City of San Diego

CONTRACTOR'S NAME:_____
ADDRESS:_____
TELEPHONE NO.:_____ **FAX NO.:**_____
CITY CONTACT: **CLEMENTINA GIORDANO, Contract Specialist; Email: cgiordano@sandiego.gov**
Phone: 619-533-3481; Fax: (619) 533-3633
S.Haghkhah/NB/egz

CONTRACT DOCUMENTS

FOR

ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)

VOLUME 1 OF 2

BID NO.:	**L-13-5263-DBB-1**
SAP NO. (WBS/IO/CC):	**B-00944**
CLIENT DEPARTMENT:	**2113**
COUNCIL DISTRICT:	**3**
PROJECT TYPE:	**BT**

THIS CONTRACT IS SUBJECT TO THE FOLLOWING:

- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM.
- COMPETITION RESTRICTED TO: **ELBE FIRMS ONLY.**

BID DUE DATE:

1:30 PM
JANUARY 3, 2013
CITY OF SAN DIEGO
PUBLIC WORKS DEPARTMENT
1010 SECOND AVENUE SUITE 1400, MS 614C
SAN DIEGO, CA 92101

ENGINEER OF WORK

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Registered Architect:

J. Manuel Oncina
Licensed Architect

11/8/2012
Date

Seal:

((((((((((((((((ATTENTION))))))))))))))))

The 2010 edition of the City of San Diego Standard Specifications for Public Works Construction ("The WHITEBOOK") now contains the following distinct Contract Documents:

1) ***Equal Opportunity Contracting Program Requirements*** - This Contract Document sets forth the requirements for the City's equal opportunity contracting program. When additional requirements by the funding source e.g., federal or state agencies are physically included in the contract documents or by reference and there is a discrepancy, the funding source requirements shall govern unless specified otherwise in the Special Provisions.

2) ***City Supplement*** – The City Supplement shall be used in conjunction with the Standard Specifications for Public Works Construction ("The GREENBOOK"), 2009 Edition. The specifications contained in City Supplement take precedence over the specifications contained in The GREENBOOK, 2009 Edition.

   Certain parts of the City Supplement have been highlighted in yellow for the convenience of the users only and shall not affect the interpretation of the Contract.

To obtain The GREENBOOK contact the publisher at: http://www.bnibooks.com

Requests from City staff for additional prints of The WHITEBOOK should be directed to the City's Print Shop. The WHITEBOOK is available to public only in electronic format under Engineering Documents and References at: http://www.sandiego.gov/engineering-cip/

TABLE OF CONTENTS

DESCRIPTION **PAGE NUMBER**

REQUIRED DOCUMENTS SCHEDULE

This table is intended to serve as a convenient tool for listing forms and documents required at different times. It is neither exhaustive nor must be considered a Contract Document by itself. Therefore, the users must review the entire Contract Documents and become familiar with the required documentation and the submittal schedule associated with each document.

Bidder's attention is directed to the City's Municipal Code §22.0807(e),(3)-(5) for important information regarding required documentation.

The specified EOC forms are all available for download from the EOC Program's web site at:

http://www.sandiego.gov/eoc/forms/index.shtml

ITEM	WHEN	BY	WHAT
1.	BID DUE DATE/TIME	ALL BIDDERS	Proposal (Bid)
2.	BID DUE DATE/TIME	ALL BIDDERS	Bid Bond
3.	BID DUE DATE/TIME	ALL BIDDERS	Non-collusion Affidavit to be Executed By Bidder and Submitted with Bid under 23 USC 112 and PCC 7106
4.	BID DUE DATE/TIME	ALL BIDDERS	Contractors Certification of Pending Actions
5.	BID DUE DATE/TIME	ALL BIDDERS	Equal Benefits Ordinance Certification of Compliance
6.	BID DUE DATE/TIME	ALL BIDDERS	Form AA35 - List of Subcontractors
7.	BID DUE DATE/TIME	ALL BIDDERS	Form AA40 – Named Equipment/Material Supplier List
8.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Names of the principle individual owners of the Apparent Low Bidder - In the event the firm is employee owned or publicly held, then the fact should be stated and the names of the firm's principals and officers shall be provided.
9.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	If the Contractor is a Joint Venture, the following information must be submitted: o Joint Venture Agreement o Joint Venture License
10.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Form BB05 - Work Force Report
11.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contract Forms - Agreement

ITEM	WHEN	BY	WHAT
12.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contract Forms - Payment and Performance Bond
13.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Certificates of Insurance and Endorsements
14.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contractor Certification - Drug-Free Workplace
15.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contractor Certification - American with Disabilities Act
16.	WITHIN 10 WORKING DAYS AFTER RECEIPT BY BIDDER OF CONTRACT FORMS	APPARENT LOW BIDDER	Contractors Standards - Pledge of Compliance
17.	BY 5th OF EACH MONTH	CONTRACTOR	Form CC20 - Monthly Employment Report
18.	BY 5th OF EACH MONTH	CONTRACTOR	Form CC25 - Monthly Invoicing Report
19.	PRIOR TO ACCEPTANCE	CONTRACTOR	Form CC10 - Contract Change Order (CCO)
20.	PRIOR TO ACCEPTANCE	CONTRACTOR	Form CC15 - Final Summary Report
21.	PRIOR TO ACCEPTANCE	CONTRACTOR	Affidavit of Disposal

SPECIAL NOTICE
SMALL LOCAL BUSINESS ENTERPRISES (SLBE)
AND
EMERGING LOCAL BUSINESS ENTERPRISES (ELBE)
PROGRAM

1. INTRODUCTION. This contract is subject to the requirements of the SLBE Program as specified in the SLBE-ELBE section of the City's EOCP Requirements included in The WHITEBOOK.

1.1. The Bidders are required to review The WHITEBOOK and become familiar with the detailed specifications including the required documentation and the submittal schedule as related to SLBE-ELBE program.

2. AMENDMENTS TO THE CITY'S GENERAL EOCP REQUIREMENTS.

III. Equal Employment Opportunity Outreach Program (A). DELETE in its entirety and **SUBSTITUTE** with the following:

A. Competitive Bids. If a contract is competitively solicited, the Apparent Low Bidder shall submit a *Work Force Report (Form BB05)* or an Equal Employment Opportunity (EEO) Plan, within 10 Working Days after receipt by the Bidder of Contract forms to the City for approval as specified in the Notice of Intent to Award letter from the City.

3. SUBCONTRACTING PARTICIPATION PERCENTAGES. The City has incorporated voluntary subcontractor participation percentage to enhance competition and maximize subcontracting opportunities as follows.

3.1. The following voluntary subcontractor participation percentage for DBE, DVBE, WBE, MBE, SLBE, and ELBE certified Subcontractors shall apply to this contract:

Total voluntary subcontractor participation percentage for this project is 15.5%.

3.2. For the purpose of achieving the voluntary subcontractor participation level (percentage), Additive, Deductive, and Allowance Bid Items will not be included in the calculation.

4. PRE-BID CONFERENCE. A Pre-Bid Conference is scheduled for this contract as specified in the Invitation to Bids. The purpose of this meeting is to inform prospective Bidders of the submittal requirements and provisions relative to the Small Local Business Enterprise Program. Bidders are strongly encouraged to attend the Pre-Bid Conference to better understand the requirements of this contract.

5. RESOURCES. The current list of certified SLBE-ELBE firms can be found on the Equal Opportunity Contracting Program Department website.

CITY OF SAN DIEGO, CALIFORNIA

INVITATION TO BIDS

1. **RECEIPT AND OPENING OF BIDS:** Bid(s) will be received at the Public Works Contracting Group **at the location, time and date shown on the cover** page of these specifications for performing work on the **ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)** (Project):

2. **DESCRIPTION OF WORK:** The Work involves furnishing all labor, materials, equipment, services, and other incidental works and appurtenances for the construction of the Project as described below:

   Upgrade of existing building to current ADA and Title 24 requirements

   The Work shall be performed in accordance with:

   - Bid No. **L-13-5263-DBB-1** and Plans numbered **35608-1-D thru 35608-25-D,** inclusive.

3. **ENGINEER'S ESTIMATE:** The Engineer's estimate of the most probable price for this contract is $213,000.

4. **LOCATION OF WORK:** The location of Work is as follows:

   4077 Fairmount Avenue, San Diego, CA 92105

5. **CONTRACT TIME:** The Contract Time for completion of the Work shall be **110 Working Days**.

6. **SUPPLEMENTAL AGREEMENTS:** Supplemental agreements attached to this contract for the items of Work such as extended re-vegetation maintenance and monitoring and emulsion aggregate slurry shall be signed upon the request from the Engineer and prior to Acceptance. The signed agreements shall be accompanied by the evidence of separate bond (i.e., labor and materials) and insurance (i.e., Commercial General Liability Insurance, Commercial Automobile Liability Insurance, and Workers' Compensation Insurance) as specified in 2-4, "CONTRACT BONDS," 7-3, "LIABILITY INSURANCE," and 7-4 WORKERS' COMPENSATION INSURANCE. Bonds shall be in amount of the Contract Price for the Work included in the supplemental agreements.

7. **CONTRACTOR'S LICENSE CLASSIFICATION**: In accordance with the provisions of California Law, the Contractor shall possess valid appropriate license(s) at the time that the Bid is submitted. Failure to possess the specified license(s) shall render the Bid as non-responsive and shall act as a bar to award of the Contract to any Bidder not possessing required license(s) at the time of Bid.

   The City has determined the following licensing classification(s) for this contract:

   - CLASS B

8. **PRE-BID CONFERENCE:** There will be a Pre-Bid Conference to discuss the scope of the project, bidding requirements, re-qualification process, and Equal Opportunity Contracting Program requirements and reporting procedures in the Public Works Contracting Group Conference Room at 1010 Second Avenue Suite 1400 MS 614C, San Diego, CA 92101 **at 10:00 AM, on DECEMBER 6, 2012.**

   All potential bidders are encouraged to attend.

To request a copy of the agenda on an alternative format, or to request a sign language or oral interpreter for this meeting, call the Public Works Contracting Group at (619) 533-3450 at least 5 Working Days prior to the Pre-Bid Conference to ensure availability.

9. REFERENCE STANDARDS: Except as otherwise noted or specified, the Work shall be completed in accordance with the following standards which are on file in the office of the Public Works Department:

1. STANDARD SPECIFICATIONS

Document No.	Filed	Description
PITS0504091	05-04-09	Standard Specifications for Public Works Construction (The GREENBOOK), 2009 Edition
PITS090110-1	09-01-10	City of San Diego Standard Specifications for Public Works Construction (The WHITEBOOK), 2010 Update
AEC1231064	12-31-06	California Department of Transportation, Manual of Uniform Traffic Control Devices (MUTCD 2006)
769023	09-11-84	Standard Federal Equal Employment Opportunity Construction Contract Specifications and the Equal Opportunity Clause

NOTE: The City of San Diego Supplement, 2010 Update now consolidates various City Public Works Construction Standard Specifications which in the past were included in the Supplementary Special Provisions. The Bidders' attention is directed to this edition of the City Supplement for a close review to ensure no important information is missed for the preparation of the Bids.

2. STANDARD DRAWINGS

Document No.	Filed	Description
AEC1230163	12-31-06	City of San Diego Standard Drawings*
N/A	Varies	City Standard Drawings - Updates Approved For Use*
AEC0925061	09-25-06	Caltrans 2006 U.S. Customary Unit Standard Plans

NOTE: *Available online under Engineering Documents and References at: http://www.sandiego.gov/engineering-cip.

10. WAGE RATES: Prevailing wages are not applicable to this project unless specified otherwise on the cover page of these specifications and when included in these specifications. See Funding Agency Provisions that follow this Invitation to Bid for more information.

11. **PRE-BID SITE VISIT:** The prospective Bidders are encouraged to visit the Work Site with the Engineer. The purpose of the Site visit is to acquaint Bidders with the Site conditions. To request a sign language or oral interpreter for this visit, call the Public Works Contracting Group at (619) 533-3450 at least 5 Working Days prior to the meeting to ensure availability. A Pre-Bid Site Visit is offered when the details are provided as follows:

    Time: **11:00 AM**
    Date: **December 6, 2012**
    Location: **4077 Fairmount Ave., San Diego CA 92105**

12. **ADDITIONAL INSURANCE REQUIREMENTS:** This contract may require the Contractor or Subcontractor to provide additional insurance beyond General Liability, Auto Liability, and Workers Compensation. The additional insurance has detailed and specific endorsement requirements which shall be met. Please refer to sections 7-3, "LIABILITY INSURANCE", and 7-4, "WORKERS' COMPENSATION INSURANCE" of the GREENBOOK, City Supplement and the Supplementary Special Provisions (SSP) for additional requirements.

Tony Heinrichs, Director
Public Works Department

INSTRUCTIONS TO BIDDERS

1. **PREQUALIFICATION OF CONTRACTORS:** The contractor(s) who intend to submit Bid or Proposal in response to this invitation to bid, or RFP's for GRC or As-Needed Design-Build Task Orders valued over $50,000, must be pre-qualified for the total amount proposed, inclusive of all alternate bid items or the specified Task Order limits prior to the date of Bid submittal.

   Bids from contractors who have not been pre-qualified as applicable, and Bids that exceed the maximum dollar amount at which contractors are pre-qualified, will be deemed non-responsive and ineligible for award or a Task Order authorization. Complete information and prequalification questionnaires are available at:

   http://www.sandiego.gov/engineering-cip/services/consultcontract/prequal.shtml

   The completed questionnaire, financial statement, and bond letter or a copy of the contractor's SLBE-ELBE certification and bond letter, must be submitted no later than 2 weeks prior to the bid opening to the Public Works Department - Engineering & Capital Projects Prequalification Program, 1010 Second Avenue, Suite 1200, San Diego, CA 92101. For additional information or the answer to questions about the prequalification program, please contact David Stucky at 619-533-3474 or dstucky@sandiego.gov.

2. **CONTRACTOR/VENDOR REGISTRATION:** Prospective bidder(s) as well as existing contractors and vendors are required to complete and submit the Contractor/Vendor Registration form. Registration will be a prerequisite for the following:

   a) Submission of future contract or subcontract bids for City projects;
   b) Acceptance of all future contractor and vendor bills and invoices to the City and;
   c) Award of all future contracts issued by the City.

   Contractor/Vendor Registration shall remain valid for 2 years from the date the registration form is submitted, and must be renewed at that time.

   It shall be the Contractor's responsibility to obtain from all its proposed Subcontractors and Suppliers the Contractor/Vendor Registration form at time of notice of intent to award. Failure to do so may result in delay of NTP and/or impact on first payment. Electronic copy of the Contractor/Vendor Registration form is available for download from the following site: http://www.sandiego.gov/purchasing/vendor/index.shtml.

3. **CITY'S RESPONSES AND ADDENDA:** The City at its option, may respond to any or all questions submitted in writing, via letter, or FAX in the form of an addendum. No oral comment shall be of any force or effect with respect to this solicitation. The changes to the Contract Documents through addendum are made effective as though originally issued with the Bid. The Bidders shall acknowledge the receipt of Addenda on the form provided for this purpose in the Bid.

4. **CITY'S RIGHTS RESERVED:** The City reserves the right to cancel the Invitation to Bids at any time, and further reserves the right to reject submitted Bids, without giving any reason for such action, at its sole discretion and without liability. Costs incurred by the Bidder(s) as a result of preparing Bids under the Invitation to Bid shall be the sole responsibility of each bidder. The Invitation to Bid creates or imposes no obligation upon the City to enter a contract.

5. **CONTRACT PRICING FORMAT:** This solicitation is for a Lump Sum contract with Unit Price provisions as set forth in the Bid Proposal Form(s), Volume 2 unless specified otherwise (e.g., GRC contracts) in the Contract Documents.

6. **SUBMITTAL OF "OR EQUAL" ITEMS PRIOR TO AWARD:** In accordance with California Public Contract Code §3400(a), unless specified elsewhere in the Contract Documents, the Apparent Low Bidder shall submit its list of proposed substitutions for "an equal" ("or equal") item within 35 days after award of the Contract

7. **AWARD OF CONTRACT:** The Bidder shall guarantee the Contract Price (or GRC Adjustment Factors) for a period of 120 days (90 days for Contracts valued at $500,000 or less) from the date of Bid opening to Award of the Contract by the Mayor or City Council action. The duration of the Contract Price (or Total Combined Adjustment Factor in case of GRC contracts) guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent, including bond and insurance.

8. **AWARD PROCESS:** The Award of this contract is contingent upon the Contractor's compliance with all conditions precedent to Award, including the submittal of acceptable insurance and surety bonds pursuant to San Diego Municipal Code Section 22.3007. If the responsible Bid does not exceed the City's engineering estimate, the City will, in most cases, prepare contract documents for execution within 3 weeks of the date of the Bid opening and award the Contract within 5 Working Days of receipt of properly executed Contract, bond, and insurance documents.

   This contract is deemed to be awarded, and effective, only upon the signing of the Contract by the Mayor or designee of the City.

9. **SUBCONTRACT LIMITATIONS:** The Bidder's attention is directed to Standard Specifications for Public Works Construction, Section 2-3, "SUBCONTRACTS" in The WHITEBOOK (unless amended otherwise in the SSP) which requires the Contractor to perform not less than the amount therein stipulated with its own forces. Failure to comply with these requirements may render the Bid non-responsive and ineligible for award.

10. **AVAILABILITY OF PLANS AND SPECIFICATIONS:** Contract Documents may be obtained by visiting the City's website: http://www.sandiego.gov/cip. Plans and Specifications for this contract are also available for review in the office of the City Clerk or Public Works Contracting Group.

11. **QUESTIONS:** The Director (or designee), of the Public Works Department is the officer responsible for opening, examining, and evaluating the competitive Bids submitted to the City for the acquisition, construction and completion of any public improvement except when otherwise set forth in these documents. All questions related to this procurement action shall be addressed to the Public Works Contracting Group, Attention Contract Specialist, 1010 Second Avenue Suite 1400 MS 614C, San Diego, California, 92101, Telephone No. (619) 533-3450.

    Questions received less than 14 days prior to the date for opening of Bids may not be answered.

    Interpretations or clarifications considered necessary by the City in response to such questions will be issued by Addenda which will be uploaded to the City's online bidding service.

    Only questions answered by formal written addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. It is the Bidder's responsibility to become informed of any Addenda that have been issued and to include all such information in its Bid.

12. **ELIGIBLE BIDDERS:** No person, firm, or corporation shall be allowed to make, file, or be interested in more than 1 Bid for the same work unless alternate Bids are called for. A person, firm or corporation who has submitted a sub-proposal to a Bidder, or who has quoted prices on materials to a Bidder, is not hereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from submitting a Bid in its own behalf.

13. **SAN DIEGO BUSINESS TAX CERTIFICATE:** All Contractors, including Subcontractors, not already having a City of San Diego Business Tax Certificate for the work contemplated shall secure the appropriate certificate from the City Treasurer, Civic Center Plaza, first floor, before the Contract can be executed.

