, G 5-7441

134 Powell R A, G 5-6998

135 Karpinski Henry, G 5-7317

Stilon Robt L

137 Sayles J L

138 Stout R D 1971 Rath J C Ø J 8573

1971 Rach J C Ø J 8575

1970 Rach S W 2766

1981 Markey Villie Ø W 2766

1982 W of Point Loma av 1982 W 1982 136 Karpinski Henry, G 5-7317
Stilson Robt L
137 Sayles J L
138 Stout R D
139 Wolff C R
140 Dicole M Mrs
141 Morris E J, G 5-7409
142 Bettes W G
143 VanMatre Ernest
144 Doherty John
145 Adams J Q
146 Curry H C
147 Lightfoot J L
148 Soranno V J
149 Barham L T
Nabors Wm
150 Medina J D
151 Vacant
152 Bouchey W C
153 Armstrong W J
154 Vacant
155 Glotzer H S
156 Stapczynski J S, G 5-7550
157 Kenney W W, G 5-4028
158 Romero T M
159 Goodrich B E
160 Wiles W T
161 Spears B L G 5-7324
162 Vacant
163 Poutre R , G 5-7777
164 Zavnowitz R M
165 Russell R E
166 Carta Henry, G 5-1655 TONOPAH (North San Diego) —
Southeast from 2300 Lieta
4504 Hudson J A ② W 6472
4512 Flood S A ② W 8-2684
4520 Morgan C M Mrs ② J 9074
4626 Greene J W ③ J 9577
4636 Morris J W H ② J 3340 s
4669 Smith A L ② W 6500
4689 Burright Melvin ③ W 8-1308
4704 Lumpkins Frank, J 3094
4705 Milner J L ③
4715 Essary P H ③ W 1380
4718 Cobern C V ③ W 4422
4725 Remke R J ③ TOOLEY (Encanto) — East from 1800 60th 6152 Laengle J G ® whol eggs M 4-2364 8207 Megtvern A Mrs @ M 4-5942 820 Lovallo John @ M 4-4737 6230 Butts Olin ® M 4-1505 6250 Buff Virgil @ M 4-6364 Republic Intersects 6328 Beran A H ® M 4-5580

<u>TP</u>

MORENA BLVD 1948

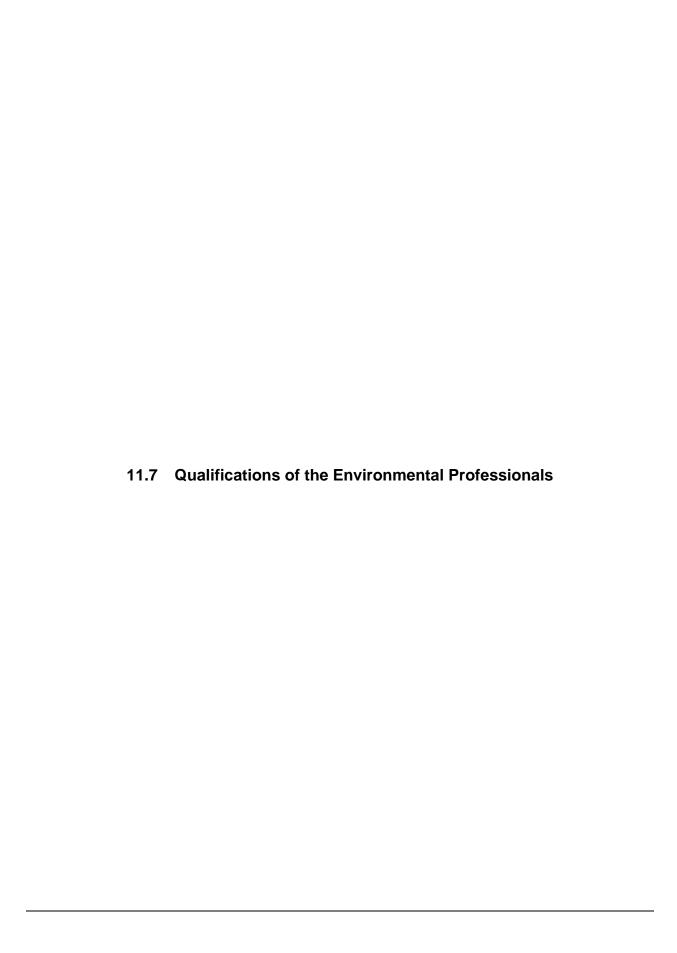
MORENA BLVD—Contd 1814 Ein Arrow Aut C 1814 Ein Arrow Aut Ein Arrow Aut C 1814 Ein Arrow Aut Ein Arrow Ein Ar			OKLINA BLVB 1940	
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1407 Smith W F auto repr 1484Alabrander & Goodwin 1494Alabrander & Goodwin 1404Alabrander & G			2094 A Harrean R. W (6)	O'Connon Posterios Mes
1492ALordis C H		1375 Sorna A J	4004ΔTwitchell L M Mrs ⊚	1440 Vacant
1484	1	1426 ΔLoftis C H Θ	4012 Denning L E @	1454 Earlywine E B
1460 Alestington P W 4461 Sanders P R 6 1460 Lykins Raney 6 1460 Lykins Raney 6 1460 Lykins Raney 7 1461 Patterson R 7 1461 Patterson R 7 1462 Patterson R 7 1463 Patterson R 7 1464 Patterson R 7 1465 Reman B V 7 1506 Stevenson R 6 1506 Stevenson R 6 1506 Reman B V 6 1507 Redman B V 6 1507 Redman B V 6 1508 Reman B V 6 1508 Reman B V 6 1509 Redman B V 6 1509 Redman B V 6 1500 Redman B V 6 1501 Redman B V 6 1501 Redman B V 6 1501 Redman B V 6 1502 Redman B V 6 1503 Reman B V 6 1504 Redman B V 6 1505 Reman B V 6 1506 Reman B V 6 1507 Redman B V 6 1507 Redman B V 6 1507 Redman B V 6 1508 Reman B V 6 1508 Reman B V 6 1509 Redman B V 6 1500 Red			4012½ Denning S D	1458 Ivec Jos
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1460 Lykins Aaney	{	1440thremington F. W (6)	4069 Kempe Arth	MORSE COURT (Linda Vista)
1464 Westbrook of D		1460 Lykins Raney 🔊	T II	- west from Coolidge, 1 h
Itel Brown and Market Mark		1464 Westbrook T D @	Pacific Beach dr intersects	COLLADORON N. A
1506. Stevenson H	<u> </u>	1471 Patterson W W pottery	4240 Holmes R F @	6912 Pousson Nicholas
1510 Devention H Deven	E {	1502 Redman E V 🕲	4266AKleckner Frank ©	6921 Lee P W
1524 DuFont W F 1505 Rosenbaum W C 1505 Rosenbaum	"		4276 Engelman Geo	6922 Lundy G R
1611 Robinson H G 1823 Fourgron A F © 1825 Fourgron A F © 1771 Asogo P B 1777 Becknell B A 1777 Becknell B A 1836 Grant S C Affair North Thos Taylor Betty Mrs 1836 Grant S C Affair North Thos Taylor Betty Mrs 1836 Grant S C Affair North Thos Taylor Betty Mrs 1836 Grant S C Affair North Intersects	10		4278∆Fleming E D ⊚	6932 McLaughlin John
1911 Monison H G	12	1605 Rosenbaum W C	4486AEllery C C @	6941 Gatton C H
TITSIA Sogo P B B A Hall R K Skien Thos Taylor Betty Mrs 1386 Grant S C AGrant V H Mrs restr © AGrant V H Mrs restr © AGrant V H Mrs restr © AGrant N H Mrs restr © AGrant N H Mrs restr © AGrant N H Mrs restr © AGrant S V		1611 Robinson H G	Garnet intersects	6942 Gatten T P
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Start 1789		Hall R K		
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A Grant V H Mrs restr © Landless Divy 3 w of vesta hat hon intersects that hat hon hat hon had been and hon had been and hon had been and ward rd to 35th feet Ashton and Napler Bay Pic 2403 Wright Wm 1906 Caudillo F J 2404 McCormick J R 2405 Wright Wm 2005 Caudillo F J 2404 McCormick J R 2411 West C B 2412 Morsan Ray 2411 West C B 2412 Morsan C M 2421 Afroman C M 2422 Afroman C M 2422 Afroman C M 2422 Afroman C M 2423 Chenault J W 2424 Afroman D C M 2425 Chent C M C 2430 Chenault J W 2425 Chent M C 2430 Chenault J W 2425 Chent M C 2430 Chenault J W 2425 Chent M C 2443 Chenault J W 2425 Chent M C 2443 Vacant M 2425 Chent Afroman D C M 2424 Arold E J J 2425 Chent M C 2443 Vacant M 2425 Chent M C 2445	I	1836 Grant S C		
A		AGrant V H Mrs restr @		Northwest from Madison av
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A 2005 Q valade L E gas sta 2493 West Clos N 4405 Lease Dalsy F © 4015 Lease Dals	1	det Ashton and Napier Bay Pk	2403 Wright Wm	4609 ADouglas Myrtle M ⊚
2111 Bay Shore Auto Court Balley O B	Δ (2005 A Valada T. E. pas sta	12411 West C B	
Bilair Carolline Mrs	'`	2111 Bay Shore Auto Court	2412 Morgan Ray	4617 Mott L R
A 2239 Vacant 2429 Vacant 2421 Minsser R P 4643 Mins 4645 Mins Mins 4645 Mins	1	Bailey O B		4621ΔEvans J B ⊚
A 2235 Reese A F 2422 Vaccast 1 4643 A Ward E A Mrs 4643 A Ward E A Mrs 4644 A B Ward E A Ward E	}		2423 Pace G E	4634 A Roggs J C Mrs 6
A 3415 Overton M C Regan J D © 34232 Schultz P R 3440 Gillikin W B 3565 Plant J L 3561 Cota Alex © Webber H C 3633 Parker Pearl © Phillips T H 3705 Carrisoza W F © 3735ARomo Wm © MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Additional Marry F (2014 Bates M O (2014 B		2239 VALSANT	2424AMUSSEI IL I	4643AWard E A Mrs
A 3415 Overton M C Regan J D © 34232 Schultz P R 3440 Gillikin W B 3565 Plant J L 3561 Cota Alex © Webber H C 3633 Parker Pearl © Phillips T H 3705 Carrisoza W F © 3735ARomo Wm © MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Northeast from 4200 Tonopah South from Uilc to Compah MORENCI (North San Diego) Additional Marry F (2014 Bates M O (2014 B	اندا	2351 Reese A F	2430 Chenault J W	
MORRING WW 6 MORRING (North San Diego) — Northeast from 4200 Tonopah MORLEY (Linda Vista) — South from Ulric to Comstock 1 w of Linda Vista rd Northeast M of Linda Vista rd Northeast	10 -	2413 Handley C R 6	2431 Landrum L W	
MORRING WW 6 MORRING (North San Diego) — Northeast from 4200 Tonopah MORLEY (Linda Vista) — South from Ulric to Comstock 1 w of Linda Vista rd Northeast M of Linda Vista rd Northeast	',	3415 Overton M C	2432 George J H	4651 Vahle W A
MORRING WW 6 MORRING (North San Diego) — Northeast from 4200 Tonopah MORLEY (Linda Vista) — South from Ulric to Comstock 1 w of Linda Vista rd Northeast M of Linda Vista rd Northeast	A	Reagan J D 💿	2440 Gillikin Wm	ΔHickey Rose Mrs
MORRING WW 6 MORRING (North San Diego) — Northeast from 4200 Tonopah MORLEY (Linda Vista) — South from Ulric to Comstock 1 w of Linda Vista rd Northeast M of Linda Vista rd Northeast		3505 Plant J L	2441 McCurdy M B 2442 Arnold E J	
MORRING WW 6 MORRING (North San Diego) — Northeast from 4200 Tonopah MORLEY (Linda Vista) — South from Ulric to Comstock 1 w of Linda Vista rd Northeast M of Linda Vista rd Northeast		Webber H C	2449 Vacant	4661AFalkenbury M C
MORRING WW 6 MORRING (North San Diego) — Northeast from 4200 Tonopah MORLEY (Linda Vista) — South from Ulric to Comstock 1 w of Linda Vista rd Northeast M of Linda Vista rd Northeast		3633 Parker Pearl ©	2450 Noonan D E 2451 Giordano Anthony	I ARhodes H H
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10			701 Stitson W C 💿	4677 Perry W H
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745 \(\text{ABrnard D M \(\text{O} \) 2216 Baker W S 2218 Shoemaker W M 748 Lewis Harold \(\text{O} \) 748 Lewis Harold \(\t			729 Chapman Della Mrs @	4681 Schoenwald John
748 Lewis Harold © 2218 Shoemaker W M 2220 Glasco R G 2222 Pentis Jos 2230 Reel Mary F 2232 Reese Ruth V 2242\(\Delta\) Lichtenbelt J H phys 2302 Yoakum B J 2304 Glover Beatrice O 2318 Knutsen Morris 2320 Fader W M 2322\(\Delta\) Yunker R V transfer 2321 Grayson I M 23224 Axson Maxine D 2332 Grayson I M 2334 Palmer S D 2336 McFarling Edw 2338 Daniels G H Smille Mary F 2338 Daniels G H Smille Mary F 2350 Yeargain E S 2360 Brindle C S 748 Lewis Harold © 3678 intersects 4688\(\Delta\) Lieberman S S © 4689\(\Delta\) Meyer H C Mrs 4691\(\Delta\) Gresham A M © 4689\(\Delta\) Meyer H C Mrs 4691\(\Delta\) Gresham A M © 4691\(\Delta\) Gresham A M © 4706\(\Delta\) Jenkins N R 4709\(\Delta\) McMurtry J H © 4709\(\Delta\) McMurtry J H © 4714\(\Delta\) Heskett D W Mrs 4714\(\De	UI-	2208 Harbin J W	737 Biramontes F A (9)	4685% AHand H J
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2320 Fader W M 346AHelling P G	rp	2318 Knutsen Morris	840 A Corrosco Peter (a)	4714AHeskett D W Mrs
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"In Business For Your Health" SAN DIEGO'S		2360 Brindle C S	964 Bartee H J @	4752AMiner W E
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MORENA BLVD 1943

ANS ESTABLISHED 1893 CHULA VISTA							
MONTECITO WAY, WEST -	5926ASodomka R R 5928 Buell A B nr 6th av extn, Valley View	2406ACastro Jas @					
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Ward D F	School	2422 Tulack Bertha H					
1910 A Wikkelson Victoria In 19	MOORE-Northwest from 3750 California	2425 Joslin Mae 2427 Bull Fred					
1818AWillier A F © 1821ASherwood E D Mrs © 1828ASchick D W © 1828ASchick D W ©	1795 ΔBlue Cross Veterinary	2431 Kapica H J Conde intersects					
1828ASchick D W @ 1829APuckett Lillie Mrs @	Hosp Clayton intersects						
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1860 A Miller F T O	1826 Susavilla F S	2512 Thornton C T					
1866 Anderson Gotfried @	1827 Tyler C W 1827½ Jones Grace Mrs	3102 Squire P C @					
1880 A Franklin Mattie Mrs 1886 A Schaber Reynold ©	Clayton intersects 1804 Hall H G 1811 McMillon W T 1813 Tonniges Martin 1815 Thompson J P 1820 Howard M L 1824 Dotts Homer 1825AHubbell V C © 1825½ Keene Raymond 1826 Susavilla F S 1827 Tyler C W 1827½ Jones Grace Mrs 1828 Darlow W A 1830 Faling J H	Riley intersects					
1896 A Eaton W B @	1833 Bennett W J 1835 Whitaker L K Mrs ©	3220∆Grim J W ⊚					
1896½ Thornton J A MONTEREY COURT (Mission	1845AConsolidated Aircraft	MOORLAND DRIVE (Pacific					
Reach) - East and W !!!	Sutherianu intersects	the same of the sa					
Mission blvd, 14 n of Amuse- ment Center	1861 Murphy J M @	1454∆McConnell M H ⊚ 1464∆Belvel O L ⊚					
Mission blvd, 14 n of Amusement Center 702 Vacant 704 Valliams R L 708 Vacant 710 Chenoweth R H 714 Bence J B Mission blvd intersects	1869 Wert Verne 1877∆Bell J A ⊚	1464∆Belvel O L ⊚ 1470∆Murray C K ⊚ Hines begins					
708 Vacant	Travelers Auto Camp	Bayonne begins					
714 Bence J B	1926 Five Points Assembly of	1530∆Hunter W L ⊚ Promontory Intersects 1564∆Hardy Vincent ⊘					
803 Eastham J E.	God Ch 1944 Yeager H C	Ingraham intersects					
803 Eastham J E. 807 Logan Jack 808 ABowen R M © 809 APervis Arth	1946 Crower W J 💿 1948 Head J E	MORENA BLVD (Old Town)-					
		North from 4000 Taylor to and					
	2010 Conderin C D	Diego river					
MONTE VISTA AV (La Jolia)	2021 Jones Claude jr 2025 Nielsen C A 2035 Anderson W D 2035 AdWillhour Gerald 2037 Crawford Wm	beyond Baker, 1 s of San Diego river 910 Gibson I I gro 945AGue S M @ 1050 Baker Vance					
0 o 700 l a lolla bivo	2000/22 William Column	1050 Baker Vance 1083AAlban M G gro					
7010ΔKitch Frances Mrs	2037 Crawford Wm 20374 Schlosser Vernon	1083 AAlban M G gro 1103 AParker J W ⊚ 1104 Hocher Augusta Mrs ⊗					
Surfton pl intersects	2037 Crawford Wm 2037½ Schlosser Vernon 2039 Cain John 2039½ Thornburg Thea 2041 Marshall Frank 2041½ Barieau Harold 2045 Hicks Lillian Mrs 2045½ Vincent E A 2047 Morris Lillian	1103AParker J W © 1104 Hocher Augusta Mrs © 1104½ Clabaugh Carrie Mrs 1106 Richardson Arth 1142 Menna Abbie 1151 Wilson Eug 1168 Sousa Albt 1168½ Lara Maria Mrs 1176 Pedroza Martin 1206AEl Camino Auto Court AGrogan C C gro					
7109ALindahl G W @ 7112AGoodell J C Mrs @ 7126ABrown H B	2041 Marshall Frank	1142 Menna Abbie					
7126ÅBrown H B 7131ÅCottrell C D Mrs ©	2045 Hicks Lillian Mrs	1151 Wilson Eug 1168 Sousa Albt					
7131ACottrell C D Mrs © 7141ABorut C M Mrs	2045 Vincent E A 2047 Morris Lillian	1168½ Lara Maria Mrs 1176 Pedroza Martin					
		1206AEI Camino Auto Court					
7148AParsons E B Mrs 7150AThompson T S	2063 Thomas V B	1211 Webb T E					
7154\Davage Eugenia Mrs @ Arenas intersects	Bandini intersects	1218 Dillon L P 1227 Bentsen Ejnar ©					
7209 \(\text{Toland C F} \) Dunemere intersects	2100 Vacant 2119 Ruiz Ernest	1231 Good I A 1235 Pena R R					
7228∆Pardy G W ⊚ 7231∆Speer A M ⊚	2121 Lewis Albt 2123 Dircks H A	1241 Pena Ray					
7235ÅMcGinnis Remsen © 7252 Roberts Eva Mrs	Couts intersects	1272\(\Omega\) Buck A C \(\Omega\)					
7258 ABackus E H Mrs @	2169 Hoffman L A @	1278 Key V A Mrs @ 1284 Δ Hendrickson C E					
7264AChislett Rebecca F © 7270AWettlaufer S B Mrs © Sea Lane intersects		1285 Conta A J 1287 Ransom G L					
7305ΔLarsen A W	2284 Saymour M. P.	Suiter G D 1291 Bartle Percival ©					
7316ÅMorgan R R @ 7330ÅGoodnough M H	2302 Malzer John gro 2306 Waltman V J Mrs 2312 Tarango Y O @ 2338 Smerdon Beatrice Mrs	1295 Moss T E @					
7334ASanborn E K 7336 Trory E V C	2312 Tarango Y O © 2338 Smerdon Beatrice Mrs	Viola intersects 1310 Hunter W B					
7349 \(\text{Smith T J \(\text{O} \) Marine intersects	Ampudia intersects	1320 Ott J F 1325 Vacant					
7403AWilliams R C 7405AHolmes S L		1325¼ Monleon Thos 1364ÅBlue Arrow Motor Inn					
7420∆Martin R W	Mrs © 2356 A Herrera Maria Mrs © 2364 Regley R M	Meyers Raymond 1375 Morrow E B					
7421APatterson M M Mrs	2368 A Prodenovich S M A	1.426∆Loftus C H ⊚					
MONTEZUMA ROAD — West from 5100 College av	rear Williams C C @	1440 Everts F L 1452AMitasoff K A @					
5734 Munson F R ⊚ 5750APrice E E ⊚	2377APiburn G T © 2385 Schaefer Henry ©	1460 McNiel C W 1476 Dupont W F @					
5816 Leonard PB © 5924 Penberthy JE ©	2393APeters J P ⊚	1502AMorin C K 1506ADupont W H @					
	777.044 11110; 35013	TOOME AN II M					

MORENA BLVD 1943

397		
1510 Lowe W A	MORROW WAY - East from	4780∆Sercombe G A ⊚
1524 Klinefelter Verner 1623 Faugerson A F	1 411/ Maryland to Cleveland	36th intersects
1623 Faugerson A F	av, 1/2 blk n of Lincoln av	4781AMurphy E H
1751 Wood M S	4123ΔWatson Eug	4785∆Baum A T
1777 Hale Florence Mrs	4125 Kenney Arth	4790ASchmohl C W
1836AGrant R E furn rms Ashton intersects	4126 Newman J J	4791 Sylvester G W @
bet Ashton and Napier Park	4128 Earlywine E B	4794∆Copley N M Mrs ⊚
bet Asnton and Ivapier Tark	4128½ Ivec Jos	Collier av intersects 4811 Sellwood W H
Bay Napier intersects	4129 Stolz H F	4821.4Karr E D ⊚
2005 Sidwell G W gas sta		4824AElkins C M
2111 Bayshore Auto Court		Elexia II begins
Bailey O B	MORSE COURT (Linda Vista)	4840 ΔOverton W L @
4249AEckhardt O A Mrs ⊚		4846 ABates M D ⊚
4503 Romo Wm	MOULTRIE AV (Pacific	4849 Culbertson Robt
4505 Carrisoza W F	Beach) - North from 3500	
		4862∆Swain Herbt ⊚
Bunker Hill begins		4867ΔManley Leona Mrs ⊚ Copley av intersects
Diameter (No. 11)	MOUNTAIN VIEW DRIVE, EAST (Normal Heights) —	4870∆Shackelford W O ⊚
MORENCI (North San Diego)		4878AGriffin S H @
Northeast from 4200 Tonopah	and Ward rd to 35th	4894∆Armstrong H L ⊚
	4603ΔCooper Alf	Cherokee av intersects
MORLEY (Linda Vista)	4609∆Douglass Myrtle M ⊚	4901 Pollard C G gro
	4613ΔLandon Bette Mrs	4905ΔComplegne M B Mrs
MORRELL (Pacific Beach) -	4615 Lease Daisy F ⊚	4921 Williams E Lucille
North from 2 blks s of 2000 Pacific Beach dr	4617∆MacDonald D A	4923 AWood J F @
3976 Bailey H V		4929 Stoughton W H ⊚ 4935ASnyder P A ⊚
3994A Harrsen R W @	1001 Citosoft 5 1	4936 De Luca F E Mrs @
Fortuna av ends		4942AMehl L F @
4004 Cleveland W A	4645 Walke Clara Mrs	4945AThompson C M ⊚
4012ΔEngland L P ⊚	14646 Burton C O	4948∆Breault Homer
4012½ Hougle P L	4651 A Vahle W A @	4951 Lewis Philip ⊚
4061 Sanders F R 💿	4652 Burr F L 6	4954ABaker G L
4080 Brisbin H E ⊚	TOO LACED DO I O	4956AHaener R J ⊚
rear Brisbin J H	4658∆Warren A R	4960∆Smith F C ⊚ 4961∆Garetson R M Mrs music
Pacific Beach dr intersects 4240AHolmerud E N ⊚		tchr
Reed av intersects	4664AMorris G M 4667ADarland H U	4966AZarker M O ⊚
4278 ΔFleming E D ⊚	70012420010010	4969 A Neal R Mr (a)
Thomas av intersects	HOLT TITUDEST IN WE WITH O	4976 A Neal C M (a)
¥486AEllery C C ⊚	Edna ni intersectsi	491921MIddleton Will (
Garnet intersects	14679 AWilliams P. T. (6)	1000 Can 221 Cite
reispar intersects	ACTED TORON TO THE CO.	Neal Z M Mrs ©
meraid intersects	14676 Sayton Edw	4989AMiller C N ⊚ 4993ASummit W L
Diamond intersects	4677 AHerney F A	Arthur av intersects
MODDIC Name from Manager	4678 Williams Francis	5003ΔSmith R A @
MORRIS—North from McCand- less blvd, 3 w of Vesta		5005ÅRodgers A M ⊚
2401 Losh Edw		5014 Bowman C E
2402 Neff K W	46854 Sherwood J H	Eugene pl begins
2403 Kobel W P	4687 Goodbub G A	5020 Stephens C J ⊚
2404 Wadhams F W		5027 Cooper S P
2411 Baxter L L	TOTAL TELEVISION AND AND AND AND AND AND AND AND AND AN	5028AWilliams R W jr 5033 Blecha A J @
2412 Mallet Richd	4691 Maiden Harold	5034 A Morrow G W
2421 Williams C A 2422 Day E T	Adams av intersects	5039 Gilleatt J R 💿
2423 Schain A C	4709 A McNulty Geo @	Sydney pl begins
2424 Siefert Jos	Merivale av begins	5045 Salgado Clementina Mrs
2429 Herman Harry	4714∆Sharp Vern	⊚
2430 Day N E	4720 AMcGuire G G ⊚	5051APayne J M ⊚
2431 Peterson R A	4726∆Macy Elmer ⊚	5056 Hadfield R R ©
2430 Day N E 2431 Peterson R A 2432 Hogan E A 2439 Golden R E	4734 A Fitzgerald L W	5068ALe Page J R 5076ADavis Theresa J ©
2440 Miller B T	4742ÅDurbin G H ⊚ Belmont av begins	
2441 McCluer H B		5082 Greggs R F @
2441 McCluer H B 2442∆Moore Walter	4743∆Stone E O ⊚	5082 Greggs R F © 5087 Hollenbeck H M
2441 McCluer H B 2442AMoore Walter 2449 Burton L L	4743∆Stone E O ⊚ 4746∆Collins Georgia Mrs ⊚	5082 Greggs R F @ 5087 Hollenbeck H M 5089 Imel Kenneth @
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G	4743∆Stone E O ⊚ 4746∆Collins Georgia Mrs ⊚ 4747∆Kinkain E E Mrs ⊚ 4750∆Hamlin J M Mrs	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092\Cox A R ©
2441 McCluer H B 2442\(\Delta\)Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant	4743∆Stone E O ⊚ 4746ÅCollins Georgia Mrs ⊚ 4747ÅKinkain E E Mrs ⊚ 4750ÅHamlin J M Mrs 4752ÅParfitt A C	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092\(\Delta\)cox A R © 35th intersects
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743∆Stone E O ⊚ 4746ÅCollins Georgia Mrs ⊚ 4747ÅKinkain E E Mrs ⊚ 4750ÅHamlin J M Mrs 4752ÅParfitt A C	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092\text{Log}
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743∆Stone E O ⊚ 4746∆Collins Georgia Mrs ⊚ 4747∆Kinkain E E Mrs ⊚ 4750∆Hamlin J M Mrs 4752∆Parfitt A C 4753∆Kaul H R ⊚ 4756∆Peterson B E ⊚	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092\(\Delta\)cox A R © 35th intersects
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743∆Stone E O ⊚ 4746ÅCollins Georgia Mrs ⊚ 4747∆Kinkain E E Mrs ⊚ 4750ÅHamlin J M Mrs 4752ÅParfitt A C 4753ÅKaul H R ⊚ 4756ÅPeterson B E ⊚ 4757 Snowden W Q	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092\(\Delta\) Cox A R © 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) —
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743∆Stone E O ⊚ 4746ÅCollins Georgia Mrs ⊚ 4747∆Kinkain E E Mrs ⊚ 4750ÅHamlin J M Mrs 4752ÅParfitt A C 4753ÅKaul H R ⊚ 4756ÅPeterson B E ⊚ 4757 Snowden W Q 4758 Glenny Thomasina ⊚ 4761 Rau O C	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092ACox A R © 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4746\(\Delta\)Collins \(\Gamma\)Coorgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) \(\Delta\) \(Mrs\) 4750\(\Delta\)Hamlin \(\Delta\) \(Mrs\) 4752\(\Delta\)Parfitt \(\Delta\) \(C\) 4753\(\Delta\)Kaul \(\Delta\) \(\Delta\) 4754\(\Delta\) \(\Delta\) \(\Delta\) \(\Delta\) 4755\(\Delta\) \(\Delta\) \(\Delta\) \(\Delta\) 4757\(\Delta\) \(\Delta\) \(\Delta\) \(\Delta\) 4758\(\Delta\) \(\Delta\) \(\Delta\) \(\Delta\) 4761\(\Delta\) \(\Delta\) \(\Delta\) \(\Delta\) 4762\(\Delta\) \(\Delta\) \(\Delta\) \(\Delta\)	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 5092ΔCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av
2441 McCluer H B 2442\(\triangle\) Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4746\(\Delta\)Collins \(\Gamma\)Coorgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) \(\Delta\)Kinkain \(\Delta\) \(Mrs\) 4750\(\Delta\)Hamlin \(\Delta\) \(Mrs\) 4752\(\Delta\)Kaul \(\Delta\) \(\Delta\) 4756\(\Delta\)Peterson \(\Delta\) \(\Delta\) 4757\(\Delta\) \(Sho\) \(Mrs\) 4758\(\Geta\) \(Glenny\) \(Thomasina\) \(\Omega\) 4758\(\Geta\) \(Glenny\) \(Thomasina\) \(\Omega\) 4761\(\Delta\) \(\Delta\) \(Glenny\) \(Thomasina\) \(\Omega\) 4762\(\Delta\)Kligman \(\Gamma\) \(Sho\) \(Mrs\) \(\Omega\) 4764\(\Delta\)Barrows \(\Wathrace\) \(Thomasina\)	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 8092ΔCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122ΔPlace W C Θ
2441 McCluer H B 2442\(\triangle Moore Walter\) 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4744\(\Delta\)Collins \(\Gamma\) Georgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) \(\Delta\) Mrs 4750\(\Delta\)Hamlin \(\Delta\) Mrs 4752\(\Delta\)Parfitt \(\Delta\) C 4753\(\Delta\)Kaul \(\Delta\) R\(\Omega\) 4753\(\Delta\)Kaul \(\Delta\) R\(\Delta\) 4765\(\Delta\)Peterson \(\Delta\) E\(\Omega\) 4765\(\Delta\) Glenny \(\Delta\) Thomasina \(\Omega\) 4761\(\Delta\) Rau \(\Omega\) C 4762\(\Delta\)Kligman \(\Gamma\) S\(\Delta\) Mrs \(\Omega\) 4764\(\Delta\)Barrows \(\Watharrow\) T 4769\(\Delta\) Falton \(\Delta\) H\(\Omega\)	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 5092 ΦCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122 ΔPlace W C Θ 3129 Smith Robt
2441 McCluer H B 2442\(\triangle Moore Walter\) 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743∆Stone E O ⊚ 4746ÅCollins Georgia Mrs ⊚ 4747ÅKinkain E E Mrs ⊚ 4750ÅHamlin J M Mrs 4752ÅParfitt A C 4753ÅKaul H R ⊚ 4756ÅPeterson B E ⊚ 4757 Snowden W Q 4758 Glenny Thomasina ⊚ 4761 Rau O C 4762ÅKligman G S Mrs ⊚ 4764ÅBarrows W T 4769 Falton T H ⊚ 4770∧Cousins V H	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 5092ΔCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122ΔPlace W C Θ 3129 Smith Robt 3130ΔWorley J M Θ
2441 McCluer H B 2442\(\triangle Moore Walter\) 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\$Stone E O © 4746\$Collins Georgia Mrs © 4747\$Kinkain E E Mrs © 4750\$Hamlin J M Mrs 4752\$Parfitt A C 4753\$Kaul H R © 4756\$Peterson B E © 4757\$ Snowden W Q 4758 Glenny Thomasina © 4761 Rau O C 4762\$Kligman G S Mrs © 4764\$Barrows W T 4769 Falton T H © 4770\$Cousins V H 4773\$\$Watenpaugh F M ©	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 8092ΔCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122ΔPlace W C Θ 3129 Smith Robt 3130ΔWorley J M Θ 3134ΔNewell C W Θ 3135 McDermott W J jr
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4746\(\Delta\)Collins \(\Gamma\) Georgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) E \(Mrs\) \(\Omega\) 4750\(\Delta\)Hamlin \(\Delta\) Mrs 4752\(\Delta\)Parfitt \(\Delta\) C 4753\(\Delta\)Kaul \(\Delta\) R \(\Omega\) 4756\(\Omega\) Glenny \(\Delta\) Thomasina \(\Omega\) 4761\(\Delta\) Rau \(\Omega\) C 4762\(\Delta\)Kligman \(\Gamma\) S \(Mrs\) \(\Omega\) 4764\(\Delta\)Barrows \(\War\) T 4769\(\Delta\) Falton \(\Delta\) H \(\Omega\) 4773\(\Delta\)Watenpaugh \(\Delta\) M \(\Omega\) 4774\(\Delta\)True \(\Delta\) Lester \(\Omega\)	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092\(\Delta\) Cox A R © 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122\(\Delta\) Place W C © 3129 Smith Robt 3130\(\Delta\) Worley J M © 3135 McDermott W J jr 3138\(\Delta\) Agnew Helen Mrs ©
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4746\(\Delta\)Collins \(\Gamma\)Coorgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) \(\Delta\) \(Mrs\) 4750\(\Delta\)Hamlin \(\Delta\) \(Mrs\) 4752\(\Delta\)Parfitt \(\Delta\) \(\Delta\) 4756\(\Delta\)Peterson \(\Delta\) \(\Delta\) 4756\(\Delta\) Colling \(\Delta\) \(\Delta\) 4761\(\Delta\) Rau \(\Omega\) \(\Delta\) 4762\(\Delta\)Kligman \(\Gamma\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wathrace\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wathrace\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wathrace\) \(\Delta\) 4764\(\Delta\)Barrows \(\Delta\) \(\Delta\) 4764\(\Delta\)Barrows \(\Delta\) \(\Delta\) 4764\(\Delta\)Barrows \(\Delta\) \(\Delta\) 4776\(\Delta\)Cousins \(\Varta\) \(\Delta\) 4775\(\Delta\)Upton \(\Ham\) 4777\(\Delta\)Hamkins \(\Delta\) \(\Omega\)	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 5092ΔCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122ΔPlace W C Θ 3129 Smith Robt 3130ΔWorley J M Θ 3134ΔNewell C W Θ 3135 McDermott W J jr 3138ΔAgnew Helen Mrs Θ 3142 Heinz Julius Θ
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4746\(\Delta\)Collins \(\Gamma\)Coorgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) \(\Delta\) \(Mrs\) 4750\(\Delta\)Hamlin \(\Delta\) \(Mrs\) 4752\(\Delta\)Parfitt \(\Delta\) \(\Delta\) 4756\(\Delta\)Peterson \(\Delta\) \(\Delta\) 4756\(\Delta\) Colling \(\Delta\) \(\Delta\) 4761\(\Delta\) Rau \(\Omega\) \(\Delta\) 4762\(\Delta\)Kligman \(\Gamma\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wathrace\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wathrace\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wathrace\) \(\Delta\) 4764\(\Delta\)Barrows \(\Delta\) \(\Delta\) 4764\(\Delta\)Barrows \(\Delta\) \(\Delta\) 4764\(\Delta\)Barrows \(\Delta\) \(\Delta\) 4776\(\Delta\)Cousins \(\Varta\) \(\Delta\) 4775\(\Delta\)Upton \(\Ham\) 4777\(\Delta\)Hamkins \(\Delta\) \(\Omega\)	5082 Greggs R F © 5087 Hollenbeck H M 5089 Imel Kenneth © 5092\(\Delta\) Cox A R © 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122\(\Delta\) Place W C © 3129 Smith Robt 3130\(\Delta\) Worley J M © 3135 McDermott W J jr 3138\(\Delta\) Agnew Helen Mrs ©
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C MORRISON — North from 1 blk s of 4150 Market 619 ΔBryan P A Mrs Θ 621 ΔSaxton Howard Θ 637 Gaboury L A Θ 641 Lowe Laverne 701 Hankins Rex 709 Morton C J Θ 729 Roach A P F intersects 803 ΔBrownyer R W	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4744\(\Delta\)Collins \(\Gamma\)Coorgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) \(\Delta\)Kinkain \(\Delta\) \(Mrs\) 4750\(\Delta\)Hamlin \(\Delta\) \(Mrs\) 4752\(\Delta\)Kaul \(\Delta\) \(\Delta\) \(\Delta\) 4756\(\Omega\)Peterson \(\Delta\) \(\Delta\) 4757\(\Omega\) Snowden \(\Wagge\) \(\Omega\) 4758\(\Omega\) Glenny \(\Delta\) Thomasina \(\Omega\) 4761\(\Delta\) Rau \(\Omega\) \(\Delta\) 4762\(\Delta\)Kligman \(\Gamma\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wagge\) \(\Delta\) 4769\(\Delta\) Falton \(\Delta\) \(\Delta\) 4773\(\Delta\) Watenpaugh \(\Delta\) \(\Delta\) 4773\(\Delta\) Watenpaugh \(\Delta\) \(\Delta\) 4773\(\Delta\) Watenpaugh \(\Delta\) \(\Omega\) 4774\(\Delta\)True \(\Delta\) Lester \(\Omega\) 4773\(\Delta\) Hankins \(\Delta\) \(\Omega\) 4773\(\Delta\) Franklin \(\Wagge\) \(\Delta\)	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 5092ΔCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122ΔPlace W C Θ 3129 Smith Robt 3134ΔNewell C W Θ 3135 McDermott W J jr 3138ΔAgnew Helen Mrs Θ 3142 Heinz Julius Θ 3145 Bohe E R Θ
2441 McCluer H B 2442 Moore Walter 2449 Burton L L 2450 West T G 2451 Vacant 2452 Moran W C	4743\(\Delta\)Stone \(\Delta\) \(\Omega\) 4744\(\Delta\)Collins \(\Gamma\)Coorgia \(Mrs\) \(\Omega\) 4747\(\Delta\)Kinkain \(\Delta\) \(\Delta\)Kinkain \(\Delta\) \(Mrs\) 4750\(\Delta\)Hamlin \(\Delta\) \(Mrs\) 4752\(\Delta\)Kaul \(\Delta\) \(\Delta\) \(\Delta\) 4756\(\Omega\)Peterson \(\Delta\) \(\Delta\) 4757\(\Omega\) Snowden \(\Wagge\) \(\Omega\) 4758\(\Omega\) Glenny \(\Delta\) Thomasina \(\Omega\) 4761\(\Delta\) Rau \(\Omega\) \(\Delta\) 4762\(\Delta\)Kligman \(\Gamma\) \(\Delta\) 4764\(\Delta\)Barrows \(\Wagge\) \(\Delta\) 4769\(\Delta\) Falton \(\Delta\) \(\Delta\) 4773\(\Delta\) Watenpaugh \(\Delta\) \(\Delta\) 4773\(\Delta\) Watenpaugh \(\Delta\) \(\Delta\) 4773\(\Delta\) Watenpaugh \(\Delta\) \(\Omega\) 4774\(\Delta\)True \(\Delta\) Lester \(\Omega\) 4773\(\Delta\) Hankins \(\Delta\) \(\Omega\) 4773\(\Delta\) Franklin \(\Wagge\) \(\Delta\)	5082 Greggs R F Θ 5087 Hollenbeck H M 5089 Imel Kenneth Θ 5092ΔCox A R Θ 35th intersects 5095 Sarsfield M L MOUNTAIN VIEW DRIVE, NORTH (Normal Heights) — East from Litchfield rd to 35th, 1 n of Copley av 3122ΔPlace W C Θ 3129 Smith Robt 3130ΔWorley J M Θ 3134ΔNewell C W Θ 3135 McDermott W J jr 3138ΔAgnew Helen Mrs Θ 3142 Heinz Julius Θ



Advantage Environmental Consultants, LLC

ENVIRONMENTAL DUE DILIGENCE AND REMEDIATION SPECIALISTS

SCOTT SCHIFFER Environmental Scientist

EDUCATION

University of California, Berkeley, CA (2014) Bachelor of Science – Society and Environment

PROFESSIONAL REGISTRATIONS, LICENSES, AND CERTIFICATIONS

40-Hour OSHA HAZWOPER (29 CFR 1910.120)

PROFESSIONAL SUMMARY AND EXPERIENCE

During his educational experience, Mr. Schiffer completed numerous environmental research projects pertaining to environmental analysis, sustainability, and California water quality. He has completed numerous Phase I Environmental Site Assessments on vacant, agricultural, multi-family, commercial, and industrial properties, and has a strong working knowledge of ASTM standards for the completion of such assessments. Mr. Schiffer is also experienced in the completion of ground water monitoring/sampling. He is very proficient in researching and interpreting historical and regulatory information (i.e. aerial photographs; fire insurance, topographic, soil, and geologic maps; and regulatory database reports) pertaining to properties of varying land uses.

SPECIFIC PROJECT EXPERIENCE

3737 Midway Drive San Diego, California -- Phase I Environmental Site Assessment

Rancho Bernardo Tech Center 11011, 11021, and 11031 Via Frontera Rancho Bernardo, California -- Phase I Environmental Site Assessment

Michelson Apartments 3031 Michelson Drive Irvine, California -- Phase I Environmental Site Assessment

701 Island Avenue San Diego, California -- Phase I Environmental Site Assessment

42000 Zevo Drive Temecula, California -- Phase I Environmental Site Assessment

3001-3027 University Avenue, 3830 Ray Street, and 3827 30th Street San Diego, California -- Phase I Environmental Site Assessment

Advantage Environmental Consultants, LLC

ENVIRONMENTAL DUE DILIGENCE AND REMEDIATION SPECIALISTS

DANIEL A. WEIS, R.E.H.S. Branch Manager – Western Regional Office

EDUCATION

- Bachelor of Arts University of Delaware, Newark, DE (1995)
- Master of Science Public Health, San Diego State University, San Diego, CA (1998)

PROFESSIONAL REGISTRATIONS, LICENSES, AND CERTIFICATIONS

- Registered Environmental Health Specialist #8172 in the State of California
- OSHA 40-hour Hazardous Waste Operations Worker and Supervisor Certifications and Annual Refreshers

PROFESSIONAL SUMMARY

Mr. Weis is the branch manager of AEC's western regional office based in the City of San Marcos, San Diego County, California. He has 14 years of experience in the environmental sciences and consulting fields and is supported by Professional Geologists, Engineers and other technical team members of AEC staff. His responsibilities at AEC include client development and management, project management, technical oversight and quality control for assessment and remediation services, project staffing, and office financial management. Mr. Weis also completes technical services (including field activities) required of select projects completed by AEC. He has a proven ability to manage multiple personnel and technical projects, negotiate with regulatory agencies and maintain strong and trusting client relationships. Such clientele include but are not limited to local government entities, redevelopment agencies, affordable housing developers, Federal government entities, environmental and land use attorneys, architectural and engineering firms, commercial lending institutions, conservancies, commercial/industrial real estate owners/managers, insurance companies, wireless telecommunication carriers and real estate developers. He is also very experienced in the completion of assessment, construction and remediation quality assurance during the completion of urban redevelopment/brownfields projects, many of which have been located in downtown San Diego, Los Angeles and other urban communities throughout the State of California. Mr. Weis has a deep understanding of environmental due diligence guidelines including:

- American Society for Testing and Materials (ASTM) E1527-05, Standard Practice for Environmental Site Assessments (ESAs)
- ASTM E2247-08, Standard Practice for ESA: Phase I ESA Process for Forestland or Rural Properties
- ASTM E1903-97 (Re-approved 2002), Standard Practices for Environmental Site Assessments: Phase II ESA Process
- ASTM E2600-10, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions
- 40 Code of Federal Regulations (CFR) Part 312 Standards for Conducting All Appropriate Inquiry (AAI)
- 33 CFR Part 137 Oil Spill Liability Standards for Conducting AAI
- United States Department of Housing and Urban Development Guide to Multifamily Accelerated Processing
- Other financial institution specific guidelines including The United States Small Business Administration, Fannie Mae and Freddie Mac

PROFESSIONAL EXPERIENCE

Mr. Weis has completed over 700 due diligence related environmental assessments (i.e. Phase I ESAs, Transaction Screen Analyses, etc.) and has managed over 200 subsurface environmental investigations of soil gas, soil and/or groundwater. Such investigations have also included human health and ecological risk assessments, evaluations of indoor air conditions based on interpretations of subsurface conditions, underground storage tank (UST) evaluation/closure and hazardous waste characterization/management. Subsurface activities performed include the completion of soil borings using various drilling technologies, soil and groundwater sampling, installation and sampling of groundwater monitoring wells, free product evaluations, exploratory trenching and real-time delineation using mobile analytical laboratories and other soil screening technology. Assets evaluated include industrial, commercial, residential, agricultural and vacant land sites throughout the State of California and numerous additional states of the Nation, with many of the assessments completed under the regulatory oversight of local environmental regulatory agencies, the California Regional Water Quality Control Boards (RWQCBs) and the California Environmental Protection Agency Department of Toxic Substances Control (DTSC). Mr. Weis has also conducted and/or managed hundreds of public/environmental health related assessments including electromagnetic field surveys, radionuclide surveys, indoor air quality investigations, radon surveys, drinking water assessments, asbestos containing materials (ACM) and lead-based paint (LBP) surveys and mold/microbial evaluations.

Mr. Weis has managed over 20 remediation related projects primarily related to source removal of subsurface contaminants including but not limited to petroleum hydrocarbons, chlorinated solvents, heavy metals, organochlorine pesticides and other agricultural related chemicals, dioxins and furans and polychlorinated biphenyls (PCBs). Cost effective solutions and various remedial action options are provided prior to remedial action implementation. He is very proficient in developing remediation cost estimates and evaluating multiple remedial strategies on specific projects and conducting budget tracking to ensure the accuracy of such estimates during remedial implementation. Mr. Weis also assists clients with the preparation of contractor bid specifications, contractor bid and change order reviews for such projects, contractor agreements and project status reports/updates and has conducted presentations to client personnel, regulatory agencies and/or the public pertaining to such remediation related projects. He has also assisted numerous clients in cost recovery efforts from private parties and State/Federal funding programs for environmental assessment and remediation work.

SPECIFIC PROJECT EXPERIENCE

48 Property State Lands Exchange Project, Various Locations Throughout San Bernardino and Inyo Counties, California - Project director for the completion of a Phase I ESA in accordance with ASTM Practice E 1527-05, 40 CFR Part 312 Standards for Conducting AAI, and other Federal Agency specific guidelines at forty eight State of California School Lands properties ranging in size from 40 acres to 666.54 acres, located in San Bernardino and Inyo Counties, California and either partially or entirely within Death Valley National Park or the Mojave National Preserve. Due to the remoteness of the properties, the site reconnaissance was conducted via helicopter flyover with intermittent landings as needed to evaluate conditions on the properties. Prior to the site reconnaissance, Geographical Information Systems (GIS) technology was utilized to determine the coordinates of each property (corners and center) and such data was subsequently provided to the aviation company in a format compatible with the helicopter's navigation system. Additional components of the ESA (i.e. interviews, regulatory research and historical research) were completed in strict accordance with the applicable guidelines. The assessment revealed no evidence of recognized environmental conditions (RECs) in connection with the properties and additional assessment was not recommended. The assessment also included an evaluation of several non-scope ASTM considerations including ACM, LBP, radon potential and lead in drinking water. None of the non-scope ASTM evaluation items were found to be a potential concern with respect to the subject properties.

Industrial Facility, West Bradley Avenue, El Cajon, California – Technical lead on pre-business acquisition due diligence (i.e. Phase I/II ESAs) at a facility that conducts the manufacturing of forged metal products for the medical field and aerospace/defense industry and that was historically used for related industrial purposes. Investigation revealed releases of chlorinated solvents to the vadose zone and groundwater underlying the facility, as well as off-site sources of chlorinated solvents to the property in groundwater. Two phases of due diligence related subsurface investigation consisted of 25 direct-push soil

borings and the collection of soil, groundwater, and soil gas samples. The analytical laboratory data was evaluated, deliverables were prepared and preliminary evaluations of risk conducted using County of San Diego Department of Environmental Health and DTSC Johnson and Ettinger vapor intrusion risk models. The case was subsequently referred to the DTSC due to permit by rule conditions and Mr. Weis oversaw and participated in the preparation a current conditions report, Facility Investigation (FI) Work plan and Community Profile for the property under a Corrective Action Consent Agreement between the interested parties and the DTSC. The FI Work Plan described the investigation objectives, pertinent background information related to the facility, current conditions, and a description of each identified Solid Waste Management Unit and Area of Concern identified at the facility. The document also included a Quality Assurance Project Plan (QAPP), data management plan and information pertaining to the proposed reporting structure. Mr. Weis also served as the project lead/coordinator for the implementation of the FI Work Plan which included the installation of sub-slab and at-depth soil gas probes and multiple groundwater monitoring wells, and the drilling of several direct-push soil borings. On-going regulatory negotiation is being conducted in efforts to reach a quantifiable approach to future monitoring of subsurface conditions at the property.

Santa Monica Beach Public Restroom Facilities Replacement Project, Santa Monica, California - Project director and lead on the completion of a Phase I ESA in accordance with ASTM Practice E 1527-05 of eight public restroom facilities on the Santa Monica State Beach in the City of Santa Monica, Los Angeles County, California. ACM, LBP and PCB surveys were also completed in conjunction with the ESA. All components of the ESA were completed in strict accordance with the applicable guidelines. The assessment revealed no evidence of RECs in connection with the properties and additional assessment was not recommended. Recommendations were provided regarding abatement of ACM and LBP identified at the facilities.

Seventh and Market Street Property - 7th and 8th Avenues and Market Street, San Diego, California -Project lead and manager for remediation planning assistance associated with a proposed 55,000 square foot mixed-use redevelopment project including a multiple level subterranean parking garage) in downtown San Diego. Subsurface characterization utilized in conjunction with prior site data included the drilling of ten soil borings using a hollow-stem auger drill rig, excavation of ten exploratory test pits using a backhoe and sampling/analysis of soil samples for various contaminants of concern. The additional data obtained was used for evaluating the feasibility of alternative remedial strategies, revising remedial cost estimates for multiple redevelopment scenarios and preparation of a mitigation plan and community health and safety plan for the project. Eligible costs for the site characterization related work were recovered from the State Water Resources Control Board (SWRCB) Orphan Site Cleanup Account (OSCA) program on behalf of the client. Although redevelopment plans for the project changed due to various factors, funding remained secured for the project and remediation work consisting of a removal action of lead and petroleum hydrocarbon impact soil was conducted. Over 15,000 tons of contaminated soil was removed from the property during the remediation effort. Mr. Weis served as the project lead and manager for the remediation phase of work which included the excavation and segregation of lead and petroleum hydrocarbon contaminated soils within an approximately 30,000 square foot remediation area, backfilling the excavation with non-contaminated soil generated from the proposed excavation as well as soil to be imported to the property and reconstruction of the property to City of San Diego surface parking lot standards. The remediation activities required the displacement of approximately 27,000 cubic yards of soil. Pre-remediation work completed by Mr. Weis included revising the mitigation plan to account for changes to the project plan, assistance with the preparation of technical bid specifications pertaining to the proposed site remediation, pre-bid meeting representation and responding to questions/inquiries from prospective bidders regarding the technical specifications, drawings and other items related to the proposed remediation effort and associated construction activity. Over 99% of \$1,500,000 in SWRCB OSCA grant funds for the cleanup was recovered on behalf of the client.

Proposed Charter School Athletic Field Complex, Temple Avenue and Hoover Street, Los Angeles, California - Project lead and manager for the completion of a Phase I and II ESA during a property acquisition due diligence period at this approximately one-acre property located in the northern portion of the downtown area of the City of Los Angeles. The Phase I ESA was completed under ASTM-2005/AAI protocol and supplemental DTSC guidelines. Prior uses of the property included metal plating activity and a gasoline service station. Other deliverables provided and approved by the DTSC included a Preliminary

Environmental Assessment (PEA) Work Plan, QAPP and a Site Specific Health and Safety Plan. Additional subsurface investigation was subsequently completed to close data gaps pertaining to contaminant distribution and remediation costs prior to a removal action completed at the property. Such investigation included the drilling of over 70 soil borings and sample collection/analysis of soil, soil gas and groundwater samples. Remediation (excavation) at the property was completed by on a turn-key basis and consisted of the excavation and disposal of approximately 2,500 cubic yards of metals contaminated soil and removal of a UST under Los Angeles Fire Department oversight. Other duties completed during the course of the project included regulatory negotiation and litigation support. Community outreach associated with the project included a public hearing with the Los Angeles Department of Building and Safety pertaining to the site permit grading and haul route for trucking of contaminated soil and mass mailing of fieldwork notification activities to all properties situated within a 300 foot radius of the property.

Strata - 9th and 10th Avenues and Market Street, San Diego, California - Project manager for the completion of California SWRCB OSCA Program application assistance pertaining to a portion (former gasoline station) of this downtown San Diego redevelopment site, which included a four-level subterranean parking garage. Initial tasks included a review of prior environmental assessments, written response to SWRCB inquiries pertaining to historical site uses and principal contamination sources and preparation of select sections of OSCA Pre-Assessment and Cleanup Grants. Portions of the Grants included a summary of background information pertaining to the property, detailed scopes of work pertaining to prior eligible assessment response work and proposed cleanup response actions and specific budget details. Cost recovery efforts from the OSCA program were successful. Mr. Weis also served as the project lead for general remediation planning assistance which included the preparation of multiple variations of remediation cost estimates for the project and attendance of meetings with the development team. The remediation cost estimate variations were broken down by physical address (parcel) and three contaminant types (lead. chlorinated solvents and petroleum hydrocarbons) and differing combinations of the referenced parameters. The cost estimation included interface with UST removal, excavation, shoring and dewatering contractors, landfill/recycling facilities, trucking companies, vapor barrier design and installation companies and analytical laboratories. Mr. Weis oversaw subsequent third-party oversight activities on behalf of the client as the property was sold to a third-party and included field oversight of remediation activities, budget tracking, invoice approval, compliance with the OSCA Grant conditions, attendance at meetings and other tasks.

Tijuana River Watershed Project, San Diego State University Graduate School of Public Health - In early stages of the project, implemented a stormwater sampling program within various areas of watershed including the use of auto sampling apparatus triggered by rainfall and flow of rivers and creeks of interest. Personally performed analytical laboratory analysis of water and sediment samples using University owned instruments for constituents of concern including heavy metals, nutrients, and bacteriological indicators and maintained chemistry and flow databases for the development of pollutographs, mass loading estimates and calibration of GIS models.

PUBLICATIONS

- Gersberg, R.M., Brown, C., Zambrano, V., Worthington, K., and Weis, D. (2000) Quality of urban runoff in the Tijuana River watershed. In Westerhoff, P. (editors), SCERP Monograph Series (no.2) on Water Issues Along the United States and Mexico Border. : Southwest Center for Environmental Research and Policy, 31-45.
- Weis, D.A., Callaway, J.C., and R.M. Gersberg (2001). Vertical Accretion Rates and Heavy Metal Chronologies in Wetland Sediments of the Tijuana Estuary. Estuaries 24(6A).
- Gersberg, R.M., Pitt, J.L., Weis, D.A., and D.D. Yorkey. Characterizing In-Stream Metal Loading in the Tijuana River Watershed. (2002). National TMDL Science and Policy Conference, Specialty Conference Proceeding on CD Rom, November 13-16, Phoenix, Arizona

AFFILIATIONS

National Brownfields Association San Diego Housing Federation

PRELIMINARY DRAINAGE REPORT

MORENA APARTMENT HOMES

City of San Diego, CA January 17th, 2018

SDP/VTM/PDP PTS # <u>526167</u> APN #: 436-020-41-00

Project Address: 1577-79 Morena Boulevard

Prepared For:

Fairfield Realty III, LLC

5510 Morehouse Drive, Suite 200 San Diego, CA 92121

Prepared By:



PROJECT DESIGN CONSULTANTS

Planning | Landscape Architecture | Environmental | Engineering | Survey

701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax

Job No. 4197.00



Prepared By: C.Bell, MS, EIT *Under the supervision of*

Debby Reece, PE RCE 56148 Registration Expires 12/31/18

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1. INTRODUCTION

This drainage report has been prepared in support of the storm drain improvements associated with the proposed Morena Apartment Homes development (Project). The Project consists of redeveloping a 6.2 acre parcel in the Mission Bay neighborhood of San Diego into a 150 unit multi-family dwelling complex.

Refer to the Vicinity Map (Figure 1) for the Project location. The Project is bounded by a commercial storage lot to the northwest, Tonopah Avenue to the northeast, Frankfort Street to the southeast, and Morena Boulevard and West Morena Boulevard to the southwest. The project is not subject to the Clean Water Act (CWA) Sections 401 and 404 as there will be no fill or dredging discharged into an aquatic environment since the project is located on urban land.