14. **PROPOSAL FORMS:** Bid shall be made only upon the Bidding Documents i.e., Proposal form attached to and forming a part of the specifications. The signature of each person signing shall be in longhand. The entire specifications for the bid package do not need to be submitted with the bid. Bidder shall complete and submit, only, all pages in the "Bidding Document" Section (see Volume 2) as their Bid per the schedule given under "Required Documents Schedule," (see Volume 1). Bidder is requested to retain for their reference other portions of the Contract Documents that are not required to be submitted with the Bid.

    Prices and notations shall be in ink or typewritten. All corrections (which have been initiated by the Contractor using erasures, strike out, line out, or "white-out") shall be typed or written in with ink adjacent thereto, and shall be initialed in ink by the person signing the bid proposal. Failure to initial all corrections made in the bidding documents shall cause the Bid to be rejected as non-responsive and ineligible for further consideration.

    Blank spaces must be filled in, using figures. Bidder's failure to submit a price for any Bid item that requires the Bidder to submit a price shall render the Bid non-responsive and shall be cause for its rejection.

    Bids shall not contain any recapitulation of the Work. Conditional Bids will be rejected. Alternative proposals will not be considered unless called for.

    The Bid shall contain an acknowledgment of receipt of all addenda, the numbers of which shall be filled in on the Bid form. Failure to acknowledge addenda shall render the Bid non-responsive and shall be cause for its rejection.

    The City may require any Bidder to furnish a statement of experience, financial responsibility, technical ability, equipment, and references.

    Bids shall be enclosed in a sealed envelope and shall bear the title of the work and name of the Bidder and the appropriate State Contractors License designation which the Bidder holds.

    Bids may be withdrawn by the Bidder prior to, but not after, the time fixed for opening of Bids.

15. **BIDDERS' GUARANTEE OF GOOD FAITH (BID SECURITY):** With the exception of the contracts valued $5,000 or less, GRC and Design-Build contracts, and contracts subject to the Small and Local Business Program of $250,000 or less e.g., ELBE contracts, each Bidder shall accompany its Bid with either a cashier's check upon some responsible bank, or a check upon such bank properly certified or an approved corporate surety bond payable to the City of San Diego, for an amount of not less than 10% of the aggregate sum of the Bid, which check or bond, and the monies represented thereby shall be held by the City as a guarantee that the Bidder, if awarded the contract, will in good faith enter into such contract and furnish the required final bonds.

The Bidder agrees that in case of Bidder's refusal or failure to execute this contract and give required final bonds, the money represented by a cashier's or certified check shall remain the property of the City, and if the Bidder shall fail to execute this contract, the Surety agrees that it will pay to the City damages which the City may suffer by reason of such failure, not exceeding the sum of 10% of the amount of the Bid. A Bid received without the specified bid security will result in return of the Bid without consideration.

16. AWARD OF CONTRACT OR REJECTION OF BIDS:

a) This contract may be awarded to the lowest responsible and reliable Bidder (for Design-Build contracts refer to the RFP for the selection and award information). Bidders shall complete the entire Bid schedule (e.g., schedule of prices). Failure to submit a completed schedule shall be considered a non-responsive Bid and therefore the Bidder shall be considered non-responsible.

b) The City reserves the right to reject any or all Bids, and to waive any informality or technicality in Bids received and any requirements of these specifications as to bidding procedure.

c) Bidders will not be released on account of their errors of judgment. Bidders may be released only upon receipt by the City from the Bidder within 3 Working Days, excluding Saturdays, Sundays, and state holidays, after the opening of Bids, of written notice which includes proof of honest, credible, clerical error of material nature, free from fraud or fraudulent intent, and of evidence that reasonable care was observed in the preparation of the Bid.

d) A non-selected Bidder may protest award of the Contract to the selected Bidder by submitting a written "Notice of Intent to Protest" including supporting documentation which shall be received by P&C Department no later than 10 days after the City's announcement of the selected Bidder or no later than 10 days from the date that the City issues notice of designation of a Bidder as non-responsible in accordance with San Diego Municipal Code Chapter 2, §22.3029, "Protests of Contract Award."

e) The City of San Diego will not discriminate with regard to race, religious creed, color, national origin, ancestry, physical handicap, marital status, sex or age, in the award of contracts.

f) Each Bid package properly executed as required by these specifications shall constitute a firm offer, which may be accepted by the City within the time specified in the Invitation to Bids.

g) The City reserves the right to evaluate all Bids and determine the lowest Bidder (or winner for Design-Build contracts) on the basis of any proposed alternates, additive items or options, at its discretion.

17. BID RESULTS: The Bid opening by the City shall constitute the public announcement of the Apparent Low Bidder (or Apparent Winner in case of Design-Build contracts). In the event that the Apparent Low Bidder (or Apparent Winner in case of Design-Build contracts) is subsequently deemed non-responsive or non-responsible, a public announcement will be posted in the City's web page, with the name of the newly designated Apparent Low Bidder (or Apparent Winner in case of Design-Build contracts).

To obtain Bid results, either attend Bid opening, review the results on the City's web site, or provide a self-addressed, stamped envelope, referencing Bid number, and Bid tabulation will be mailed to you upon verification of extensions. Due to time constraints, Bid results cannot be given out over the telephone.

18. THE CONTRACT: The Bidder to whom award is made shall execute a written contract with the City of San Diego and furnish good and approved bonds and insurance certificates specified by the City within 10 Working Days after receipt by Bidder of a form of contract for execution unless an extension of time is granted to the Bidder in writing. If the Bidder takes longer than 10 Working Days to fulfill these requirements, then the additional time taken shall be added to the Bid guarantee. The Contract shall be made in the form adopted by the City, which includes the provision that no claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder. If the Bidder to whom the award is made fails to enter into the contract as herein provided, the award may be annulled and the Bidder's Guarantee of Good Faith will be subject to forfeiture. An award may be made to the next lowest responsible and reliable Bidder who shall fulfill every stipulation embraced herein as if it were the party to whom the first award was made.

For contracts that are not Design-Build, pursuant to the San Diego City Charter section 94, the City may only award a public works contract to the lowest responsible and reliable Bidder. The City will require the Apparent Low Bidder to (i) submit information to determine the Bidder's responsibility and reliability, (ii) execute the Contract in form provided by the City, and (iii) furnish good and approved bonds and insurance certificates specified by the City within 10 days, unless otherwise approved by the City, in writing after the Bidder receives notification from the City, designating the Bidder as the Apparent Low Bidder and formally requesting the above mentioned items.

The award of the Contract is contingent upon the satisfactory completion of the above mentioned items and becomes effective upon the signing of the Contract by the Mayor or designee. If the Apparent Low Bidder does not execute the Contract or submit required documents and information, the City may award the Contract to the next lowest responsible and reliable Bidder who shall fulfill every condition precedent to award. A corporation designated as the Apparent Low Bidder shall furnish evidence of its corporate existence and evidence that the officer signing the Contract and bond for the corporation is duly authorized to do so.

19. EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE OF WORK: The Bidder shall examine carefully the Project Site, the Plans and Specifications, the GRC Unit Price Books if applicable, other materials as described in the Special Provisions, Section 2-7, and the proposal forms (e.g., Bidding Documents) therefore. The submission of a Bid or GRC Task Order Proposal shall be conclusive evidence that the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of Work, the quantities of materials to be furnished, and as to the requirements of the Bidding Documents Proposal, Plans, and Specifications.

20. DRUG-FREE WORKPLACE:

a) General:

City projects are subject to City of San Diego Resolution No. R-277952 adopted on May 20, 1991. Bidders shall become aware of the provisions of Council Policy 100-17 which was established by Resolution No. R-277952. The policy applies equally to the Contractor and Subcontractors. The elements of the policy are outlined below.

b) Definitions:

"Drug-free workplace" means a site for the performance of work done in connection with a contract let by City of San Diego for the construction, maintenance, or repair of any facility or public work by an entity at which employees of the entity are prohibited from engaging in the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in accordance with the requirements of this section.

"Employee" means the employee of a contractor directly engaged in the performance of work pursuant to a contract as described in Section 3, "City Contractor Requirements."

"Controlled substance" means a controlled substance in schedules I through V of Section 202 of the Controlled Substances Act (21 U.S.C. Sec. 812).

"Contractor" means the department, division, or other unit of a person or organization responsible to the contractor for the performance of a portion of the work under the contract.

c) City Contractor Requirements:

Every person or organization awarded a contract or grant by the City of San Diego for the provision of services shall certify to the City that it will provide a drug-free workplace by doing all following:

a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's organization's workplace and specifying the actions that will be taken against employees for violations of the prohibition.

b. Establishing a drug-free awareness program to inform employees about all of the following:

i. The dangers of drug abuse in the workplace.

ii. The person's or organization's policy of maintaining a drug-free workplace.

iii. Any available drug counseling, rehabilitation, and employee assistance programs.

iv. The penalties that may be imposed upon employees for drug abuse violations.

c. Posting the statement required by subdivision (1) in a prominent place at contractor's main office. For projects large enough to necessitate a construction trailer at the job site, the required signage would also be posted at the Site.

The Contractor shall include in each subcontract agreement language which indicates the Subcontractor's agreement to abide by the provisions of subdivisions a) through c) above. The Contractors and Subcontractors shall be individually responsible for their own drug-free workplace programs.

Note: The requirements of a drug-free awareness program can be satisfied by periodic tailgate sessions covering the various aspects of drug-abuse education. Although an in-house employee assistance program is not required, contractors should be able to provide a listing of drug rehabilitation and counseling programs available in the community at large.

Questions about the City's Drug-free Workplace Policy shall be referred to the Director, Public Works- Public Works Contracting Group.

21. AMERICANS WITH DISABILITIES ACT:

a) General: City projects are subject to City of San Diego Resolution No. R-282153 adopted on June 14, 1993. The Bidders shall become aware of the provisions of Council Policy 100-04 which was established by Resolution No. R-282153. The policy applies equally to the Contractor and all Subcontractors. The elements of the policy are outlined below.

b) Definitions:

"Qualified individual with a disability" means an individual with a disability who satisfies the requisite skill, experience, education and other job-related requirements of the employment position such individual holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

"Employee" means the employee of the Contractor directly engaged in the performance of Work.

c) The City Requirements: Every person or organization entering into a contractual agreement with or receiving a grant from the City of San Diego shall certify to the City of San Diego that it will comply with the ADA by adhering to all of the provisions of the ADA listed below.

i. The Contractor shall not discriminate against qualified persons with disabilities in any aspects of employment, including recruitment, hiring, promotions, conditions and privileges of employment, training, compensation, benefits, discipline, layoffs, and termination of employment.

ii. No qualified individual with a disability may be excluded on the basis of disability, from participation in, or be denied the benefits of services, programs, or activities by the Contractor or Subcontractors providing services for the City.

iii. The Contractor shall post a statement addressing the requirements of the ADA in a prominent place at the worksite. The Contractor shall include in each subcontract agreement, language which indicates the Subcontractor's agreement to abide by the provisions of subdivisions (a) through (c) inclusive of Section 3. The Contractor and Subcontractors shall be individually responsible for their own ADA employment programs. Questions about the City's ADA Policy should be referred to the Contract Administrator.

22. CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE: The City contracts, including public works construction projects, are subject to City of San Diego Municipal Code §22.3224 as amended 11/24/08 by ordinance O-19808. Bidders shall become aware that the requirements apply to Contractors and Subcontractors for contracts greater than $50,000 in value.

Upon award, amendment, renewal, or extension of such contracts, the Contractors shall complete a Pledge of Compliance attesting under penalty of perjury that they complied with the requirements of this section.

The Contractors shall ensure that their Subcontractors whose subcontracts are greater than $50,000 in value complete a Pledge of Compliance attesting under penalty of perjury that they complied with the requirements of this section. Subcontractors may access the Pledge of Compliance at:

http://www.sandiego.gov/purchasing/pdf/contractor_standards_questionnaire.pdf.

The Contractors shall include in each subcontract agreement, language which requires Subcontractors to abide by the provisions of City of San Diego Municipal Code §22.3224. A sample provision is as follows:

> "**Compliance with San Diego Municipal Code §22.3224**: Subcontractor acknowledges that it is familiar with the requirements of San Diego Municipal Code §22.3224 ("Contractor Standards"), and agrees to comply with requirements of that section. The Subcontractor further agrees to complete the Pledge of Compliance, incorporated herein by reference."

23. **NOTICE OF LABOR COMPLIANCE PROGRAM APPROVAL:** The City of San Diego received initial approval as a Labor Compliance Program on August 11, 2003. The Labor Compliance Program Manual is available at http://www.sandiego.gov/eoc/laborcompliance/#manual. The limited exemption from prevailing wages pursuant to Labor Code §1771.5(a) does not apply to contracts under jurisdiction of the Labor Compliance Program. Inquiries, questions, or assistance about the Labor Compliance Program should be directed to: Equal Opportunity Contracting Program, 1010 Second Avenue, Suite 1400, MS 614C, San Diego, CA 92101, Tel. 619-533-3450.

24. **PAYROLL RECORDS:** The Contractor's attention is directed to the City of San Diego Labor Compliance Program, Section IV, pages 4-7, and the State of California Labor Code §§ 1771.5(b) and 1776 (Stats. 1978, Ch. 1249). These require, in part, that the Contractor and Subcontractors maintain and furnish to the City, at a designated time, a certified copy of each weekly payroll containing a statement of compliance signed under penalty of perjury.

    a) The Contractor and Subcontractors shall submit weekly certified payrolls online via Prism® i.e., the City's web-based labor compliance program. Instructions on how to use the system will be provided to the Contractor after the award.

    b) The Contractor shall be responsible for the compliance with these provisions by Subcontractors. The City shall withhold contract payments when payroll records are delinquent or inadequate, or when it is established after investigation that underpayment has occurred.

25. **APPRENTICES ON PUBLIC WORKS:** The Contractor shall abide by the requirements of §§1777.5, 1777.6, and 1777.7 of the State of California Labor Code concerning the employment of apprentices by contractors and subcontractors performing public works contracts.

26. **EQUAL BENEFITS:** This contract is subject to the City's Equal Benefits Ordinance [EBO], Chapter 2, Article 2, Division 43 of the San Diego Municipal Code [SDMC].

    In accordance with the EBO, Bidders shall certify they will provide and maintain equal benefits as defined in SDMC §22.4302 for the duration of the Contract [SDMC §22.4304(f)]. Failure to maintain equal benefits is a material breach of the Contract [SDMC §22.4304(e)]. The Contractor shall notify employees of their equal benefits policy at the time of hire and during open enrollment periods and shall post a copy of the following statement in an area frequented by employees:

    > "During the performance of a contract with the City of San Diego, this employer will provide equal benefits to its employees with spouses and its employees with domestic partners."

The Contractor shall give the City access to documents and records sufficient for the City to verify the contractors are providing equal benefits and otherwise complying with EBO requirements.

Full text of the EBO and the Rules Implementing the Equal Benefits Ordinance are posted on the City's website at www.sandiego.gov/purchasing/ or can be requested from the Equal Benefits Program at (619) 533-3948.

27. **LIMITED COMPETITION:** Contracts designated with a Bid number beginning with "L" may only be bid by the Contractors on the approved SLBE-ELBE Construction Contractors List. For information regarding the SLBE-ELBE Construction Program and registration go to the City's web site: http://www.sandiego.gov.

28. **PRE-AWARD ACTIVITIES:**

Pre-award Submittals - The Apparent Low Bidder (or winner in case of Design-Build contracts) shall provide the information required within the time specified in "Required Documents," of this bid package. Failure to provide the information within the time specified may result in the Bid being rejected as non-responsive. If the Bid is rejected as non-responsive, the Apparent Low Bidder (or winner in case of Design-Build contracts) shall forfeit the Bid Security required under Invitation to Bids, of this bid package. The decision that the Apparent Low Bidder (or winner in case of Design-Build contracts) is non-responsive for failure to provide the information required within the time specified shall be at the sole discretion of the City.

CONTRACT FORMS
AGREEMENT

CONSTRUCTION CONTRACT

This contract is made and entered into between THE CITY OF SAN DIEGO, a municipal corporation, herein called "City", and **Handy Industrial**, herein called "Contractor" for construction of **Adult Center East San Diego Access Upgrades (Barrier Removal)**; Bid No. **L-13-5263-DBB-1**; in the amount of **One Hundred Seventy-One Thousand and 00/100 Dollars ($171,000.00)**, which is comprised of the Base Bid.

IN CONSIDERATION of the payments to be made hereunder and the mutual undertakings of the parties hereto, City and Contractor agree as follows:

1. The following are incorporated into this contract as though fully set forth herein:

   (a) The attached Faithful Performance and Payment Bonds.

   (b) The attached Proposal included in the Bid documents by the Contractor.

   (c) That certain documents entitled **Adult Center East Access Upgrades (Barrier Removal)**, on file in the Public Works Department as Document No. **B-00944,** as well as all matters referenced therein.

2. Contractor shall perform and be bound by all the terms and conditions of this contract and in strict conformity therewith shall perform and complete in a good and workmanlike manner **Adult Center East Access Upgrades (Barrier Removal)**, Bid Number **L-13-5263-DBB-1,** San Diego, California.

3. For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner and with such additions or deductions as are provided for in this contract, and Contractor shall accept such payment in full satisfaction of all claims incident to such performances.

4. No claim or suit whatsoever shall be made or brought by Contractor against any officer, agent, or employee of the City for or on account of anything done or omitted to be done in connection with this contract, nor shall any such officer, agent, or employee be liable hereunder.

5. This contract is effective as of the date that the Mayor or designee signs the agreement.

CONTRACT FORMS (continued)
AGREEMENT

IN WITNESS WHEREOF, this agreement is signed by the City of San Diego, acting by and through its Mayor or designee authorizing such execution.

THE CITY OF SAN DIEGO

By: Tony Heinrichs
Tony Heinrichs
Director, Department of Public Works

Date: 4/29/13

APPROVED AS TO FORM AND LEGALITY

Jan I. Goldsmith, City Attorney

By _____

Print Name: Katherine A. Malcolm
Deputy City Attorney

Date: 5/2/13

CONTRACTOR

By _____

Print Name: Wahead William Raz

Title: Owner

Date: 2/6/13

City of San Diego License No.: B 20120181 22

State Contractor's License No.: 940082

Bond No. 0604059
Bond Premium: $4,420.00 which is subject to change based on the final contract amount
Bond Executed in Triplicate

CONTRACT FORMS (continued)
PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND

FAITHFUL PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND:

Handy Industrial, a corporation, as principal, and Allegheny Casualty Company, a corporation authorized to do business in the State of California, as Surety, hereby obligate themselves, their successors and assigns, jointly and severally, to The City of San Diego a municipal corporation in the sum of **One Hundred Seventy-One Thousand and 00/100 Dollars ($171,000.00)** for the faithful performance of the annexed contract, and in the sum of **One Hundred Seventy-One Thousand and 00/100 Dollars ($171,000.00)** for the benefit of laborers and materialmen designated below.

Conditions:

If the Principal shall faithfully perform the annexed contract **Adult Center East San Diego Access Upgrades (Barrier Removal)**, Bid Number **L-13-5263-DBB-1**, San Diego, California then the obligation herein with respect to a faithful performance shall be void; otherwise it shall remain in full force.