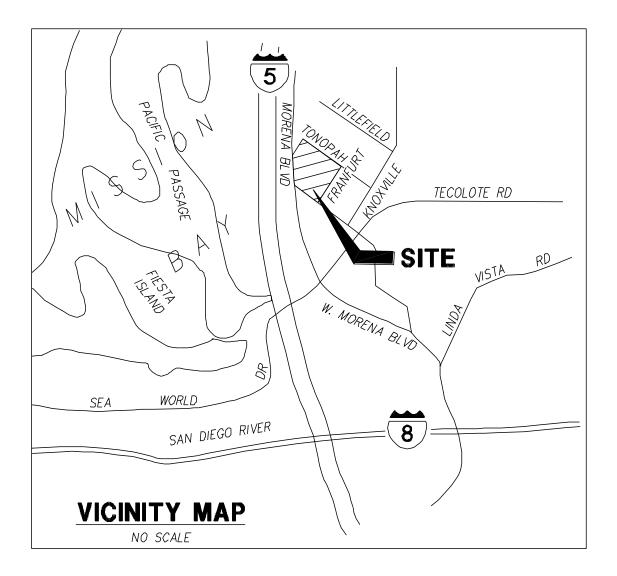


Figure 1: Vicinity Map

The existing site is occupied by a mobile-home park that includes drive pads, grassed areas and trees. Redevelopment of the site will entail the removal of mobile homes, trees and demolition of existing structures. The proposed development includes nine multi-unit residential structures, a club house, pool area and all the associated utilities, hardscaping, and landscaping. The site will also undergo significant cut and fill to flatten out the site and raise it above the floodplain.

Under existing conditions the runoff from the site sheet flows to the southwest and into two curb inlets along Morena Boulevard. The proposed drainage pattern will remain similar with the

addition of curb and ribbon gutters as well as a private storm drain system to route water into the treatment BMPs and offsite. The treatment BMPs will include one large and two small biofiltration basins and three Modular Wetland units. For more information regarding water quality management concerns refer to the Storm Water Quality Management Plan (SWQMP) prepared by Project Design Consultants for the proposed project treatment BMPs.

The southwestern half of the site is located within Special Flood Hazard Area or a FEMA flood area, Zone AO, denoting average flood depths of 1 foot, per FIRM panel 06073C1614G. Refer to the FIRMette in Appendix 1, which shows the Project site in relation to the FEMA floodplain. The project is undergoing a CLOMR-F process to revise the floodplain based on the elevation change due to the site fill which should put the vast majority of the site out of the floodplain.

2. EXISTING AND PROPOSED DRAINAGE PATTERNS AND IMPROVEMENTS

The following sections provide descriptions of the existing and proposed drainage patterns and improvements for the project.

2.1 Existing Drainage Patterns

Currently the site consists of a mobile home park with a few permanent support structures. Drive pads for the mobile homes and private streets occupy much of the site accounting for the imperviousness and the site also includes some grass lawn areas and large trees. The 100-year floodplain associated with Tecolote Creek passes through the site, inundating the southern portion of the site by as much as 3 feet. Appendix 1 contains the FEMA flood plain map. Steep hills draining onsite exist along the northeastern edge of the Project. Rainfall sheet flows from the northern side of the site to the southern side where it enters the Morena Boulevard curb and gutter system. Site runoff enters the public storm drainpipe via two curb and gutter inlets, (System 100) at the corner of Morena Boulevard and Frankfort Street and (System 200) along Morena Boulevard. Flow captured at the first inlet is then conveyed by a concrete box-culvert to a 24-inch RCP (DWG 25119-21-D, 10162-L) into a 53-inch by 34-inch elliptical RCP lateral storm drain in West Morena Boulevard (25119-31-D). Flow captured at the second inlet travels through an 18-inch RCP into the lateral storm drain in West Morena Boulevard towards a 60inch by 36-inch elliptical RCP (25119-31-D). The backbone design flow provided on this drawing for the 53x34 RCP is 47.8 cfs and 63.6 cfs for the 60x38 RCP. Flow from this lateral ultimately discharges into Tecolote Creek. See Exhibit A in Appendix 5 for the existing conditions hydrology map. For reduced copies of downstream storm drain asbuilt plans, refer to Appendix 6.

2.2 Proposed Drainage Improvements

Runoff generated under proposed conditions will similarly discharge to the same respective curb inlets. Gutters and on-site area drains will direct water into the private storm drain system that convey flows to and from the treatment BMPs and then to the public storm drain system. The

connection to the public storm drain is the same as existing conditions with one inlet at the corner of Morena Boulevard and Frankfort and another along Morena Boulevard and conveyed as described in the previous section (2.1). The runoff from approximately one acre of drainage area shifts from System 200 (the drainage area leading to the inlet along Morena) to System 100 (the inlet at the corner of Morena and Frankfort), however, the drainage improvements are expected to improve the overall drainage condition as they will vary time of concentration across the site vs the existing condition which all basically sheet flows off as one plane. Refer to Exhibit B in Appendix 5 for the proposed condition drainage map.

3. HYDROLOGY CRITERIA, METHODOLOGY, AND RESULTS

Hydrologic modeling was performed per City of San Diego Drainage Design Manual criteria to provide the design flows for storm drain design and improvements.

3.1 Hydrology Criteria

Table 1 summarizes the hydrology assumptions and criteria used for hydrologic modeling.

Table 1: Hydrology Criteria

Existing and Proposed Hydrology:	100-year storm frequency		
Soil Type:	Hydrologic Soil Group D		
Land Use / Runoff Coefficients:	Based on criteria presented in the 1984 City of San Diego Drainage Design Manual.		
Rainfall intensity:	Based on intensity duration frequency relationships presented in the 1984 City of San Diego Drainage Design Manual, see Appendix 1.		

3.2 Hydrologic Methodology

The Rational Method was used to determine the onsite 100-year storm flow for the design of the Project storm drainpipe improvements. The goal of this analysis was to:

- Determine the design flows for the sizing of any proposed storm drain improvements.
- Determine the differences in the drainage conditions between existing and proposed conditions to confirm there are no significant downstream impacts.

The Civil-D Rational Method program was used to calculate onsite and offsite runoff for the 100-year storm event. The runoff coefficient for Mobile Home development (C = 0.65) was used for the on-site existing conditions Multi-Family residential development (C = 0.7) was used for the proposed conditions. The off-site areas contributing to the site discharge points has been represented as Commercial development with a 90% impervious area (C = .95).

3.3 Description of Hydrologic Modeling Software

The Civil-D Rational Method Program was used to perform the Rational Method hydrologic calculations. This section provides a brief explanation of the computational procedure used in the computer model.

The Civil-D Modified Rational Method Hydrology Program is a computer-aided design program where the user simulates the hydrology with a link-node model. The sub-watersheds are represented by a pair of nodes and the conduits connecting them are assigned channel properties. The intensity-duration-frequency relationships are applied to each of the drainage areas in the model to yield peak flow rates at each point of interest per the methodology in the *City of San Diego Drainage Design Manual*.

3.4 Hydrology Results

The Rational Method as presented in the City of San Diego Drainage Design Manual was used to calculate the existing and proposed conditions peak storm flows. Table 2 below summarizes the Rational Method results for the comparison of the existing and proposed project site. Storm drain capacity is addressed in this section and the associated calculations and as-built drawings are provided in Attachment 6.

Table 2: Hydrology Results

	EXISTING CONDITIONS		PROPOSED CONDITIONS	
LOCATION	100-Year Flow Rate	Contributing Area	100-Year Flow Rate	Contributing Area
	(cfs)	(ac)	(cfs)	(ac)
System 100	19.1	7.3	18.0	8.3
System 200	29.4	11.7	27.3	10.7
Total	48.5	19.3	45.3	19.3

Based on the hydrologic analys it is expected that there will not be an increase in runoff despite the diversion. This is likely due to the attenuation that may have came as a result of the change in flow paths from solely overland in the existing condition to various overland flow paths and addition of piped conveyance on-site in the proposed condition that led to a greater variability in time of concentration across the site.

Approximately one acre of runoff has been re-directed from System 200 into System 100, however as the pipe conveying System 100 (12'x42" Box Culvert, DWG 10162-L) is larger than that carrying System 200 (18" RCP), this would be expected to alleviate any capacity issues due to the smaller pipe serving the larger drainage area. The total flow out of System 100 is 18.0 cfs while a 12"x42" box culvert has a capacity of 20.9 cfs.

The total flow out of System 200, 27.3 cfs, is less than the backbone design capacity of the lateral along Morena at 47.8 cfs (53x34 RCP), while the combined flow of 48.4 is less than the backbone design capacity of 63.6 cfs in the subsequent upsized segment of the lateral (60x38 RCP). Overall the site will experience a peak flow reduction of about 3 cfs. Therefore it is determined that total flow with the addition of the proposed peak runoff from the project is within the capacity of the storm drain system and there will be no adverse impacts to the storm drain system or downstream properties.

4. HYDRAULIC CRITERIA, METHODOLOGY, AND RESULTS

The hydraulic calculations will be provided during final engineering when storm drain design and roof plumbing layout has been finalized. For the proposed condition the storm drains will be designed to carry the 100-year storm event.

5. CONCLUSION

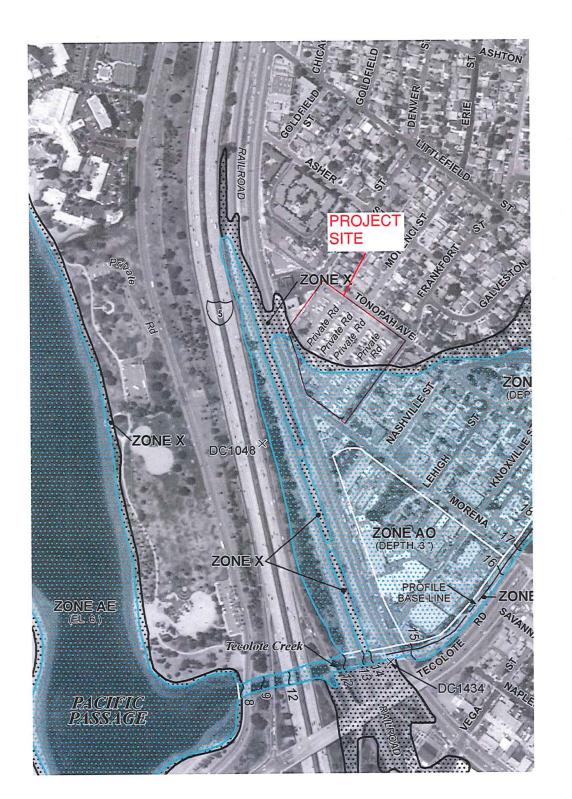
This drainage report was prepared for the Morena Boulevard Apartment Homes project. The site is presently developed with a similar land use, but the site will experience a reduction in peak flow of 3.2 cfs, from the proposed development and drainage improvements. This is attributed to the various overland, channel and piped conveyances in the proposed condition in comparison to the existing condition that sheet flowed off the site as almost one common plane. With more numerous drainage paths, of varying type and complexity this has had the effect of varying the time of concentration across the site and thus reducing peak flows vs existing conditions.

The storm drain system will be designed to comply with drainage guidelines and will be adequate to convey the peak design flows. The site will be elevated by fill to ensure the proposed buildings are placed above the required freeboard elevation per City of San Diego and FEMA requirements.

Based on the hydrologic analysis performed and expected reduction in peak flow due to the proposed development and drainage improvements it is anticipated that there will be no adverse impacts to downstream properties or the public storm drain system.

APPENDIX 1

Supplemental Information (Intensity Duration Frequency Curve, Runoff Coefficients, and FEMA Firmette)





MAP SCALE 1" = 500'



PANEL 1614G

FIRM

FLOOD INSURANCE RATE MAP SAN DIEGO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 1614 OF 2375

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY

NUMBER PANEL SUFFIX

SAN DIEGO, CITY OF

060205 1

G

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER 06073C1614G

MAP REVISED MAY 16, 2012

Federal Emergency Management Agency

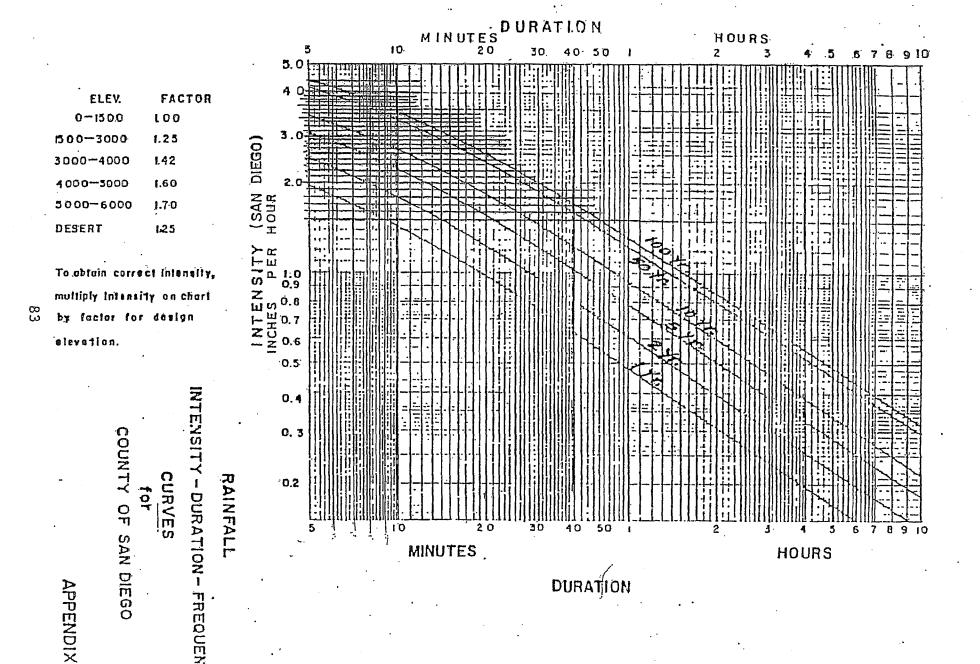


TABLE 2

RUNOFF COEFFICIENTS (RATIONAL METHOD)

DEVELOPED AREAS (URBAN)

Land Use	Coefficient, C Soil Type (1)
Residential:	<u> D</u>
Single Family	.55
Multi-Units	.70
Mobile Homes	.65
Rural (lots greater than 1/2 acre)	.45
Commercial (2) 80% Impervious	.85
Industrial (2) 90% Impervious	. 95

· NOTES:

- (1) Type D soil to be used for all areas.
- Where actual conditions deviate significantly from the tabulated imperviousness values of 80% or 90%, the values given for coefficient C, may be revised by multiplying 80% or 90% by the ratio of actual imperviousness to the tabulated imperviousness. However, in no case shall the final coefficient be less than 0.50. For example: Consider commercial property on D soil.

Actual imperviousness				=	50%
Tabulated in	npervi	iousness		=	80%
Revised C	=	50 x	0.85	=	0.53

APPENDIX 2

Existing Conditions Rational Method Computer Output

P:\4197\Engr\Reports\Drainage\HYDRO\4197S100E.out Modified: 11/30/2016 12:23:29 PM PM

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San Diego County Rational Hydrology Program
CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version 6.3
Rational method hydrology program based on
San Diego County Flood Control Division 1985 hydrology manual
      Rational Hydrology Study Date: 11/30/16
MORENA BLVD
SYSTEM 100 - EXISTING 100 YR
******* Hydrology Study Control Information *******
Program License Serial Number 4049
Rational hydrology study storm event year is 100.0
English (in-lb) input data Units used
English (in) rainfall data used
Standard intensity of Appendix I-B used for year and
Elevation 0 - 1500 feet
Factor (to multiply * intensity) = 1.000
Only used if inside City of San Diego
San Diego hydrology manual 'C' values used
Runoff coefficients by rational method
Process from Point/Station 100.000 to Point/Station
                                                     101.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Initial subarea flow distance = 100.000(Ft.)
Highest elevation = 45.000(Ft.)
Lowest elevation = 23.000(Ft.)
Elevation difference = 22.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 2.89 \text{ min.}
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.6500)*(100.000^{.5})/(22.000^{(1/3)}] = 2.89
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.650
Subarea runoff = 0.342(CFS)
Total initial stream area =
                                0.120(Ac.)
Process from Point/Station
                          101.000 to Point/Station
**** IMPROVED CHANNEL TRAVEL TIME ****
```

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```
Upstream point elevation = 24.000(Ft.)
Downstream point elevation = 11.600(Ft.)
Channel length thru subarea = 650.000(Ft.)
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel =
                                                 3.851 (CFS)
Manning's 'N' = 0.015
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 3.851(CFS)
Depth of flow = 0.131(Ft.), Average velocity = 2.228(Ft/s)
Channel flow top width = 26.293(Ft.)
Flow Velocity = 2.23(Ft/s)
Travel time = 4.86 min.
Time of concentration = 9.86 min.
Critical depth = 0.156(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
                       3.391(In/Hr) for a 100.0 year storm
Rainfall intensity =
Runoff coefficient used for sub-area, Rational method, Q-KCIA, C = 0.650
Subarea runoff =
                  5.423(CFS) for 2.460(Ac.)
Total runoff =
                  5.765(CFS) Total area =
                                               2.58(Ac.)
Process from Point/Station 137.000 to Point/Station
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Time of concentration =
                         9.86 min.
Rainfall intensity =
                       3.391(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.783(CFS) for 0.330(Ac.)
Total runoff =
                  6.548(CFS) Total area =
                                               2.91 (Ac.)
Process from Point/Station
                           137.000 to Point/Station
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 2.910(Ac.)
Runoff from this stream =
                          6.548(CFS)
Time of concentration =
                       9.86 min.
Rainfall intensity = 3.391(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station 140.000 to Point/Station 141.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
```

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Decimal fraction soil group C = 0.000Decimal fraction soil group D = 1.000

Initial subarea flow distance = 50.000(Ft.)

[COMMERCIAL area type

```
Highest elevation = 27.000(Ft.)
Lowest elevation = 25.000(Ft.)
Elevation difference =
                      2.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) =
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.8500)*(50.000^{.5})/(4.000^{(1/3)}] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) =
                         4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (O=KCIA) is C = 0.850
Subarea runoff =
                    0.522(CFS)
Total initial stream area =
                                0.140(Ac.)
Process from Point/Station 141.000 to Point/Station
                                                        150.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation =
                                  25.000(Ft.)
End of street segment elevation =
                                 10.000(Ft.)
Length of street segment = 450.000(Ft.)
Height of curb above gutter flowline =
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                 6.006(CFS)
Depth of flow = 0.350(Ft.), Average velocity = 4.378(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 11.158(Ft.)
Flow velocity = 4.38(Ft/s)
Travel time = 1.71 min.
                                  6.71 min.
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Rainfall intensity =
                       3.908(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
Subarea runoff =
                   9.766(CFS) for
                                  2.940(Ac.)
Total runoff =
                 10.288(CFS) Total area =
                                               3.08(Ac.)
                              10.288 (CFS)
Street flow at end of street =
Half street flow at end of street =
                                    10.288 (CFS)
Depth of flow = 0.405(Ft.), Average velocity = 4.973(Ft/s)
Flow width (from curb towards crown) = 13.936(Ft.)
145.000 to Point/Station
Process from Point/Station
                                                        150,000
**** SUBAREA FLOW ADDITION ****
```

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```
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Time of concentration =
                          6.71 min.
                        3.908(In/Hr) for a 100.0 year storm
Rainfall intensity =
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
                  4.219(CFS) for 1.270(Ac.)
Subarea runoff =
                 14.507(CFS) Total area =
Total runoff =
Process from Point/Station
                             145.000 to Point/Station
                                                          150.000
**** CONFIGENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =
                      4.350(Ac.)
Runoff from this stream =
                          14.507 (CFS)
                         6.71 min.
Time of concentration =
Rainfall intensity =
                       3.908(In/Hr)
Summary of stream data:
Stream Flow rate
                      TC
                                    Rainfall Intensity
          (CFS)
No.
                      (min)
                                          (In/Hr)
        6.548
                  9.86
                                      3.391
       14.507
                  6.71
                                      3.908
Qmax(1) =
          1.000 *
                    1.000 *
                                6.548) +
          0.868 *
                    1.000 *
                               14.507) + =
                                               19.137
Qmax(2) =
          1.000 *
                    0.681 *
                                6.548) +
          1.000 *
                    1.000 *
                               14.507) + =
                                               18.964
Total of 2 main streams to confluence:
Flow rates before confluence point:
      6.548
                14.507
Maximum flow rates at confluence using above data:
      19,137
                  18,964
Area of streams before confluence:
       2.910
                   4.350
Results of confluence:
Total flow rate =
                  19.137 (CES)
Time of concentration =
                        9.861 min.
Effective stream area after confluence =
                                            7.260 (Ac.)
End of computations, total study area =
                                               7.260 (Ac.)
```

```
San Diego County Rational Hydrology Program
CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version 6.3
Rational method hydrology program based on
San Diego County Flood Control Division 1985 hydrology manual
       Rational Hydrology Study Date: 12/02/16
MORENA BLVD
SYSTEM 200 - EXISTING 100 YR
 ******* Hydrology Study Control Information ********
Program License Serial Number 4049
Rational hydrology study storm event year is 100.0
English (in-lb) input data Units used
English (in) rainfall data used
Standard intensity of Appendix I-B used for year and
Elevation 0 - 1500 feet
Factor (to multiply * intensity) = 1.000
Only used if inside City of San Diego
San Diego hydrology manual 'C' values used
Runoff coefficients by rational method
Process from Point/Station
                          200.000 to Point/Station
                                                        201,000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Initial subarea flow distance = 100.000(Ft.)
Highest elevation = 45.000(Ft.)
Lowest elevation = 25.000(Ft.)
Elevation difference = 20.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 2.98 \text{ min.}
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.6500)*(100.000^{.5})/(20.000^{(1/3)}] = 2.98
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.650
Subarea runoff = 0.342(CFS)
                                0.120(Ac.)
Total initial stream area =
Process from Point/Station
                            201.000 to Point/Station 224.000
**** IMPROVED CHANNEL TRAVEL TIME ****
```

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Upstream point elevation = 25.000(Ft.)
Downstream point elevation = 18.700(Ft.)
Channel length thru subarea = 350.000(Ft.)
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel =
                                                     2.083(CFS)
Manning's 'N' = 0.015
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 2.083(CFS)
Depth of flow = 0.106(Ft.), Average velocity = 1.870(Ft/s)
Channel flow top width = 21.107(Ft.)
Flow Velocity = 1.87(Ft/s)
Travel time = 3.12 min.
Time of concentration = 8.12 min.
Critical depth =
                   0.122(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
                        3.640(In/Hr) for a 100.0 year storm
Rainfall intensity =
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.650
Subarea runoff = 2.886(CFS) for 1.220(Ac.)
                   3.229(CFS) Total area =
Total runoff =
                                                  1.34 (Ac.)
Process from Point/Station 201.000 to Point/Station
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 1.340(Ac.)
Runoff from this stream = 3.229(CFS)
Time of concentration = 8.12 min.
Rainfall intensity = 3.640(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station 222.000 to Point/Station
**** INITIAL AREA EVALUATION ****
                                                           223,000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type ]
Note: user entry of impervious value, Ap = 0.900
Initial subarea flow distance = 60.000(Ft.)
Highest elevation = 24.000(Ft.)
Lowest elevation = 22.000(Ft.)
Elevation difference = 2.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 1.34 min.
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.9563)*(60.000^.5)/(3.333^(1/3)] = 1.34
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.956
Subarea runoff =
                     0.672 (CES)
```

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```
Total initial stream area =
                               0.160(Ac.)
Process from Point/Station
                            223.000 to Point/Station
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation =
                                 24.000(Ft.)
End of street segment elevation = 24.000(Ft.)
Length of street seament = 1000.000(Ft.)
Height of curb above gutter flowline =
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
Manning's N in gutter = 0.0150
 Manning's N from gutter to grade break = 0.0150
 Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                6.505 (CFS)
Depth of flow = 0.420(Ft.), Average velocity = 2.862(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 14.652(Ft.)
Flow velocity = 2.86(Ft/s)
Travel time = 5.82 min.
                           TC = 10.82 \text{ min.}
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                      3.279(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q-KCIA, C = 0.700
Subarea runoff =
                   6.381(CFS) for
                                  2.780(Ac.)
Total runoff =
                  7.052(CFS) Total area =
                                              2.94 (Ac.)
                                7.052(CFS)
Street flow at end of street =
Half street flow at end of street =
                                    7.052 (CFS)
Depth of flow = 0.429(Ft.), Average velocity = 2.918(Ft/s)
Flow width (from curb towards crown) = 15.134(Ft.)
**** SUBAREA FLOW ADDITION ****
                                                       224.000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Time of concentration =
                        10.82 min.
Rainfall intensity =
                       3.279(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, 0=KCIA, C = 0.650
Subarea runoff =
                  1.982(CFS) for
                                   0.930 (Ac.)
Total runoff =
                  9.034(CFS) Total area =
                                              3.87 (Ac.)
Process from Point/Station
                            225.000 to Point/Station
                                                       224.000
```

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```
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =
                       3.870 (Ac.)
Runoff from this stream =
                              9.034 (CFS)
Time of concentration = 10.82 min.
Rainfall intensity =
                       3.279(In/Hr)
Summary of stream data:
Stream Flow rate
                                     Rainfall Intensity
                      (min)
No.
          (CFS)
                                           (In/Hr)
        3.229
                   8.12
                                       3.640
        9.034
                  10.82
                                       3,279
Omax(1) =
          1.000 *
                     1.000 *
                                 3.229) +
          1.000 *
                     0.750 *
                                 9.034) + =
                                                10,006
Qmax(2) =
          0.901 *
                     1.000 *
                                3.229) +
          1.000 *
                     1.000 *
                                 9.034) + =
                                                11.943
Total of 2 main streams to confluence:
Flow rates before confluence point:
      3.229
                  9.034
Maximum flow rates at confluence using above data:
                   11.943
      10.006
Area of streams before confluence:
       1.340
                    3.870
Results of confluence:
Total flow rate =
                    11.943 (CFS)
Time of concentration = 10.824 min.
Effective stream area after confluence =
                                             5.210 (Ac.)
Process from Point/Station
                              224,000 to Point/Station
                                                            230,000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation = 13.600(Ft.)
End of street segment elevation = 10.300(Ft.)
Length of street segment = 450.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                   12.733 (CFS)
Depth of flow = 0.542(Ft.), Average velocity = 2.851(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =
Streetflow hydraulics at midpoint of street travel:
```

```
Halfstreet flow width = 20.748(Ft.)
Flow velocity = 2.85(Ft/s)
Travel time = 2.63 min.
                            TC = 13.45 \text{ min.}
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                       3.027(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff =
                    1.462(CFS) for 0.690(Ac.)
Total runoff =
                  13.405(CFS) Total area =
                                                 5.90 (Ac.)
Street flow at end of street =
                                13.405(CFS)
Half street flow at end of street =
                                     13,405 (CFS)
Depth of flow = 0.551(Ft.), Average velocity = 2.870(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =
                                                   2.02(Ft.)
Flow width (from curb towards crown) = 21.195(Ft.)
Process from Point/Station 229.000 to Point/Station **** SUBAREA FLOW ADDITION ****
                                                          230.000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Time of concentration =
                         13.45 min.
Rainfall intensity =
                        3.027(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, O=KCIA, C = 0.650
Subarea runoff =
                    2.066(CFS) for
                                   1.050(Ac.)
Total runoff =
                 15.471(CFS) Total area =
                                                 6.95 (Ac.)
Process from Point/Station
                             230.000 to Point/Station
                                                          234.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation =
                                    7.250(Ft.)
Downstream point/station elevation =
                                    6.500(Ft.)
Pipe length = 100.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 15.471(CFS)
Nearest computed pipe diameter =
                                  15.471 (CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 16.08(In.)
Flow top width inside pipe = 22.57(Tn.)
Critical Depth = 17.01(In.)
Pipe flow velocity =
                       6.91(Ft/s)
Travel time through pipe = 0.24 min.
Time of concentration (TC) = 13.70 min.
Process from Point/Station
                             230,000 to Point/Station
                                                          234 - 000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =
                      6.950(Ac.)
Runoff from this stream =
                           15.471 (CFS)
```

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```
Time of concentration = 13.70 min.
Rainfall intensity = 3.007(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station
                            231.000 to Point/Station
                                                         232,000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Note: user entry of impervious value, Ap = 0.900
Initial subarea flow distance = 50.000(Ft.)
Highest elevation = 15.000(Ft.)
Lowest elevation = 14.000(Ft.)
Elevation difference = 1.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) =
                                      1 45 min
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3))
TC = [1.8*(1.1-0.9563)*(50.000^{.5})/(2.000^{(1/3)}] = 1.45
Setting time of concentration to 5 minutes
Rainfall intensity (I) =
                          4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.956
Subarea runoff =
                   0.462(CFS)
Total initial stream area =
                                0.110(Ac.)
Process from Point/Station 232.000 to Point/Station
                                                         234.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation =
                                  14.000(Ft.)
End of street segment elevation =
                                  10.000(Ft.)
Length of street segment = 600.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 5.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 3.000
Gutter width = 1.000(Ft.)
Gutter hike from flowline = 3.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                 3.253 (CFS)
Depth of flow = 0.474(Ft.), Average velocity = 2.033(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 12.184 (Ft.)
Flow velocity = 2.03(Ft/s)
Travel time = 4.92 min.
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Note: user entry of impervious value, Ap = 0.900
```

```
Rainfall intensity =
                        3.384(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, O=KCIA, C = 0.956
Subarea runoff =
                    4.304(CFS) for
                                   1.330(Ac.)
Total runoff =
                   4.766(CFS) Total area =
                                                1.44 (Ac.)
Street flow at end of street =
                                 4.766(CFS)
                                      4.766(CFS)
Half street flow at end of street =
Depth of flow = 0.514(Ft.), Average velocity = 2.230(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =
                                                   0.00(Ft.)
Flow width (from curb towards crown) = 14.221(Ft.)
233.000 to Point/Station 238.000 to Point/Station **** SUBAREA FLOW ADDITION ****
                                                          234.000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[INDUSTRIAL area type
                          9.92 min.
Time of concentration =
Rainfall intensity =
                        3.384(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.950
                    5.337(CFS) for
Subarea runoff =
                                    1.660(Ac.)
Total runoff =
                 10.103(CFS) Total area =
                                                3.10(Ac.)
Process from Point/Station
                           233.000 to Point/Station
                                                         234,000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =
                      3.100(Ac.)
Runoff from this stream =
                           10,103(CFS)
Time of concentration =
                        9.92 min.
                       3.384 (In/Hr)
Rainfall intensity =
Summary of stream data:
Stream Flow rate
                                   Rainfall Intensity
No.
          (CFS)
                      (min)
                                          (In/Hr)
                                      3.007
       15.471
                 13.70
       10.103
                  9.92
                                      3.384
Omax(1) =
          1.000 *
                    1.000 *
                              15.471) +
          0.889 *
                    1.000 *
                              10.103) + =
                                              24.449
Omax(2) =
          1.000 *
                    0.724 *
                              15.471) +
          1.000 *
                    1.000 *
                              10.103) + =
                                              21.306
Total of 2 main streams to confluence:
Flow rates before confluence point:
     15.471
                10.103
Maximum flow rates at confluence using above data:
                  21.306
      24 449
Area of streams before confluence:
       6.950
                   3.100
```

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24,449 (CFS)

```
Total flow rate =
Time of concentration = 13.696 min.
Effective stream area after confluence =
                                        10.050 (Ac.)
Process from Point/Station
                           234.000 to Point/Station
                                                      238.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation =
Downstream point/station elevation =
                                   6.250(Ft.)
Pipe length = 20.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow =
                                24.00(In.)
Nearest computed pipe diameter =
Calculated individual pipe flow =
                                24.449 (CFS)
Normal flow depth in pipe = 18.98(In.)
Flow top width inside pipe = 19.52(In.)
Critical Depth = 20.98(In.)
Pipe flow velocity =
                     9.17(Ft/s)
Travel time through pipe = 0.04 min.
Time of concentration (TC) = 13.73 min.
Process from Point/Station
                           234.000 to Point/Station
                                                      238,000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =
                  10.050(Ac.)
Runoff from this stream =
                         24.449(CFS)
Time of concentration = 13.73 min.
Rainfall intensity =
                   3.004(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station
                           235.000 to Point/Station
                                                      236.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 50.000(Ft.)
Highest elevation = 24.000(Ft.)
Lowest elevation = 23.500(Ft.)
Elevation difference = 0.500(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) =
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3))
TC = [1.8*(1.1-0.7000)*(50.000^{.5})/(1.000^{(1/3)}] = 5.09
Rainfall intensity (I) =
                         4.357(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
                   0.274 (CFS)
Subarea runoff =
Total initial stream area =
                              0.090(Ac.)
Process from Point/Station
                           236.000 to Point/Station
                                                      237.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
```

Results of confluence:

```
Top of street segment elevation =
                                 23.500(Ft.)
End of street segment elevation = 10.000(Ft.)
Length of street segment = 1100.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 20.000(Ft.)
Distance from crown to crossfall grade break = 5.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.200
Slope from grade break to crown (v/hz) = 0.200
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.050
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 3.000(In.)
 Manning's N in gutter = 0.0130
 Manning's N from gutter to grade break = 0.0130
Manning's N from grade break to crown = 0.0130
Estimated mean flow rate at midpoint of street =
                                                  0.497 (CFS)
Depth of flow = 0.217(Ft.). Average velocity = 2.648(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 2.000(Ft.)
Flow velocity = 2.65(Ft/s)
Travel time = 6.92 min.
                             TC = 12.02 \text{ min.}
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[INDUSTRIAL area type
Rainfall intensity =
                        3.157(In/Hr.) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.950
Subarea runoff =
                  4.858(CFS) for 1.620(Ac.)
Total runoff =
                  5.133(CFS) Total area =
                                                1.71(Ac.)
Street flow at end of street =
                                5.133(CFS)
Half street flow at end of street =
                                      5.133(CFS)
Depth of flow = 0.555(Ft.), Average velocity = 4.575(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property = 1.10(Ft.)
Flow width (from curb towards crown) = 3.524(Ft.)
Process from Point/Station
                           237.000 to Point/Station
                                                          238.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation =
Downstream point/station elevation =
                                      6.500(Ft.)
Pipe length = 50.00 (Ft.) Manning's N = 0.013 No. of pipes = 1 Required pipe flow = 5.133 (0
Nearest computed pipe diameter = 15.00(In.)
Calculated individual pipe flow =
Normal flow depth in pipe = 10.10(In.)
Flow top width inside pipe = 14.07(In.)
Critical Depth = 11.03(In.)
Pipe flow velocity =
                     5.84(Ft/s)
Travel time through pipe = 0.14 min.
Time of concentration (TC) = 12.16 min.
Process from Point/Station
                             237.000 to Point/Station
                                                          238.000
**** CONFLUENCE OF MAIN STREAMS ****
```

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```
In Main Stream number: 2
Stream flow area =
                     1.710(Ac.)
Runoff from this stream =
                              5.133 (CFS)
Time of concentration = 12.16 min.
Rainfall intensity =
                        3.143(In/Hr)
Summary of stream data:
Stream Flow rate
                       TC
                                     Rainfall Intensity
No.
          (CFS)
                       (min)
                                            (In/Hr)
        24.449
                                        3,004
                   13.73
         5.133
                   12.16
                                        3.143
Omax(1) =
           1.000 *
                     1.000 *
                                 24.449) +
          0.956 *
                     1.000 *
                                                 29.355
                                 5.133) + =
Omax(2) =
           1.000 *
                     0.885 *
                                 24.449) +
          1.000 *
                     1.000 *
                                 5.133) + =
                                                 26.779
Total of 2 main streams to confluence:
Flow rates before confluence point:
      24.449
                  5.133
Maximum flow rates at confluence using above data:
       29.355
                   26.779
Area of streams before confluence:
       10.050
                    1 710
Results of confluence:
Total flow rate = 29.355(CFS)
Time of concentration = 13.732 min.
Effective stream area after confluence =
                                             11.760(Ac.)
End of computations, total study area =
                                               11.760 (Ac.)
```

The following data inside Main Stream is listed:

APPENDIX 3

Proposed Conditions Rational Method Computer Output

San Diego County Rational Hydrology Program

```
CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version 6.3
Rational method hydrology program based on
San Diego County Flood Control Division 1985 hydrology manual
     Rational Hydrology Study Date: 07/20/17
MORENA BLVD
SYSTEM 100 - PROPOSED 100 YR
_____
******* Hydrology Study Control Information ********
______
Program License Serial Number 4049
Rational hydrology study storm event year is 100.0
English (in-lb) input data Units used
English (in) rainfall data used
Standard intensity of Appendix I-B used for year and
Elevation 0 - 1500 feet
Factor (to multiply * intensity) = 1.000
Only used if inside City of San Diego
San Diego hydrology manual 'C' values used
Runoff coefficients by rational method
Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 50.000(Ft.)
Highest elevation = 22.200(Ft.)
Lowest elevation = 21.100(Ft.)
Elevation difference = 1.100(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 3.91 min.

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.7000)*(50.000^.5)/(2.200^(1/3)] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.123 (CFS)
Total initial stream area =
                              0.040 (Ac.)
Process from Point/Station 101.000 to Point/Station 102.000
**** IMPROVED CHANNEL TRAVEL TIME ****
Upstream point elevation = 21.100(Ft.)
Downstream point elevation = 19.400(Ft.)
Channel length thru subarea = 230.000(Ft.)
```

```
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel =
                                                     1.321 (CFS)
Manning's 'N'
               = 0.015
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 1.321(CFS)
Depth of flow = 0.105(Ft.), Average velocity = 1.195(Ft/s)
Channel flow top width = 21.028(Ft.)
Flow Velocity = 1.20(Ft/s)
Travel time =
                 3.21 min.
Time of concentration = 8.21 min,
Critical depth = 0.102(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                         3.625(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 1.979 (CFS) for 0.780 (Ac.)
Total runoff =
                   2.102(CFS) Total area =
                                                     0.82 (Ac.)
Process from Point/Station 102.000 to Point/Station
                                                           105.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation = 19.400(Ft.)
End of street segment elevation = 18.150(Ft.)
Length of street segment = 110.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 12.000(Ft.)
Distance from crown to crossfall grade break = 0.500(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 1.000(Ft.)
Gutter hike from flowline = 2.000(In.)
 Manning's N in gutter = 0.0150
 Manning's N from gutter to grade break = 0.0150
 Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                      2.679 (CFS)
Depth of flow = 0.352(Ft.), Average velocity = 2.368(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 10.286(Ft.)
Flow velocity = 2.37(Ft/s)
Travel time = 0.77 min.
                              TC = 8.98 \text{ min.}
 Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                         3.508(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 1.105 (CFS) for 0.450 (Ac.)
Total runoff =
                   3.207(CFS) Total area =
                                                     1.27 (Ac.)
                                 3.207(CFS)
Street flow at end of street =
Half street flow at end of street = 3.207(CFS)
Depth of flow = 0.368(Ft.), Average velocity = 2.473(Ft/s)
Flow width (from curb towards crown) = 11.062(Ft.)
```

```
Process from Point/Station 104.000 to Point/Station
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
MULTI - UNITS area type
Time of concentration = 8.98 min.
Rainfall intensity = 3.508(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C=0.700
Subarea runoff = 0.368(CFS) for 0.150(Ac.)
Total runoff =
                  3.576(CFS) Total area =
                                                 1.42 (Ac.)
Process from Point/Station 105.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.150(Ft.)
Downstream point/station elevation = 17.700(Ft.)
Pipe length = 30.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 3.576(6
                                         3.576 (CFS)
Nearest computed pipe diameter = 12.00(In.)
Calculated individual pipe flow = 3.576(CFS)
Normal flow depth in pipe = 8.26(In.)
Flow top width inside pipe =
                            11.11(In.)
Critical Depth = 9.68(In.)
Pipe flow velocity = 6.20(Ft/s)
Travel time through pipe = 0.08 min.
                           9.06 min.
Time of concentration (TC) =
Process from Point/Station 105.000 to Point/Station 130.000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 1.420(Ac.)
Runoff from this stream = 3.576 (CFS)
Time of concentration = 9.06 min.
Rainfall intensity = 3.497(In/Hr)
                        9.06 min.
Program is now starting with Main Stream No. 2
Process from Point/Station 110.000 to Point/Station 111.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 40.000(Ft.)
Highest elevation = 21.550(Ft.)
Lowest elevation = 20.400(Ft.)
Elevation difference = 1.150(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 3.20 min.
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
```

```
TC = [1.8*(1.1-0.7000)*(40.000^.5)/(2.875^(1/3)] = 3.20
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.061(CFS)
Total initial stream area =
                                  0.020(Ac.)
Process from Point/Station 111.000 to Point/Station 112.000
**** IMPROVED CHANNEL TRAVEL TIME ****
Upstream point elevation = 20.400(Ft.)

Downstream point elevation = 18.800(Ft.)

Channel length thru subarea = 180.000(Ft.)
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel = 0.568(CFS)
Manning's 'N' = 0.013
Maximum depth of channel =
                              2.000(Ft.)
Flow(q) thru subarea = 0.568(CFS)
Depth of flow = 0.070(Ft.), Average velocity = 1.155(Ft/s)
Channel flow top width = 14.032 (Ft.)
Flow Velocity = 1.15(Ft/s)
Travel time = 2.60 min.
                 2.60 min.
Time of concentration = 7.60 \text{ min.}
Critical depth = 0.072(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity = 3.730(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.862(CFS) for 0.330(Ac.)
Total runoff = 0.923(CFS) Total area =
                                                     0.35 (Ac.)
Process from Point/Station 112.000 to Point/Station 114.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.800(Ft.)
Downstream point/station elevation = 17.900(Ft.)
Pipe length = 60.00 (Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 0.923 (CFS)
Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 0.923(CFS)
Normal flow depth in pipe = 4.26(In.)
Flow top width inside pipe =
                               8.99(In.)
Critical Depth = 5.28(In.)
Pipe flow velocity = 4.48(Ft/s)
Travel time through pipe = 0.22 min.
Time of concentration (TC) = 7.82 \text{ min.}
Process from Point/Station 113.000 to Point/Station 114.000 **** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
```

```
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Time of concentration = 7.82 min.
Rainfall intensity = 3.690(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C=0.700
Subarea runoff = 0.878 (CFS) for 0.040 (Ac.)
                             Total area =
Total runoff =
                  1.801 (CFS)
                                                 0.75 (Ac.)
Process from Point/Station 114.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 17.900(Ft.)
Downstream point/station elevation = 16.800(Ft.)
Pipe length = 0.34(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 1.801(CFS)
Nearest computed pipe diameter = 6.00(In.)
Calculated individual pipe flow =
                                   1.801 (CFS)
Normal flow depth in pipe = 1.72(In.)
Flow top width inside pipe = 5.42(In.)
Flow top width inside pipe =
Critical depth could not be calculated.
Pipe flow velocity = 38.85(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) \approx 7.82 min.
Process from Point/Station 114.000 to Point/Station 120.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 1
Stream flow area = 0.750(Ac.)
Runoff from this stream = 1.801(CFS)
Time of concentration = 7.82 min.
Rainfall intensity = 3.690(In/Hr)
Process from Point/Station 115.000 to Point/Station 116.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 60.000(Ft.)
Highest elevation = 21.550(Ft.)
Lowest elevation = 20.710(Ft.)
Elevation difference = 0.840(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 4.99 \text{ min.}

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.7000)*(60.000^.5)/(1.400^(1/3)] = 4.99
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.092 (CFS)
Total initial stream area =
                                0.030 (Ac.)
Process from Point/Station 116.000 to Point/Station 117.000
**** IMPROVED CHANNEL TRAVEL TIME ****
```

```
Upstream point elevation = 20.710(Ft.)

Downstream point elevation = 20.300(Ft.)

Channel length thru subarea = 200.000(Ft.)
Channel base width = 10.000(Ft.)
Slope or 'Z' of left channel bank = 20.000
Slope or 'Z' of right channel bank = 20.000
Estimated mean flow rate at midpoint of channel = 0.661(CFS)
Manning's 'N' = 0.050
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 0.661(CFS)
Depth of flow = 0.152(Ft.), Average velocity = 0.333(Ft/s)
Channel flow top width = 16.081(Ft.)
Flow Velocity = 0.33(Ft/s)
Travel time = 10.00 min.
Time of concentration = 15.00 min.
Critical depth = 0.050(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity = 2.905(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.752 (CFS) for 0.370 (Ac.)
Total runoff =
                    0.844(CFS) Total area =
                                                       0.40 (Ac.)
Process from Point/Station 117.000 to Point/Station 120.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 20.000(Ft.)
Downstream point/station elevation = 18.500(Ft.)
Pipe length = 80.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 0.844(CFS)
Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 0.844(CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 3.81(In.)
Flow top width inside pipe =
                               8.89(In.)
Critical Depth = 5.04(In.)
Pipe flow velocity = 4.75 (Ft/s)
Travel time through pipe = 0.28 \text{ min.}
Time of concentration (TC) = 15.28 \text{ min.}
Process from Point/Station 117.000 to Point/Station 120.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 2
Stream flow area = 0.400(Ac.)
Runoff from this stream =
                                0.844 (CFS)
Time of concentration = 15.28 min.
Rainfall intensity = 2.884(In/Hr)
Summary of stream data:
                        TC
                                     Rainfall Intensity
Stream
        Flow rate
                        (min)
 No.
          (CFS)
                                              (In/Hr)
        1.801 7.82
                                   3.690
        0.844
                   15.28
                                    2.884
Qmax(1) =
```

```
1.000 * 1.000 * 1.801) +
         1.000 *
                   0.512 *
                              0.844) + =
                                               2.234
Omax(2) =
         0.781 *
                   1.000 *
                               1.801) +
         1.000 *
                   1.000 *
                               0.844) + =
                                               2.252
Total of 2 streams to confluence:
Flow rates before confluence point:
      1 801
               0.844
Maximum flow rates at confluence using above data:
       2.234 2.252
Area of streams before confluence:
       0.750 0.400
Results of confluence:
Total flow rate = 2.252(CFS)
Time of concentration = 15.284 min.
Effective stream area after confluence =
                                           1.150(Ac.)
Process from Point/Station 120.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.500(Ft.)
Downstream point/station elevation = 17.200(Ft.)
Pipe length = 170.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 2.252(CFS)
Nearest computed pipe diameter = 12.00(In.)
Calculated individual pipe flow = 2.252(CFS)
Normal flow depth in pipe = 7.56(In.)
Flow top width inside pipe =
                            11.59(In.)
Critical Depth = 7.70(In.)
Pipe flow velocity = 4.32(Ft/s)
Travel time through pipe = 0.66 min.
Time of concentration (TC) = 15.94 min.
Process from Point/Station 120.000 to Point/Station 125.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 1
Stream flow area = 1.150 (Ac.)
Runoff from this stream = 2.252(CFS)
Time of concentration = 15.94 min.
Rainfall intensity =
                      2.837(In/Hr)
Process from Point/Station 121.000 to Point/Station 122.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 60.000(Ft.)
Highest elevation = 22.100(Ft.)
Lowest elevation = 21.200(Ft.)
Elevation difference = 0.900(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 4.87 min. TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.7000)*(60.000^{\circ}.5)/(1.500^{\circ}(1/3)] =
```

```
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.092(CFS)
Total initial stream area =
                                  0.030(Ac.)
Process from Point/Station 122.000 to Point/Station 123.000
**** IMPROVED CHANNEL TRAVEL TIME ****
Upstream point elevation = 21.600(Ft.)

Downstream point elevation = 21.400(Ft.)

Channel length thru subarea = 200.000(Ft.)
Channel base width = 10.000(Ft.)
Slope or 'Z' of left channel bank = 20.000
Slope or 'Z' of right channel bank = 20.000
Estimated mean flow rate at midpoint of channel =
                                                    0.661(CFS)
Manning's 'N' = 0.050
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 0.661(CFS)
Depth of flow = 0.185(Ft.), Average velocity = 0.260(Ft/s)
Channel flow top width = 17.408(Ft.)
Flow Velocity = 0.26(Ft/s)
Travel time = 12.81 min.
Time of concentration = 17.81 min.
Critical depth = 0.050(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
[MULTI - UNITS area type ]
Rainfall intensity = 2.712(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.702(CFS) for 0.370(Ac.)
Total runoff = 0.795(CFS) Total area =
                                                   0.40(Ac.)
Process from Point/Station 123.000 to Point/Station 125.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 20.000(Ft.)

Downstream point/station elevation = 18.500(Ft.)
Pipe length = 60.00 (Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 0.795(CFS)
No. of pipes = 1 Required pipe 11...

Nearest computed pipe diameter = 6.00(In.)

Coloulated individual pipe flow = 0.795(CFS)
Normal flow depth in pipe = 4.43(In.)
Flow top width inside pipe = 5.27(In.)
Flow top width inside pipe =
Critical Depth = 5.32(In.)
Pipe flow velocity = 5.11(Ft/s)
Travel time through pipe = 0.20 min.
Time of concentration (TC) = 18.00 min.
Process from Point/Station 123.000 to Point/Station 125.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 2
Stream flow area = 0.400(Ac.)
Runoff from this stream = 0.795(CFS)
Time of concentration = 18.00 min.
```

```
Summary of stream data:
                       TC
                                   Rainfall Intensity
Stream
        Flow rate
         (CFS)
                      (min)
                                      (In/Hr)
NO
        2.252 15.94
0.795 18.00
                                 2.837
1
       0.795
                                 2.700
Qmax(1) =
        1.000 *
                 1.000 *
                               2.252) +
         1.000 *
                 0.885 *
                               0.795) + =
                                              2.956
Qmax(2) =
         0.952 * 1.000 *
1.000 * 1.000 +
                               2.252) +
                               0.795) + =
                                              2.938
Total of 2 streams to confluence:
Flow rates before confluence point:
      2.252 0.795
Maximum flow rates at confluence using above data:
       2.956 2.938
Area of streams before confluence:
       1.150 0.400
Results of confluence:
Total flow rate = 2.956(CFS)
Time of concentration = 15.940 min.
Effective stream area after confluence =
                                           1.550 (Ac.)
Process from Point/Station 125.000 to Point/Station 130.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.500(Ft.)

Downstream point/station elevation = 16.000(Ft.)
Pipe length = 240.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 2.956(CFS)
Nearest computed pipe diameter = 12.00(In.)
Calculated individual pipe flow = 2.956(CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 8.21(In.)
Flow top width inside pipe =
                            11.15(In.)
Critical Depth = 8.84(In.)
Pipe flow velocity = 5.16(Ft/s)
Travel time through pipe = 0.78 min.
Time of concentration (TC) = 16.72 min.
Process from Point/Station 125.000 to Point/Station 130.000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area = 1.490(Ac.)
Runoff from this stream =
                            2.956 (CFS)
Time of concentration = 16.72 min.
Rainfall intensity = 2.784 (In/Hr)
Summary of stream data:
Stream Flow rate
                      TC
                                   Rainfall Intensity
                     (min)
No.
         (CFS)
                                           (In/Hr)
        3.576
                 9.06
                                  3.497
1
        2.956
                  16.72
                                  2.784
```

2.700(In/Hr)

Rainfall intensity =

```
Qmax(1) =
        1.000 * 1.000 * 3.576) +
         1.000 *
                   0.542 *
                              2.956) + =
                                                5.178
Qmax(2) =
         0.796 *
                    1.000 *
                                3.576) +
         1.000 *
                    1.000 *
                              2.956) + =
                                               5.802
Total of 2 main streams to confluence:
Flow rates before confluence point:
      3.576
               2,956
Maximum flow rates at confluence using above data:
       5.178 5.802
Area of streams before confluence:
       1.420
                   1.550
Results of confluence:
Total flow rate = 5.802 (CFS)
Time of concentration = 16.716 min.
Effective stream area after confluence =
                                            2.970 (Ac.)
Process from Point/Station 130.000 to Point/Station 135.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 16.000(Ft.)

Downstream point/station elevation = 13.500(Ft.)
Pipe length = 150.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 5.802(CFS)
No. of pipes = 1 Required pipe inc.

Nearest computed pipe diameter = 15.00(In.)

7 leaded individual pipe flow = 5.802(CFS)
Normal flow depth in pipe = 9.21(In.)
Flow top width inside pipe =
                              14.60(In.)
Critical Depth = 11.71(In.)
Pipe flow velocity = 7.34 (Ft/s)
Travel time through pipe = 0.34 min.
Time of concentration (TC) = 17.06 \text{ min.}
Process from Point/Station 132.000 to Point/Station 135.000
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
                                            ]
Time of concentration = 17.06 min.
Rainfall intensity = 2.761(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.193(CFS) for 0.100(Ac.)
Total runoff = 5.996(CFS) Total area =
                                                   3.01 (Ac.)
Process from Point/Station 133.000 to Point/Station 135.000
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000 Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
                                            ]
[MULTI - UNITS area type
```

```
Time of concentration = 17.06 \text{ min.}
Rainfall intensity = 2.761(\text{In/Hr}) \text{ for a} 100.0 \text{ year storm}
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.406 (CFS) for 0.210 (Ac.)
Total runoff =
                   6.401(CFS) Total area =
                                                     3.22 (Ac.)
Process from Point/Station 135.000 to Point/Station 150.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 12.500(Ft.)

Downstream point/station elevation = 10.300(Ft.)
Pipe length = 150.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 6.401(CFS)
Nearest computed pipe diameter = 15.00(In.)
Calculated individual pipe flow = 6.401(CFS)
Normal flow depth in pipe = 10.31(In.)
Flow top width inside pipe = 13.91(In.)
Critical Depth = 12.25(In.)
Pipe flow velocity = 7.11(Ft/s)
Travel time through pipe = 0.35 \text{ min.}
Time of concentration (TC) = 17.41 \text{ min.}
Process from Point/Station 137.000 to Point/Station 150.000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 3.220(Ac.)
Runoff from this stream = 6.401(CFS)
Time of concentration = 17.41 min.
Rainfall intensity = 2.738(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station 140.000 to Point/Station 141.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Initial subarea flow distance = 65.000(Ft.)
Highest elevation = 26.000(Ft.)
Lowest elevation = 25.500(Ft.)
Elevation difference = 0.500(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 3.96 min.

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.8500)*(65.000^.5)/(0.769^(1/3)] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C=0.850
Subarea runoff = 0.522 (CFS)
Total initial stream area =
                                  0.140 (Ac.)
Process from Point/Station 141.000 to Point/Station 147.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
```

```
Top of street segment elevation = 25.000(Ft.)
End of street segment elevation = 10.000(Ft.)
Length of street segment = 450.000(Ft.)
Height of curb above gutter flowline =
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) =
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
 Manning's N in gutter = 0.0150
 Manning's N from gutter to grade break = 0.0150
 Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                   6.006 (CFS)
Depth of flow = 0.350(Ft.), Average velocity = 4.378(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 11.158 (Ft.)
Flow velocity = 4.38(Ft/s)
Travel time = 1.71 min.
                                     6.71 min.
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Rainfall intensity =
                        3.908(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
Subarea runoff =
                     9.766(CFS) for
                                     2.940(Ac.)
Total runoff =
                               Total area =
                  10.288 (CFS)
                                                   3.08 (Ac.)
Street flow at end of street =
                               10.288 (CFS)
Half street flow at end of street = 10.288(CFS)
Depth of flow = 0.405(Ft.), Average velocity = 4.973(Ft/s)
Flow width (from curb towards crown) = 13.936(Ft.)
Process from Point/Station 141.000 to Point/Station
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 1
Stream flow area = 3.080(Ac.)
Runoff from this stream = 10.288(CFS)
Time of concentration = 6.71 min.
Rainfall intensity =
                      3.908(In/Hr)
Process from Point/Station 145.000 to Point/Station
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Initial subarea flow distance =
                                 50.000 (Ft.)
Highest elevation = 14.000(Ft.)
Lowest elevation = 13.000(Ft.)
Elevation difference = 1.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 2.53 \text{ min.}
```

```
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.8500)*(50.000^.5)/(2.000^(1/3)] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.850
Subarea runoff =
                     0.149(CFS)
Total initial stream area =
                                  0.040(Ac.)
Process from Point/Station 146.000 to Point/Station
                                                             147.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation = 13.500(Ft.)
End of street segment elevation = 11.000(Ft.)
Length of street segment = 550.000(Ft.)
Height of curb above gutter flowline = 6.0(In.) Width of half street (curb to crown) = 25.000(Ft.)
Distance from crown to crossfall grade break = 10.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) =
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 2.000
Gutter width = 2.500 (Ft.)
Gutter hike from flowline = 4.000(In.)
Manning's N in gutter = 0.0130
Manning's N from gutter to grade break = 0.0130
Manning's N from grade break to crown = 0.0130
Estimated mean flow rate at midpoint of street =
                                                     0.242 (CFS)
Depth of flow = 0.205(Ft.), Average velocity = 1.543(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 2.500(Ft.)
Flow velocity = 1.54(Ft/s)
Travel time = 5.94 min.
                              TC = 10.94 \text{ min.}
 Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Rainfall intensity = 3.266(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
Subarea runoff = 3.470 (CFS) for 1.250 (Ac.)
Total runoff = 3.620(CFS) Total area = Street flow at end of street = 3.620(CFS)
Half street flow at end of street = 3.620(CFS)
Depth of flow = 0.518(Ft.), Average velocity = 2.088(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property = 0.01(Ft.)
Flow width (from curb towards crown) = 11.743 (Ft.)
Process from Point/Station 137.000 to Point/Station 147.000
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
                                             ]
Time of concentration = 10.94 min.

Rainfall intensity = 3.266(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
```

```
Subarea runoff = 1.578(CFS) 101

5.197(CFS) Total area =
                   1.578 (CFS) for 0.690 (Ac.)
                                                1.98(Ac.)
Process from Point/Station 146.000 to Point/Station 147.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 2
Stream flow area = 1.980 (Ac.)
Runoff from this stream = 5.197(CFS)
Time of concentration = 10.94 min.
Rainfall intensity = 3.266(In/Hr)
Summary of stream data:
                                 Rainfall Intensity
Stream Flow rate
                     TC
No.
        (CFS)
                     (min)
                                         (In/Hr)
      10.288
                 6.71
                                3.908
       5.197
               10.94
                                3.266
Qmax(1) =
        1.000 * 1.000 *
1.000 * 0.614 *
                           10.288) +
                             5.197) + =
                                            13.477
Qmax(2) =
        0.836 * 1.000 * 10.288) +
        1.000 *
                  1.000 *
                            5.197) + =
                                            13.796
Total of 2 streams to confluence:
Flow rates before confluence point:
     10.288 5,197
Maximum flow rates at confluence using above data:
      13.477 13.796
Area of streams before confluence:
       3.080
                  1.980
Results of confluence:
Total flow rate = 13.796(CFS)
Time of concentration = 10.940 min.
Effective stream area after confluence =
                                         5.110(Ac.)
Process from Point/Station 147.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 9.500(Ft.)
Downstream point/station elevation = 9.200(Ft.)
Pipe length = 30.00 (Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 13.796 (CFS)
Nearest computed pipe diameter = 21.00(In.)
Calculated individual pipe flow = 13.796(CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 15.16(In.) Flow top width inside pipe = 18.81(In.)
Critical Depth = 16.57(In.)
Pipe flow velocity = 7.42 (Ft/s)
Travel time through pipe = 0.07 min.
Time of concentration (TC) = 11.01 min.
Process from Point/Station 147.000 to Point/Station 150.000
**** CONFLUENCE OF MAIN STREAMS ****
```

The following data inside Main Stream is listed: In Main Stream number: 2

Stream flow area = 5.060(Ac.)
Runoff from this stream = 13.796(CFS)
Time of concentration = 11.01 min.
Rainfall intensity = 3.259(In/Hr)
Summary of stream data:

Stream No.	Flow rate (CFS)	TC (min)		Intensity In/Hr)
1 2	6.401 13.796	17.41 11.01	2.738 3.259	
Qmax(1)	=			
	1.000 *	1.000 *	6.401) +	
	0.840 *	1.000 *	13.796) + =	17.992
Qmax(2)	=			
	1.000 *	0.632 *	6.401) +	
	1.000 *	1.000 *	13.796) + =	17.844

Total of 2 main streams to confluence: Flow rates before confluence point:

6.401 13.796

Maximum flow rates at confluence using above data:

17.992 17.844

Area of streams before confluence:

3.220 5.110

Results of confluence:
Total flow rate = 17.992(CFS)
Time of concentration = 17.408 min.
Effective stream area after confluence = 8.280(Ac.)
End of computations, total study area = 8.340 (Ac.)