If the Principal shall promptly pay all persons, firms and corporations furnishing materials for or performing labor in the execution of this contract, and shall pay all amounts due under the California Unemployment Insurance Act then the obligation herein with respect to laborers and materialmen shall be void; otherwise it shall remain in full force.

The obligation herein with respect to laborers and materialmen shall inure to the benefit of all persons, firms and corporations entitled to file claims under the provisions of Chapter 3 of Division 5 of Title I of the Government Code of the State of California or under the provisions of Section 3082 et seq. of the Civil Code of the State of California.

Changes in the terms of the annexed contract or specifications accompanying same or referred to therein shall not affect the Surety's obligation on this bond, and the Surety hereby waives notice of same.

CONTRACT FORMS (continued)
PERFORMANCE BOND AND LABOR AND MATERIALMEN'S BOND

The Surety shall pay reasonable attorney's fees should suit be brought to enforce the provisions of this bond.

Dated January 29, , 2013

Approved as to Form and Legality

Jan I. Goldsmith, City Attorney

By 5/2/13
Deputy City Attorney

Approved:

By:
Tony Heinrichs
Director, Department of Public Works

Handy Industrial
Principal

By

Wahead William Raz
Printed Name of Person Signing for Principal

Allegheny Casualty Company
Surety

By
Attorney-in-fact Nathan R. Varnold

13400 Sabre Springs Pkwy, Ste 245
Local Address of Surety

San Diego, CA 92128-4198
Local Address (City, State) of Surety

858-513-1795
Local Telephone No. of Surety

Premium $ 4,420.00 which is subject to change based on final contract price

Bond No. 0604059

Tel (973) 624-7200

POWER OF ATTORNEY

INTERNATIONAL FIDELITY INSURANCE COMPANY
ALLEGHENY CASUALTY COMPANY

ONE NEWARK CENTER, 20TH FLOOR NEWARK, NEW JERSEY 07102-5207

KNOW ALL MEN BY THESE PRESENTS: That **INTERNATIONAL FIDELITY INSURANCE COMPANY**, a corporation organized and existing under the laws of the State of New Jersey, and **ALLEGHENY CASUALTY COMPANY** a corporation organized and existing under the laws of the State of Pennsylvania, having their principal office in the City of Newark, New Jersey, do hereby constitute and appoint

R. HAAS-BATES, NATHAN R. VARNOLD, RICHARD ADAIR, OWEN M. BROWN, WILLIAM SYRKIN

Irvine, CA.

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY and is granted under and by authority of the following resolution adopted by the Board of Directors of INTERNATIONAL FIDELITY INSURANCE COMPANY at a meeting duly held on the 20th day of July, 2010 and by the Board of Directors of ALLEGHENY CASUALTY COMPANY at a meeting duly held on the 15th day of August, 2000:

"RESOLVED, that (1) the President, Vice President, or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY have each executed and attested these presents on this 12th day of March, 2012.

INTERNATIONAL FIDELITY INSURANCE COMPANY CORPORATE SEAL 1904 NEW JERSEY

ALLEGHENY CASUALTY COMPANY 1936 PENNSYLVANIA

STATE OF NEW JERSEY
County of Essex

ROBERT W. MINSTER
Executive Vice President/Chief Operating Officer
(International Fidelity Insurance Company)
and President (Allegheny Casualty Company)

On this 12th day of March 2012, before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.

CATHY VAZQUEZ NOTARY PUBLIC STATE OF NEW JERSEY

A NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Mar. 27, 2014

CERTIFICATION

I, the undersigned officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 24th day of January 2013

MARIA BRANCO, Assistant Secretary

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Orange

On January 29, 2013 (Date) before me, A. Wilkison, Notary Public (Here Insert Name and Title of the Officer),

personally appeared Nathan R Varnold (Name(s) of Signer(s)),

who proved to me on the basis of satisfactory evidence to be the person(~~s~~) whose name(~~s~~) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Signature of Notary Public)

A. WILKISON
Commission # 1866283
Notary Public - California
Orange County
My Comm. Expires Sep 26, 2013

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Performance Bond and Labor and Materialmen's Bond

Document Date: January 29, 2013 Number of Pages: Two (2)

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: Nathan R Varnold

☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☒ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: Allegheny Casualty Company

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer's Name: _____

☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

CONTRACTOR CERTIFICATION

DRUG-FREE WORKPLACE

PROJECT TITLE: Adult Center East San Diego Access Upgrades (Barrier Removal)

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-17 regarding Drug-Free Workplace as outlined in INSTRUCTION TO BIDDERS, "Drug-Free Workplace", of the project specifications, and that;

_____

(Name under which business is conducted)

has in place a drug-free workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

Signed _____

Printed Name Wahead William Raz

Title Owner

CONTRACTOR CERTIFICATION

AMERICAN WITH DISABILITIES ACT (ADA) COMPLIANCE CERTIFICATION

PROJECT TITLE: **Adult Center East San Diego Access Upgrades (Barrier Removal)**

I hereby certify that I am familiar with the requirements of San Diego City Council Policy No. 100-4 regarding the American With Disabilities Act (ADA) outlined in the INSTRUCTION TO BIDDERS, "American With Disabilities Act", of the project specifications, and that;

_____

(Name under which business is conducted)

has in place a workplace program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the subcontractor's agreement to abide by the provisions of the policy as outlined.

Signed _____

Printed Name Wahead Williams

Title Owner

CONTRACTOR CERTIFICATION

CONTRACTOR STANDARDS – PLEDGE OF COMPLIANCE

PROJECT TITLE: Adult Center East San Diego Access Upgrades (Barrier Removal)

I declare under penalty of perjury that I am authorized to make this certification on behalf of _____, as Contractor, that I am familiar with the requirements of City of San Diego Municipal Code § 22.3224 regarding Contractor Standards as outlined in INSTRUCTION TO BIDDERS ("Contractor Standards"), of the project specifications, and that Contractor has complied with those requirements.

I further certify that each of the Contractor's subcontractors whose subcontracts are greater than $50,000 in value has completed a Pledge of Compliance attesting under penalty of perjury of having complied with City of San Diego Municipal Code § 22.3224.

Dated this 6th Day of Feb, 23.

Signed _____

Printed Name Wahead William Raz

Title Owner

AFFIDAVIT OF DISPOSAL

WHEREAS, on the _____ DAY OF _____, 2_____, the undersigned entered into and executed a contract with the City of San Diego, a municipal corporation, for:

Adult Center East San Diego Access Upgrades (Barrier Removal)
(Project)

as particularly described in said contract and identified as Bid No. **L-13-5263-DBB-1**; Sap No. (WBS/IO/CC) **B-00944**; and **WHEREAS**, the specifications of said contract requires the Contractor to affirm that "all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner"; and **WHEREAS**, said contract has been completed and all surplus materials disposed of:

_____

_____

_____

NOW, THEREFORE, in consideration of the final payment by the City of San Diego to said Contractor under the terms of said contract, the undersigned Contractor, does hereby affirm that all surplus materials as described in said contract have been disposed of at the following location(s):

_____

_____

_____

and that they have been disposed of according to all applicable laws and regulations.

Dated this ____ DAY OF _____, 2_____.

_____Contractor
by

ATTEST:

State of _____
County of _____

On this _____ DAY OF _____, 2_____, before the undersigned, a Notary Public in and for said County and State, duly commissioned and sworn, personally appeared _____ known to me to be the _____ Contractor named in the foregoing Release, and whose name is subscribed thereto, and acknowledged to me that said Contractor executed the said Release.

Notary Public in and for said County and State

SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

THESE SUPPLEMENTARY SPECIAL PROVISIONS CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (THE GREENBOOK) CURRENTLY ADOPTED BY THE CITY, INCLUDING ITS CURRENT SUPPLEMENT AMENDMENTS (CITY SUPPLEMENTS INCLUDED IN THE WHITEBOOK), EXCEPT FOR THE FOLLOWING:

STYLE OF SPECIFICATIONS

The City is gradually standardizing the style and language of the standard specifications for the public works construction. The new style and language follows the Federal guidelines for "Plain Language" to the extent possible.

The use of this new style does not change the meaning of a specification not yet using this style. Where used in the Contract Documents, statement or command type phrases (i.e., active voice and imperative mood) refer to and are directed at the Bidder or Contractor as applicable. The specifications are written to the Bidder before award and the Contractor after. Before award, interpret sentences written in the imperative mood as starting with "The Bidder must" and interpret "you" as "the Bidder" and "your" as "the Bidder's". After award, interpret sentences written in the imperative mood as starting with "The Contractor must" and interpret "you" as "the Contractor" and "your" as "the Contractor's." Similarly, interpret "we" and "us" as "the City" and "our" as "the City's."

PART 1 – GENERAL PROVISIONS

SECTION 1 – TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

1-2 TERMS AND DEFINITIONS.

Agency – ADD the following:

Regulatory activities handled by the City of San Diego Developmental Services, Fire and Planning Departments, or any other City Department are not subject to the responsibilities of the City under this contract.

Certificate of Compliance – To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Certificate of Compliance – A written document signed and submitted by a supplier or manufacturer that certifies that the material or assembled material supplied to the Work site complies with the requirements of the Contract Documents.

Contract Documents – To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

The Agreement, Addendum, Invitation to Bid, Instructions to Bidders, special notice page, funding agency provisions, Bid and documentation accompanying the Bid and any post-bid documentation submitted prior to the Notice of Award when attached as an exhibit to the Contract, Bonds, permits from jurisdictional regulatory agencies, Supplementary Special Provisions (SSP), City's EOCP Requirements, City Supplement, Plans, Standard Plans, Construction Documents, Reference Specifications listed in the Invitation to Bid or the RFP for Design-Build contracts, Request for Qualifications (RFQ), Statement of Qualifications (SOQ), Request for Proposals (RFP), modifications issued after the execution of the Contract e.g., Change Orders, Construction Manager At Risk's Guaranteed Maximum Price including written qualifications, assumptions and conditions thereto and Pre-construction Services Agreement.

ADD: **Limited Notice To Proceed** – A written notice given from the City to the Contractor that authorizes the Contractor to start a limited amount of work that is not Construction Work, such as finalizing subcontract agreements, ordering materials, mobilization, furnishing a field office, and any other preliminary work done prior to performing Construction Work.

Normal Working Hours. To the City Supplement, ADD the following:

The Normal Working Hours shall be 7:00 AM to 3:30 PM.

Notice of Completion (NOC) – ADD the following:

See California Civil Code section 9204.

Samples - Physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be evaluated.

SECTION 2 - SCOPE AND CONTROL OF WORK

2-1.2.2 Joint Venture Contractors. To the City Supplement, last paragraph, DELETE in its entirety and SUBSTITUTE with the following:

The Joint Venture shall designate an on-site representative and an alternate in writing. The on-site representative and the alternate shall have the full authority to bind all Joint Venture partners.

The Joint Venture shall provide a copy of the Joint Venture agreement and the Joint Venture license to the City within 10 Working Days after receipt by the Bidder of Contract forms.

2-3.1.2 Subcontractor List. ADD the following:

For Extra Work, the Contractor shall submit Form CC10, "CONTRACT CHANGE ORDER (CCO)" with each CCO proposal. Form CC10 is available for download from the EOCP site at: http://www.sandiego.gov/eoc/pdf/cc10.pdf

2-3.2 Self Performance. DELETE in its entirety and SUBSTITUTE with the following:

The Contractor shall perform, with its own organization, Contract work amounting to at least **50 percent** of the base bid alone or base bid and any additive or deductive alternate(s) that together when added or deducted form the basis of determining the Apparent Low Bidder as specified. The self performance percentage requirement will be waived for contracts when a "B" License is required or allowed.

2-3.3 Status of Subcontractors. ADD the following:

With every request for payment, the Contractor shall submit to the Engineer a breakdown showing monthly and cumulative amounts of the Work performed under Change Order by the Contractor and the Subcontractors. The reporting format shall be approved by the Engineer.

2-3.4 Subcontract Requirements. To the City Supplement, ADD the following paragraph:

The Contractor shall ensure that all of its Subcontractors are licensed at the time of the execution of their subcontract agreements. In the event a Subcontractor is not properly licensed, the Contractor shall cease payment to Subcontractor for all work performed when the Subcontractor was improperly licensed. Any payment made by the Contractor to a Subcontractor for work performed when the Subcontractor was unlicensed shall be returned to the City.

Where the Contract Documents require that a particular product be installed or applied by an applicator approved by the manufacturer, it is the Contractor's responsibility to ensure the Subcontractor or Supplier employed for such work is approved by the manufacturer.

2-5.2 Precedence of Contract Documents. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

2-5.2 Precedence of Contract Documents.. If there is a conflict between any of the Contract Documents, the document highest in the order of precedence shall control. The order of precedence, from highest to lowest, shall be as follows:

1) Permits (i.e., issued by jurisdictional regulatory agencies)
2) Change Orders and Supplemental Agreements; whichever occurs last
3) Contract and Agreement
4) Addenda
5) Bid (e.g., price Proposal for Design-Build contracts)
6) Request for Proposal (RFP)
7) Invitation to Bid
8) Instruction to Bidders
9) Request for Qualifications (RFQ)
10) Special Provisions (i.e., City's EOCP Requirements, City Supplement, and Supplementary Special Provisions (SSP))
11) Plans
12) Construction Documents (for Design-Build contracts)
13) Standard Drawings
14) Reference Specifications (e.g., GREENBOOK)
15) Technical Proposal (for Design-Build contracts)
16) Statement of Qualifications (SOQ)

When additional requirements by the funding sources are physically or by reference incorporated in the Contract Documents, the funding source's requirements shall govern **unless specified otherwise**.

Figured dimensions shall take precedence over scaled dimensions. Detailed drawings shall take precedence over general drawings.

2-5.3.1 General. DELETE in its entirety and SUBSTITUTE with the following:

When required by the Contract Documents or when requested by the Engineer, the Contractor shall provide the submittals as specified in 2-5.3.2, 2-5.3.3, and 2-5.3.4 to the Engineer. Materials shall neither be furnished nor fabricated, nor shall any work for which submittals are required be performed before the required submittals have been reviewed and accepted by the Engineer. The payment for the submittals shall be included in the various Bid items. Neither review nor acceptance of submittals by the Engineer shall relieve the Contractor from responsibility for errors, omissions, or deviations from the Contract Documents, unless such deviations were specifically called to the attention of the Engineer in the letter of transmittal. The Contractor shall be responsible for the correctness of the submittals.

The Contractor shall allow a minimum of 20 working days for review of submittals unless otherwise specified in the Special Provisions. Each submittal shall be accompanied by a letter of transmittal.

2-5.4.1 General. ADD the following:

Source Identification e.g., RFI numbers and Change Order numbers as required to identify the source of the change to the Contract Documents shall be noted.

2-5.4.2 Asset Specific Red-lines. To the City Supplement, item d), ADD the following:

- Dimensional changes to the drawings.
- Revisions to details shown on drawings.
- Depths of foundations below first floor.
- Locations and depths of underground utilities.
- Revisions to routing of piping and conduits.
- Revisions to electrical circuitry.
- Actual equipment locations.
- Duct size and routing.
- Locations of concealed internal utilities.
- Changes made by Change Order.
- Details not on original Plans.

2-6 WORK TO BE DONE. ADD the following:

In accordance with the provisions of California Law, the Contractor shall possess or require the Subcontractor(s) to possess valid appropriate license(s) for the Work being performed.

2-9.1 Permanent Survey Markers. DELETE in its entirety and SUBSTITUTE with the following:

The Contractor shall notify the Engineer or the owner on a Private Contract, at least 7 days before starting the Work to allow for the preservation of survey monuments, and benchmarks. The Engineer or the owner on a Private Contract through its Registered Land Surveyor or a Registered Civil Engineer, will, at its cost, file a Corner Record or a Record of Survey referencing survey monuments subject to disturbance in the Office of the County Surveyor in accordance with Business and Professions Code 8771.

The Contractor shall not disturb or permanently cover survey monuments or benchmarks without the consent of the Engineer or the owner on a Private Contract. The Contractor shall bear the expense of uncovering and replacing any that may be disturbed or covered without permission. When a change is made in the finished elevation of the pavement of any roadway in which a street survey monument is located, the Contractor shall adjust the monument riser ring to the new grade within 7 days of finished paving unless otherwise specified in the Special Provisions. If a referenced monument is unable to be reset in its original location due to improvements, the Contractor shall establish the reset monument in a location approved by the Engineer.

Replacing and establishing survey references e.g., survey monuments and benchmarks shall be done only under the direction of the Engineer by a Registered Land Surveyor or a Registered Civil Engineer authorized to practice land surveying within the State of California.

2-10 AUTHORITY OF BOARD AND ENGINEER. ADD the following:

Regulating agencies of the City, such as Developmental Services, Fire and Planning Departments, enforce Legal Requirements and standards. These enforcement activities are not subject to the responsibilities of the Engineer under this Agreement.

2-11 INSPECTION. ADD the following:

The City may utilize field inspectors to assist the Engineer during construction in observing performance of the Contractor. The inspector is for the purpose of assisting the Engineer and shall not be confused with an inspector with a City regulatory agency or with a Special Inspector.

Code compliance testing (including all Geotechnical requirements) and inspections required by codes or ordinances, or by a plan approval authority, shall be the responsibility of and shall be paid by the Contractor, unless otherwise provided in the Contract Documents.

The Contractor's quality control testing and inspections shall be the sole responsibility of the Contractor and paid by the Contractor included in the Bid price.

ADD: 2-17 CONTRACTOR REGISTRATION. The Contractor, Subcontractors, and Suppliers shall register with the City's EOCP via Prism® i.e., the City's web-based contract compliance portal at: https://pro.prismcompliance.com/contractor/plugins/pages/contractormenu.aspx.

The Contractor shall ensure that proposed Subcontractors and Suppliers have completed the registration prior to Notice of Intent to Award. If the Contractor fails to have its Subcontractors and Suppliers registered after the NTP has been issued, the City will withhold a minimum of 10% in addition to the Retention from all invoices submitted until the Contractor and all listed Subcontractors and Suppliers are properly registered in PRISM.

SECTION 3 – CHANGES IN WORK

3-3.2.2 Basis for Establishing Costs. To the City Supplement, item a) Labor, first and second paragraphs, DELETE in their entirety and SUBSTITUTE with the following:

The City reserves the right to request financial records of salaries for an employee, wages, bonuses and deductions to substantiate the actual cost of labor certified by a California licensed Certified Public Accountant. The Contractor shall use the City provided form i.e., "PUBLIC WORKS PAYROLL REPORTING FORM" which is available at http://www.sandiego.gov/eoc/pdf/payrollreport.pdf to list the labor rates of its personnel and Subcontractors who work on this Project. An initial submittal shall be made prior to NTP.

The payment for payroll records shall be included in the various Bid item unless a separate Bid item has been provided.

SECTION 4 - CONTROL OF MATERIALS

4-1.3.1 General. First paragraph, ADD the following:

Other standard items or materials typically accepted by Certificate of Compliance shall not require inspection at the source unless specified in the Special Provisions. For a list of these items or materials, the Contractor may refer to the Contract Documents.

4-1.3.5 Special Inspections. To the City Supplement, ADD the following:

Special Inspection and testing by the Special Inspectors shall meet the minimum requirements of the prevailing Codes and by the City's Development Services Department (DSD) and reference in http://www.sandiego.gov/development-services/industry/special.shtml

4-1.5 Certificates of Compliance. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

4-1.5 Certificates of Compliance. DELETE in its entirety and SUBSTITUTE with the following:

Certificates of Compliance shall be furnished to the Engineer prior to the use of any material or assembled material for which these Specifications so require or if so required by the Engineer.

The Engineer may waive the materials testing requirements of the Specifications and accept a Certificate of Compliance. Manufacturing test data may be required by the Engineer to be included with the submittal.

Materials used on the basis of a Certificate of Compliance may be sampled and tested at any time. The submission of a Certificate of Compliance shall not relieve the Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Contract Documents, and any material not conforming to the requirements will be subject to rejection whether in place or not.

When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the City shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.

4-1.6 Trade Names or Equals. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Whenever materials or equipment are indicated in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, and quality required. Unless stated otherwise, materials or equipment of other Suppliers may be accepted if sufficient information is submitted to the Engineer for review to determine whether the material or equipment proposed is equivalent or equal to that named.

a) The Contractor shall submit its list of proposed substitutions for "an equal" ("or equal") item(s) **no later than 5 Working Days after the determination of the Apparent Low Bidder** and on a City form when provided by the City.

b) The request for substitution shall include the following information:

   i. Whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents to adopt the design to the proposed substitute.

   ii. Whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.

   iii. All variations of the proposed substitute from the items originally specified will be identified.

   iv. Available maintenance, repair, and replacement service requirements. The manufacturer shall have a local service agency within 50 miles of the site which maintains properly trained personnel and adequate spare parts and is able to respond and complete repairs within 24 hours.

   v. Certification that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, and be similar and of equal substance to that indicated, and be suited to the same use as that specified.

c) There is no guaranteed time frame for the City's review of the substitution requests.

d) The burden of proof as to the type, function, and quality of any such substitute product, material or equipment shall be upon the Contractor. The Engineer may require at the Contractor's expense additional data about the proposed substitute.

e) If the Engineer takes no exceptions to the proposed substitution, it shall not relieve the Contractor from responsibility for the efficiency, sufficiency, quality, and performance of the substitute material or equipment, in the same manner and degree as the material and equipment specified by name.

f) The lack of action(s) on the Engineer's side within the Contractor's requested time shall not constitute acceptance of the substitution.

g) Acceptance by the Engineer of a substitute item shall not relieve the Contractor of the responsibility for full compliance with the Contract Documents.

h) For the substitution review process or to have materials listed on the AML, refer to the AML standard review process.

i) The Bid submittal shall be based on the material and equipment specified by name in the Contract. If the proposal is rejected by the Engineer, the Contractor shall not be entitled to either an extension in Contract Time, increase in the Contract Price, or both.

j) As applicable, no Shop Drawing or Working Drawing submittals shall be made for a substitute item nor shall any substitute item be ordered, installed, or utilized without the Engineer's prior written.

k) The Contractor shall reimburse the City for the charges of the Engineer for evaluating each proposed substitute.

l) For Design-Build contracts, one copy of all designer reviewed submittals shall be provided to the Engineer.

SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF WORK

6-1.2 Commencement of Work. To the GREENBOOK and the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Unless specified otherwise, construction shall start within 5 Working Days after NTP and be diligently prosecuted to completion within the Contract Time. The Contractor shall not start any construction activity at the Site until the Pre-construction Meeting is held and the NTP has been issued by the Engineer.

Upon the Contractor's written request, the City may delay the NTP as follows:

a) Up to 5 Working Days from the Pre-construction Meeting, or

b) Up to 40 Working Days from the Limited NTP for the preparation, submittal, obtaining approval for and filing of the PRDs in accordance with 801, "STORM WATER POLLUTION CONTROL," or

c) Up to 60 Working Days from the Limited NTP for the preparation, submittal, and approval of the TCP on "D-sheets" when specified in 7-10.2, "Traffic Control."

The Contractor shall notify SDG&E at least 10 Working Days prior to excavating within 10' of SDG&E Underground High Voltage Transmission Power Lines (i.e., 69 KV and higher).

For areas that do not require engineered TCP on D-sheets, the Contractor may at any time after the Pre-construction Meeting obtain a TCP Permit via Working Drawings or the City's over the counter process and start the Work. If the Contractor decides to commence the construction work before the completion of the D-sheet TCPs, the Contractor shall forfeit the 60 Working Days specified here. The D-sheet TCP shall be done concurrently and no additional time will be granted.

For paving Work, the Contractor shall coordinate the Work to facilitate the installation and protection of the new curb ramps and associated concrete work prior to commencing the asphalt overlay operations. The Work at a specific location shall not commence until all layouts and measurements are agreed upon by both the Contractor and the Engineer.

ADD: 6-1.8 Pre-construction Meeting. Within 20 Working Days from the Limited NTP the Engineer will schedule a mandatory pre-construction meeting (Pre-construction Meeting) with the Contractor. The agenda will include items such as NTP, design services and submittal and review

process for Design-Build contracts, critical elements of the work schedule, submittal schedule, cost breakdown of major lump sum items, payment requests and processing, environmental and community concerns, coordination with the involved utility firms, the level of record project documents required and emergency telephone numbers for all representatives involved in the course of construction.

ADD: 6-8.1 Completion. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

6-8.1 Completion. The Contractor shall submit a written assertion that the Work has been completed. If, in the Engineer's judgment, the Work has been completed in accordance with the Contract Documents, the Engineer will set forth in writing the date the Work was completed. This will be the date when the Contractor is relieved from responsibility to protect and maintain the Work.

6-8.2 Acceptance. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

6-8.2 Acceptance. Acceptance will occur after all of the requirements contained in the Contract Documents have been fulfilled. If, in the Engineer's judgment, the Contractor has fully performed the Contract, the Engineer will accept the Contractor's performance of the Contract.

6-8.3 Warranty. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

6-8.3 Warranty. Unless specified otherwise, the Work shall be warranted by the Contractor against defective workmanship and materials for a period of 1 year.

a) The warranty period shall start on the date of completion of the Work as determined by the Engineer.

b) The Contractor shall provide an unconditional warranty on all installed fiber optic cable for a minimum period of 2 years.

c) The warranty period for the following items of the Work shall be 3 years:

    1. Work under Section 500 (requires Long Term Warranty Contract (LTWC))

    2. DWT Construction (requires manufacturer's warranty)

    3. LED signal modules (requires manufacturer's warranty)

d) Private sewer pumps including the alarm panel and all other accessories. The Contractor shall provide the City and property owner a copy of the warranty. (requires manufacturer's warranty)

e) The Contractor shall involve the manufacturer in the installation and startup as needed to secure any extended warranty required.

f) The warranty period for specific items covered under manufacturers' or suppliers' warranties shall commence on the date they are placed into service at the direction of or as approved by the Engineer in writing.

g) All warranties, express or implied, from Subcontractors or Suppliers, of any tier, for the work performed and materials furnished shall be assigned, in writing, to the City, and such warranties shall be delivered to the Engineer prior to acceptance of the Contractor's performance of the Contract.

h) The Contractor shall replace or repair defective Work in a manner satisfactory to the Engineer, after notice to do so from the Engineer, and within the time specified in the notice. If the Contractor fails to make such replacement or repairs within the time specified in the notice, the City may perform the replacement or repairs at the Contractor's expense. If the Contractor fails to reimburse the City for the actual costs, the Contractor's Surety shall be liable for the cost thereof.

i) Nothing in this warranty is intended to limit any manufacturer's warranty which provides the City with greater warranty rights than set forth in this section or the Contract Documents.

j) These specifications are not intended to constitute a period of limitations or waiver of any other rights or remedies City may have regarding the Contractor's other obligations under the Contract Documents or federal or state law.

k) The Contractor shall respond and initiate corrective action within 24 hours of notice of nonconforming Work that poses an imminent threat to person or property.

6-9 LIQUIDATED DAMAGES. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

MODIFY to increase the daily value from $250 to $1,000 for contracts with a value of over $100,000.

SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

7-3.1 Policies and Procedures. To the City Supplement, first paragraph, DELETE in its entirety and SUBSTITUTE with the following:

The insurance provisions herein must not be construed to limit your indemnity obligations contained in this contract.

ADD: 7-3.1 Policies and Procedures.

a) You must procure the insurance described below, at your sole cost and expense, to provide coverage against claims for loss including injuries to persons or damage to property, which may arise out of or in connection with the performance of the Work by you, your agents, representatives, officers, employees or subcontractors.

b) Insurance coverage for property damage resulting from your operations is on a replacement cost valuation. The market value will not be accepted.

c) You must maintain this insurance for the duration of this contract and at all times thereafter when you are correcting, removing, or replacing Work in accordance with this contract. Your liabilities under this contract, e.g., your indemnity obligations, will is not deemed limited to the insurance coverage required by this contract.

d) Payment for insurance is included in the various items of Work as bid by you, and except as specifically agreed to by the City in writing, you are not entitled to any additional payment. Do not begin any work under this contract until you have provided and the City has approved all required insurance.

e) Policies of insurance must provide that the City is entitled to 30 days (10 days for cancellation due to non-payment of premium) prior written notice of cancellation or non-renewal of the policy. Maintenance of specified insurance coverage is a material element of this contract. Your failure to maintain or renew coverage or to provide evidence of renewal during the term of this contract may be treated by the City as a material breach of contract.

ADD: 7-3.2 Types of Insurance.

7-3.2.1 Commercial General Liability Insurance.

a) Commercial General Liability Insurance must be written on the current version of the ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad.

b) The policy must cover liability arising from premises and operations, XCU (explosions, underground, and collapse), independent contractors, products/completed operations, personal injury and advertising injury, bodily injury, property damage, and liability assumed under an insured's contract (including the tort liability of another assumed in a business contract).

c) There must be no endorsement or modification limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. You must maintain the same or equivalent insurance for at least 10 years following completion of the Work.

d) All costs of defense must be outside the policy limits. Policy coverage must be in liability limits of not less than the following:

General Annual Aggregate Limit	Limits of Liability
Other than Products/Completed Operations	$2,000,000
Products/Completed Operations Aggregate Limit	$2,000,000
Personal Injury Limit	$1,000,000
Each Occurrence	$1,000,000

7-3.2.2 Commercial Automobile Liability Insurance.

a) You must provide a policy or policies of Commercial Automobile Liability Insurance written on the current version of the ISO form CA 00 01 12 90 or later version or equivalent form providing coverage at least as broad in the amount of $1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned, and hired automobiles ("Any Auto").

b) All costs of defense must be outside the limits of the policy.

7-3.2.3 Commercial Pollution Liability Insurance.

a) You must procure and maintain at your expense or require Subcontractor, as described below to procure and maintain, the Contractors Pollution Liability Insurance including contractual liability coverage to cover liability arising out of cleanup, removal, storage, or handling of hazardous or toxic chemicals, materials, substances, or any other pollutants by you or any Subcontractor in an amount not less than $2,000,000 limit for bodily injury and property damage.

b) All costs of defense must be outside the limits of the policy. Any such insurance provided by Subcontractor instead of you must be approved separately in writing by the City.

c) For approval of a substitution of Subcontractor's insurance, you must certify that all activities for which the Contractors Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance. The deductible must not exceed $25,000 per claim.

d) Contractual liability must include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There must be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability.

e) Occurrence based policies must be procured before the Work commences and must be maintained for the Contract Time. Claims Made policies must be procured before the Work commences, must be maintained for the Contract Time, and must include a 12 month extended Claims Discovery Period applicable to this contract or the existing policy or policies must continue to be maintained for 12 months after the completion of the Work without advancing the retroactive date.

f) Except as provided for under California law, the policy or policies must provide that the City is entitled to 30 days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.4 Contractors Hazardous Transporters Pollution Liability Insurance.

a) You must provide at your expense or require Subcontractor to provide, as described below Contractors Hazardous Transporters Pollution Liability Insurance including contractual liability coverage to cover liability arising out of transportation of hazardous or toxic, materials, substances, or any other pollutants by you or any subcontractor in an amount not less than $2,000,000 limit per occurrence/aggregate for bodily injury and property damage.

b) All costs of defense must be outside the limits of the policy. The deductible must not exceed $25,000 per claim. Any such insurance provided by a subcontractor instead of you must be approved separately in writing by the City.

c) For approval of the substitution of Subcontractor's insurance you must certify that all activities for which Contractors Hazardous Transporters Pollution Liability Insurance will provide coverage will be performed exclusively by the Subcontractor providing the insurance.

d) Contractual liability must include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There must be no endorsement or modification of the coverage limiting the scope of coverage for either "insured vs. insured" claims or contractual liability. Occurrence based policies must be procured before the Work commences and must be maintained for the duration of this contract. Claims Made policies must be procured before the Work commences, must be maintained for the duration of this contract, and must include a 12 month extended Claims Discovery Period applicable to this contract or the existing policy or policies must continue to be maintained for 12 months after the completion of the Work under this contract without advancing the retroactive date.

e) Except as provided for under California law, the policy or policies must provide that the City is entitled to 30 days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.5 Contractors Builders Risk Property Insurance..

a) You must provide at your expense, and maintain until Final Acceptance of the Work, a Special Form Builders Risk Policy or Policies. This insurance must be in an amount equal to the replacement cost of the completed Work (without deduction for depreciation) including the cost of excavations, grading, and filling. The policy or policies limits must be 100% of this contract value of the Work plus15% to cover administrative costs, design costs, and the costs of inspections and construction management.

b) Insured property must include material or portions of the Work located away from the Site but intended for use at the Site, and must cover material or portions of the Work in transit. The policy or policies must include as insured property scaffolding, falsework, and temporary buildings located at the Site. The policy or policies must cover the cost of removing debris, including demolition.

c) The policy or policies must provide that all proceeds thereunder must be payable to the City as Trustee for the insured, and must name the City, you, Subcontractors, and Suppliers of all tiers as named insured. We as Trustee will collect, adjust, and receive all monies which may become due and payable under the policy or policies, may compromise any and all claims thereunder, and will apply the proceeds of such insurance to the repair, reconstruction, or replacement of the Work.

d) Any deductible applicable to the insurance must be identified in the policy or policies documents and responsibility for paying the part of any loss not covered because of the application of such deductibles must be apportioned among the parties except for the City as follows: if there is more than one claimant for a single occurrence, then each claimant must pay a pro-rata share of the per occurrence deductible based upon the percentage of their paid

claim to the total paid for insured. The City must be entitled to 100% of its loss. You must pay the City any portion of that loss not covered because of a deductible, at the same time the proceeds of the insurance are paid to the City as trustee.

e) Any insured, other than the City, making claim to which a deductible applies must be responsible for 100% of the loss not insured because of the deductible. Except as provided for under California law, the policy or policies must provide that the City is entitled to 30 days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

ADD: 7-3.3 Rating Requirements. Except for the State Compensation Insurance Fund, all insurance required by this contract as described herein must be carried only by responsible insurance companies with a rating of, or equivalent to, at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State, and that have been approved by the City.

7-3.3.1 Non-Admitted Carriers. The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State and is included on the List of Eligible Surplus Lines Insurers (LESLI list).

All policies of insurance carried by non-admitted carriers must be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

ADD: 7-3.4 Evidence of Insurance. Furnish to the City documents e.g., certificates of insurance and endorsements evidencing the insurance required herein, and furnish renewal documentation prior to expiration of this insurance. Each required document must be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf. We reserve the right to require complete, certified copies of all insurance policies required herein.

ADD: 7-3.5 Policy Endorsements.

7-3.5.1 Commercial General Liability Insurance

7-3.5.1.1 Additional Insured.

a) You must provide at your expense policy endorsement written on the current version of the ISO Occurrence form CG 20 10 11 85 or an equivalent form providing coverage at least as broad.

b) To the fullest extent allowed by law e.g., California Insurance Code §11580.04, the policy must be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured.

   1. The additional insured coverage for projects for which the Engineer's Estimate is $1,000,000 or more must include liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) Your products, (c) Your work, e.g., your completed operations performed by you or on your behalf, or (d) premises owned, leased, controlled, or used by you.

   2. The additional insured coverage for projects for which the Engineer's Estimate is less than $1,000,000 must include liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) Your products, or (c) premises owned, leased, controlled, or used by you.

7-3.5.1.2 Primary and Non-Contributory Coverage. The policy must be endorsed to provide that the coverage with respect to operations, including the completed operations, if appropriate, of the Named Insured is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives. Further, it must provide that any insurance maintained by the City and its elected officials, officers, employees, agents and representatives must be in excess of the Contractor's insurance and must not contribute to it.

7-3.5.1.3 Project General Aggregate Limit.

The policy or policies must be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work. Only claims payments which arise from the Work must reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit must be in addition to the aggregate limit provided for the products-completed operations hazard.

7-3.5.2 Commercial Automobile Liability Insurance.

7-3.5.2.1 Additional Insured. Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy must be endorsed to include the City and its respective elected officials, officers, employees, agents, and representatives as additional insured, with respect to liability arising out of automobiles owned, leased, hired or borrowed by you or on your behalf. This endorsement is limited to the obligations permitted by California Insurance Code §11580.04.

7-3.5.3 Contractors Pollution Liability Insurance Endorsements.

7-3.5.3.1 Additional Insured.

a) The policy or policies must be endorsed to include as an Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) your products, (c) your work, e.g., your completed operations performed by you or on your behalf, or (d) premises owned, leased, controlled, or used by you; except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of § 2782 of the California Civil Code apply, this endorsement must not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

b) In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that is not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives must be limited to obligations permitted by California Insurance Code §11580.04.

7-3.5.3.2 Primary and Non-Contributory Coverage. The policy or policies must be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents and representatives must be in excess of your insurance and must not contribute to it.

7-3.5.3.3 Severability of Interest. For Contractors Pollution Liability Insurance, the policy or policies must provide that your insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and must provide cross-liability coverage.

7-3.5.4 Contractors Hazardous Transporters Pollution Liability Insurance Endorsements.

7-3.5.4.1 Additional Insured.

a) The policy or policies must be endorsed to include as an Insured the City and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) your products, (c) your work, e.g., your completed operations performed by you or on your behalf, or (d)

premises owned, leased, controlled, or used by you; except that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of §2782 of the California Civil Code apply, this endorsement must not provide any duty of indemnity coverage for the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of §2782 of the California Civil Code.

b) In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City and its respective elected officials, officers, employees, agents, and representatives that is not covered because of California Insurance Code §11580.04, the insurer's obligation to the City and its respective elected officials, officers, employees, agents, and representatives must be limited to obligations permitted by California Insurance Code §11580.04.

7-3.5.4.2 Primary and Non-Contributory Coverage. The policy or policies must be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City and its elected officials, officers, employees, agents and representatives must be in excess of your insurance and must not contribute to it.

7-3.5.4.3 Severability of Interest. For Contractors Hazardous Transporters Pollution Liability Insurance, the policy or policies must provide that your insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and must provide cross-liability coverage.

7-3.5.5 Builders Risk Endorsements.