San Diego County Rational Hydrology Program

```
CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version
6.3
     Rational method hydrology program based on
     San Diego County Flood Control Division 1985 hydrology manual
         Rational Hydrology Study Date: 11/16/17
    MORENA BLVD
     SYSTEM 200 - PROPOSED 100 YR
     _____
     ******* Hydrology Study Control Information *******
     Program License Serial Number 4049
     _____
     Rational hydrology study storm event year is 100.0
     English (in-lb) input data Units used
     English (in) rainfall data used
     Standard intensity of Appendix I-B used for year and
     Elevation 0 - 1500 feet
     Factor (to multiply * intensity) = 1.000
     Only used if inside City of San Diego
     San Diego hydrology manual 'C' values used
     Runoff coefficients by rational method
     ++++
                               200.000 to Point/Station
     Process from Point/Station
201.000
     **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [MULTI - UNITS area type
     Initial subarea flow distance = 60.000(Ft.)
     Highest elevation = 22.000(Ft.)
     Lowest elevation = 21.000(Ft.)
     Elevation difference = 1.000(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-C) = 4.70 min.
     TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3))
     TC = [1.8*(1.1-0.7000)*(60.000^{\circ}.5)/(1.667^{\circ}(1/3)] = 4.70
     Setting time of concentration to 5 minutes
     Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year
```

```
storm
      Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
      Subarea runoff = 0.092 (CFS)
      Total initial stream area =
                                           0.030(Ac.)
      Process from Point/Station 201.000 to Point/Station
205.000
      **** IMPROVED CHANNEL TRAVEL TIME ****
      Upstream point elevation = 21.000(Ft.)
      Downstream point elevation = 21.000(Ft.)

Channel length thru subarea = 300.000(Ft.)

Channel base width = 0.000(Ft.)
      Slope or 'Z' of left channel bank = 100.000
      Slope or 'Z' of right channel bank = 100.000
      Estimated mean flow rate at midpoint of channel = 0.937(CFS)
      Manning's 'N' = 0.015
      Maximum depth of channel = 2.000(Ft.)
      Flow(q) thru subarea = 0.937(CFS)
      Depth of flow = 0.092(Ft.), Average velocity = 1.112(Ft/s)
      Channel flow top width = 18.360(Ft.)
      Flow Velocity = 1.11(Ft/s)
Travel time = 4.50 min.
      Time of concentration = 9.50 \text{ min.}
      Critical depth = 0.089(Ft.)
       Adding area flow to channel
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
      Rainfall intensity = 3.438(In/Hr) for a 100.0 year storm
      Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
      Subarea runoff = 1.324 (CFS) for 0.550 (Ac.)
Total runoff = 1.416 (CFS) Total area =
                           1.324 (CFS) for 0.550 (Ac.)
                                                                0.58(Ac.)
      Process from Point/Station
                                      205.000 to Point/Station
210.000
      **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
      Upstream point/station elevation = 17.000(Ft.)
Downstream point/station elevation = 16.000(Ft.)
      Pipe length = 30.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 1.416(CFS)
      Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 1.416(CFS)
      Normal flow depth in pipe = 4.33(In.)
      Flow top width inside pipe =
                                      8.99(In.)
      Critical Depth = 6.57(In.)
      Pipe flow velocity = 6.73 (Ft/s)
      Travel time through pipe = 0.07 \text{ min.}
Time of concentration (TC) = 9.57 \text{ min.}
```

```
Process from Point/Station
                                   205.000 to Point/Station
210.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 1
     Stream flow area = 0.580(Ac.)
     Runoff from this stream = 1.416 (CFS)
     Time of concentration =
                              9.57 min.
     Rainfall intensity = 3.428(In/Hr)
     Program is now starting with Main Stream No. 2
     Process from Point/Station
                                   206.000 to Point/Station
207.000
     **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [MULTI - UNITS area type
     Initial subarea flow distance =
     Highest elevation = 21.600(Ft.)
     Lowest elevation = 20.100(Ft.)
     Elevation difference =
                             1.500(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-C) = 4.11 \text{ min.}

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.7000)*(60.000^.5)/(2.500^(1/3)] =
     Setting time of concentration to 5 minutes
     Rainfall intensity (I) =
                                4.389(In/Hr) for a 100.0 year
storm
     Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
     Subarea runoff = 0.061(CFS)
     Total initial stream area =
                                      0.020(Ac.)
     ++++
     Process from Point/Station
                                  207.000 to Point/Station
208.000
     **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
                                     20.100(Ft.)
     Top of street segment elevation =
     End of street segment elevation =
                                       19.000(Ft.)
     Length of street segment = 100.000(Ft.)
     Height of curb above gutter flowline =
                                            6.0(In.)
     Width of half street (curb to crown) = 22.000(Ft.)
     Distance from crown to crossfall grade break = 18.000(Ft.)
     Slope from gutter to grade break (v/hz) = 0.020
     Slope from grade break to crown (v/hz) =
```

```
Street flow is on [1] side(s) of the street
     Distance from curb to property line = 10.000(Ft.)
     Slope from curb to property line (v/hz) =
     Gutter width = 2.000(Ft.)
     Gutter hike from flowline = 2.000(In.)
      Manning's N in gutter = 0.0150
      Manning's N from gutter to grade break = 0.0150
      Manning's N from grade break to crown = 0.0150
     Estimated mean flow rate at midpoint of street =
                                                     0.070(CFS)
     Depth of flow = 0.095(Ft.), Average velocity =
                                                  1.289(Ft/s)
     Streetflow hydraulics at midpoint of street travel:
     Halfstreet flow width = 2.000(Ft.)
     Flow velocity = 1.29(Ft/s)
     Travel time =
                    1.29 min.
                                 TC =
                                       6.29 min.
     Adding area flow to street
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [MULTI - UNITS area type
     Rainfall intensity = 4.006(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
     Subarea runoff =
                        0.757(CFS) for
                                        0.270(Ac.)
     Total runoff =
                      0.819(CFS) Total area =
                                                       0.29(Ac.)
     Street flow at end of street = 0.819(CFS)
     Half street flow at end of street = 0.819(CFS)
     Depth of flow = 0.239(Ft.), Average velocity = 1.854(Ft/s)
     Flow width (from curb towards crown) = 5.611(Ft.)
     ++++
     Process from Point/Station
                                  208.000 to Point/Station
210.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 18.000(Ft.)
     Downstream point/station elevation = 16.000(Ft.)
     Pipe length = 160.00(Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow = 0.819(CFS)
     Nearest computed pipe diameter = 9.00(In.)
                                     0.819(CFS)
     Calculated individual pipe flow =
     Normal flow depth in pipe = 4.19(In.)
     Flow top width inside pipe =
                                8.98(In.)
     Critical Depth = 4.96(In.)
     Pipe flow velocity = 4.06(Ft/s)
     Travel time through pipe = 0.66 min.
     Time of concentration (TC) = 6.95 \text{ min.}
     ++++
     Process from Point/Station
                                  208.000 to Point/Station
210.000
     **** CONFLUENCE OF MAIN STREAMS ****
```

The following data inside Main Stream is listed: In Main Stream number: 2

```
Stream flow area = 0.290(Ac.)
     Runoff from this stream = 0.819(CFS)
     Time of concentration = 6.95 min.
     Rainfall intensity = 3.857(In/Hr)
     Summary of stream data:
     Stream Flow rate
                         TC
                                      Rainfall Intensity
     No.
              (CFS)
                         (min)
                                             (In/Hr)
                    9.57
     1
            1.416
                                       3.428
     2
             0.819
                      6.95
                                       3.857
     Qmax(1) =
            1.000 *
                    1.000 *
                                 1.416) +
                    1.000 *
             0.889 *
                                 0.819) + =
                                                2.143
     Omax(2) =
             1.000 *
                    0.726 *
                                 1.416) +
             1.000 *
                      1.000 *
                                 0.819) + =
                                               1.847
     Total of 2 main streams to confluence:
     Flow rates before confluence point:
           1.416 0.819
     Maximum flow rates at confluence using above data:
            2.143 1.847
     Area of streams before confluence:
            0.580
                      0.290
     Results of confluence:
     Total flow rate = 2.143(CFS)
     Time of concentration = 9.571 \text{ min.}
     Effective stream area after confluence = 0.870(Ac.)
     ++++
     Process from Point/Station
                                 210.000 to Point/Station
215.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 16.000(Ft.)
     Downstream point/station elevation = 15.000(Ft.)
     Pipe length = 50.00 (Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow =
                                           2.143 (CFS)
     Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 2.143(CFS)
     Normal flow depth in pipe = 6.77(In.)
     Flow top width inside pipe =
     Critical Depth = 7.91(In.)
     Pipe flow velocity = 6.01(Ft/s)
     Travel time through pipe = 0.14 min.
     Time of concentration (TC) = 9.71 \text{ min.}
     Process from Point/Station
                                212.000 to Point/Station
215.000
     **** SUBAREA FLOW ADDITION ****
```

```
Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
     Time of concentration =
                               9.71 min.
     Rainfall intensity = 3.410(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
     Subarea runoff =
                          1.170(CFS) for
                                            0.490(Ac.)
     Total runoff =
                        3.313 (CFS)
                                     Total area =
                                                          1.36 (Ac.)
     ++++
     Process from Point/Station
                                   215.000 to Point/Station
217.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 15.000(Ft.)
Downstream point/station elevation = 14.000(Ft.)
     Pipe length = 20.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 3.313(
     Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 3.313(CFS)
     Normal flow depth in pipe = 6.64(In.)
Flow top width inside pipe = 7.91(In.)
     Critical depth could not be calculated.
                          9.47(Ft/s)
     Pipe flow velocity =
     Travel time through pipe = 0.04 min.
     Time of concentration (TC) =
                                    9.75 min.
     ++++
                                   216.000 to Point/Station
     Process from Point/Station
217.000
      **** SUBAREA FLOW ADDITION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
                                                 ]
     Time of concentration =
                               9.75 min.
     Rainfall intensity =
                             3.406(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
                          1.049(CFS) for
     Subarea runoff =
                                           0.440(Ac.)
     Total runoff =
                         4.362 (CFS)
                                        Total area =
                                                           1.80(Ac.)
     ++++
                                   217.000 to Point/Station
     Process from Point/Station
230.000
      **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
```

```
Upstream point/station elevation = 14.000(Ft.)
Downstream point/station elevation = 10.000(Ft.)
     Pipe length = 200.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 4.362(CFS)
     Nearest computed pipe diameter = 12.00(In.)
     Calculated individual pipe flow = 4.362(CFS)
     Normal flow depth in pipe = 8.63(In.)
     Flow top width inside pipe =
                                  10.79(In.)
     Critical Depth = 10.52(In.)
     Pipe flow velocity = 7.22(Ft/s)
     Travel time through pipe = 0.46 min.
     Time of concentration (TC) =
                                 10.21 min.
     ++++
     Process from Point/Station
                                   217.000 to Point/Station
230.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 1
     Stream flow area = 1.800(Ac.)
     Runoff from this stream = 4.362(CFS)
     Time of concentration = 10.21 min.
     Rainfall intensity = 3.349(In/Hr)
     Program is now starting with Main Stream No. 2
     ++++
     Process from Point/Station
                                  222.000 to Point/Station
223.000
     **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [COMMERCIAL area type
     Note: user entry of impervious value, Ap = 0.900
     Initial subarea flow distance =
                                      60.000(Ft.)
     Highest elevation = 24.000(Ft.)
     Lowest elevation = 23.000(Ft.)
     Elevation difference = 1.000(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-C) = 1.69 min.
     TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
     TC = [1.8*(1.1-0.9563)*(60.000^{.5})/(1.667^{(1/3)}] =
     Setting time of concentration to 5 minutes
     Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year
storm
     Effective runoff coefficient used for area (Q=KCIA) is C = 0.956
     Subarea runoff = 0.672(CFS)
     Total initial stream area =
                                      0.160(Ac.)
```

224.000

**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****

```
Top of street segment elevation = 24.000(Ft.)
End of street segment elevation = 13.600(Ft.)
      Length of street segment = 1000.000(Ft.)
      Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
      Distance from crown to crossfall grade break = 18.000(Ft.)
      Slope from gutter to grade break (v/hz) = 0.020
      Slope from grade break to crown (v/hz) =
      Street flow is on [1] side(s) of the street
      Distance from curb to property line = 10.000(Ft.)
      Slope from curb to property line (v/hz) =
      Gutter width = 2.000(Ft.)
      Gutter hike from flowline = 2.000(In.)
       Manning's N in gutter = 0.0150
       Manning's N from gutter to grade break = 0.0150
       Manning's N from grade break to crown = 0.0150
      Estimated mean flow rate at midpoint of street = 6.505 (CF) Depth of flow = 0.420 (Ft.), Average velocity = 2.862 (Ft/s)
                                                                6.505(CFS)
      Streetflow hydraulics at midpoint of street travel:
      Halfstreet flow width = 14.652(Ft.)
      Flow velocity = 2.86(Ft/s)
Travel time = 5.82 min.
                                      TC = 10.82 \text{ min.}
       Adding area flow to street
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
      Rainfall intensity = 3.279(In/Hr) for a 100.0 year storm
      Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
      Subarea runoff = 6.381(CFS) for 2.780(Ac.
Total runoff = 7.052(CFS) Total area = Street flow at end of street = 7.052(CFS)
                           6.381(CFS) for 2.780(Ac.)
                                                                   2.94 (Ac.)
      Half street flow at end of street = 7.052(CFS)
      Depth of flow = 0.429(Ft.), Average velocity = 2.918(Ft/s)
      Flow width (from curb towards crown) = 15.134(Ft.)
      ++++
      Process from Point/Station 224.000 to Point/Station
224.000
      **** SUBAREA FLOW ADDITION ****
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
                                                       ]
      Time of concentration = 10.82 min.

Rainfall intensity = 3.279(In/Hr) for a 100.0 year storm
      Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
```

```
Subarea runoff = 0.895 (CFS) rotal area = 7.947 (CFS) Total area =
                          0.895 (CFS) for 0.390 (Ac.)
                                                            3.33(Ac.)
     Process from Point/Station
                                    224.000 to Point/Station
230.000
     **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
     Top of street segment elevation = 13.600(Ft.)
End of street segment elevation = 10.300(Ft.)
     Length of street segment = 450.000(Ft.)
     Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
     Distance from crown to crossfall grade break = 18.000(Ft.)
     Slope from gutter to grade break (v/hz) = 0.020
     Slope from grade break to crown (v/hz) =
     Street flow is on [1] side(s) of the street
     Distance from curb to property line = 10.000(Ft.)
     Slope from curb to property line (v/hz) =
     Gutter width = 2.000(Ft.)
     Gutter hike from flowline = 2.000(In.)
      Manning's N in gutter = 0.0150
      Manning's N from gutter to grade break = 0.0150
      Manning's N from grade break to crown = 0.0150
     Estimated mean flow rate at midpoint of street =
                                                           8.854 (CFS)
     Depth of flow = 0.482(Ft.), Average velocity = 2.701(Ft/s)
     Streetflow hydraulics at midpoint of street travel:
     Halfstreet flow width = 17.751(Ft.)
     Flow velocity = 2.70(Ft/s)
Travel time = 2.78 min.
                                    TC = 13.60 \text{ min.}
      Adding area flow to street
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
     Rainfall intensity = 3.015(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
     Subarea runoff = 1.604(CFS) LOL C.....

Total area = 9.551(CFS)

Total area = 9.551(CFS)
                                                            4.09(Ac.)
                                        9.551 (CFS)
     Half street flow at end of street = 9.551(CFS)
     Depth of flow = 0.492(Ft.), Average velocity = 2.752(Ft/s)
     Flow width (from curb towards crown) = 18.288(Ft.)
     ++++
     Process from Point/Station
                                     224.000 to Point/Station
230.000
      **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
      In Main Stream number: 2
      Stream flow area = 4.090(Ac.)
     Runoff from this stream = 9.551(CFS)
```

```
Rainfall intensity =
                             3.015(In/Hr)
     Summary of stream data:
     Stream Flow rate
                            TC
                                           Rainfall Intensity
                                                  (In/Hr)
      No.
               (CFS)
                            (min)
             4.362
                       10.21
                                            3.349
             9.551
                        13.60
                                            3.015
     Omax(1) =
              1.000 *
                        1.000 *
                                    4.362) +
              1.000 *
                        0.750 *
                                     9.551) + =
                                                    11.530
     Omax(2) =
              0.900 *
                         1.000 *
                                     4.362) +
                        1.000 *
              1.000 *
                                     9.551) + =
                                                    13.478
     Total of 2 main streams to confluence:
     Flow rates before confluence point:
            4.362
                       9.551
     Maximum flow rates at confluence using above data:
            11.530 13.478
     Area of streams before confluence:
             1.800
                         4.090
     Results of confluence:
     Total flow rate = 13.478 (CFS)
     Time of concentration = 13.601 min.
     Effective stream area after confluence =
                                                   5.890(Ac.)
     ++++
     Process from Point/Station
                                     230.000 to Point/Station
234.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 7.250(Ft.)
Downstream point/station elevation = 6.500(Ft.)
     Pipe length = 100.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 13.478(CFS)
Nearest computed pipe diameter = 21.00(In.)
Calculated individual pipe flow = 13.478(CFS)
     Normal flow depth in pipe = 16.88(In.)
                                   16.69(In.)
     Flow top width inside pipe =
     Critical Depth = 16.39(In.)
     Pipe flow velocity = 6.50(Ft/s)
     Travel time through pipe = 0.26 min.
     Time of concentration (TC) = 13.86 \text{ min.}
     ++++
     Process from Point/Station
                                     230.000 to Point/Station
234.000
      **** CONFLUENCE OF MAIN STREAMS ****
```

Time of concentration = 13.60 min.

The following data inside Main Stream is listed:

```
In Main Stream number: 1
     Stream flow area = 5.890 (Ac.)
     Runoff from this stream = 13.478 (CFS)
     Time of concentration = 13.86 min.
     Rainfall intensity = 2.994(In/Hr)
     Program is now starting with Main Stream No. 2
     ++++
     Process from Point/Station
                                   231.000 to Point/Station
232.000
      **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [COMMERCIAL area type
     Note: user entry of impervious value, Ap = 0.900
     Initial subarea flow distance = 50.000(Ft.)
     Highest elevation = 15.000(Ft.)
     Lowest elevation = 14.000(Ft.)
     Elevation difference = 1.000(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-\dot{C}) = 1.45 min TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
     TC = [1.8*(1.1-0.9563)*(50.000^{\circ}.5)/(2.000^{\circ}(1/3)] =
      Setting time of concentration to 5 minutes
     Rainfall intensity (I) =
                                  4.389(In/Hr) for a 100.0 year
storm
     Effective runoff coefficient used for area (O=KCIA) is C = 0.956
      Subarea runoff = 0.462(CFS)
      Total initial stream area =
                                       0.110(Ac.)
      ++++
     Process from Point/Station
                                   232.000 to Point/Station
234.000
      **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
     Top of street segment elevation = 14.000(Ft.)
End of street segment elevation = 10.000(Ft.)
     Top of street segment elevation =
     Length of street segment = 600.000(Ft.)
     Height of curb above gutter flowline = 6.0(In.)
     Width of half street (curb to crown) = 22.000(Ft.)
     Distance from crown to crossfall grade break = 5.000(Ft.)
      Slope from gutter to grade break (v/hz) = 0.020
      Slope from grade break to crown (v/hz) =
      Street flow is on [1] side(s) of the street
      Distance from curb to property line = 10.000(Ft.)
      Slope from curb to property line (v/hz) =
      Gutter width = 1.000(Ft.)
      Gutter hike from flowline = 3.000(In.)
      Manning's N in gutter = 0.0150
      Manning's N from gutter to grade break = 0.0150
      Manning's N from grade break to crown = 0.0150
      Estimated mean flow rate at midpoint of street = 3.253(CFS)
```

```
Depth of flow = 0.474(Ft.), Average velocity = 2.033(Ft/s)
     Streetflow hydraulics at midpoint of street travel:
     Halfstreet flow width = 12.184(Ft.)
     Flow velocity = 2.03(Ft/s)
     Travel time = 4.92 min.
                                 TC = 9.92 \text{ min.}
      Adding area flow to street
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [COMMERCIAL area type
     Note: user entry of impervious value, Ap = 0.900
     Rainfall intensity = 3.384(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.956
     Subarea runoff = 4.304 (CFS) for 1.330 (Ac.)
Total runoff = 4.766 (CFS) Total area = 1.44 (Ac.)
Street flow at end of street = 4.766 (CFS)
     Half street flow at end of street = 4.766(CFS)
     Depth of flow = 0.514(Ft.), Average velocity = 2.230(Ft/s)
     Warning: depth of flow exceeds top of curb
     Distance that curb overflow reaches into property = 0.00(Ft.)
     Flow width (from curb towards crown) = 14.221(Ft.)
     ++++
     Process from Point/Station 233.000 to Point/Station
234.000
      **** SUBAREA FLOW ADDITION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [INDUSTRIAL area type
                                                 1
     Time of concentration = 9.92 min.

Rainfall intensity = 3.384(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C=
0.950
     Subarea runoff =
                        5.337 (CFS) for 1.660 (Ac.)
     Total runoff = 10.103(CFS) Total area =
                                                          3.10(Ac.)
     ++++
     Process from Point/Station 233.000 to Point/Station
234.000
      **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 2
     Stream flow area = 3.100(Ac.)
     Runoff from this stream = 10.103(CFS)
Time of concentration = 9.92 min.
     Rainfall intensity = 3.384(In/Hr)
     Summary of stream data:
     Stream Flow rate TC Rainfall Intensity
```

```
No. (CFS) (min)
                                             (In/Hr)
            13.478 13.86
                                        2.994
     1
            10.103
                      9.92
                                        3.384
     2
     Qmax(1) =
             1.000 * 1.000 * 13.478) + 0.885 * 1.000 * 10.103) +
                                10.103) + =
                                               22.416
     Qmax(2) =
             1.000 * 0.716 * 13.478) +
             1.000 * 1.000 * 10.103) + = 19.749
     Total of 2 main streams to confluence:
     Flow rates before confluence point:
           13.478 10.103
     Maximum flow rates at confluence using above data:
           22.416 19.749
     Area of streams before confluence:
            5.890
                    3.100
     Results of confluence:
     Total flow rate = 22.416(CFS)
     Time of concentration = 13.857 min.
     Effective stream area after confluence = 8.990(Ac.)
     ++++
     Process from Point/Station 234.000 to Point/Station
238.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 6.500(Ft.)
Downstream point/station elevation = 6.250(Ft.)
     Pipe length = 20.00(Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow = 22.416(CFS)
     Nearest computed pipe diameter = 24.00(In.)
Calculated individual pipe flow = 22.416(CFS)
     Normal flow depth in pipe = 17.58(In.)
     Flow top width inside pipe = 21.25(In.)
     Critical Depth = 20.27(In.)
     Pipe flow velocity = 9.09(Ft/s)
     Travel time through pipe = 0.04 min.
     Time of concentration (TC) = 13.89 \text{ min.}
     ++++
     Process from Point/Station
                                  234.000 to Point/Station
238.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 1
     Stream flow area = 8.990(Ac.)
     Runoff from this stream = 22.416 (CFS)
     Time of concentration = 13.89 min.
     Rainfall intensity = 2.991(In/Hr)
```

```
++++
      Process from Point/Station
                                      235.000 to Point/Station
236.000
      **** INITIAL AREA EVALUATION ****
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
      Initial subarea flow distance =
                                         50.000(Ft.)
      Highest elevation = 24.000(Ft.)
      Lowest elevation = 23.500(Ft.)
      Elevation difference =
                                0.500(Ft.)
      Time of concentration calculated by the urban
      areas overland flow method (App X-C) = 5.09 \text{ min.}

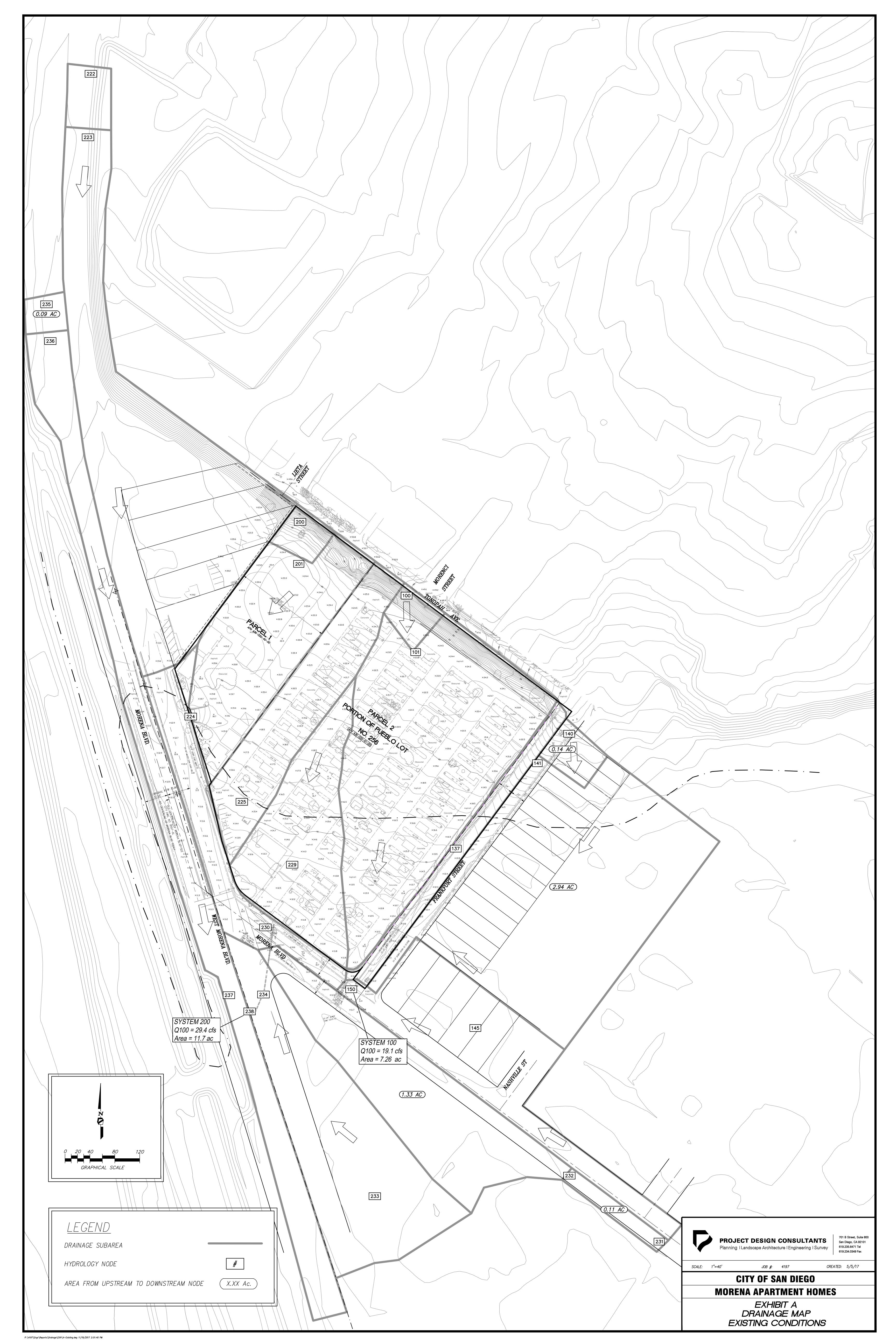
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
      TC = [1.8*(1.1-0.7000)*(50.000^{\circ}.5)/(1.000^{\circ}(1/3))] = 5.09
      Rainfall intensity (I) =
                                    4.357(In/Hr) for a 100.0 year
storm
      Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
      Subarea runoff =
                            0.274 (CFS)
      Total initial stream area =
                                         0.090 (Ac.)
      ++++
      Process from Point/Station 236.000 to Point/Station
237.000
      **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
      Top of street segment elevation = 23.500(Ft.)
End of street segment elevation = 10.000(Ft.)
      Length of street segment = 1100.000(Ft.)
      Height of curb above gutter flowline =
                                                 6.0(In.)
      Width of half street (curb to crown) = 20.000(Ft.)
      Distance from crown to crossfall grade break = 5.000(Ft.)
      Slope from gutter to grade break (v/hz) =
                                                  0.200
      Slope from grade break to crown (v/hz) =
      Street flow is on [1] side(s) of the street
      Distance from curb to property line = 10.000(Ft.)
      Slope from curb to property line (v/hz) =
                      2.000(Ft.)
      Gutter width =
      Gutter hike from flowline = 3.000(In.)
       Manning's N in gutter = 0.0130
       Manning's N from gutter to grade break = 0.0130
       Manning's N from grade break to crown = 0.0130
      Estimated mean flow rate at midpoint of street =
                                                             0.498 (CFS)
      Depth of flow = 0.217(Ft.), Average velocity = 2.649(Ft/s)
      Streetflow hydraulics at midpoint of street travel:
      Halfstreet flow width = 2.000(Ft.)
      Flow velocity =
                      2.65(Ft/s)
      Travel time = 6.92 min.
                                     TC = 12.01 \text{ min.}
       Adding area flow to street
      Decimal fraction soil group A = 0.000
```