7-3.5.5.1 Waiver of Subrogation. The policy or policies must be endorsed to provide that the insurer will waive all rights of subrogation against the City, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from work performed by the Named Insured for the City.

7-3.5.5.2 Builders Risk – Partial Utilization. If we desire to occupy or use a portion or portions of the Work prior to Acceptance in accordance with this contract, we will notify you and you must immediately notify your Builder's Risk insurer and obtain an endorsement that the policy or policies must not be cancelled or lapse on account of any such partial use or occupancy. You must obtain the endorsement prior to our occupation and use.

ADD: 7-3.6 Deductibles and Self-Insured Retentions. You are responsible for the payment of all deductibles and self-insured retentions. Disclose deductibles and self-insured retentions to the City at the time the evidence of insurance is provided.

ADD: 7-3.7 Reservation of Rights. We reserve the right, from time to time, to review your insurance coverage, limits, deductibles and self-insured retentions to determine if they are acceptable to the City. We will reimburse you, without overhead, profit, or any other markup, for the cost of additional premium for any coverage requested by the Engineer but not required by this contract.

ADD: 7-3.8 Notice of Changes to Insurance. You must notify the City 30 days prior to any material change to the policies of insurance provided under this contract.

ADD: 7-3.9 Excess Insurance. Policies providing excess coverage must follow the form of the primary policy or policies e.g., all endorsements.

7-4 WORKERS' COMPENSATION INSURANCE. DELETE in its entirety and SUBSTITUTE with the following:

7-4.1 Workers' Compensation Insurance and Employers Liability Insurance.

a) In accordance with the provisions of §3700 of the California Labor Code, you must provide at its expense Workers' Compensation Insurance and Employers Liability Insurance to protect you against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by your failure to comply with the requirements of this section.

b) Limits for this insurance must be not less than the following:

Workers' Compensation	Statutory Employers Liability
Bodily Injury by Accident	$1,000,000 each accident
Bodily Injury by Disease	$1,000,000 each employee
Bodily Injury by Disease	$1,000,000 policy limit

c) By signing and returning this contract you certify that you are aware of the provisions of §3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code and you will comply with such provisions before commencing the Work as required by § 1861 of the California Labor Code.

7-4.1.1 Waiver of Subrogation. The policy or policies must be endorsed to provide that the insurer will waive all rights of subrogation against the City, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from work performed by the Named Insured for the City.

7-5.3 Payment. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

The payment for applying for and obtaining the required permits shall be included in the various Bid items unless a Bid item has been provided.

7-8.6 Water Pollution Control. ADD the following:

a) The Project is subject to the Storm Water Pollution control requirements listed on the Plans or as specified in these specifications.

b) For contracts subject to Construction General Permit (CGP), the Contractor's QSD shall verify the City's assessment prior to submittal through SMARTS.

c) The Contractor's attention is directed to Section 801, "WATER POLLUTION CONTROL" of these specifications for more information.

Based on a preliminary assessment by the City, this contract is subject to WPCP.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS. ADD the following:

In any emergency affecting the safety of persons or property, the Contractor shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in Contract Price or Contract Time resulting from emergency work shall be determined as provided in SECTION 3, "CHANGES IN WORK."

7-10.1 Traffic and Access. To the City Supplement, DELETE the agency notification listing in its entirety and SUBSTITUTE with the following:

The Contractor shall notify Metropolitan Transit System (MTS), a minimum of 5 Working Days prior to excavation, construction, or traffic control affecting bus stops. The Contractor shall notify the remaining agencies a minimum of two 2 Working Days prior to construction activities affecting the agencies:

Fire Department Dispatch	(Street or alley closure)	(858) 573-1300
Police Department Traffic	(Street or alley closure)	(858) 495-7800
Street Division/Electrical	(Traffic signals)	(619) 527-7500
U.S. Navy	(32nd Street Naval Station)	(619) 556-1319
Underground Service Alert	(Any excavation)	(800) 422-4133
MTS	(Street Closure and Bus Stops)	(619) 238-0100 Ext 6451

7-10.2.6 Traffic Control Signs and Notices for Resurfacing and Slurry Sealing. To the first paragraph of the City Supplement, ADD the following:

For each street segment in addition to resurfacing and slurry sealing, the Contractor shall post "NO PARKING" for any required preparatory work such as, but not limited to, damaged asphalt pavement replacement (mill & pave), crack seal, and tree trimming.

7-15 INDEMNIFICATION AND HOLD HARMLESS AGREEMENT. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

ADD: 7-15 INDEMNIFICATION AND HOLD HARMLESS AGREEMENT. The Contractor shall defend, indemnify, protect, and hold harmless the City, its agents, officers, and employees, from and against all claims asserted, or liability established for damages or injuries to any person or property resulting from the Contractor's action or failure to take the necessary measures to prevent such damages and injuries.

The Contractor shall be responsible for payment of any fines resulting from citations issued to the City by either the federal, state, or local environmental and safety enforcement agencies due to the Contractor's failure to abide by applicable safety, health, and environmental standards.

SECTION 8 - FACILITIES FOR AGENCY PERSONNEL

8-2 FIELD OFFICE FACILITIES. To the City Supplement, DELETE in its entirety.

ADD: PART 8 – ENVIRONMENTAL WORKS

SECTION 803 – ENCOUNTERING OR RELEASING HAZARDOUS SUBSTANCES

803-1.1 ASBESTOS CONTAINING MAERIAL.

1. The City of San Diego's Asbestos and Lead Management Program (ALMP) has performed an asbestos and lead inspection for **Adult Center East Access Upgrades (Barrier Removal)** involved with this contract. There are asebstos and lead paint containing materials in this facility. The Contractor shall not include any costs associated with mitigation of the asbestos and lead materials as it will be performed by others after the NTP. See the asbestos and lead test results in the Contract Appendix.
2. The inspection and sampling performed by the ALMP was conducted without using destructive methods. Therefore, it is possible for the Contractor to encounter additional suspected hazardous materials as the walls are opened during demolition. The Contractor and his staff shall continue looking for suspected materials throughout this process.
3. If additional suspected asbestos materials or loose and flaky lead paint are identified, stop work in that area and immediately notify the Engineer.

4. The City will undertake confirmation of the materials and determine if abatement is required. If abatement is required, the City will conduct such abatement at no cost to the Contractor.
5. The Contractor shall remain out of that work area if abatement is required. There will be no additional financial compensation to the Contractor during the removal of this ACM or loose and flaky lead paint.
6. Coatings that have lead content below the 5000 parts per million (ppm) thresholds for lead based paint:
    1. If the Contractor salvages components or building materials that have intact lead containing coatings on them, the Contractor shall ensure the lead is disclosed to all persons accepting their salvaged material. Submit to the City a letter of evidence from the person accepting the lead coated salvaged material.
    2. Where the paint or component contains lead above 600 ppm but below the 5000 ppm the Contractor shall use "lead safe work practices" to protect their employees.
    3. After demolition is complete, all loose paint chips present shall be collected by the Contractor, have a waste characterization performed, and then properly disposed of.
    4. Debris generated from demolition that will be salvaged via crushing shall be segregated into separate piles for lead containing and non-lead containing debris. The Contractor shall perform testing for lead on all crushed concrete and other aggregate materials they may be reusing or selling.

803-3 DEFINITIONS.

Petroleum Contaminated Soil Disposal and Recycling Facility. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

Petroleum Contaminated Soil Disposal and Recycling Facility – A recycling or disposal facility which has as a minimum a valid California regional water quality control board permit including Waste Discharge Requirements (DWRs) and air emission permit to receive specific petroleum contaminated soils for processing, bioremediation, recycling, alternative fuel, or disposal. If a facility is chosen that is located outside of California, the receiving TSDF facility shall be equally permitted and regulated in that state as the TSDF accepting that same waste would be regulated in California.

TSDF. To the City Supplement, DELETE in its entirety and SUBSTITUTE with the following:

TSDF - a Hazardous Waste transfer, treatment, storage, or disposal facility which has received a California Department of Toxic Substances Control permit, a grant of interim status, or a variance or is otherwise authorized by California law and regulations to receive specific RCRA and/or Non-RCRA hazardous wastes for processing, recycling, alternative fuel, or disposal. The TSDF is regulated by other California regulatory agencies for storm water compliance, air emissions, and fire codes, as applicable. . If a facility is chosen that is located outside of California, the receiving TSDF facility shall be equally permitted and regulated in that state as the TSDF accepting that same waste would be regulated in California.

SECTION 807 – RESOURCE DISCOVERIES

ADD: 807-1.1 Environmental Document. The City of San Diego Environmental Analysis Section (EAS) of the Development Services Department has prepared Notice of Exemption for **Adult Center East Access Upgrades (Barrier Removal)** as referenced in the Contract Appendix. The Contractor shall comply with all requirements of the Notice of Exemption as set forth in Contract Appendix.

END OF SUPPLEMENTARY SPECIAL PROVISIONS (SSP)

TECHNICAL SPECIFICATIONS

ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES
(BARRIER REMOVAL)

TECHNICAL SPECIFICATIONS
TABLE OF CONTENTS

SECTION 02 4100

DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Selective demolition of built site elements.

B. Selective demolition of building elements for alterations purposes.

C. Abandonment and removal of existing utilities and utility structures.

1.02 REFERENCE STANDARDS

A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards; current edition.

B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2004.

1.03 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Site Plan: Showing:

1. Vegetation to be protected.

2. Areas for temporary construction and field offices.

3. Areas for temporary and permanent placement of removed materials.

C. Schedule of Building Demolition Activities: Indicate the following:

1. Detailed sequence of demolition work, with starting and ending dates for each activity.

2. Temporary interruption of utility services.

3. Shutoff and capping or re-routing of utility services.

D. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.

1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.

2. Identify demolition firm and submit qualifications.

3. Include a summary of safety procedures.

E. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

F. Pre-demolition Photographs: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by building demolition operations. Submit to Resident Engineer before the Work begins.

G. Post-demolition Photographs: Sufficiently detailed, of existing conditions of trees and plantings, adjoining buildings and construction, and site improvements that might be misconstrued as damage caused by site clearing. Submit to Resident Engineer upon completion of demolition activies.

1.04 QUALITY ASSURANCE

A. Demolition Firm Qualifications: Company specializing in the type of work required.

1. Minimum of 3 years of documented experience.

PART 3 EXECUTION

2.01 SCOPE

A. Remove partition, furniture, cabinetry, fixture and accessory items from existing building, as indicated on the drawings.

B. Remove asphalt paving and curbs as indicated and as necessary to complete work as indicated on drawings.

C. Remove concrete paving, slabs on grade, ramps and stairs as necessary to complete work as indicated on drawings.

D. Remove railings as indicated and as necessary to complete work as indicated on drawings.

E. Remove fences and gates, as indicated and as necessary to accomplish new work.

F. Remove existing parking lot striping and signage.

G. Remove selected sections, glazing and framing members of solarium as required to complete new work as indicated on drawings. Carefully remove portions of canvas covering and preserve for patching or reinstallation.

H. Remove door and door hardware items where indicated.

I. Remove other items indicated, for salvage and relocation.

J. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as required so that required rough grade elevations do not subside within one year after completion.

K. Remove any items as necessary for completion of overall scope of work. Contractor to coordinate demolition requirements on Demolition Plan with rest of sheets in plan set and specifications. Items that will conflict with successful completion of the work described in these construction documents must be removed; notify Resident Engineer prior to removal. Where existing structural components conflict with construction of finished project, and are not specifically shown on Demolition Plan, notify Resident Engineer prior to removal.

2.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

A. Comply with applicable codes and regulations for demolition operations and safety of adjacent structures and the public.

1. Obtain required permits.

2. Comply with applicable requirements of NFPA 241.

3. Use of explosives is not permitted.

4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.

5. Provide, erect, and maintain temporary barriers and security devices.

6. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.

7. Conduct operations to minimize effects on and interference with adjacent structures and occupants.

8. Do not close or obstruct roadways or sidewalks without permit.

9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.

10. Obtain written permission from owners of adjacent properties when demolition equipment will traverse, infringe upon or limit access to their property.

B. Do not begin removal until receipt of notification to proceed from Resident Engineer.

C. Do not begin removal until built elements to be salvaged or relocated have been removed.

D. Do not begin removal until vegetation to be relocated has been removed and specified measures have been taken to protect vegetation to remain.

E. Protect existing structures and other elements that are not to be removed.

1. Provide bracing and shoring.

2. Prevent movement or settlement of adjacent structures.

3. Stop work immediately if adjacent structures appear to be in danger and notify Resident Engineer immediately.

F. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

G. If hazardous materials are discovered during removal operations, stop work and notify Resident Engineer; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.

H. Perform demolition in a manner that maximizes salvage and recycling of materials.

1. Dismantle existing construction and separate materials.

2. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.

I. Partial Removal of Paving and Curbs: Neatly saw cut at right angle to surface.

2.03 EXISTING UTILITIES

A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.

B. Protect existing utilities to remain from damage.

C. Do not disrupt public utilities without permit from authority having jurisdiction.

D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least 7 days prior written notification to Resident Engineer.

E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least 3 days prior written notification to Resident Engineer.

F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.

G. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.

2.04 SELECTIVE DEMOLITION FOR ALTERATIONS

A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.

1. Verify that construction and utility arrangements are as shown.

2. Report discrepancies to Resident Engineer before disturbing existing installation.

3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.

B. Separate areas in which demolition is being conducted from other areas that are still occupied.

1. Provide, erect, and maintain temporary dustproof partitions of construction.

C. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.

D. Remove existing work as indicated and as required to accomplish new work.

1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.

2. Remove items indicated on drawings.

E. Services (Including but not limited to Plumbing and Electrical): Remove existing systems and equipment as indicated.

1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components.

2. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.

3. Verify that abandoned services serve only abandoned facilities before removal.

4. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.

F. Protect existing work to remain.

1. Prevent movement of structure; provide shoring and bracing if necessary.

2. Perform cutting to accomplish removals neatly and as specified for cutting new work.

3. Repair adjacent construction and finishes damaged during removal work.

4. Patch as specified for patching new work.

2.05 DEBRIS AND WASTE REMOVAL

A. Remove debris, junk, and trash from site daily.

B. Leave site in clean condition, ready for subsequent work daily.

C. Clean up spillage and wind-blown debris from public and private lands, as a result of construction activities.

END OF SECTION

SECTION 03 1000

CONCRETE FORMING AND ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Formwork for cast-in place concrete, with shoring, bracing and anchorage.

B. Openings for other work.

C. Form accessories.

D. Form stripping.

1.02 RELATED REQUIREMENTS

A. Section 03 2000 - Concrete Reinforcing.

B. Section 03 3000 - Cast-in-Place Concrete.

C. Section 03 3900 - Concrete Curing.

D. Section 05 1200 - Structural Steel: Placement of embedded steel anchors and plates in cast-in-place concrete.

1.03 REFERENCE STANDARDS

A. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials; 2006.

B. ACI 301 - Specifications for Structural Concrete for Buildings; American Concrete Institute; 2005.

C. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; American Concrete Institute; 2008.

D. ACI 347 - Guide to Formwork for Concrete; American Concrete Institute; 2004.

E. PS 1 - Structural Plywood; 2007.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Provide data on void form materials and installation requirements.

C. Shop Drawings: Indicate pertinent dimensions, materials, bracing, and arrangement of joints and ties.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with Highways standards of the State of California.

B. Designer Qualifications: Design formwork under direct supervision of a Professional Structural Engineer experienced in design of concrete formwork and licensed in California.

C. Maintain one copy of each installation standard on site throughout the duration of concrete work.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver void forms and installation instructions in manufacturer's packaging.

B. Store void forms off ground in ventilated and protected manner to prevent deterioration from moisture.

PART 2 PRODUCTS

2.01 FORMWORK - GENERAL

A. Provide concrete forms, accessories, shoring, and bracing as required to accomplish cast-in-place concrete work.

B. Design and construct to provide resultant concrete that conforms to design with respect to shape, lines, and dimensions.

C. Comply with applicable state and local codes with respect to design, fabrication, erection, and removal of formwork.

D. Comply with relevant portions of ACI 347, ACI 301, and ACI 318.

2.02 WOOD FORM MATERIALS

A. Softwood Plywood: PS 1, B-B High Density Concrete Form Overlay, Class I.

2.03 FORMWORK ACCESSORIES

A. Form Ties: Removable type, galvanized metal, fixed length, cone type, with waterproofing washer, free of defects that could leave holes larger than 1 inch in concrete surface.

B. Form Release Agent: Colorless mineral oil that will not stain concrete or absorb moisture.

C. Filler Strips for Chamfered Corners: Rigid plastic type; 12x1/2 inch size; maximum possible lengths.

D. Dovetail Anchor Slot: Galvanized steel, 22 gage thick, foam filled, release tape sealed slots, anchors for securing to concrete formwork.

E. Flashing Reglets: Galvanized steel, 22 gage thick, longest possible lengths, with alignment splines for joints, foam filled, release tape sealed slots, anchors for securing to concrete formwork.

F. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.

G. Embedded Anchor Shapes, Plates, Angles and Bars: As indicated on Drawings.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels and centers before proceeding with formwork. Ensure that dimensions agree with drawings.

3.02 ERECTION - FORMWORK

A. Erect formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 301.

B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.

C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.

D. Align joints and make watertight. Keep form joints to a minimum.

E. Obtain approval before framing openings in structural members that are not indicated on

drawings.

F. Coordinate this section with other sections of work that require attachment of components to formwork.

G. If formwork is placed after reinforcement, resulting in insufficient concrete cover over reinforcement, request instructions from Resident Engineer before proceeding.

3.03 APPLICATION - FORM RELEASE AGENT

A. Apply form release agent on formwork in accordance with manufacturer's recommendations.

B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.

C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings that are affected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

3.04 INSERTS, EMBEDDED PARTS, AND OPENINGS

A. Provide formed openings where required for items to be embedded in passing through concrete work.

B. Locate and set in place items that will be cast directly into concrete.

C. Coordinate with work of other sections in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other work.

D. Install accessories in accordance with manufacturer's instructions, so they are straight, level, and plumb. Ensure items are not disturbed during concrete placement.

E. Install reglets to receive waterproofing.

F. Chamfer exterior corners and edges of permanently exposed concrete. Chamfer exterior edges and corners of concrete that are to be wrapped with waterproofing.

G. Install waterstops in accordance with manufacturer's instructions, so they are continuous without displacing reinforcement. Heat seal joints so they are watertight.

H. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.

I. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.

3.05 FORM CLEANING

A. Clean forms as erection proceeds, to remove foreign matter within forms.

B. Clean formed cavities of debris prior to placing concrete.

1. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.

3.06 FORMWORK TOLERANCES

A. Construct formwork to maintain tolerances required by ACI 117.

B. Camber slabs and beams in accordance with ACI 301.

3.07 FIELD QUALITY CONTROL

A. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and to verify that supports, fastenings, wedges, ties, and items are secure.

3.08 FORM REMOVAL

A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.

B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.

C. Store removed forms to prevent damage to form materials or to fresh concrete. Discard damaged forms.

D. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form release agent.

END OF SECTION

SECTION 03 2000

CONCRETE REINFORCING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Reinforcing steel for cast-in-place concrete.

B. Supports and accessories for steel reinforcement.

1.02 RELATED REQUIREMENTS

A. Section 03 1000 - Concrete Forming and Accessories.

B. Section 03 3000 - Cast-in-Place Concrete.

C. Section 04 2000 - Unit Masonry: Reinforcement for masonry.

D. Comply with all General Notes and Typical Details as listed on Structural drawings.

1.03 REFERENCE STANDARDS

A. ACI 301 - Specifications for Structural Concrete for Buildings; American Concrete Institute International; 2005.

B. ACI SP-66 - ACI Detailing Manual; American Concrete Institute International; 2004.

C. ASTM A 82/A 82M - Standard Specification for Steel Wire, Plain, for Concrete Reinforcement; 2007.

D. ASTM A 185/A 185M - Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete; 2007.

E. ASTM A 615/A 615M - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement; 2009b.

F. ASTM A 704/A 704M - Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement; 2006.

G. ASTM A 706/A 706M - Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement; 2009b.

H. AWS D1.4/D1.4M - Structural Welding Code - Reinforcing Steel; American Welding Society; 2005.

I. CRSI (DA4) - Manual of Standard Practice; Concrete Reinforcing Steel Institute; 2001.

J. CRSI (P1) - Placing Reinforcing Bars; Concrete Reinforcing Steel Institute; Eighth Edition.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Shop Drawings: Comply with requirements of ACI SP-66. Include bar schedules, shapes of bent bars, spacing of bars, and location of splices.

1. Prepare shop drawings under seal of a Professional Structural Engineer experienced in design of work of this type and licensed in California.

C. Manufacturer's Certificate: Certify that reinforcing steel and accessories supplied for this project meet or exceed specified requirements.

D. Reports: Submit certified copies of mill test report of reinforcement materials analysis.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with ACI 301 and 318.

1. Maintain one copy of each document on project site.

B. Welders' Certificates: Submit certifications for welders employed on the project, verifying AWS qualification within the previous 12 months.

1.06 DELIVERY, STORAGE AND HANDLING

A. Steel Reinforcement: Deliver, store and handle steel reinforcement in manner that prevents bending and damage.

PART 2 PRODUCTS

2.01 REINFORCEMENT

A. Reinforcing Steel: ASTM A 615/A 615M Grade deformed 60 (420).

B. Reinforcing Steel: ASTM A 706/A 706M, deformed low-alloy steel bars.

C. Reinforcing Steel Mat: ASTM A 704/A 704M, using ASTM A 615/A 615M, Grade 60 (420) steel bars or rods, unfinished.

D. Stirrup Steel: ASTM A 82/A 82M steel wire, unfinished.

E. Steel Welded Wire Reinforcement: ASTM A 185/A 185M, plain type.

1. Flat Sheets.

2. Mesh Size and Wire Gage: As indicated on drawings.

F. Reinforcement Accessories:

1. Tie Wire: Annealed, minimum 16 gage.

2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.

3. Provide stainless steel components for placement within 1-1/2 inches of weathering surfaces.

2.02 FABRICATION

A. Fabricate concrete reinforcing in accordance with CRSI (DA4) - Manual of Standard Practice.

B. Welding of reinforcement is permitted only with the specific approval of Resident Engineer. Perform welding in accordance with AWS D1.4.

1. Galvanized Reinforcement: Clean surfaces, weld and re-protect welded joint in accordance with CRSI (DA4).

2. Welding to comply with all specifications listed in General Notes: Reinforcing Steel on Structural drawings.

C. Locate reinforcing splices not indicated on drawings at point of minimum stress.

1. Review locations of splices with Resident Engineer.

PART 3 EXECUTION

3.01 PLACEMENT

A. Place, support and secure reinforcement against displacement. Do not deviate from required position.

B. Do not cut, puncture, displace or damage vapor barrier. Repair any damage and reseal vapor retarder before placing concrete.

C. Clean reinforcement of loose rust and mill scale, earth, ice and other foreign materials that would reduce bond with concrete.

D. Accurately position, support and secure reinforcement against displacement.

E. Set wire ties with ends directed into concrete, rather than toward exposed concrete surfaces.

F. Install welded wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least on mesh spacing. Offset laps of adjoining shee widths to prevent continuous laps in either direction. Lace overlaps with wire.

G. Accommodate placement of formed openings.

H. Conform to applicable code for concrete cover over reinforcement, including the following minimum cover:

1. Footings cast against earth: 3 inches
2. Formed concrete exposed to earth or weather: 2 inches
3. Beams and girders: 1 ½ inches
4. Walls: 1 ½ inches
5. Column Ties: 1 ½ inches
6. Slabs (#11 and smaller): 1 ½ inches

END OF SECTION

SECTION 03 3000

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Floors and slabs on grade.

B. Concrete foundation walls.

C. Underslab vapor retarder.

D. Mixture design.

E. Joint devices associated with concrete work.

F. Miscellaneous concrete elements, including equipment pads, light pole bases, flagpole bases, thrust blocks, and manholes.

1.02 RELATED REQUIREMENTS

A. Section 03 1000 - Concrete Forming and Accessories: Forms and accessories for formwork.

B. Section 03 2000 - Concrete Reinforcing.

C. Section 03 3900 - Concrete Curing.

D. Section 07 9005 - Joint Sealers.

E. Comply with all General Notes and Typical Details as listed on Structural drawings.

1.03 REFERENCE STANDARDS

A. ACI 117 - Standard Specifications for Tolerances for Concrete Construction and Materials; American Concrete Institute International; 2010.

B. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; American Concrete Institute International; 1991 (Reapproved 2002).

C. ACI 301 - Specifications for Structural Concrete for Buildings; American Concrete Institute International; 2005.

D. ACI 302.1R - Guide for Concrete Floor and Slab Construction; American Concrete Institute International; 2004 (Errata 2007).

E. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete; American Concrete Institute International; 2000.

F. ACI 305R - Hot Weather Concreting; American Concrete Institute International; 2010.

G. ACI 306R - Cold Weather Concreting; American Concrete Institute International; 2010.

H. ACI 308R - Guide to Curing Concrete; American Concrete Institute International; 2001 (Reapproved 2008).

I. ACI 318 - Building Code Requirements for Structural Concrete and Commentary; American Concrete Institute International; 2008.

J. ASTM C 33 - Standard Specification for Concrete Aggregates; 2008.

K. ASTM C 39/C 39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2009a.

L. ASTM C 94/C 94M - Standard Specification for Ready-Mixed Concrete; 2009a.

M. ASTM C 143/C 143M - Standard Test Method for Slump of Hydraulic-Cement Concrete; 2009.

N. ASTM C 150 - Standard Specification for Portland Cement; 2007.

O. ASTM C171 - Standard Specification for Sheet Materials for Curing Concrete; 2007.

P. ASTM C618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete; 2008a.

Q. ASTM C 881/C 881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete; 2002.

R. ASTM C 1059 - Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete; 1999 (Reapproved 2008).

S. ASTM C1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures; 2010a.

T. ASTM D 1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types); 2004 (Reapproved 2008).

U. ASTM D2103 - Standard Specification for Polyethylene Film and Sheeting; 2010.

V. ASTM D3963/D3963M - Standard Specification for Fabrication and Jobsite Handling of Epoxy Coated Reinforcing Steel Bars; 2001 (Reapproved 2007).

W. ASTM E154 - Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover; 2008a.

X. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.

Y. ASTM E154 - Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs.

Z. ASTM E 1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs; 2009.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Submit manufacturers' data on manufactured products showing compliance with specified requirements.

C. Design Mixes: For each concrete mixture. Sumbit alternate design mixtures when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.

1. Indicate amounts of mixing water to be withheld for later addition at the Project site.

2. Submittal for each mix design shall include, at minimum, the following:

a. Compressive strength.

b. Water to cement ratio.

c. Slump.

d. Aggregate proportion.

e. Mix proportions of all ingredients.

f. Intended location(s) of use.

D. Construction Joint Layout: Indicate proposed locations of constructions joints required, final joint layout pending approval of Architect.

E. Samples for Pigment Color Selection: Submit manufacturer's complete sample chip set, including pigment number and required dosage rate for each color.

F. Samples: Submit samples of underslab vapor retarder to be used.

G. Samples: Submit two, 4 inch long samples of waterstops and construction joint devices.

H. Manufacturer's Installation Instructions: Indicate installation procedures and interface required with adjacent construction for concrete accessories.

I. Project Record Documents: Accurately record actual locations of embedded utilities and components that will be concealed from view upon completion of concrete work.

J. Material Certificates: For each of the following, signed by manufacturers.

1. Cementitious materials.

2. Admixtures.

3. Vapor retarders.

4. Curing compounds.

K. Material Test Reports: For each of the following, from a qualified testing agency, indicating compliance with requirements:

1. Aggregates.

L. Floor surface flatness and levelness measurements indicating compliance with specified tolerances.

M. Field Quality Control Reports.

N. Minutes of pre-installation conference.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with ACI 301 and ACI 318.

B. Follow recommendations of ACI 306R when concreting during cold weather.

C. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products that complies with ASTM C 94/C 94M requirements for productions facilities and equipment.

D. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

E. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant. Obtain aggregate from a single source. Obtain admixtures, if applicable, from a single source from single manufacturer.

F. Pre-Installation Conference: Before starting concrete construction, conduct conference at Project site.

1. Meet with Resident Engineer, Architect, testing and inspection agency representative, Contractor's superintendent, installer, independent testing agency representative responsible for concrete design mixtures, ready mix concrete manufacturer, concrete subcontractor, special concrete finish subcontractor, and installers whose work interfaces with or affects concrete construction, including installer of structural steel connections and rough plumbing.
2. Review methods and procedures related to concrete construction.
3. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials.
4. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment and facilities needed to make progress and avoid delays.
5. Review surface finish requirements for conditions and finishes.
6. Review special inspection and testing requirements and inspecting agency procedures for field quality control, concrete finishes and finishing, curing procedures, construction contraction and isolation joints, joint filler strips, semi-rigid joint fillers, vapor-retarder installation, floor and slab flatness and levelness measurement, concrete repair procedures and concrete protection.

PART 2 PRODUCTS

2.01 FORMWORK

A. Comply with requirements of Section 03 1000.

2.01 REINFORCEMENT

A. Comply with requirements of Section 03 2000.

2.02 CONCRETE MATERIALS

A. Cement: ASTM C 150, Type I or II, low alkali.
   1. Acquire all cement for entire project from same source.
B. Fine and Coarse Aggregates: ASTM C 33.
   1. Acquire all aggregates for entire project from same source.
   2. Maximum size aggregate in foundation and mass concrete work shall be 1 inch. The maximum size aggregate in slabs on grade, walls and all other concrete shall be ¾ inch.
C. Fly Ash: ASTM C618, Class F.
D. Silica Fume: ASTM C1240, proportioned in accordance with ACI 211.1.
E. Water: Clean and not detrimental to concrete.

2.03 ACCESSORY MATERIALS

A. Underslab Vapor Retarder: Multi-layer, fabric-, cord-, grid-, or aluminum-reinforced polyethylene or equivalent, complying with ASTM E 1745, Class A; stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. Single ply polyethylene is prohibited.
   1. Accessory Products: Vapor retarder manufacturer's recommended tape, adhesive, mastic, prefabricated boots, etc., for sealing seams and penetrations in vapor retarder.

2. Acceptable Products:

a. Stego Industries, LLC; Stego Wrap Vapor Barrier 10-mil (Class A): www.stegoindustries.com.

b. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

B. Non-Shrink Cementitious Grout: ASTM C1107/C1107M; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents.

a. Minimum Compressive Strength at 48 Hours: 2,400 psi.

C. Curing Materials: Comply with requirements of Section 03 3900.

D. Embedded Parts: Non-structural steel embedded in concrete shall be galvanized or painted. All damaged galvanized areas shall be repaired prior to embedment.

E. Corners: Provide ¾ inch chamfer on all exposed concrete corners, UNO.

2.04 BONDING AND JOINTING PRODUCTS

A. Latex Bonding Agent: Non-dispersible acrylic latex, complying with ASTM C 1059 Type II.

B. Epoxy Bonding System: Complying with ASTM C 881/C 881M and of Type required for specific application.

C. Waterstops: Thermoplastic Vulcanized (TPV).

1. Acceptable Products:

a. JP Specialties, Inc / Earth Shield; www.jpspecialties.com; 3" T-shaped Flexible Retrofit Waterstop; Part EY-JP325T; Provide with factory installed brass eyelets. Install per manufacturer's instructions.

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

D. Slab Isolation Joint Filler: 1/2 inch thick, height equal to slab thickness, with removable top section that will form 1/2 inch deep sealant pocket after removal.

1. Material: Closed-cell, non-absorbent, compressible polyethylene or polymer foam in sheet form.

2. Acceptable Products:

a. W.R. Meadows, Inc; Deck-O-Foam Joint Filler with pre-scored top strip: www.wrmeadows.com.

3. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

E. Slab Contraction Joint Device: Preformed linear strip intended for pressing into wet concrete to provide straight route for shrinkage cracking.

1. Acceptable Products:

a. W.R. Meadows, Inc; Speed-E-Joint: www.wrmeadows.com.

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

F. Joint Filler: Nonextruding, resilient asphalt impregnated fiberboard or felt, complying with ASTM D 1751, 1/4 inch thick and 4 inches deep; tongue and groove profile.

G. Slab Construction Joint Devices: Combination keyed joint form and screed, galvanized steel, with minimum 1 inch diameter holes for conduit or rebars to pass through at 6 inches on center; ribbed steel stakes for setting.

1. Provide removable plastic cap strip that forms wedge-shaped joint for sealant installation.
2. Height: To suit slab thickness.

H. Sealant and Primer: As specified in Section 07 9005.

1. Acceptable Sealant Products:
   a. W.R. Meadows, Inc; Deck-O-Seal Gun Grade #785: www.wrmeadows.com.
2. Acceptable Primer Products (including submerged applications):
   a. W.R. Meadows, Inc; P/G Primer #782: www.wrmeadows.com.
3. Acceptable Backe Rod Products:
   a. W.R. Meadows, Inc; Kool-Rod: www.wrmeadows.com.
4. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.05 CONCRETE MIX DESIGN

A. All concrete shall be 150 P.C.F. hardrock, mixed per ASTM C-94, and shall have a minimum compressive strength of 3,000 PSI at 28 days.

B. Admixtures and colors (except as noted herein) shall not be used unless substantiating data is submitted to and accepted by the Resident Engineer.

C. Concrete mixes shall be designed by a qualified testing laboratory. The mix designs shall conform to CBC Section 1905 unless noted otherwise.

D. Water to concrete ratio: Not to exceed 0.5.

E. Ready mixed concrete shall conform to ASTM C-94.

2.06 MIXING

A. Transit Mixers: Comply with ASTM C 94/C 94M.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

A. Verify that forms are clean and free of rust before applying release agent.

B. Coordinate placement of embedded items with erection of concrete formwork and placement of form accessories.

C. Where new concrete is to be bonded to previously placed concrete, prepare existing surface by cleaning with steel brush and applying bonding agent in accordance with manufacturer's instructions.

1. Use epoxy bonding system for bonding to damp surfaces, for structural load-bearing applications, and where curing under humid conditions is required.
2. Use latex bonding agent only for non-load-bearing applications.

D. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.

E. Interior Slabs on Grade: Install vapor retarder under interior slabs on grade. Lap joints minimum 6 inches. Seal joints, seams and penetrations watertight with manufacturer's recommended products and follow manufacturer's written instructions. Repair damaged vapor retarder before covering.

F. Sleeves: Sleeve plumbing openings in slabs with non-corrosive sleeve before placing concrete and bend reinforcing around sleeves.

G. No brick or porous material shall be used to support foundation steel off the ground.

3.03 PLACING CONCRETE

A. Place concrete in accordance with ACI 304R.

B. Place concrete for floor slabs in accordance with ACI 302.1R.

C. Notify Resident Engineer not less than 24 hours prior to commencement of placement operations.

D. Ensure reinforcement, inserts, waterstops, embedded parts, and formed construction joint devices will not be disturbed during concrete placement.

E. Repair underslab vapor retarder damaged during placement of concrete reinforcing. Repair with vapor retarder material; lap over damaged areas minimum 6 inches and seal watertight.

F. Separate slabs on grade from vertical surfaces with joint filler.

G. Place joint filler in floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

H. Extend joint filler from bottom of slab to within 1/2 inch of finished slab surface. Conform to Section 07 9005 for finish joint sealer requirements.

I. Install joint devices in accordance with manufacturer's instructions.

J. Install construction joint devices in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

K. Apply sealants in joint devices in accordance with Section 07 9005.

L. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

M. Place concrete continuously between predetermined expansion, control, and construction joints.

N. Do not interrupt successive placement; do not permit cold joints to occur.

O. Saw cut joints within 24 hours after placing. Use 3/16 inch thick blade, cut into 1/4 depth of slab thickness.

P. Screed slabs on grade level, maintaining surface flatness of maximum 1/4 inch in 10 ft.

3.04 SLAB JOINTING

A. Locate joints per shop drawings at locations approved by Architect.

B. Anchor joint fillers and devices to prevent movement during concrete placement.

C. Isolation Joints: Use preformed joint filler with removable top section for joint sealant, total height equal to thickness of slab, set flush with top of slab.

1. Install wherever necessary to separate slab from other building members, including columns, walls, equipment foundations, footings, stairs, manholes, sumps, and drains.

D. Load Transfer Construction and Contraction Joints: Install load transfer devices as indicated; saw cut joint at surface as indicated for contraction joints.

E. Saw Cut Contraction Joints: Saw cut joints before concrete begins to cool, within 4 to 12 hours after placing; use 3/16 inch thick blade and cut at least 1 inch deep but not less than one quarter (1/4) the depth of the slab.

F. Construction Joints: Where not otherwise indicated, use metal combination screed and key form, with removable top section for joint sealant.

G. Repair underslab vapor retarder damaged during placement of concrete reinforcing. Repair with vapor retarder material; lap over damaged areas minimum 6 inches and seal watertight.

H. Separate slabs on grade from vertical surfaces with joint filler.

I. Place joint filler in floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

J. Extend joint filler from bottom of slab to within 1/2 inch of finished slab surface. Conform to Section 07 9005 for finish joint sealer requirements.

K. Install joint devices in accordance with manufacturer's instructions.

L. Install construction joint devices in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.

M. Apply sealants in joint devices in accordance with Section 07 9005.

N. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

O. Place concrete continuously between predetermined expansion, control, and construction joints.

P. Do not interrupt successive placement; do not permit cold joints to occur.

Q. Saw cut joints within 24 hours after placing. Use 3/16 inch thick blade, cut into 1/4 depth of slab thickness.

R. Screed floors and slabs on grade level, maintaining surface flatness of maximum 1/4 inch in 10 ft.

3.05 FLOOR FLATNESS AND LEVELNESS TOLERANCES

A. Maximum Variation of Surface Flatness:

1. Exposed Concrete Floors: 1/4 inch in 10 ft.
2. Under Seamless Resilient Flooring: 1/4 inch in 10 ft.
3. Under Carpeting: 1/4 inch in 10 ft.