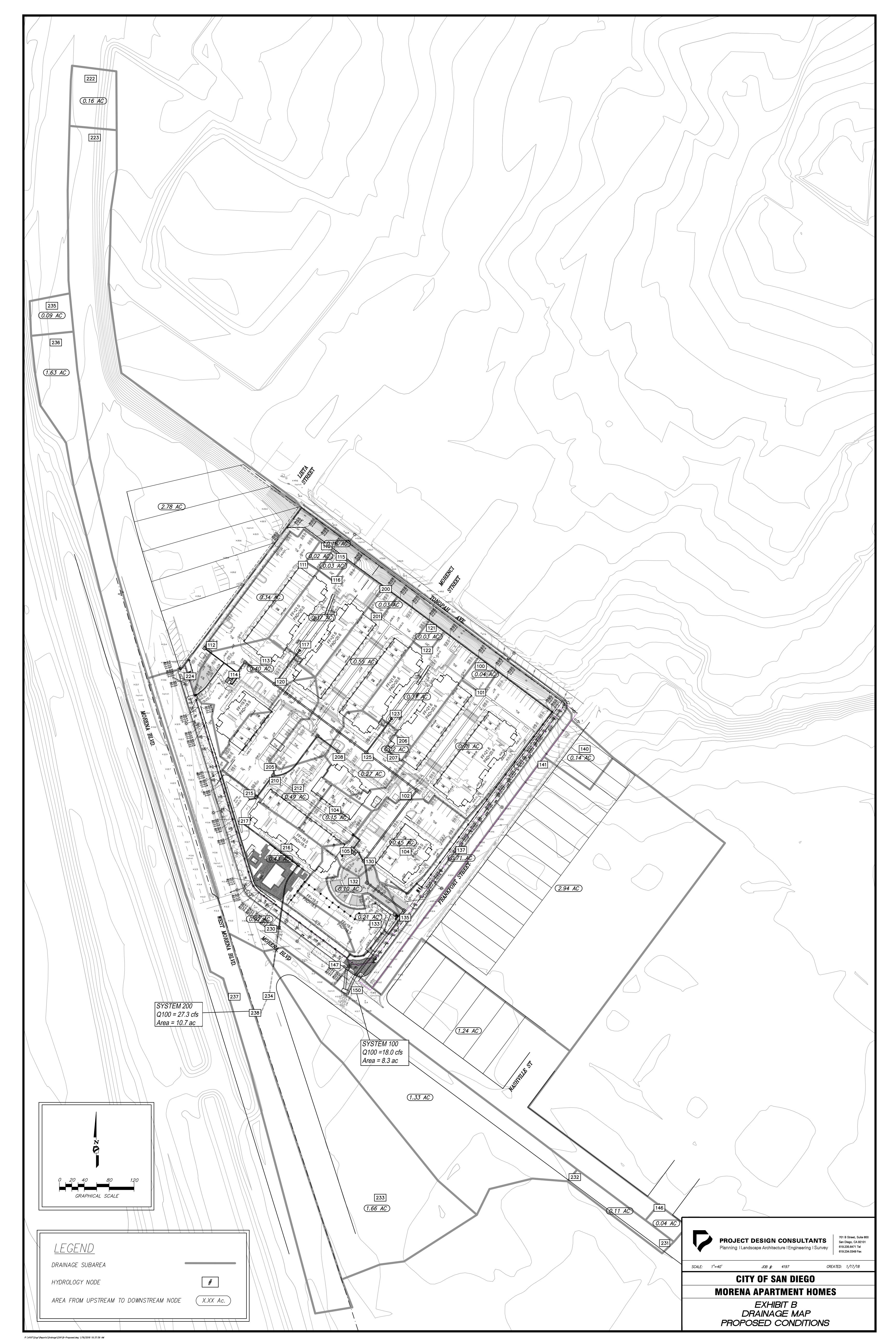
```
Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [INDUSTRIAL area type
     Rainfall intensity = 3.157(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.950
     Subarea runoff = 4.889 (CFS) for 1.630 (Ac.)
Total runoff = 5.163 (CFS) Total area =
                                                         1.72(Ac.)
                                      5.163(CFS)
     Street flow at end of street =
     Half street flow at end of street = 5.163(CFS)
     Depth of flow = 0.556(Ft.), Average velocity = 4.571(Ft/s)
     Warning: depth of flow exceeds top of curb
     Distance that curb overflow reaches into property = 1.13(Ft.)
     Flow width (from curb towards crown) = 3.532(Ft.)
     ++++
                                  237.000 to Point/Station
     Process from Point/Station
238.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 7.000(Ft.)
Downstream point/station elevation = 6.500(Ft.)
     Pipe length = 50.00(Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow = 5.163(CFS)
     Nearest computed pipe diameter = 15.00(In.)
Calculated individual pipe flow = 5.163(CFS)
     Normal flow depth in pipe = 10.15(In.)
     Flow top width inside pipe = 14.03(In.)
     Critical Depth = 11.05(In.)
     Pipe flow velocity = 5.85(Ft/s)
     Travel time through pipe = 0.14 min.
     Time of concentration (TC) = 12.15 min.
     ++++
     Process from Point/Station
                                  237.000 to Point/Station
238.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 2
     Stream flow area = 1.720 (Ac.)
     Runoff from this stream = 5.163 (CFS)
     Time of concentration = 12.15 min.
     Rainfall intensity = 3.143(In/Hr)
     Summary of stream data:
     Stream Flow rate
                          TC
                                        Rainfall Intensity
                           (min)
                                                (In/Hr)
      No.
              (CFS)
           22.416 13.89
5.163 12.15
                                         2.991
                                         3.143
     Qmax(1) =
             1.000 * 1.000 * 22.416) +
```

Proposed Conditions Rational Method Computer Output

Hydraulic Calculations

Drainage Exhibits





SD Capacity Calculations and As-Built Drawings

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San Diego County Rational Hydrology Program
CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version 6.3
Rational method hydrology program based on
San Diego County Flood Control Division 1985 hydrology manual
      Rational Hydrology Study Date: 11/30/16
MORENA BLVD
SYSTEM 100 - EXISTING 100 YR
******* Hydrology Study Control Information *******
Program License Serial Number 4049
Rational hydrology study storm event year is 100.0
English (in-lb) input data Units used
English (in) rainfall data used
Standard intensity of Appendix I-B used for year and
Elevation 0 - 1500 feet
Factor (to multiply * intensity) = 1.000
Only used if inside City of San Diego
San Diego hydrology manual 'C' values used
Runoff coefficients by rational method
Process from Point/Station 100.000 to Point/Station
                                                     101.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Initial subarea flow distance = 100.000(Ft.)
Highest elevation = 45.000(Ft.)
Lowest elevation = 23.000(Ft.)
Elevation difference = 22.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 2.89 \text{ min.}
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.6500)*(100.000^{.5})/(22.000^{(1/3)}] = 2.89
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.650
Subarea runoff = 0.342(CFS)
Total initial stream area =
                                0.120(Ac.)
Process from Point/Station
                          101.000 to Point/Station
**** IMPROVED CHANNEL TRAVEL TIME ****
```

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```
Upstream point elevation = 24.000(Ft.)
Downstream point elevation = 11.600(Ft.)
Channel length thru subarea = 650.000(Ft.)
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel =
                                                 3.851 (CFS)
Manning's 'N' = 0.015
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 3.851(CFS)
Depth of flow = 0.131(Ft.), Average velocity = 2.228(Ft/s)
Channel flow top width = 26.293(Ft.)
Flow Velocity = 2.23(Ft/s)
Travel time = 4.86 min.
Time of concentration = 9.86 min.
Critical depth = 0.156(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
                       3.391(In/Hr) for a 100.0 year storm
Rainfall intensity =
Runoff coefficient used for sub-area, Rational method, Q-KCIA, C = 0.650
Subarea runoff =
                  5.423(CFS) for 2.460(Ac.)
Total runoff =
                  5.765(CFS) Total area =
                                               2.58(Ac.)
Process from Point/Station 137.000 to Point/Station
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Time of concentration =
                         9.86 min.
Rainfall intensity =
                       3.391(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.783 (CFS) for 0.330 (Ac.)
Total runoff =
                  6.548(CFS) Total area =
                                               2.91 (Ac.)
Process from Point/Station
                           137.000 to Point/Station
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 2.910(Ac.)
Runoff from this stream =
                          6.548(CFS)
Time of concentration =
                       9.86 min.
Rainfall intensity = 3.391(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station 140.000 to Point/Station 141.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
```

Page 1 of 4

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Decimal fraction soil group C = 0.000Decimal fraction soil group D = 1.000

Initial subarea flow distance = 50.000(Ft.)

[COMMERCIAL area type

```
Highest elevation = 27.000(Ft.)
Lowest elevation = 25.000(Ft.)
Elevation difference =
                      2.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) =
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.8500)*(50.000^{.5})/(4.000^{(1/3)}] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) =
                         4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (O=KCIA) is C = 0.850
Subarea runoff =
                    0.522(CFS)
Total initial stream area =
                                0.140(Ac.)
Process from Point/Station 141.000 to Point/Station
                                                        150.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation =
                                  25.000(Ft.)
End of street segment elevation =
                                 10.000(Ft.)
Length of street segment = 450.000(Ft.)
Height of curb above gutter flowline =
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                 6.006(CFS)
Depth of flow = 0.350(Ft.), Average velocity = 4.378(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 11.158(Ft.)
Flow velocity = 4.38(Ft/s)
Travel time = 1.71 min.
                                  6.71 min.
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Rainfall intensity =
                       3.908(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
Subarea runoff =
                   9.766(CFS) for
                                  2.940(Ac.)
Total runoff =
                 10.288(CFS) Total area =
                                               3.08(Ac.)
                              10.288 (CFS)
Street flow at end of street =
Half street flow at end of street =
                                    10.288 (CFS)
Depth of flow = 0.405(Ft.), Average velocity = 4.973(Ft/s)
Flow width (from curb towards crown) = 13.936(Ft.)
145.000 to Point/Station
Process from Point/Station
                                                        150,000
**** SUBAREA FLOW ADDITION ****
```

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```
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Time of concentration =
                          6.71 min.
                        3.908(In/Hr) for a 100.0 year storm
Rainfall intensity =
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
                  4.219(CFS) for 1.270(Ac.)
Subarea runoff =
                 14.507(CFS) Total area =
Total runoff =
Process from Point/Station
                             145.000 to Point/Station
                                                          150.000
**** CONFIGENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =
                      4.350(Ac.)
Runoff from this stream =
                         14.507 (CFS)
                         6.71 min.
Time of concentration =
Rainfall intensity =
                       3.908(In/Hr)
Summary of stream data:
Stream Flow rate
                      TC
                                    Rainfall Intensity
          (CFS)
No.
                      (min)
                                          (In/Hr)
        6.548
                  9.86
                                      3.391
       14.507
                  6.71
                                      3.908
Qmax(1) =
          1.000 *
                    1.000 *
                                6.548) +
          0.868 *
                    1.000 *
                               14.507) + =
                                               19.137
Qmax(2) =
          1.000 *
                    0.681 *
                                6.548) +
          1.000 *
                    1.000 *
                               14.507) + =
                                               18.964
Total of 2 main streams to confluence:
Flow rates before confluence point:
      6.548
                14.507
Maximum flow rates at confluence using above data:
      19,137
                  18,964
Area of streams before confluence:
       2.910
                   4.350
Results of confluence:
Total flow rate =
                  19.137 (CES)
Time of concentration =
                        9.861 min.
Effective stream area after confluence =
                                            7.260(Ac.)
End of computations, total study area =
                                               7.260 (Ac.)
```

```
San Diego County Rational Hydrology Program
CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version 6.3
Rational method hydrology program based on
San Diego County Flood Control Division 1985 hydrology manual
       Rational Hydrology Study Date: 12/02/16
MORENA BLVD
SYSTEM 200 - EXISTING 100 YR
 ******* Hydrology Study Control Information ********
Program License Serial Number 4049
Rational hydrology study storm event year is 100.0
English (in-lb) input data Units used
English (in) rainfall data used
Standard intensity of Appendix I-B used for year and
Elevation 0 - 1500 feet
Factor (to multiply * intensity) = 1.000
Only used if inside City of San Diego
San Diego hydrology manual 'C' values used
Runoff coefficients by rational method
Process from Point/Station
                          200.000 to Point/Station
                                                        201,000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Initial subarea flow distance = 100.000(Ft.)
Highest elevation = 45.000(Ft.)
Lowest elevation = 25.000(Ft.)
Elevation difference = 20.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 2.98 \text{ min.}
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.6500)*(100.000^{.5})/(20.000^{(1/3)}] = 2.98
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.650
Subarea runoff = 0.342(CFS)
                                0.120(Ac.)
Total initial stream area =
Process from Point/Station
                            201.000 to Point/Station 224.000
**** IMPROVED CHANNEL TRAVEL TIME ****
```

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```
Upstream point elevation = 25.000(Ft.)
Downstream point elevation = 18.700(Ft.)
Channel length thru subarea = 350.000(Ft.)
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel =
                                                     2.083(CFS)
Manning's 'N' = 0.015
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 2.083(CFS)
Depth of flow = 0.106(Ft.), Average velocity = 1.870(Ft/s)
Channel flow top width = 21.107(Ft.)
Flow Velocity = 1.87(Ft/s)
Travel time = 3.12 min.
Time of concentration = 8.12 min.
Critical depth =
                   0.122(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
                        3.640(In/Hr) for a 100.0 year storm
Rainfall intensity =
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.650
Subarea runoff = 2.886(CFS) for 1.220(Ac.)
                   3.229(CFS) Total area =
Total runoff =
                                                  1.34 (Ac.)
Process from Point/Station 201.000 to Point/Station
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 1.340(Ac.)
Runoff from this stream = 3.229(CFS)
Time of concentration = 8.12 min.
Rainfall intensity = 3.640(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station 222.000 to Point/Station
**** INITIAL AREA EVALUATION ****
                                                           223,000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type ]
Note: user entry of impervious value, Ap = 0.900
Initial subarea flow distance = 60.000(Ft.)
Highest elevation = 24.000(Ft.)
Lowest elevation = 22.000(Ft.)
Elevation difference = 2.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 1.34 min.
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.9563)*(60.000^.5)/(3.333^(1/3)] = 1.34
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.956
Subarea runoff =
                     0.672 (CES)
```

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```
Total initial stream area =
                               0.160(Ac.)
Process from Point/Station
                            223.000 to Point/Station
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation =
                                 24.000(Ft.)
End of street segment elevation = 24.000(Ft.)
Length of street seament = 1000.000(Ft.)
Height of curb above gutter flowline =
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
Manning's N in gutter = 0.0150
 Manning's N from gutter to grade break = 0.0150
 Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                6.505 (CFS)
Depth of flow = 0.420(Ft.), Average velocity = 2.862(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 14.652(Ft.)
Flow velocity = 2.86(Ft/s)
Travel time = 5.82 min.
                           TC = 10.82 \text{ min.}
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                      3.279(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q-KCIA, C = 0.700
Subarea runoff =
                   6.381(CFS) for
                                  2.780(Ac.)
Total runoff =
                  7.052(CFS) Total area =
                                              2.94 (Ac.)
                                7.052(CFS)
Street flow at end of street =
Half street flow at end of street =
                                    7.052 (CFS)
Depth of flow = 0.429(Ft.), Average velocity = 2.918(Ft/s)
Flow width (from curb towards crown) = 15.134(Ft.)
**** SUBAREA FLOW ADDITION ****
                                                       224.000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Time of concentration =
                        10.82 min.
Rainfall intensity =
                       3.279(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, 0=KCIA, C = 0.650
Subarea runoff =
                  1.982(CFS) for
                                   0.930 (Ac.)
Total runoff =
                  9.034(CFS) Total area =
                                              3.87 (Ac.)
Process from Point/Station
                            225.000 to Point/Station
                                                       224.000
```

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```
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =
                       3.870 (Ac.)
Runoff from this stream =
                              9.034 (CFS)
Time of concentration = 10.82 min.
Rainfall intensity =
                       3.279(In/Hr)
Summary of stream data:
Stream Flow rate
                                     Rainfall Intensity
                      (min)
No.
          (CFS)
                                           (In/Hr)
        3.229
                   8.12
                                       3.640
        9.034
                  10.82
                                       3,279
Omax(1) =
          1.000 *
                     1.000 *
                                 3.229) +
          1.000 *
                     0.750 *
                                 9.034) + =
                                                10,006
Qmax(2) =
          0.901 *
                     1.000 *
                                3.229) +
          1.000 *
                     1.000 *
                                 9.034) + =
                                                11.943
Total of 2 main streams to confluence:
Flow rates before confluence point:
      3.229
                  9.034
Maximum flow rates at confluence using above data:
                   11.943
      10.006
Area of streams before confluence:
       1.340
                    3.870
Results of confluence:
Total flow rate =
                    11.943 (CFS)
Time of concentration = 10.824 min.
Effective stream area after confluence =
                                             5.210 (Ac.)
Process from Point/Station
                              224,000 to Point/Station
                                                            230,000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation = 13.600(Ft.)
End of street segment elevation = 10.300(Ft.)
Length of street segment = 450.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                   12.733 (CFS)
Depth of flow = 0.542(Ft.), Average velocity = 2.851(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =
Streetflow hydraulics at midpoint of street travel:
```

```
Halfstreet flow width = 20.748(Ft.)
Flow velocity = 2.85(Ft/s)
Travel time = 2.63 min.
                            TC = 13.45 \text{ min.}
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                       3.027(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff =
                    1.462(CFS) for 0.690(Ac.)
Total runoff =
                  13.405(CFS) Total area =
                                                 5.90 (Ac.)
Street flow at end of street =
                                13.405(CFS)
Half street flow at end of street =
                                     13,405 (CFS)
Depth of flow = 0.551(Ft.), Average velocity = 2.870(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =
                                                   2.02(Ft.)
Flow width (from curb towards crown) = 21.195(Ft.)
Process from Point/Station 229.000 to Point/Station **** SUBAREA FLOW ADDITION ****
                                                          230.000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MOBILE HOMES area type
Time of concentration =
                         13.45 min.
Rainfall intensity =
                        3.027(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, O=KCIA, C = 0.650
Subarea runoff =
                    2.066(CFS) for
                                   1.050(Ac.)
Total runoff =
                 15.471(CFS) Total area =
                                                 6.95 (Ac.)
Process from Point/Station
                             230.000 to Point/Station
                                                          234.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation =
                                    7.250(Ft.)
Downstream point/station elevation =
                                    6.500(Ft.)
Pipe length = 100.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 15.471(CFS)
Nearest computed pipe diameter =
                                  15.471 (CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 16.08(In.)
Flow top width inside pipe = 22.57(Tn.)
Critical Depth = 17.01(In.)
Pipe flow velocity =
                       6.91(Ft/s)
Travel time through pipe = 0.24 min.
Time of concentration (TC) = 13.70 min.
Process from Point/Station
                             230,000 to Point/Station
                                                          234 - 000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =
                      6.950(Ac.)
Runoff from this stream =
                           15.471 (CFS)
```

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```
Time of concentration = 13.70 min.
Rainfall intensity = 3.007(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station
                            231.000 to Point/Station
                                                         232,000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Note: user entry of impervious value, Ap = 0.900
Initial subarea flow distance = 50.000(Ft.)
Highest elevation = 15.000(Ft.)
Lowest elevation = 14.000(Ft.)
Elevation difference = 1.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) =
                                      1 45 min
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3))
TC = [1.8*(1.1-0.9563)*(50.000^{.5})/(2.000^{(1/3)}] = 1.45
Setting time of concentration to 5 minutes
Rainfall intensity (I) =
                          4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.956
Subarea runoff =
                   0.462(CFS)
Total initial stream area =
                                0.110(Ac.)
Process from Point/Station 232.000 to Point/Station
                                                         234.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation =
                                  14.000(Ft.)
End of street segment elevation =
                                  10.000(Ft.)
Length of street segment = 600.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 5.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 3.000
Gutter width = 1.000(Ft.)
Gutter hike from flowline = 3.000(In.)
Manning's N in gutter = 0.0150
Manning's N from gutter to grade break = 0.0150
Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                 3.253 (CFS)
Depth of flow = 0.474(Ft.), Average velocity = 2.033(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 12.184(Ft.)
Flow velocity = 2.03(Ft/s)
Travel time = 4.92 min.
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Note: user entry of impervious value, Ap = 0.900
```

```
Rainfall intensity =
                        3.384(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, O=KCIA, C = 0.956
Subarea runoff =
                    4.304(CFS) for
                                   1.330(Ac.)
Total runoff =
                   4.766(CFS) Total area =
                                                1.44 (Ac.)
Street flow at end of street =
                                 4.766(CFS)
                                      4.766(CFS)
Half street flow at end of street =
Depth of flow = 0.514(Ft.), Average velocity = 2.230(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property =
                                                   0.00(Ft.)
Flow width (from curb towards crown) = 14.221(Ft.)
233.000 to Point/Station 238.000 to Point/Station **** SUBAREA FLOW ADDITION ****
                                                          234.000
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[INDUSTRIAL area type
                          9.92 min.
Time of concentration =
Rainfall intensity =
                        3.384(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.950
                    5.337(CFS) for
Subarea runoff =
                                    1.660(Ac.)
Total runoff =
                 10.103(CFS) Total area =
                                                3.10(Ac.)
Process from Point/Station
                           233.000 to Point/Station
                                                         234,000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area =
                      3.100(Ac.)
Runoff from this stream =
                           10,103(CFS)
Time of concentration =
                        9.92 min.
                       3.384 (In/Hr)
Rainfall intensity =
Summary of stream data:
Stream Flow rate
                                   Rainfall Intensity
No.
          (CFS)
                      (min)
                                          (In/Hr)
                                      3.007
       15.471
                 13.70
       10.103
                  9.92
                                      3.384
Omax(1) =
          1.000 *
                    1.000 *
                              15.471) +
          0.889 *
                    1.000 *
                              10.103) + =
                                              24.449
Omax(2) =
          1.000 *
                    0.724 *
                              15.471) +
          1.000 *
                    1.000 *
                              10.103) + =
                                              21.306
Total of 2 main streams to confluence:
Flow rates before confluence point:
     15.471
                10.103
Maximum flow rates at confluence using above data:
                  21.306
      24 449
Area of streams before confluence:
       6.950
                   3.100
```

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24,449 (CFS)

```
Total flow rate =
Time of concentration = 13.696 min.
Effective stream area after confluence =
                                        10.050 (Ac.)
Process from Point/Station
                           234.000 to Point/Station
                                                      238.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation =
Downstream point/station elevation =
                                   6.250(Ft.)
Pipe length = 20.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow =
                                24.00(In.)
Nearest computed pipe diameter =
Calculated individual pipe flow =
                                24.449 (CFS)
Normal flow depth in pipe = 18.98(In.)
Flow top width inside pipe = 19.52(In.)
Critical Depth = 20.98(In.)
Pipe flow velocity =
                     9.17(Ft/s)
Travel time through pipe = 0.04 min.
Time of concentration (TC) = 13.73 min.
Process from Point/Station
                           234.000 to Point/Station
                                                      238,000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area =
                  10.050(Ac.)
Runoff from this stream =
                         24.449(CFS)
Time of concentration = 13.73 min.
Rainfall intensity =
                   3.004(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station
                           235.000 to Point/Station
                                                      236.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 50.000(Ft.)
Highest elevation = 24.000(Ft.)
Lowest elevation = 23.500(Ft.)
Elevation difference = 0.500(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) =
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3))
TC = [1.8*(1.1-0.7000)*(50.000^{.5})/(1.000^{(1/3)}] = 5.09
Rainfall intensity (I) =
                         4.357(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
                   0.274 (CFS)
Subarea runoff =
Total initial stream area =
                              0.090(Ac.)
Process from Point/Station
                           236.000 to Point/Station
                                                      237.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
```

Results of confluence:

```
Top of street segment elevation =
                                 23.500(Ft.)
End of street segment elevation = 10.000(Ft.)
Length of street segment = 1100.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 20.000(Ft.)
Distance from crown to crossfall grade break = 5.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.200
Slope from grade break to crown (v/hz) = 0.200
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.050
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 3.000(In.)
 Manning's N in gutter = 0.0130
 Manning's N from gutter to grade break = 0.0130
Manning's N from grade break to crown = 0.0130
Estimated mean flow rate at midpoint of street =
                                                  0.497 (CFS)
Depth of flow = 0.217(Ft.). Average velocity = 2.648(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 2.000(Ft.)
Flow velocity = 2.65(Ft/s)
Travel time = 6.92 min.
                             TC = 12.02 \text{ min.}
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[INDUSTRIAL area type
Rainfall intensity =
                        3.157(In/Hr.) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.950
Subarea runoff =
                  4.858(CFS) for 1.620(Ac.)
Total runoff =
                  5.133(CFS) Total area =
                                                1.71(Ac.)
Street flow at end of street =
                                5.133(CFS)
Half street flow at end of street =
                                      5.133(CFS)
Depth of flow = 0.555(Ft.), Average velocity = 4.575(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property = 1.10(Ft.)
Flow width (from curb towards crown) = 3.524(Ft.)
Process from Point/Station
                           237.000 to Point/Station
                                                          238.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation =
Downstream point/station elevation =
                                      6.500(Ft.)
Pipe length = 50.00 (Ft.) Manning's N = 0.013 No. of pipes = 1 Required pipe flow = 5.133 (0
Nearest computed pipe diameter = 15.00(In.)
Calculated individual pipe flow =
Normal flow depth in pipe = 10.10(In.)
Flow top width inside pipe = 14.07(In.)
Critical Depth = 11.03(In.)
Pipe flow velocity =
                     5.84(Ft/s)
Travel time through pipe = 0.14 min.
Time of concentration (TC) = 12.16 min.
Process from Point/Station
                             237.000 to Point/Station
                                                          238.000
**** CONFLUENCE OF MAIN STREAMS ****
```

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```
In Main Stream number: 2
Stream flow area =
                     1.710(Ac.)
Runoff from this stream =
                              5.133 (CFS)
Time of concentration = 12.16 min.
Rainfall intensity =
                        3.143(In/Hr)
Summary of stream data:
Stream Flow rate
                       TC
                                     Rainfall Intensity
No.
          (CFS)
                       (min)
                                            (In/Hr)
        24.449
                                        3,004
                   13.73
         5.133
                   12.16
                                        3.143
Omax(1) =
           1.000 *
                     1.000 *
                                 24.449) +
          0.956 *
                     1.000 *
                                                 29.355
                                 5.133) + =
Omax(2) =
           1.000 *
                     0.885 *
                                 24.449) +
          1.000 *
                     1.000 *
                                 5.133) + =
                                                 26.779
Total of 2 main streams to confluence:
Flow rates before confluence point:
      24.449
                  5.133
Maximum flow rates at confluence using above data:
       29.355
                   26.779
Area of streams before confluence:
       10.050
                    1 710
Results of confluence:
Total flow rate = 29.355(CFS)
Time of concentration = 13.732 min.
Effective stream area after confluence =
                                             11.760(Ac.)
End of computations, total study area =
                                               11.760 (Ac.)
```