B. Correct the slab surface if tolerances are less than specified.

C. Correct defects by grinding or by removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

3.06 CONCRETE FINISHING

A. Repair surface defects, including tie holes, immediately after removing formwork.

B. Unexposed Form Finish: Rub down or chip off fins or other raised areas 1/4 inch or more in height.

C. Exposed Form Finish: Rub down or chip off and smooth fins or other raised areas 1/4 inch or more in height. Provide finish as follows:

1. Smooth Rubbed Finish: Wet concrete and rub with carborundum brick or other abrasive, not more than 24 hours after form removal.

D. Concrete Slabs: Finish to requirements of ACI 302.1R, and as follows:

1. Surfaces to Receive Thick Floor Coverings: "Wood float" as described in ACI 302.1R; thick floor coverings include quarry tile, ceramic tile, porcelain tile and terrazzo with full bed setting system.

2. Surfaces to Receive Thin Floor Coverings: "Steel trowel" as described in ACI 301.1R; thin floor coverings include resilient flooring and thin set ceramic tile.

3. Decorative Exposed Surfaces: "Steel trowel" as described in ACI 302.1R; use steel-reinforced plastic trowel blades instead of steel blades to avoid black-burnish marks; decorative exposed surfaces include surfaces to be stained or dyed, pigmented concrete, surfaces to be polished, and all other slab surfaces.

a. Steel-Reinforced Plastic Trowel Blade Manufacturer: Wagman Metal Products Inc: www.wagmanmetal.com.

4. Other Surfaces to Be Left Exposed: "Steel trowel" as described in ACI 302.1R, minimizing burnish marks and other appearance defects.

a. Chemical Hardener: After slab has cured, apply water-diluted hardener in three coats per manufacturer's instructions, allowing 24 hours between coats.

E. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains at 1:100 nominal.

3.07 CURING AND PROTECTION

A. Comply with requirements of Section 03 3900.

3.08 FIELD QUALITY CONTROL

A. Provide free access to concrete operations at project site and cooperate with appointed firm.

B. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of concrete operations.

C. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.

D. Compressive Strength Tests: ASTM C 39/C 39M. For each test, mold and cure three concrete test cylinders. Obtain test samples for every 100 cu yd or less of each class of concrete placed.

E. Take one additional test cylinder during cold weather concreting, cured on job site under same conditions as concrete it represents.

F. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C 143/C 143M.

G. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.

HI. Test results shall be reported in writing to Architect, Construction Manager, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7 and 28-day tests.

I. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.

J. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

K. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

3.09 DEFECTIVE CONCRETE

A. Test Results: The testing agency shall report test results in writing to Resident Engineer and Contractor within 24 hours of test.

B. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.

C. Repair or replacement of defective concrete will be determined by the Resident Engineer. The cost of additional testing shall be borne by Contractor when defective concrete is identified.

D. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Resident Engineer for each individual area.

3.10 PROTECTION

A. Do not permit traffic over unprotected concrete floor surface until fully cured.

END OF SECTION

SECTION 03 3900

CONCRETE CURING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Initial and final curing of horizontal concrete surfaces.

1.02 RELATED REQUIREMENTS

A. Section 03 3000 - Cast-in-Place Concrete.

1.03 REFERENCE STANDARDS

A. ACI 308R - Guide to Curing Concrete; American Concrete Institute International; 2001 (Reapproved 2008).

B. ASTM C 171 - Standard Specification for Sheet Materials for Curing Concrete; 2007.

C. ASTM D 2103 - Standard Specification for Polyethylene Film and Sheeting; 2008.

PART 2 PRODUCTS

2.01 MATERIALS

A. Evaporation Reducer: Liquid thin-film-forming compound that reduces rapid moisture loss caused by high temperature, low humidity, and high winds; intended for application immediately after concrete placement.

1. Acceptable Products:

a. W.R. Meadows, Inc; Evapre or Evapre-RTU: www.wrmeadows.com.

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. Curing Compound, Naturally Dissipating: Clear, water-based, liquid membrane-forming compound, that dissipates within 3 to 5 weeks; complying with ASTM C309.

1. Provide product containing fugitive red dye.

2. Acceptable Products:

a. W.R. Meadows, Inc.; 1100-Clear: www.wrmeadows.com.

3. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

C. Curing and Sealing Compound, Low Gloss: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C1315 Type 1 Class A.

1. Application: Use at new interior slabs and exterior concrete paving.

2. Vehicle: Water-based.

3. Solids by Mass: 30%, minimum.

4. VOC Content: OTC compliant.

5. Acceptable Products:

a. W.R. Meadows, Inc.; VOCOMP-30: www.wrmeadows.com. (interior applications)

b. W.R. Meadows, Inc.; CS-309-30 OTC: www.wrmeadows.com. (exterior applications)

6. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

D. Moisture-Retaining Sheet: ASTM C 171.

1. Curing paper, regular.
2. Polyethylene film, clear, minimum nominal thickness of 0.0040 in..
3. White-burlap-polyethylene sheet, weighing not less than 10 oz/per linear yd, 40 inches wide.

E. Polyethylene Film: ASTM D 2103, 4 mil thick, clear.

F. Water: Potable, not detrimental to concrete.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces are ready to be cured.

3.02 EXECUTION - HORIZONTAL SURFACES

A. Cure floor surfaces in accordance with ACI 308R.

B. Moisture-Retaining Sheet: Lap strips not less than 3 inches and seal with waterproof tape or adhesive; secure at edges; maintain in place for not less than 4 days.

C. Absorptive Moisture-Retaining Sheet: Saturate burlap-polyethylene and place burlap-side down over floor slab areas, lapping ends and sides; maintain in place for 7 days.

3.03 PROTECTION

A. Do not permit traffic over unprotected floor surface.

END OF SECTION

SECTION 05 5000

METAL FABRICATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Shop fabricated steel and aluminum items.

1.02 RELATED REQUIREMENTS

A. Section 09 9000 - Painting and Coating: Paint finish.

1.03 REFERENCE STANDARDS

A. AAMA 611 - Voluntary Specification for Anodized Architectural Aluminum; American Architectural Manufacturers Association; 1998.

B. ASTM A 36/A 36M - Standard Specification for Carbon Structural Steel; 2008.

C. ASTM A 53/A 53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; 2007.

D. ASTM A 123/A 123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2009.

E. ASTM A 153/A 153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.

F. ASTM A 283/A 283M - Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates; 2003 (Reapproved 2007).

G. ASTM A 325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength; 2009a.

H. ASTM A 325M - Standard Specification for Structural Bolts, Steel, Heat Treated 830 MPa Tensile Strength (Metric); 2009.

I. ASTM A 500/A 500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2010.

J. ASTM B 26/B 26M - Standard Specification for Aluminum-Alloy Sand Castings; 2009.

K. ASTM B 85 - Standard Specification for Aluminum-Alloy Die Castings; 2009.

L. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2007.

M. ASTM B 209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2007.

N. ASTM B 210 - Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes; 2004.

O. ASTM B 210M - Standard Specification for Aluminum and Aluminum-Alloy Drawn Seamless Tubes (Metric); 2005.

P. ASTM B 211 - Standard Specification for Aluminum and Aluminum-Alloy Bar, Rod, and Wire; 2003.

Q. ASTM B 211M - Standard Specification for Aluminum and Aluminum-Alloy Bar, Rod, and Wire (Metric); 2003.

R. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2008.

S. ASTM B 221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2007.

T. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination; American Welding Society; 2007.

U. AWS D1.1/D1.1M - Structural Welding Code - Steel; American Welding Society; 2010.

V. AWS D1.2/D1.2M - Structural Welding Code - Aluminum; American Welding Society; 2003, and Errata 2004.

W. SSPC-Paint 15 - Steel Joist Shop Primer; Society for Protective Coatings; 1999 (Ed. 2004).

X. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); Society for Protective Coatings; 2002 (Ed. 2004).

Y. SSPC-SP 2 - Hand Tool Cleaning; Society for Protective Coatings; 1982 (Ed. 2004).

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.

1. Indicate welded connections using standard AWS A2.4 welding symbols. Indicate net weld lengths.

C. Welders' Certificates: Welding to be performed by certified welder; certification to be current at time Work is performed and completed. Submit certification for welders employed on the project, verifying AWS qualification within the previous 12 months.

PART 2 PRODUCTS

2.01 MATERIALS - STEEL

A. Steel Sections: ASTM A 36/A 36M.

B. Steel Tubing: ASTM A 500, Grade B cold-formed structural tubing.

C. Plates: ASTM A 283.

D. Pipe: ASTM A 53/A 53M, Grade B Schedule 40, black finish.

E. Slotted Channel Framing: ASTM A 653, Grade 33.

F. Slotted Channel Fittings: ASTM A 1011/A 1011M.

G. Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, galvanized to ASTM A 153/A 153M where connecting galvanized components.

H. Welding Materials: AWS D1.1/D1.1M; type required for materials being welded.

I. Shop and Touch-Up Primer: SSPC-Paint 15, complying with VOC limitations of authorities having jurisdiction.

J. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.

K. Stainless Steel Sheet, Strip, Plate and Flat Bars: ASTM A 666, Type 304

2.02 MATERIALS - ALUMINUM

A. Extruded Aluminum: ASTM B 221 (ASTM B 221M), 6063 alloy, T6 temper.

B. Sheet Aluminum: ASTM B 209 (ASTM B 209M), 5052 alloy, H32 or H22 temper.

C. Aluminum-Alloy Drawn Seamless Tubes: ASTM B 210 (ASTM B 210M), 6063 alloy, T6 temper.

D. Aluminum-Alloy Bars: ASTM B 211 (ASTM B 211M), 6061 alloy, T6 temper.

E. Aluminum-Alloy Sand Castings: ASTM B 26.

F. Aluminum-Alloy Die Castings: ASTM B 85.

G. Bolts, Nuts, and Washers: Stainless steel.

H. Welding Materials: AWS D1.2/D1.2M; type required for materials being welded.

2.03 FABRICATION

A. Fit and shop assemble items in largest practical sections, for delivery to site.

B. Fabricate items with joints tightly fitted and secured.

C. Continuously seal joined members by continuous welds.

D. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

E. Exposed Mechanical Fastenings: Flush countersunk screws or bolts; unobtrusively located; consistent with design of component, except where specifically noted otherwise.

F. Supply components required for anchorage of fabrications. Fabricate anchors and related components of same material and finish as fabrication, except where specifically noted otherwise.

2.04 FABRICATED ITEMS

A. Ledge Angles, Shelf Angles, Channels, and Plates Not Attached to Structural Framing: For support of countertops and miscellaneous blocking at grab bars and restroom accessories; galvanized finish.

B. Countertop Support Angles: prime paint finish.

C. Blocking plates as necessary for restroom grab bars, in locations and per details, as indicated on Drawings.

D. Toilet Partition Door Pull: Stainless steel Type 304, fabricated to dimensions indicated on drawings. Install where indicated in Section 10 2113.19 – Plastic Toilet Compartments.

2.05 FINISHES - STEEL

A. Prime paint all steel items.

1. Exceptions: Galvanize items to be embedded in concrete or masonry.

2. Exceptions: Do not prime surfaces in direct contact with concrete, where field welding is required, and items to be covered with sprayed fireproofing.

3. Exceptions: Do not prime surfaces of stainless steel items.

B. Prepare surfaces to be primed in accordance with SSPC-SP2.

C. Clean surfaces of rust, scale, grease, and foreign matter prior to finishing.

D. Prime Painting: One coat.

E. Galvanizing of Non-structural Items: Galvanize after fabrication to ASTM A 123/A 123M requirements.

F. See Section 09 9000 - Painting and Coating for paint finish of fabricated steel items.

2.06 FINISHES - ALUMINUM

A. Exterior Aluminum Surfaces: Class I color anodized.

B. Interior Aluminum Surfaces: Class I color anodized.

C. Class I Natural Anodized Finish: AAMA 611 AA-M12C22A41 Clear anodic coating not less than 0.7 mils thick.

D. Apply one coat of bituminous paint to concealed aluminum surfaces in contact with cementitious or dissimilar materials.

2.07 FABRICATION TOLERANCES

A. Squareness: 1/8 inch maximum difference in diagonal measurements.

B. Maximum Offset Between Faces: 1/16 inch.

C. Maximum Misalignment of Adjacent Members: 1/16 inch.

D. Maximum Bow: 1/8 inch in 48 inches.

E. Maximum Deviation From Plane: 1/16 inch in 48 inches.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

3.02 PREPARATION

A. Clean and strip primed steel items to bare metal where site welding is required.

B. Supply setting templates to the appropriate entities for steel items required to be cast into concrete or embedded in masonry.

3.03 INSTALLATION

A. Install items plumb and level, accurately fitted, free from distortion or defects.

B. Provide for erection loads, and for sufficient temporary bracing to maintain true alignment until completion of erection and installation of permanent attachments.

C. Field weld components indicated on shop drawings.

D. Perform field welding in accordance with AWS D1.1/D1.1M.

E. Obtain approval prior to site cutting or making adjustments not scheduled.

F. After erection, prime welds, abrasions, and surfaces not shop primed or galvanized, except surfaces to be in contact with concrete.

3.04 TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch per story, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch.

C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION

SECTION 05 5213

PIPE AND TUBE RAILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Free-standing railings at stairs and ramps.

B. Wall-anchored railings at stairs and ramps.

1.02 REFERENCE STANDARDS

A. ASTM E 935 - Standard Test Methods for Performance of Permanent Metal Railing Systems and Rails for Buildings; 2000 (Reapproved 2006).

B. ASTM E 985 - Standard Specification for Permanent Metal Railing Systems and Rails for Buildings; 2000 (Reapproved 2006).

1.03 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Shop Drawings: Indicate profiles, sizes, connection attachments, anchorage, size and type of fasteners, and accessories.

PART 2 PRODUCTS

2.01 RAILINGS - GENERAL REQUIREMENTS

A. Design, fabricate, and test railing assemblies in accordance with the most stringent requirements of ASTM E 985 and applicable local code.

B. Design railing assembly, wall rails, and attachments to resist lateral force of 75 lbs at any point without damage or permanent set. Test in accordance with ASTM E 935.

C. Allow for expansion and contraction of members and building movement without damage to connections or members.

D. Dimensions: See drawings for configurations and heights.

1. Top Rails and Wall Rails: 1-1/2 inches diameter, round.

2. Intermediate Rails: 1-1/2 inches diameter, round.

3. Posts: 1-1/2 inches diameter, round.

E. Provide anchors, wall brackets, escutcheon plates and other components as required to attach to structure, made of same materials as railing components unless otherwise indicated; where exposed fasteners are unavoidable provide flush countersunk fasteners.

1. For anchorage to concrete, provide inserts to be cast into concrete, for welding anchors.

2. For anchorage to stud walls, provide backing plates, for bolting anchors.

3. For anchorage to masonry walls, provide stainless steel expansion anchors.

4. Posts: Provide adjustable flanged brackets.

F. Provide welding fittings to join lengths, seal open ends, and conceal exposed mounting bolts and nuts, including but not limited to elbows, T-shapes, splice connectors, flanges, escutcheons, and wall brackets.

2.02 STEEL RAILING SYSTEM

A. Steel Tube: Type 304 Stainless Steel structural tubing.

1. For use at exterior applications: including ramp and stair.

B. Steel Tube: ASTM A 500, grade B, cold-formed structural tubing.

1. For use at interior applications: including ramp and stair.

C. Welding Fittings: Factory- or shop-welded from matching pipe or tube; seams continuously welded; joints and seams ground smooth.

D. Exposed Fasteners: No exposed bolts or screws.

2.03 FABRICATION

A. Accurately form components to suit specific project conditions and for proper connection to building structure.

B. Fit and shop assemble components in largest practical sizes for delivery to site.

C. Fabricate components with joints tightly fitted and secured. Provide spigots and sleeves to accommodate site assembly and installation.

D. Welded Joints:

1. Exterior Components: Continuously seal joined pieces by intermittent welds and plastic filler. Drill condensate drainage holes at bottom of members at locations that will not encourage water intrusion.

2. Interior Components: Continuously seal joined pieces by intermittent welds and plastic filler.

3. Grind exposed joints flush and smooth with adjacent finish surface. Make exposed joints butt tight, flush, and hairline. Ease exposed edges to small uniform radius.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field conditions are acceptable and are ready to receive work.

3.02 PREPARATION

A. Clean and strip primed steel items to bare metal where site welding is required.

B. Supply items required to be cast into concrete with setting templates, for installation as work of other sections.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install components plumb and level, accurately fitted, free from distortion or defects, with tight joints.

C. Anchor railings securely to structure.

D. Field weld anchors as indicated on shop drawings. Touch-up welds with primer. Grind welds smooth.

E. Conceal anchor bolts and screws whenever possible.

3.04 TOLERANCES

A. Maximum Variation From Plumb: 1/4 inch per floor level, non-cumulative.

B. Maximum Offset From True Alignment: 1/4 inch.

C. Maximum Out-of-Position: 1/4 inch.

END OF SECTION

SECTION 06 1000

ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Structural dimension lumber framing.

B. Non-structural dimension lumber framing.

C. Rough opening framing for doors, windows, and roof openings.

D. Sheathing.

E. Preservative treated wood materials.

F. Miscellaneous framing and sheathing.

G. Concealed wood blocking, nailers, and supports.

H. Miscellaneous wood nailers, furring, and grounds.

1.02 RELATED REQUIREMENTS

A. Section 03 3000: Setting anchors in concrete.

B. Section 09 2900 - Gypsum Board: Gypsum-based sheathing.

1.03 REFERENCE STANDARDS

A. AFPA (WFCM) - Wood Frame Construction Manual for One- and Two-Family Dwellings; American Forest and Paper Association; 2001.

B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.

C. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2010

D. AWPA U1 - Use Category System: User Specification for Treated Wood; American Wood Protection Association; 2010.

E. PS 1 - Structural Plywood; 2007.

F. PS 20 - American Softwood Lumber Standard; National Institute of Standards and Technology (Department of Commerce); 2005.

G. WCLIB (GR) - Standard Grading Rules for West Coast Lumber No. 17; West Coast Lumber Inspection Bureau; 2004, and supplements.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data: Provide technical data on wood preservative materials and application instructions.

C. Manufacturer's Certificate: Certify that wood products supplied for rough carpentry meet or exceed specified requirements.

D. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

A. General: Cover wood products to protect against moisture. Support stacked products to prevent deformation and to allow air circulation.

1.06 WARRANTY

A. Correct defective Work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

A. Dimension Lumber: Comply with PS 20 and requirements of specified grading agencies.

1. Species: Douglas Fir-Larch, unless otherwise indicated.

2. Grading Agency: Any grading agency whose rules are approved by the Board of Review, American Lumber Standard Committee (www.alsc.org) and who provides grading service for the species and grade specified; provide lumber stamped with grade mark unless otherwise indicated.

3. Lumber of other species or grades is acceptable provided structural and appearance characteristics are equivalent to or better than products specified.