The following data inside Main Stream is listed:

APPENDIX 3

Proposed Conditions Rational Method Computer Output

San Diego County Rational Hydrology Program

```
CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version 6.3
Rational method hydrology program based on
San Diego County Flood Control Division 1985 hydrology manual
     Rational Hydrology Study Date: 07/20/17
MORENA BLVD
SYSTEM 100 - PROPOSED 100 YR
_____
******* Hydrology Study Control Information ********
______
Program License Serial Number 4049
Rational hydrology study storm event year is 100.0
English (in-lb) input data Units used
English (in) rainfall data used
Standard intensity of Appendix I-B used for year and
Elevation 0 - 1500 feet
Factor (to multiply * intensity) = 1.000
Only used if inside City of San Diego
San Diego hydrology manual 'C' values used
Runoff coefficients by rational method
Process from Point/Station 100.000 to Point/Station 101.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 50.000(Ft.)
Highest elevation = 22.200(Ft.)
Lowest elevation = 21.100(Ft.)
Elevation difference = 1.100(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 3.91 min.

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.7000)*(50.000^.5)/(2.200^(1/3)] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.123 (CFS)
Total initial stream area =
                              0.040 (Ac.)
Process from Point/Station 101.000 to Point/Station 102.000
**** IMPROVED CHANNEL TRAVEL TIME ****
Upstream point elevation = 21.100(Ft.)
Downstream point elevation = 19.400(Ft.)
Channel length thru subarea = 230.000(Ft.)
```

```
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel =
                                                     1.321 (CFS)
Manning's 'N'
               = 0.015
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 1.321(CFS)
Depth of flow = 0.105(Ft.), Average velocity = 1.195(Ft/s)
Channel flow top width = 21.028(Ft.)
Flow Velocity = 1.20(Ft/s)
Travel time =
                 3.21 min.
Time of concentration = 8.21 min,
Critical depth = 0.102(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                         3.625(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 1.979 (CFS) for 0.780 (Ac.)
Total runoff =
                   2.102(CFS) Total area =
                                                     0.82 (Ac.)
Process from Point/Station 102.000 to Point/Station
                                                           105.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation = 19.400(Ft.)
End of street segment elevation = 18.150(Ft.)
Length of street segment = 110.000(Ft.)
Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 12.000(Ft.)
Distance from crown to crossfall grade break = 0.500(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) = 0.020
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 1.000(Ft.)
Gutter hike from flowline = 2.000(In.)
 Manning's N in gutter = 0.0150
 Manning's N from gutter to grade break = 0.0150
 Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                      2.679 (CFS)
Depth of flow = 0.352(Ft.), Average velocity = 2.368(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 10.286(Ft.)
Flow velocity = 2.37(Ft/s)
Travel time = 0.77 min.
                              TC = 8.98 \text{ min.}
 Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity =
                         3.508(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 1.105 (CFS) for 0.450 (Ac.)
Total runoff =
                   3.207(CFS) Total area =
                                                     1.27 (Ac.)
                                 3.207(CFS)
Street flow at end of street =
Half street flow at end of street = 3.207(CFS)
Depth of flow = 0.368(Ft.), Average velocity = 2.473(Ft/s)
Flow width (from curb towards crown) = 11.062(Ft.)
```

```
Process from Point/Station 104.000 to Point/Station
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
MULTI - UNITS area type
Time of concentration = 8.98 min.
Rainfall intensity = 3.508(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C=0.700
Subarea runoff = 0.368(CFS) for 0.150(Ac.)
Total runoff =
                  3.576(CFS) Total area =
                                                 1.42 (Ac.)
Process from Point/Station 105.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.150(Ft.)
Downstream point/station elevation = 17.700(Ft.)
Pipe length = 30.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 3.576(6
                                         3.576 (CFS)
Nearest computed pipe diameter = 12.00(In.)
Calculated individual pipe flow = 3.576(CFS)
Normal flow depth in pipe = 8.26(In.)
Flow top width inside pipe =
                            11.11(In.)
Critical Depth = 9.68(In.)
Pipe flow velocity = 6.20(Ft/s)
Travel time through pipe = 0.08 min.
                           9.06 min.
Time of concentration (TC) =
Process from Point/Station 105.000 to Point/Station 130.000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 1.420(Ac.)
Runoff from this stream = 3.576 (CFS)
Time of concentration = 9.06 min.
Rainfall intensity = 3.497(In/Hr)
                        9.06 min.
Program is now starting with Main Stream No. 2
Process from Point/Station 110.000 to Point/Station 111.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 40.000(Ft.)
Highest elevation = 21.550(Ft.)
Lowest elevation = 20.400(Ft.)
Elevation difference = 1.150(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 3.20 min.
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
```

```
TC = [1.8*(1.1-0.7000)*(40.000^.5)/(2.875^(1/3)] = 3.20
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.061(CFS)
Total initial stream area =
                                  0.020(Ac.)
Process from Point/Station 111.000 to Point/Station 112.000
**** IMPROVED CHANNEL TRAVEL TIME ****
Upstream point elevation = 20.400(Ft.)

Downstream point elevation = 18.800(Ft.)

Channel length thru subarea = 180.000(Ft.)
Channel base width = 0.000(Ft.)
Slope or 'Z' of left channel bank = 100.000
Slope or 'Z' of right channel bank = 100.000
Estimated mean flow rate at midpoint of channel = 0.568(CFS)
Manning's 'N' = 0.013
Maximum depth of channel =
                              2.000(Ft.)
Flow(q) thru subarea = 0.568(CFS)
Depth of flow = 0.070(Ft.), Average velocity = 1.155(Ft/s)
Channel flow top width = 14.032 (Ft.)
Flow Velocity = 1.15(Ft/s)
Travel time = 2.60 min.
                 2.60 min.
Time of concentration = 7.60 \text{ min.}
Critical depth = 0.072(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity = 3.730(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.862(CFS) for 0.330(Ac.)
Total runoff = 0.923(CFS) Total area =
                                                     0.35 (Ac.)
Process from Point/Station 112.000 to Point/Station 114.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.800(Ft.)
Downstream point/station elevation = 17.900(Ft.)
Pipe length = 60.00 (Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 0.923 (CFS)
Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 0.923(CFS)
Normal flow depth in pipe = 4.26(In.)
Flow top width inside pipe =
                               8.99(In.)
Critical Depth = 5.28(In.)
Pipe flow velocity = 4.48(Ft/s)
Travel time through pipe = 0.22 min.
Time of concentration (TC) = 7.82 \text{ min.}
Process from Point/Station 113.000 to Point/Station 114.000 **** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
```

```
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Time of concentration = 7.82 min.
Rainfall intensity = 3.690(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C=0.700
Subarea runoff = 0.878 (CFS) for 0.040 (Ac.)
                             Total area =
Total runoff =
                  1.801 (CFS)
                                                 0.75 (Ac.)
Process from Point/Station 114.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 17.900(Ft.)
Downstream point/station elevation = 16.800(Ft.)
Pipe length = 0.34(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 1.801(CFS)
Nearest computed pipe diameter = 6.00(In.)
Calculated individual pipe flow =
                                   1.801 (CFS)
Normal flow depth in pipe = 1.72(In.)
Flow top width inside pipe = 5.42(In.)
Flow top width inside pipe =
Critical depth could not be calculated.
Pipe flow velocity = 38.85(Ft/s)
Travel time through pipe = 0.00 min.
Time of concentration (TC) \approx 7.82 min.
Process from Point/Station 114.000 to Point/Station 120.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 1
Stream flow area = 0.750(Ac.)
Runoff from this stream = 1.801(CFS)
Time of concentration = 7.82 min.
Rainfall intensity = 3.690(In/Hr)
Process from Point/Station 115.000 to Point/Station 116.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 60.000(Ft.)
Highest elevation = 21.550(Ft.)
Lowest elevation = 20.710(Ft.)
Elevation difference = 0.840(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 4.99 \text{ min.}

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.7000)*(60.000^.5)/(1.400^(1/3)] = 4.99
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.092 (CFS)
Total initial stream area =
                                0.030 (Ac.)
Process from Point/Station 116.000 to Point/Station 117.000
**** IMPROVED CHANNEL TRAVEL TIME ****
```

```
Upstream point elevation = 20.710(Ft.)

Downstream point elevation = 20.300(Ft.)

Channel length thru subarea = 200.000(Ft.)
Channel base width = 10.000(Ft.)
Slope or 'Z' of left channel bank = 20.000
Slope or 'Z' of right channel bank = 20.000
Estimated mean flow rate at midpoint of channel = 0.661(CFS)
Manning's 'N' = 0.050
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 0.661(CFS)
Depth of flow = 0.152(Ft.), Average velocity = 0.333(Ft/s)
Channel flow top width = 16.081(Ft.)
Flow Velocity = 0.33(Ft/s)
Travel time = 10.00 min.
Time of concentration = 15.00 min.
Critical depth = 0.050(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Rainfall intensity = 2.905(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.752 (CFS) for 0.370 (Ac.)
Total runoff =
                    0.844(CFS) Total area =
                                                       0.40 (Ac.)
Process from Point/Station 117.000 to Point/Station 120.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 20.000(Ft.)
Downstream point/station elevation = 18.500(Ft.)
Pipe length = 80.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 0.844(CFS)
Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 0.844(CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 3.81(In.)
Flow top width inside pipe =
                               8.89(In.)
Critical Depth = 5.04(In.)
Pipe flow velocity = 4.75 (Ft/s)
Travel time through pipe = 0.28 \text{ min.}
Time of concentration (TC) = 15.28 \text{ min.}
Process from Point/Station 117.000 to Point/Station 120.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 2
Stream flow area = 0.400(Ac.)
Runoff from this stream =
                                0.844 (CFS)
Time of concentration = 15.28 min.
Rainfall intensity = 2.884(In/Hr)
Summary of stream data:
                        TC
                                     Rainfall Intensity
Stream
        Flow rate
                        (min)
 No.
          (CFS)
                                              (In/Hr)
        1.801 7.82
                                   3.690
        0.844
                   15.28
                                    2.884
Qmax(1) =
```

```
1.000 * 1.000 * 1.801) +
         1.000 *
                   0.512 *
                               0.844) + =
                                               2.234
Omax(2) =
         0.781 *
                    1.000 *
                               1.801) +
         1.000 *
                   1.000 *
                               0.844) + =
                                                2.252
Total of 2 streams to confluence:
Flow rates before confluence point:
      1 801
               0.844
Maximum flow rates at confluence using above data:
       2.234 2.252
Area of streams before confluence:
       0.750 0.400
Results of confluence:
Total flow rate = 2.252(CFS)
Time of concentration = 15.284 min.
Effective stream area after confluence =
                                           1.150(Ac.)
Process from Point/Station 120.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.500(Ft.)
Downstream point/station elevation = 17.200(Ft.)
Pipe length = 170.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 2.252(CFS)
Nearest computed pipe diameter = 12.00(In.)
Calculated individual pipe flow = 2.252(CFS)
Normal flow depth in pipe = 7.56(In.)
Flow top width inside pipe =
                            11.59(In.)
Critical Depth = 7.70(In.)
Pipe flow velocity = 4.32(Ft/s)
Travel time through pipe = 0.66 min.
Time of concentration (TC) = 15.94 min.
Process from Point/Station 120.000 to Point/Station 125.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 1
Stream flow area = 1.150 (Ac.)
Runoff from this stream = 2.252(CFS)
Time of concentration = 15.94 min.
Rainfall intensity =
                      2.837(In/Hr)
Process from Point/Station 121.000 to Point/Station 122.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
Initial subarea flow distance = 60.000(Ft.)
Highest elevation = 22.100(Ft.)
Lowest elevation = 21.200(Ft.)
Elevation difference = 0.900(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 4.87 \text{ min.}
TC = [1.8*(1.1-\text{C})*distance(Ft.)^.5)/(% slope^(1/3)]
TC = [1.8*(1.1-0.7000)*(60.000^{\circ}.5)/(1.500^{\circ}(1/3)] =
```

```
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
Subarea runoff = 0.092(CFS)
Total initial stream area =
                                  0.030(Ac.)
Process from Point/Station 122.000 to Point/Station 123.000
**** IMPROVED CHANNEL TRAVEL TIME ****
Upstream point elevation = 21.600(Ft.)

Downstream point elevation = 21.400(Ft.)

Channel length thru subarea = 200.000(Ft.)
Channel base width = 10.000(Ft.)
Slope or 'Z' of left channel bank = 20.000
Slope or 'Z' of right channel bank = 20.000
Estimated mean flow rate at midpoint of channel =
                                                    0.661(CFS)
Manning's 'N' = 0.050
Maximum depth of channel = 2.000(Ft.)
Flow(q) thru subarea = 0.661(CFS)
Depth of flow = 0.185(Ft.), Average velocity = 0.260(Ft/s)
Channel flow top width = 17.408(Ft.)
Flow Velocity = 0.26(Ft/s)
Travel time = 12.81 min.
Time of concentration = 17.81 min.
Critical depth = 0.050(Ft.)
Adding area flow to channel
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
[MULTI - UNITS area type ]
Rainfall intensity = 2.712(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.702(CFS) for 0.370(Ac.)
Total runoff = 0.795(CFS) Total area =
                                                   0.40(Ac.)
Process from Point/Station 123.000 to Point/Station 125.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 20.000(Ft.)

Downstream point/station elevation = 18.500(Ft.)
Pipe length = 60.00 (Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 0.795(CFS)
No. of pipes = 1 Required pipe 11...

Nearest computed pipe diameter = 6.00(In.)

Coloulated individual pipe flow = 0.795(CFS)
Normal flow depth in pipe = 4.43(In.)
Flow top width inside pipe = 5.27(In.)
Flow top width inside pipe =
Critical Depth = 5.32(In.)
Pipe flow velocity = 5.11(Ft/s)
Travel time through pipe = 0.20 min.
Time of concentration (TC) = 18.00 min.
Process from Point/Station 123.000 to Point/Station 125.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 2
Stream flow area = 0.400(Ac.)
Runoff from this stream = 0.795(CFS)
Time of concentration = 18.00 min.
```

```
Summary of stream data:
                       TC
                                   Rainfall Intensity
Stream
        Flow rate
         (CFS)
                      (min)
                                      (In/Hr)
NO
        2.252 15.94
0.795 18.00
                                 2.837
1
       0.795
                                 2.700
Qmax(1) =
        1.000 *
                 1.000 *
                               2.252) +
         1.000 *
                 0.885 *
                               0.795) + =
                                              2.956
Qmax(2) =
         0.952 * 1.000 *
1.000 * 1.000 +
                               2.252) +
                               0.795) + =
                                              2.938
Total of 2 streams to confluence:
Flow rates before confluence point:
      2.252 0.795
Maximum flow rates at confluence using above data:
       2.956 2.938
Area of streams before confluence:
       1.150 0.400
Results of confluence:
Total flow rate = 2.956(CFS)
Time of concentration = 15.940 min.
Effective stream area after confluence =
                                           1.550 (Ac.)
Process from Point/Station 125.000 to Point/Station 130.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 18.500(Ft.)

Downstream point/station elevation = 16.000(Ft.)
Pipe length = 240.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 2.956(CFS)
Nearest computed pipe diameter = 12.00(In.)
Calculated individual pipe flow = 2.956(CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 8.21(In.)
Flow top width inside pipe =
                            11.15(In.)
Critical Depth = 8.84(In.)
Pipe flow velocity = 5.16(Ft/s)
Travel time through pipe = 0.78 min.
Time of concentration (TC) = 16.72 min.
Process from Point/Station 125.000 to Point/Station 130.000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 2
Stream flow area = 1.490(Ac.)
Runoff from this stream =
                            2.956 (CFS)
Time of concentration = 16.72 min.
Rainfall intensity = 2.784 (In/Hr)
Summary of stream data:
Stream Flow rate
                      TC
                                   Rainfall Intensity
                     (min)
No.
         (CFS)
                                           (In/Hr)
        3.576
                 9.06
                                  3.497
1
        2.956
                  16.72
                                  2.784
```

2.700(In/Hr)

Rainfall intensity =

```
Qmax(1) =
        1.000 * 1.000 * 3.576) +
         1.000 *
                   0.542 *
                              2.956) + =
                                                5.178
Qmax(2) =
         0.796 *
                    1.000 *
                                3.576) +
         1.000 *
                    1.000 *
                              2.956) + =
                                               5.802
Total of 2 main streams to confluence:
Flow rates before confluence point:
      3.576
               2,956
Maximum flow rates at confluence using above data:
       5.178 5.802
Area of streams before confluence:
       1.420
                   1.550
Results of confluence:
Total flow rate = 5.802 (CFS)
Time of concentration = 16.716 min.
Effective stream area after confluence =
                                            2.970 (Ac.)
Process from Point/Station 130.000 to Point/Station 135.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 16.000(Ft.)

Downstream point/station elevation = 13.500(Ft.)
Pipe length = 150.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 5.802(CFS)
No. of pipes = 1 Required pipe inc.

Nearest computed pipe diameter = 15.00(In.)

7 leaded individual pipe flow = 5.802(CFS)
Normal flow depth in pipe = 9.21(In.)
Flow top width inside pipe =
                              14.60(In.)
Critical Depth = 11.71(In.)
Pipe flow velocity = 7.34 (Ft/s)
Travel time through pipe = 0.34 min.
Time of concentration (TC) = 17.06 \text{ min.}
Process from Point/Station 132.000 to Point/Station 135.000
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
                                            ]
Time of concentration = 17.06 min.
Rainfall intensity = 2.761(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.193(CFS) for 0.100(Ac.)
Total runoff = 5.996(CFS) Total area =
                                                   3.01 (Ac.)
Process from Point/Station 133.000 to Point/Station 135.000
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000 Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
                                            ]
[MULTI - UNITS area type
```

```
Time of concentration = 17.06 \text{ min.}
Rainfall intensity = 2.761(\text{In/Hr}) \text{ for a} 100.0 \text{ year storm}
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
Subarea runoff = 0.406 (CFS) for 0.210 (Ac.)
Total runoff =
                   6.401(CFS) Total area =
                                                     3.22 (Ac.)
Process from Point/Station 135.000 to Point/Station 150.000
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 12.500(Ft.)

Downstream point/station elevation = 10.300(Ft.)
Pipe length = 150.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 6.401(CFS)
Nearest computed pipe diameter = 15.00(In.)
Calculated individual pipe flow = 6.401(CFS)
Normal flow depth in pipe = 10.31(In.)
Flow top width inside pipe = 13.91(In.)
Critical Depth = 12.25(In.)
Pipe flow velocity = 7.11(Ft/s)
Travel time through pipe = 0.35 \text{ min.}
Time of concentration (TC) = 17.41 \text{ min.}
Process from Point/Station 137.000 to Point/Station 150.000
**** CONFLUENCE OF MAIN STREAMS ****
The following data inside Main Stream is listed:
In Main Stream number: 1
Stream flow area = 3.220(Ac.)
Runoff from this stream = 6.401(CFS)
Time of concentration = 17.41 min.
Rainfall intensity = 2.738(In/Hr)
Program is now starting with Main Stream No. 2
Process from Point/Station 140.000 to Point/Station 141.000
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Initial subarea flow distance = 65.000(Ft.)
Highest elevation = 26.000(Ft.)
Lowest elevation = 25.500(Ft.)
Elevation difference = 0.500(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 3.96 min.

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.8500)*(65.000^.5)/(0.769^(1/3)] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.850
Subarea runoff = 0.522 (CFS)
Total initial stream area =
                                  0.140 (Ac.)
Process from Point/Station 141.000 to Point/Station 147.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
```

```
Top of street segment elevation = 25.000(Ft.)
End of street segment elevation = 10.000(Ft.)
Length of street segment = 450.000(Ft.)
Height of curb above gutter flowline =
Width of half street (curb to crown) = 22.000(Ft.)
Distance from crown to crossfall grade break = 18.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) =
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 0.025
Gutter width = 2.000(Ft.)
Gutter hike from flowline = 2.000(In.)
 Manning's N in gutter = 0.0150
 Manning's N from gutter to grade break = 0.0150
 Manning's N from grade break to crown = 0.0150
Estimated mean flow rate at midpoint of street =
                                                   6.006 (CFS)
Depth of flow = 0.350(Ft.), Average velocity = 4.378(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 11.158 (Ft.)
Flow velocity = 4.38(Ft/s)
Travel time = 1.71 min.
                                     6.71 min.
Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Rainfall intensity =
                        3.908(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
Subarea runoff =
                     9.766(CFS) for
                                     2.940(Ac.)
Total runoff =
                               Total area =
                  10.288 (CFS)
                                                   3.08 (Ac.)
Street flow at end of street =
                               10.288 (CFS)
Half street flow at end of street = 10.288(CFS)
Depth of flow = 0.405(Ft.), Average velocity = 4.973(Ft/s)
Flow width (from curb towards crown) = 13.936(Ft.)
Process from Point/Station 141.000 to Point/Station
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 1
Stream flow area = 3.080(Ac.)
Runoff from this stream = 10.288(CFS)
Time of concentration = 6.71 min.
Rainfall intensity =
                      3.908(In/Hr)
Process from Point/Station 145.000 to Point/Station
**** INITIAL AREA EVALUATION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Initial subarea flow distance =
                                 50.000 (Ft.)
Highest elevation = 14.000(Ft.)
Lowest elevation = 13.000(Ft.)
Elevation difference = 1.000(Ft.)
Time of concentration calculated by the urban
areas overland flow method (App X-C) = 2.53 \text{ min.}
```

```
TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.8500)*(50.000^.5)/(2.000^(1/3)] =
Setting time of concentration to 5 minutes
Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year storm
Effective runoff coefficient used for area (Q=KCIA) is C = 0.850
Subarea runoff =
                     0.149(CFS)
Total initial stream area =
                                  0.040(Ac.)
Process from Point/Station 146.000 to Point/Station
                                                             147.000
**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
Top of street segment elevation = 13.500(Ft.)
End of street segment elevation = 11.000(Ft.)
Length of street segment = 550.000(Ft.)
Height of curb above gutter flowline = 6.0(In.) Width of half street (curb to crown) = 25.000(Ft.)
Distance from crown to crossfall grade break = 10.000(Ft.)
Slope from gutter to grade break (v/hz) = 0.020
Slope from grade break to crown (v/hz) =
Street flow is on [1] side(s) of the street
Distance from curb to property line = 10.000(Ft.)
Slope from curb to property line (v/hz) = 2.000
Gutter width = 2.500 (Ft.)
Gutter hike from flowline = 4.000(In.)
Manning's N in gutter = 0.0130
Manning's N from gutter to grade break = 0.0130
Manning's N from grade break to crown = 0.0130
Estimated mean flow rate at midpoint of street =
                                                     0.242 (CFS)
Depth of flow = 0.205(Ft.), Average velocity = 1.543(Ft/s)
Streetflow hydraulics at midpoint of street travel:
Halfstreet flow width = 2.500(Ft.)
Flow velocity = 1.54(Ft/s)
Travel time = 5.94 min.
                              TC = 10.94 \text{ min.}
 Adding area flow to street
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[COMMERCIAL area type
Rainfall intensity = 3.266(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.850
Subarea runoff = 3.470 (CFS) for 1.250 (Ac.)
Total runoff = 3.620(CFS) Total area = Street flow at end of street = 3.620(CFS)
Half street flow at end of street = 3.620(CFS)
Depth of flow = 0.518(Ft.), Average velocity = 2.088(Ft/s)
Warning: depth of flow exceeds top of curb
Distance that curb overflow reaches into property = 0.01(Ft.)
Flow width (from curb towards crown) = 11.743 (Ft.)
Process from Point/Station 137.000 to Point/Station 147.000
**** SUBAREA FLOW ADDITION ****
Decimal fraction soil group A = 0.000
Decimal fraction soil group B = 0.000
Decimal fraction soil group C = 0.000
Decimal fraction soil group D = 1.000
[MULTI - UNITS area type
                                             ]
Time of concentration = 10.94 min.

Rainfall intensity = 3.266(In/Hr) for a 100.0 year storm
Runoff coefficient used for sub-area, Rational method, Q=KCIA, C = 0.700
```

```
Subarea runoff = 1.578(CFS) 101

5.197(CFS) Total area =
                   1.578 (CFS) for 0.690 (Ac.)
                                                1.98(Ac.)
Process from Point/Station 146.000 to Point/Station 147.000
**** CONFLUENCE OF MINOR STREAMS ****
Along Main Stream number: 2 in normal stream number 2
Stream flow area = 1.980 (Ac.)
Runoff from this stream = 5.197(CFS)
Time of concentration = 10.94 min.
Rainfall intensity = 3.266(In/Hr)
Summary of stream data:
                                 Rainfall Intensity
Stream Flow rate
                     TC
No.
        (CFS)
                     (min)
                                         (In/Hr)
      10.288
                 6.71
                                3.908
       5.197
               10.94
                                3.266
Qmax(1) =
        1.000 * 1.000 *
1.000 * 0.614 *
                           10.288) +
                             5.197) + =
                                            13.477
Qmax(2) =
        0.836 * 1.000 * 10.288) +
        1.000 *
                  1.000 *
                            5.197) + =
                                            13.796
Total of 2 streams to confluence:
Flow rates before confluence point:
     10.288 5,197
Maximum flow rates at confluence using above data:
      13.477 13.796
Area of streams before confluence:
       3.080
                  1.980
Results of confluence:
Total flow rate = 13.796(CFS)
Time of concentration = 10.940 min.
Effective stream area after confluence =
                                         5.110(Ac.)
Process from Point/Station 147.000 to Point/Station
**** PIPEFLOW TRAVEL TIME (Program estimated size) ****
Upstream point/station elevation = 9.500(Ft.)
Downstream point/station elevation = 9.200(Ft.)
Pipe length = 30.00 (Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 13.796 (CFS)
Nearest computed pipe diameter = 21.00(In.)
Calculated individual pipe flow = 13.796(CFS)
Calculated individual pipe flow =
Normal flow depth in pipe = 15.16(In.) Flow top width inside pipe = 18.81(In.)
Critical Depth = 16.57(In.)
Pipe flow velocity = 7.42 (Ft/s)
Travel time through pipe = 0.07 min.
Time of concentration (TC) = 11.01 min.
Process from Point/Station 147.000 to Point/Station 150.000
**** CONFLUENCE OF MAIN STREAMS ****
```

The following data inside Main Stream is listed: In Main Stream number: 2

Stream flow area = 5.060(Ac.)
Runoff from this stream = 13.796(CFS)
Time of concentration = 11.01 min.
Rainfall intensity = 3.259(In/Hr)
Summary of stream data:

Stream No.	Flow rate (CFS)	TC (min)		Intensity In/Hr)
1 2	6.401 13.796	17.41 11.01	2.738 3.259	
Qmax(1)	=			
	1.000 *	1.000 *	6.401) +	
	0.840 *	1.000 *	13.796) + =	17.992
Qmax(2)	=			
	1.000 *	0.632 *	6.401) +	
	1.000 *	1.000 *	13.796) + =	17.844

Total of 2 main streams to confluence: Flow rates before confluence point:

6.401 13.796

Maximum flow rates at confluence using above data:

17.992 17.844

Area of streams before confluence:

3.220 5.110

Results of confluence:
Total flow rate = 17.992(CFS)
Time of concentration = 17.408 min.
Effective stream area after confluence = 8.280(Ac.)
End of computations, total study area = 8.340 (Ac.)

San Diego County Rational Hydrology Program

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CIVILCADD/CIVILDESIGN Engineering Software, (c) 1991-2003 Version
6.3
     Rational method hydrology program based on
     San Diego County Flood Control Division 1985 hydrology manual
         Rational Hydrology Study Date: 11/16/17
    MORENA BLVD
     SYSTEM 200 - PROPOSED 100 YR
     _____
     ******* Hydrology Study Control Information *******
     Program License Serial Number 4049
     _____
     Rational hydrology study storm event year is 100.0
     English (in-lb) input data Units used
     English (in) rainfall data used
     Standard intensity of Appendix I-B used for year and
     Elevation 0 - 1500 feet
     Factor (to multiply * intensity) = 1.000
     Only used if inside City of San Diego
     San Diego hydrology manual 'C' values used
     Runoff coefficients by rational method
     ++++
                               200.000 to Point/Station
     Process from Point/Station
201.000
     **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [MULTI - UNITS area type
     Initial subarea flow distance = 60.000(Ft.)
     Highest elevation = 22.000(Ft.)
     Lowest elevation = 21.000(Ft.)
     Elevation difference = 1.000(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-C) = 4.70 min.
     TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3))
     TC = [1.8*(1.1-0.7000)*(60.000^{\circ}.5)/(1.667^{\circ}(1/3)] = 4.70
     Setting time of concentration to 5 minutes
     Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year
```

```
storm
      Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
      Subarea runoff = 0.092 (CFS)
      Total initial stream area =
                                           0.030(Ac.)
      Process from Point/Station 201.000 to Point/Station
205.000
      **** IMPROVED CHANNEL TRAVEL TIME ****
      Upstream point elevation = 21.000(Ft.)
      Downstream point elevation = 21.000(Ft.)

Channel length thru subarea = 300.000(Ft.)

Channel base width = 0.000(Ft.)
      Slope or 'Z' of left channel bank = 100.000
      Slope or 'Z' of right channel bank = 100.000
      Estimated mean flow rate at midpoint of channel = 0.937(CFS)
      Manning's 'N' = 0.015
      Maximum depth of channel = 2.000(Ft.)
      Flow(q) thru subarea = 0.937(CFS)
      Depth of flow = 0.092(Ft.), Average velocity = 1.112(Ft/s)
      Channel flow top width = 18.360(Ft.)
      Flow Velocity = 1.11(Ft/s)
Travel time = 4.50 min.
      Time of concentration = 9.50 \text{ min.}
      Critical depth = 0.089(Ft.)
       Adding area flow to channel
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
      Rainfall intensity = 3.438(In/Hr) for a 100.0 year storm
      Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
      Subarea runoff = 1.324 (CFS) for 0.550 (Ac.)
Total runoff = 1.416 (CFS) Total area =
                           1.324 (CFS) for 0.550 (Ac.)
                                                                0.58(Ac.)
      Process from Point/Station
                                      205.000 to Point/Station
210.000
      **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
      Upstream point/station elevation = 17.000(Ft.)
Downstream point/station elevation = 16.000(Ft.)
      Pipe length = 30.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 1.416(CFS)
      Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 1.416(CFS)
      Normal flow depth in pipe = 4.33(In.)
      Flow top width inside pipe =
                                      8.99(In.)
      Critical Depth = 6.57(In.)
      Pipe flow velocity = 6.73 (Ft/s)
      Travel time through pipe = 0.07 \text{ min.}
Time of concentration (TC) = 9.57 \text{ min.}
```

```
Process from Point/Station
                                   205.000 to Point/Station
210.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 1
     Stream flow area = 0.580(Ac.)
     Runoff from this stream = 1.416 (CFS)
     Time of concentration =
                              9.57 min.
     Rainfall intensity = 3.428(In/Hr)
     Program is now starting with Main Stream No. 2
     Process from Point/Station
                                   206.000 to Point/Station
207.000
     **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [MULTI - UNITS area type
     Initial subarea flow distance =
     Highest elevation = 21.600(Ft.)
     Lowest elevation = 20.100(Ft.)
     Elevation difference =
                             1.500(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-C) = 4.11 \text{ min.}

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]

TC = [1.8*(1.1-0.7000)*(60.000^.5)/(2.500^(1/3)] =
     Setting time of concentration to 5 minutes
     Rainfall intensity (I) =
                                4.389(In/Hr) for a 100.0 year
storm
     Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
     Subarea runoff = 0.061(CFS)
     Total initial stream area =
                                      0.020(Ac.)
     ++++
     Process from Point/Station
                                  207.000 to Point/Station
208.000
     **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
                                     20.100(Ft.)
     Top of street segment elevation =
     End of street segment elevation =
                                       19.000(Ft.)
     Length of street segment = 100.000(Ft.)
     Height of curb above gutter flowline =
                                            6.0(In.)
     Width of half street (curb to crown) = 22.000(Ft.)
     Distance from crown to crossfall grade break = 18.000(Ft.)
     Slope from gutter to grade break (v/hz) = 0.020
     Slope from grade break to crown (v/hz) =
```

```
Street flow is on [1] side(s) of the street
     Distance from curb to property line = 10.000(Ft.)
     Slope from curb to property line (v/hz) =
     Gutter width = 2.000(Ft.)
     Gutter hike from flowline = 2.000(In.)
      Manning's N in gutter = 0.0150
      Manning's N from gutter to grade break = 0.0150
      Manning's N from grade break to crown = 0.0150
     Estimated mean flow rate at midpoint of street =
                                                     0.070(CFS)
     Depth of flow = 0.095(Ft.), Average velocity =
                                                  1.289(Ft/s)
     Streetflow hydraulics at midpoint of street travel:
     Halfstreet flow width = 2.000(Ft.)
     Flow velocity = 1.29(Ft/s)
     Travel time =
                    1.29 min.
                                 TC =
                                        6.29 min.
     Adding area flow to street
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [MULTI - UNITS area type
     Rainfall intensity = 4.006(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
     Subarea runoff =
                        0.757(CFS) for
                                        0.270(Ac.)
     Total runoff =
                      0.819(CFS) Total area =
                                                       0.29(Ac.)
     Street flow at end of street = 0.819(CFS)
     Half street flow at end of street = 0.819(CFS)
     Depth of flow = 0.239(Ft.), Average velocity = 1.854(Ft/s)
     Flow width (from curb towards crown) = 5.611(Ft.)
     ++++
     Process from Point/Station
                                  208.000 to Point/Station
210.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 18.000(Ft.)
     Downstream point/station elevation = 16.000(Ft.)
     Pipe length = 160.00 (Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow = 0.819(CFS)
     Nearest computed pipe diameter = 9.00(In.)
                                     0.819(CFS)
     Calculated individual pipe flow =
     Normal flow depth in pipe = 4.19(In.)
     Flow top width inside pipe =
                                8.98(In.)
     Critical Depth = 4.96(In.)
     Pipe flow velocity = 4.06(Ft/s)
     Travel time through pipe = 0.66 min.
     Time of concentration (TC) = 6.95 \text{ min.}
     ++++
     Process from Point/Station
                                  208.000 to Point/Station
210.000
     **** CONFLUENCE OF MAIN STREAMS ****
```

The following data inside Main Stream is listed: In Main Stream number: 2

```
Stream flow area = 0.290(Ac.)
     Runoff from this stream = 0.819(CFS)
     Time of concentration = 6.95 min.
     Rainfall intensity = 3.857(In/Hr)
     Summary of stream data:
     Stream Flow rate
                         TC
                                      Rainfall Intensity
     No.
              (CFS)
                         (min)
                                             (In/Hr)
                    9.57
     1
            1.416
                                       3.428
     2
             0.819
                      6.95
                                       3.857
     Qmax(1) =
            1.000 *
                    1.000 *
                                 1.416) +
                    1.000 *
             0.889 *
                                 0.819) + =
                                                2.143
     Omax(2) =
             1.000 *
                    0.726 *
                                 1.416) +
             1.000 *
                      1.000 *
                                 0.819) + =
                                               1.847
     Total of 2 main streams to confluence:
     Flow rates before confluence point:
           1.416 0.819
     Maximum flow rates at confluence using above data:
            2.143 1.847
     Area of streams before confluence:
            0.580
                      0.290
     Results of confluence:
     Total flow rate = 2.143(CFS)
     Time of concentration = 9.571 \text{ min.}
     Effective stream area after confluence = 0.870(Ac.)
     ++++
     Process from Point/Station
                                 210.000 to Point/Station
215.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 16.000(Ft.)
     Downstream point/station elevation = 15.000(Ft.)
     Pipe length = 50.00 (Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow =
                                           2.143 (CFS)
     Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 2.143(CFS)
     Normal flow depth in pipe = 6.77(In.)
     Flow top width inside pipe =
     Critical Depth = 7.91(In.)
     Pipe flow velocity = 6.01(Ft/s)
     Travel time through pipe = 0.14 min.
     Time of concentration (TC) = 9.71 \text{ min.}
     Process from Point/Station
                                212.000 to Point/Station
215.000
     **** SUBAREA FLOW ADDITION ****
```

```
Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
     Time of concentration =
                               9.71 min.
     Rainfall intensity = 3.410(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
     Subarea runoff =
                          1.170(CFS) for
                                            0.490(Ac.)
     Total runoff =
                        3.313 (CFS)
                                     Total area =
                                                          1.36 (Ac.)
     ++++
     Process from Point/Station
                                   215.000 to Point/Station
217.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 15.000(Ft.)
Downstream point/station elevation = 14.000(Ft.)
     Pipe length = 20.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 3.313(
     Nearest computed pipe diameter = 9.00(In.)
Calculated individual pipe flow = 3.313(CFS)
     Normal flow depth in pipe = 6.64(In.)
Flow top width inside pipe = 7.91(In.)
     Critical depth could not be calculated.
                          9.47(Ft/s)
     Pipe flow velocity =
     Travel time through pipe = 0.04 min.
     Time of concentration (TC) =
                                    9.75 min.
     ++++
                                   216.000 to Point/Station
     Process from Point/Station
217.000
      **** SUBAREA FLOW ADDITION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
                                                 ]
     Time of concentration =
                               9.75 min.
     Rainfall intensity =
                             3.406(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
                          1.049(CFS) for
     Subarea runoff =
                                           0.440(Ac.)
     Total runoff =
                         4.362 (CFS)
                                        Total area =
                                                           1.80(Ac.)
     ++++
                                   217.000 to Point/Station
     Process from Point/Station
230.000
      **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
```

```
Upstream point/station elevation = 14.000(Ft.)
Downstream point/station elevation = 10.000(Ft.)
     Pipe length = 200.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 4.362(CFS)
     Nearest computed pipe diameter = 12.00(In.)
     Calculated individual pipe flow = 4.362(CFS)
     Normal flow depth in pipe = 8.63(In.)
     Flow top width inside pipe =
                                  10.79(In.)
     Critical Depth = 10.52(In.)
     Pipe flow velocity = 7.22(Ft/s)
     Travel time through pipe = 0.46 min.
     Time of concentration (TC) =
                                 10.21 min.
     ++++
     Process from Point/Station
                                   217.000 to Point/Station
230.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 1
     Stream flow area = 1.800(Ac.)
     Runoff from this stream = 4.362(CFS)
     Time of concentration = 10.21 min.
     Rainfall intensity = 3.349(In/Hr)
     Program is now starting with Main Stream No. 2
     ++++
     Process from Point/Station
                                  222.000 to Point/Station
223.000
     **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [COMMERCIAL area type
     Note: user entry of impervious value, Ap = 0.900
     Initial subarea flow distance =
                                      60.000(Ft.)
     Highest elevation = 24.000(Ft.)
     Lowest elevation = 23.000(Ft.)
     Elevation difference = 1.000(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-C) = 1.69 min.
     TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
     TC = [1.8*(1.1-0.9563)*(60.000^{.5})/(1.667^{(1/3)}] =
     Setting time of concentration to 5 minutes
     Rainfall intensity (I) = 4.389(In/Hr) for a 100.0 year
storm
     Effective runoff coefficient used for area (Q=KCIA) is C = 0.956
     Subarea runoff = 0.672(CFS)
     Total initial stream area =
                                      0.160(Ac.)
```

224.000

**** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****

```
Top of street segment elevation = 24.000(Ft.)
End of street segment elevation = 13.600(Ft.)
      Length of street segment = 1000.000(Ft.)
      Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
      Distance from crown to crossfall grade break = 18.000(Ft.)
      Slope from gutter to grade break (v/hz) = 0.020
      Slope from grade break to crown (v/hz) =
      Street flow is on [1] side(s) of the street
      Distance from curb to property line = 10.000(Ft.)
      Slope from curb to property line (v/hz) =
      Gutter width = 2.000(Ft.)
      Gutter hike from flowline = 2.000(In.)
       Manning's N in gutter = 0.0150
       Manning's N from gutter to grade break = 0.0150
       Manning's N from grade break to crown = 0.0150
      Estimated mean flow rate at midpoint of street = 6.505 (CF) Depth of flow = 0.420 (Ft.), Average velocity = 2.862 (Ft/s)
                                                                6.505(CFS)
      Streetflow hydraulics at midpoint of street travel:
      Halfstreet flow width = 14.652(Ft.)
      Flow velocity = 2.86(Ft/s)
Travel time = 5.82 min.
                                      TC = 10.82 \text{ min.}
       Adding area flow to street
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
      Rainfall intensity = 3.279(In/Hr) for a 100.0 year storm
      Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
      Subarea runoff = 6.381(CFS) for 2.780(Ac.
Total runoff = 7.052(CFS) Total area = Street flow at end of street = 7.052(CFS)
                           6.381(CFS) for 2.780(Ac.)
                                                                   2.94 (Ac.)
      Half street flow at end of street = 7.052(CFS)
      Depth of flow = 0.429(Ft.), Average velocity = 2.918(Ft/s)
      Flow width (from curb towards crown) = 15.134(Ft.)
      ++++
      Process from Point/Station 224.000 to Point/Station
224.000
      **** SUBAREA FLOW ADDITION ****
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
                                                       ]
      Time of concentration = 10.82 min.

Rainfall intensity = 3.279(In/Hr) for a 100.0 year storm
      Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
```

```
Subarea runoff = 0.895 (CFS) rotal area = 7.947 (CFS) Total area =
                          0.895 (CFS) for 0.390 (Ac.)
                                                            3.33(Ac.)
     Process from Point/Station
                                    224.000 to Point/Station
230.000
     **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
     Top of street segment elevation = 13.600(Ft.)
End of street segment elevation = 10.300(Ft.)
     Length of street segment = 450.000(Ft.)
     Height of curb above gutter flowline = 6.0(In.)
Width of half street (curb to crown) = 22.000(Ft.)
     Distance from crown to crossfall grade break = 18.000(Ft.)
     Slope from gutter to grade break (v/hz) = 0.020
     Slope from grade break to crown (v/hz) =
     Street flow is on [1] side(s) of the street
     Distance from curb to property line = 10.000(Ft.)
     Slope from curb to property line (v/hz) =
     Gutter width = 2.000(Ft.)
     Gutter hike from flowline = 2.000(In.)
      Manning's N in gutter = 0.0150
      Manning's N from gutter to grade break = 0.0150
      Manning's N from grade break to crown = 0.0150
     Estimated mean flow rate at midpoint of street =
                                                           8.854 (CFS)
     Depth of flow = 0.482(Ft.), Average velocity = 2.701(Ft/s)
     Streetflow hydraulics at midpoint of street travel:
     Halfstreet flow width = 17.751(Ft.)
     Flow velocity = 2.70(Ft/s)
Travel time = 2.78 min.
                                    TC = 13.60 \text{ min.}
      Adding area flow to street
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
     Rainfall intensity = 3.015(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.700
     Subarea runoff = 1.604(CFS) LOL C.....

Total area = 9.551(CFS)

Total area = 9.551(CFS)
                                                            4.09(Ac.)
                                        9.551 (CFS)
     Half street flow at end of street = 9.551(CFS)
     Depth of flow = 0.492(Ft.), Average velocity = 2.752(Ft/s)
     Flow width (from curb towards crown) = 18.288(Ft.)
     ++++
     Process from Point/Station
                                     224.000 to Point/Station
230.000
      **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
      In Main Stream number: 2
      Stream flow area = 4.090(Ac.)
     Runoff from this stream = 9.551(CFS)
```

```
Rainfall intensity =
                             3.015(In/Hr)
     Summary of stream data:
     Stream Flow rate
                            TC
                                           Rainfall Intensity
                                                  (In/Hr)
      No.
               (CFS)
                            (min)
             4.362
                       10.21
                                            3.349
             9.551
                        13.60
                                            3.015
     Omax(1) =
              1.000 *
                        1.000 *
                                    4.362) +
              1.000 *
                        0.750 *
                                     9.551) + =
                                                    11.530
     Omax(2) =
              0.900 *
                         1.000 *
                                     4.362) +
                        1.000 *
              1.000 *
                                     9.551) + =
                                                    13.478
     Total of 2 main streams to confluence:
     Flow rates before confluence point:
            4.362
                       9.551
     Maximum flow rates at confluence using above data:
            11.530 13.478
     Area of streams before confluence:
             1.800
                         4.090
     Results of confluence:
     Total flow rate = 13.478 (CFS)
     Time of concentration = 13.601 min.
     Effective stream area after confluence =
                                                   5.890(Ac.)
     ++++
     Process from Point/Station
                                     230.000 to Point/Station
234.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 7.250(Ft.)
Downstream point/station elevation = 6.500(Ft.)
     Pipe length = 100.00(Ft.) Manning's N = 0.013
No. of pipes = 1 Required pipe flow = 13.478(CFS)
Nearest computed pipe diameter = 21.00(In.)
Calculated individual pipe flow = 13.478(CFS)
     Normal flow depth in pipe = 16.88(In.)
                                   16.69(In.)
     Flow top width inside pipe =
     Critical Depth = 16.39(In.)
     Pipe flow velocity = 6.50(Ft/s)
     Travel time through pipe = 0.26 min.
     Time of concentration (TC) = 13.86 \text{ min.}
     ++++
     Process from Point/Station
                                     230.000 to Point/Station
234.000
      **** CONFLUENCE OF MAIN STREAMS ****
```

Time of concentration = 13.60 min.

The following data inside Main Stream is listed:

```
In Main Stream number: 1
     Stream flow area = 5.890 (Ac.)
     Runoff from this stream = 13.478 (CFS)
     Time of concentration = 13.86 min.
     Rainfall intensity = 2.994(In/Hr)
     Program is now starting with Main Stream No. 2
     ++++
     Process from Point/Station
                                   231.000 to Point/Station
232.000
      **** INITIAL AREA EVALUATION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
      [COMMERCIAL area type
     Note: user entry of impervious value, Ap = 0.900
     Initial subarea flow distance = 50.000(Ft.)
     Highest elevation = 15.000(Ft.)
     Lowest elevation = 14.000(Ft.)
     Elevation difference = 1.000(Ft.)
     Time of concentration calculated by the urban
     areas overland flow method (App X-\dot{C}) = 1.45 min TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
     TC = [1.8*(1.1-0.9563)*(50.000^{\circ}.5)/(2.000^{\circ}(1/3)] =
      Setting time of concentration to 5 minutes
     Rainfall intensity (I) =
                                  4.389(In/Hr) for a 100.0 year
storm
     Effective runoff coefficient used for area (O=KCIA) is C = 0.956
      Subarea runoff = 0.462(CFS)
      Total initial stream area =
                                       0.110(Ac.)
      ++++
     Process from Point/Station
                                   232.000 to Point/Station
234.000
      **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
     Top of street segment elevation = 14.000(Ft.)
End of street segment elevation = 10.000(Ft.)
     Top of street segment elevation =
     Length of street segment = 600.000(Ft.)
     Height of curb above gutter flowline = 6.0(In.)
     Width of half street (curb to crown) = 22.000(Ft.)
     Distance from crown to crossfall grade break = 5.000(Ft.)
      Slope from gutter to grade break (v/hz) = 0.020
      Slope from grade break to crown (v/hz) =
      Street flow is on [1] side(s) of the street
      Distance from curb to property line = 10.000(Ft.)
      Slope from curb to property line (v/hz) =
      Gutter width = 1.000(Ft.)
      Gutter hike from flowline = 3.000(In.)
      Manning's N in gutter = 0.0150
      Manning's N from gutter to grade break = 0.0150
      Manning's N from grade break to crown = 0.0150
      Estimated mean flow rate at midpoint of street = 3.253(CFS)
```

```
Depth of flow = 0.474(Ft.), Average velocity = 2.033(Ft/s)
     Streetflow hydraulics at midpoint of street travel:
     Halfstreet flow width = 12.184(Ft.)
     Flow velocity = 2.03(Ft/s)
     Travel time = 4.92 min.
                                 TC = 9.92 \text{ min.}
      Adding area flow to street
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [COMMERCIAL area type
     Note: user entry of impervious value, Ap = 0.900
     Rainfall intensity = 3.384(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.956
     Subarea runoff = 4.304 (CFS) for 1.330 (Ac.)
Total runoff = 4.766 (CFS) Total area = 1.44 (Ac.)
Street flow at end of street = 4.766 (CFS)
     Half street flow at end of street = 4.766(CFS)
     Depth of flow = 0.514(Ft.), Average velocity = 2.230(Ft/s)
     Warning: depth of flow exceeds top of curb
     Distance that curb overflow reaches into property = 0.00(Ft.)
     Flow width (from curb towards crown) = 14.221(Ft.)
     ++++
     Process from Point/Station 233.000 to Point/Station
234.000
      **** SUBAREA FLOW ADDITION ****
     Decimal fraction soil group A = 0.000
     Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [INDUSTRIAL area type
                                                 1
     Time of concentration = 9.92 min.

Rainfall intensity = 3.384(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C=
0.950
     Subarea runoff =
                        5.337 (CFS) for 1.660 (Ac.)
     Total runoff = 10.103(CFS) Total area =
                                                          3.10(Ac.)
     ++++
     Process from Point/Station 233.000 to Point/Station
234.000
      **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 2
     Stream flow area = 3.100(Ac.)
     Runoff from this stream = 10.103(CFS)
Time of concentration = 9.92 min.
     Rainfall intensity = 3.384(In/Hr)
     Summary of stream data:
     Stream Flow rate TC Rainfall Intensity
```

```
No. (CFS) (min)
                                             (In/Hr)
            13.478 13.86
                                        2.994
     1
            10.103
                      9.92
                                        3.384
     2
     Qmax(1) =
             1.000 * 1.000 * 13.478) + 0.885 * 1.000 * 10.103) +
                                10.103) + =
                                               22.416
     Qmax(2) =
             1.000 * 0.716 * 13.478) +
             1.000 * 1.000 * 10.103) + = 19.749
     Total of 2 main streams to confluence:
     Flow rates before confluence point:
           13.478 10.103
     Maximum flow rates at confluence using above data:
           22.416 19.749
     Area of streams before confluence:
            5.890
                    3.100
     Results of confluence:
     Total flow rate = 22.416(CFS)
     Time of concentration = 13.857 min.
     Effective stream area after confluence = 8.990(Ac.)
     ++++
     Process from Point/Station 234.000 to Point/Station
238.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 6.500(Ft.)
Downstream point/station elevation = 6.250(Ft.)
     Pipe length = 20.00(Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow = 22.416(CFS)
     Nearest computed pipe diameter = 24.00(In.)
Calculated individual pipe flow = 22.416(CFS)
     Normal flow depth in pipe = 17.58(In.)
     Flow top width inside pipe = 21.25(In.)
     Critical Depth = 20.27(In.)
     Pipe flow velocity = 9.09(Ft/s)
     Travel time through pipe = 0.04 min.
     Time of concentration (TC) = 13.89 \text{ min.}
     ++++
     Process from Point/Station
                                  234.000 to Point/Station
238.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 1
     Stream flow area = 8.990(Ac.)
     Runoff from this stream = 22.416 (CFS)
     Time of concentration = 13.89 min.
     Rainfall intensity = 2.991(In/Hr)
```

```
++++
      Process from Point/Station
                                      235.000 to Point/Station
236.000
      **** INITIAL AREA EVALUATION ****
      Decimal fraction soil group A = 0.000
      Decimal fraction soil group B = 0.000
      Decimal fraction soil group C = 0.000
      Decimal fraction soil group D = 1.000
      [MULTI - UNITS area type
      Initial subarea flow distance =
                                         50.000(Ft.)
      Highest elevation = 24.000(Ft.)
      Lowest elevation = 23.500(Ft.)
      Elevation difference =
                                0.500(Ft.)
      Time of concentration calculated by the urban
      areas overland flow method (App X-C) = 5.09 \text{ min.}

TC = [1.8*(1.1-C)*distance(Ft.)^.5)/(% slope^(1/3)]
      TC = [1.8*(1.1-0.7000)*(50.000^{\circ}.5)/(1.000^{\circ}(1/3))] = 5.09
      Rainfall intensity (I) =
                                    4.357(In/Hr) for a 100.0 year
storm
      Effective runoff coefficient used for area (Q=KCIA) is C = 0.700
      Subarea runoff =
                            0.274 (CFS)
      Total initial stream area =
                                         0.090 (Ac.)
      ++++
      Process from Point/Station 236.000 to Point/Station
237.000
      **** STREET FLOW TRAVEL TIME + SUBAREA FLOW ADDITION ****
      Top of street segment elevation = 23.500(Ft.)
End of street segment elevation = 10.000(Ft.)
      Length of street segment = 1100.000(Ft.)
      Height of curb above gutter flowline =
                                                 6.0(In.)
      Width of half street (curb to crown) = 20.000(Ft.)
      Distance from crown to crossfall grade break = 5.000(Ft.)
      Slope from gutter to grade break (v/hz) =
                                                  0.200
      Slope from grade break to crown (v/hz) =
      Street flow is on [1] side(s) of the street
      Distance from curb to property line = 10.000(Ft.)
      Slope from curb to property line (v/hz) =
                      2.000(Ft.)
      Gutter width =
      Gutter hike from flowline = 3.000(In.)
       Manning's N in gutter = 0.0130
       Manning's N from gutter to grade break = 0.0130
       Manning's N from grade break to crown = 0.0130
      Estimated mean flow rate at midpoint of street =
                                                             0.498 (CFS)
      Depth of flow = 0.217(Ft.), Average velocity = 2.649(Ft/s)
      Streetflow hydraulics at midpoint of street travel:
      Halfstreet flow width = 2.000(Ft.)
      Flow velocity =
                      2.65(Ft/s)
      Travel time = 6.92 min.
                                     TC = 12.01 \text{ min.}
       Adding area flow to street
      Decimal fraction soil group A = 0.000
```

```
Decimal fraction soil group B = 0.000
     Decimal fraction soil group C = 0.000
     Decimal fraction soil group D = 1.000
     [INDUSTRIAL area type
     Rainfall intensity = 3.157(In/Hr) for a 100.0 year storm
     Runoff coefficient used for sub-area, Rational method, Q=KCIA, C =
0.950
     Subarea runoff = 4.889 (CFS) for 1.630 (Ac.)
Total runoff = 5.163 (CFS) Total area =
                                                         1.72(Ac.)
                                      5.163(CFS)
     Street flow at end of street =
     Half street flow at end of street = 5.163(CFS)
     Depth of flow = 0.556(Ft.), Average velocity = 4.571(Ft/s)
     Warning: depth of flow exceeds top of curb
     Distance that curb overflow reaches into property = 1.13(Ft.)
     Flow width (from curb towards crown) = 3.532(Ft.)
     ++++
                                  237.000 to Point/Station
     Process from Point/Station
238.000
     **** PIPEFLOW TRAVEL TIME (Program estimated size) ****
     Upstream point/station elevation = 7.000(Ft.)
Downstream point/station elevation = 6.500(Ft.)
     Pipe length = 50.00(Ft.) Manning's N = 0.013
     No. of pipes = 1 Required pipe flow = 5.163(CFS)
     Nearest computed pipe diameter = 15.00(In.)
Calculated individual pipe flow = 5.163(CFS)
     Normal flow depth in pipe = 10.15(In.)
     Flow top width inside pipe = 14.03(In.)
     Critical Depth = 11.05(In.)
     Pipe flow velocity = 5.85(Ft/s)
     Travel time through pipe = 0.14 min.
     Time of concentration (TC) = 12.15 min.
     ++++
     Process from Point/Station
                                  237.000 to Point/Station
238.000
     **** CONFLUENCE OF MAIN STREAMS ****
     The following data inside Main Stream is listed:
     In Main Stream number: 2
     Stream flow area = 1.720 (Ac.)
     Runoff from this stream = 5.163 (CFS)
     Time of concentration = 12.15 min.
     Rainfall intensity = 3.143(In/Hr)
     Summary of stream data:
     Stream Flow rate
                          TC
                                        Rainfall Intensity
                           (min)
                                                (In/Hr)
      No.
              (CFS)
           22.416 13.89
5.163 12.15
                                         2.991
                                         3.143
     Qmax(1) =
             1.000 * 1.000 * 22.416) +
```