B. Lumber fabricated from old growth timber is not permitted.

2.02 DIMENSION LUMBER FOR CONCEALED APPLICATIONS

A. Grading Agency: West Coast Lumber Inspection Bureau (WCLIB).

B. Sizes: Nominal sizes as indicated on drawings, S4S.

C. Surfacing: S4S, S-DRY.

D. Moisture Content: Kiln-dry, MC19 or less.

E. Stud Framing (2 by 2 through 2 by 6):

1. Species: Any allowed under referenced grading rules.

2. Grade: No. 2.

F. Joist and Small Beam Framing (2 by 6 through 4 by 16):

1. Machine stress-rated (MSR) as follows:

a. Fb-single (minimum extreme fiber stress in bending): 1350 psi.

b. E (minimum modulus of elasticity): 1,300,000 psi.

2. Species: Douglas Fir-Larch.

G. Miscellaneous Framing, Blocking, Nailers, Grounds, and Furring:

1. Lumber: S4S, No. 2 or Standard Grade.

2. Boards: Standard or No. 3.

2.03 EXPOSED DIMENSION LUMBER

A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.

B. Grading Agency: West Coast Lumber Inspection Bureau (WCLIB).

C. Sizes: Nominal sizes as indicated on drawings, S4S.

D. Surfacing: S4S, S-DRY.

E. Moisture Content: Kiln-dry or MC15.

F. Stud Framing (2 by 2 through 2 by 6):

1. Species: Douglas Fir.

2. Grade: Clear.

G. Joist and Small Beam Framing (2 by 6 through 4 by 16):

1. Species: Douglas Fir.

2. Grade: Select Structural.

2.04 EXPOSED BOARDS

A. Submit manufacturer's certificate that products meet or exceed specified requirements, in lieu of grade stamping.

B. Moisture Content: Kiln-dry (15 percent maximum).

C. Surfacing: S4S, S-DRY.

D. Species: Douglas Fir.

E. Grade: No. 1, 1 Common, or Select.

2.05 CONSTRUCTION PANELS

A. Wall Sheathing: Plywood, PS 1, Grade C-D, Exposure I.

2.06 ACCESSORIES

A. Fasteners and Anchors:

1. Metal and Finish: Hot-dipped galvanized steel per ASTM A 153/A 153M for high humidity and preservative-treated wood locations, unfinished steel elsewhere.

2. Drywall Screws: Bugle head, hardened steel, power driven type, length three times thickness of sheathing.

3. Anchors: Expansion shield and lag bolt type for anchorage to solid masonry or concrete.

B. Die-Stamped Connectors: Hot dipped galvanized steel, sized to suit framing conditions.

1. For contact with preservative treated wood in exposed locations, provide minimum G185 galvanizing per ASTM A653/A653M.

C. Joist Hangers: Hot dipped galvanized steel, sized to suit framing conditions.

1. For contact with preservative treated wood in exposed locations, provide minimum G185 galvanizing per ASTM A653/A653M.

D. Sill Gasket on Top of Foundation Wall: 1/4 inch thick, plate width, closed cell plastic foam from continuous rolls.

E. Sill Flashing: As specified in Section 07 6200.

2.07 FACTORY WOOD TREATMENT

A. Treated Lumber and Plywood: Comply with requirements of AWPA U1 - Use Category System for wood treatments determined by use categories, expected service conditions, and specific applications.

1. Preservative-Treated Wood: Provide lumber and plywood marked or stamped by an ALSC-accredited testing agency, certifying level and type of treatment in accordance with AWPA standards.

B. Preservative Treatment:

1. Manufacturers:

a. Arch Wood Protection, Inc: www.wolmanizedwood.com.

b. Viance, LCC: www.treatedwood.com.

c. Osmose, Inc: www.osmose.com.

2. Preservative Pressure Treatment of Lumber Above Grade: AWPA U1, Use Category UC3B, Commodity Specification A using waterborne preservative to 0.25 lb/cu ft retention.

a. Kiln dry lumber after treatment to maximum moisture content of 19 percent.

b. Treat lumber exposed to weather.

c. Treat lumber in contact with roofing, flashing, or waterproofing.

d. Treat lumber in contact with masonry or concrete.

e. Treat lumber less than 18 inches above grade.

f. Treat lumber in other locations as indicated.

PART 3 EXECUTION

3.01 PREPARATION

A. Where wood framing bears on cementitious foundations, install full width sill flashing continuous over top of foundation, lap ends of flashing minimum of 4 inches and seal.

B. Install sill gasket under sill plate of framed walls bearing on foundations; puncture gasket cleanly to fit tightly around protruding anchor bolts.

C. Coordinate installation of rough carpentry members specified in other sections.

3.02 INSTALLATION - GENERAL

A. Select material sizes to minimize waste.

B. Reuse scrap to the greatest extent possible; clearly separate scrap for use on site as accessory components, including: shims, bracing, and blocking.

C. Where treated wood is used on interior, provide temporary ventilation during and immediately after installation sufficient to remove indoor air contaminants.

3.03 FRAMING INSTALLATION

A. Set structural members level, plumb, and true to line. Discard pieces with defects that would lower required strength or result in unacceptable appearance of exposed members.

B. Make provisions for temporary construction loads, and provide temporary bracing sufficient to maintain structure in true alignment and safe condition until completion of erection and installation of permanent bracing.

C. Install structural members full length without splices.

D. Comply with member sizes, spacing, and configurations indicated, and fastener size and spacing indicated, but not less than required by applicable codes and AFPA Wood Frame Construction Manual.

E. Install horizontal spanning members with crown edge up and not less than 1-1/2 inches of bearing at each end.

F. Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists; use metal joist hangers unless otherwise detailed.

G. Provide bridging at joists in excess of 8 feet span at mid-span. Fit solid blocking at ends of members.

H. Frame wall openings with two or more studs at each jamb; support headers on cripple studs.

3.04 BLOCKING, NAILERS, AND SUPPORTS

A. Provide framing and blocking members as indicated or as required to support finishes, fixtures, specialty items, and trim.

B. In framed assemblies that have concealed spaces, provide solid wood fireblocking as required by applicable local code, to close concealed draft openings between floors and between top story and roof/attic space; other material acceptable to code authorities may be used in lieu of solid wood blocking.

C. In metal stud walls, provide continuous blocking around door and window openings for anchorage of frames, securely attached to stud framing.

D. In walls, provide blocking attached to studs as backing and support for wall-mounted items, unless item can be securely fastened to two or more studs or other method of support is explicitly indicated.

E. Where ceiling-mounting is indicated, provide blocking and supplementary supports above ceiling, unless other method of support is explicitly indicated.

F. Specifically, provide the following non-structural framing and blocking:

1. Cabinets and shelf supports.
2. Wall brackets.
3. Handrails.
4. Grab bars.
5. Towel and bath accessories.
6. Wall-mounted door stops.
7. Chalkboards and marker boards.
8. Wall paneling and trim.
9. Joints of rigid wall coverings that occur between studs.

3.05 INSTALLATION OF CONSTRUCTION PANELS

A. Wall Sheathing: Secure with long dimension perpendicular to wall studs, with ends over firm bearing and staggered, using nails or screws.

1. Use plywood or other acceptable structural panels at building corners, for not less than 96 inches, measured horizontally.
2. Provide inlet diagonal bracing at corners.
3. Place water-resistive barrier horizontally over wall sheathing, weather lapping edges and ends.

3.06 SITE APPLIED WOOD TREATMENT

A. Apply preservative treatment compatible with factory applied treatment at site-sawn cuts, complying with manufacturer's instructions.

B. Allow preservative to dry prior to erecting members.

3.07 TOLERANCES

A. Framing Members: 1/4 inch from true position, maximum.

B. Variation from Plane (Other than Floors): 1/4 inch in 10 feet maximum, and 1/4 inch in 30 feet maximum.

3.08 CLEANING

A. Waste Disposal:

1. Comply with applicable regulations.

2. Do not burn scrap on project site.

3. Do not burn scraps that have been pressure treated.

4. Do not send materials treated with pentachlorophenol, CCA, or ACA to co-generation facilities or “waste-to-energy” facilities.

B. Do not leave any wood, shavings, sawdust, etc. on the ground or buried in fill.

C. Prevent sawdust and wood shavings from entering the storm drainage system.

END OF SECTION

SECTION 06 2000

FINISH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Finish carpentry items.

B. Wood door frames, glazed frames.

C. Wood casings and moldings.

D. Hardware and attachment accessories.

1.02 RELATED REQUIREMENTS

A. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.

B. Section 06 4100 - Architectural Wood Casework: Shop fabricated custom cabinet work.

C. Section 08 1416 - Flush Wood Doors.

D. Section 09 9000 - Painting and Coating: Painting and finishing of finish carpentry items.

1.03 REFERENCE STANDARDS

A. AWI/AWMAC (QSI) - Architectural Woodwork Quality Standards Illustrated; Architectural Woodwork Institute and Architectural Woodwork Manufacturers Association of Canada; 2005, 8th Ed., Version 2.0.

B. BHMA A156.9 - American National Standard for Cabinet Hardware; Builders Hardware Manufacturers Association; 2010 (ANSI/BHMA A156.9).

C. NEMA LD 3 - High-Pressure Decorative Laminates; National Electrical Manufacturers Association; 2005.

D. NHLA G-101 - Rules for the Measurement & Inspection of Hardwood & Cypress; National Hardwood Lumber Association; 2007.

E. PS 1 - Structural Plywood; 2007.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with plumbing rough-in, electrical rough-in, and installation of associated and adjacent components.

B. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

1.05 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data:

1. Provide instructions for attachment hardware and finish hardware.

C. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, and accessories.

1. Minimum Scale of Detail Drawings: 1-1/2 inch to 1 foot.

2. Provide the information required by AWI/AWMAC/WI Architectural Woodwork Standards.

3. Include certification program label.

D. Shop Drawings: Indicate materials, component profiles, fastening methods, jointing details, accessories, to a minimum scale of 1-1/2 inch to 1 ft.

E. Samples: Submit two samples of wood trim 4 inch long.

1.06 QUALITY ASSURANCE

A. Grade materials in accordance with the following:

1. Softwood Lumber: In accordance with rules certified by ALSC; www.alsc.org.

2. Plywood: Certified by the American Plywood Association.

3. Hardwood Lumber: In accordance with NHLA Grading Rules; www.natlhardwood.org.

B. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

1. Company with at least one project in the past 5 years with value of woodwork within 20 percent of cost of woodwork for this Project.

2. Single Source Responsibility: Provide and install this work from single fabricator.

C. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum three years of documented experience.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Protect work from moisture damage.

PART 2 PRODUCTS

2.01 FINISH CARPENTRY ITEMS

A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI//AWMAC/WI Architectural Woodwork Standards for Custom Grade.

B. Unless otherwise indicated provide products of quality specified by AWI Architectural Woodwork Quality Standards Illustrated for Custom grade.

C. Unless otherwise indicated provide products of quality specified by Woodwork Institute Manual of Millwork for Custom grade.

D. Surface Burning Characteristics: Provide materials having fire and smoke properties as required by applicable code.

E. Interior Woodwork Items:

1. Moldings, Bases, Casings, and Miscellaneous Trim: Clear white pine; prepare for paint finish.

2. Door, Glazed Light, and Pocket Door Frames: White birch; prepare for paint finish.

2.02 WOOD-BASED COMPONENTS

A. Wood fabricated from old growth timber is not permitted.

2.03 LUMBER MATERIALS

A. Softwood Lumber: Sugar and Ponderosa Pine species, quarter sawn, maximum moisture content of 6 percent; paint grade.

2.04 SHEET MATERIALS

A. Softwood Plywood Not Exposed to View: Any face species, veneer core; PS 1 Grade A-B; glue type as recommended for application.

2.05 PLASTIC LAMINATE MATERIALS

A. Plastic Laminate: NEMA LD 3, HGS; color as selected; satin finish.

B. Laminate Backing Sheet: NEMA LD 3, BKL; undecorated plastic laminate.

2.06 ADHESIVE

A. Adhesive: Type recommended by laminate manufacturer to suit application.

2.07 FASTENINGS

A. Fasteners: Of size and type to suit application; galvanized finish in concealed locations and stainless steel finish in exposed locations.

B. Concealed Joint Fasteners: Threaded steel.

2.08 ACCESSORIES

A. Lumber for Shimming, Blocking, and other miscellaneous concealed uses: Softwood lumber of Spruce-Pine-Fir species.

B. Primer: as specified in Section 09 9000.

C. Wood Filler: Solvent base, tinted to match surface finish color.

2.09 HARDWARE

A. Hardware: Comply with BHMA A156.9.

2.10 FABRICATION

A. Shop assemble work for delivery to site, permitting passage through building openings.

B. Cap exposed plastic laminate finish edges with material of same finish and pattern.

C. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

D. Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.

E. Apply laminate backing sheet to reverse face of plastic laminate finished surfaces.

2.11 SHOP FINISHING

A. Sand work smooth and set exposed nails and screws.

B. Apply wood filler in exposed nail and screw indentations.

C. On items to receive transparent finishes, use wood filler that matches surrounding surfaces and is of type recommended for the applicable finish.

D. Finish work in accordance with AWI/AWMAC/WI Architectural Woodwork Standards, Section 5 - Finishing for Grade specified and as follows:

1. Opaque:
    a. System - 4, Latex Acrylic, Water-based.
    b. Color: As selected by Architect.
    c. Sheen: Satin.

E. Back prime woodwork items to be field finished, prior to installation.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify adequacy of backing and support framing.

B. Verify mechanical, electrical, and building items affecting work of this section are placed and ready to receive this work.

C. See Section 06-1000 Rough Carpentry for installation of recessed wood blocking.

3.02 INSTALLATION

A. Install work in accordance with AWI/AWMAC/WI Architectural Woodwork Standards requirements for grade indicated.

B. Set and secure materials and components in place, plumb and level.

C. Carefully scribe work abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim to conceal larger gaps.

D. Install components with nails at 8 inch on center.

E. Install prefinished paneling with full bed contact adhesive applied to substrate.

F. Install hardware in accordance with manufacturer's instructions.

3.03 PREPARATION FOR SITE FINISHING

A. Set exposed fasteners. Apply wood filler in exposed fastener indentations. Sand work smooth.

B. Site Finishing: See Section 09 9000.

C. Before installation, prime paint surfaces of items or assemblies to be in contact with cementitious materials.

3.04 TOLERANCES

A. Maximum Variation from True Position: 1/16 inch.

B. Maximum Offset from True Alignment with Abutting Materials: 1/32 inch.

END OF SECTION

SECTION 06 4100

ARCHITECTURAL WOOD CASEWORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Specially fabricated cabinet units.

B. Cabinet hardware.

C. Factory finishing.

D. Preparation for installing utilities.

1.02 RELATED REQUIREMENTS

A. Section 06 1000 - Rough Carpentry: Support framing, grounds, and concealed blocking.

B. Section 12 3600 - Countertops.

1.03 REFERENCE STANDARDS

A. ANSI A135.4 - American National Standard for Basic Hardboard; 2004.

B. ANSI A208.2 - American National Standard for Medium Density Fiberboard for Interior Use; 2009.

C. AWI/AWMAC/WI (AWS) - Architectural Woodwork Standards; 2009.

D. AWI/AWMAC (QSI) - Architectural Woodwork Quality Standards Illustrated; Architectural Woodwork Institute and Architectural Woodwork Manufacturers Association of Canada; 2005, 8th Ed., Version 2.0.

E. BHMA A156.9 - American National Standard for Cabinet Hardware; Builders Hardware Manufacturers Association; 2010 (ANSI/BHMA A156.9).

F. NEMA LD 3 - High-Pressure Decorative Laminates; National Electrical Manufacturers Association; 2005.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene a preinstallation meeting not less than one week before starting work of this section; require attendance by all affected installers.

1.05 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Shop Drawings: Indicate materials, component profiles and elevations, assembly methods, joint details, fastening methods, accessory listings, hardware location and schedule of finishes.

C. Product Data: Provide data for hardware accessories.

D. Samples: Submit actual samples of architectural cabinet construction, minimum 12 inches square, illustrating proposed cabinet, countertop, and shelf unit substrate and finish.

E. Samples: Submit actual sample items of proposed pulls, hinges, shelf standards, and locksets, demonstrating hardware design, quality, and finish.

1.06 QUALITY ASSURANCE

A. Fabricator Qualifications: Company specializing in fabricating the products specified in this section with minimum five years of documented experience.

1. Company with at least one project in the past 5 years with value of woodwork within 20 percent of cost of woodwork for this Project.

2. Accredited participant in the specified certification program prior to the commencement of fabrication and throughout the duration of the project.

B. Perform cabinet construction in accordance with AWI/AWMAC Architectural Woodwork Quality Standards Illustrated, Custom quality.

C. Single Source Responsibility: A single manufacturer shall provide and install the work described in this Section.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Protect units from moisture damage.

1.08 FIELD CONDITIONS

A. During and after installation of custom cabinets, maintain temperature and humidity conditions in building spaces at same levels planned for occupancy.

PART 2 PRODUCTS

2.01 CABINETS

A. Quality Grade: Unless otherwise indicated provide products of quality specified by AWI//AWMAC/WI Architectural Woodwork Standards for Premium Grade.

B. Plastic Laminate Faced Cabinets: Custom grade.

C. Cabinets at kitchen:

1. Finish - Exposed Exterior Surfaces: Decorative laminate.

2. Finish - Exposed Interior Surfaces: Decorative laminate.

3. Finish - Concealed Surfaces: Manufacturer's option.

4. Door and Drawer Front Edge Profiles: Square edge with thin applied band.

5. Door and Drawer Front Retention Profiles: Fixed panel.

6. Casework Construction Type: Type A - Frameless.

7. Interface Style for Cabinet and Door: Style 1 - Overlay; flush overlay.

8. Cabinet Design Series: 186, 211, 222, 301, 302.

9. Adjustable Shelf Loading: 50 lbs. per sq. ft..

a. Deflection: L/144.

10. Casework Integrity: Base Cabinet and Wall Cabinet

11. Cabinet Style: Flush overlay.

12. Cabinet Doors and Drawer Fronts: Flush style.

13. Drawer Side Construction: Multiple-dovetailed.

14. Drawer Construction Technique: Dovetail joints.

2.02 WOOD-BASED COMPONENTS

A. Wood fabricated from old growth timber is not permitted.

2.03 LUMBER MATERIALS

A. Lumber shall be in accordance with the Architectural Woodwork Standards Grade specified for the product being fabricated. Moisture Content shall be 6% to 12% for boards up to 2 inch nominal thickness, and shall not exceed 19% for thicker pieces.

2.04 PANEL MATERIALS

A. Medium Density Fiberboard (MDF): ANSI A208.2; type as specified in AWI/AWMAC Architectural Woodwork Quality Standards Illustrated; composed of wood fibers pressure bonded with moisture resistant adhesive to suit application; sanded faces; thickness as required.

1. Use for concealed components.
2. Use as backing for plastic laminate unless otherwise indicated.

B. Hardboard: AHA A135.4; Pressed wood fiber with resin binder, Class 1 - Tempered, 1/4 inch thick, smooth two sides (S2S); use for drawer bottoms, dust panels, and other components indicated on drawings.

2.05 LAMINATE MATERIALS

A. Manufacturers:

1. Formica Corporation: www.formica.com.
2. Panolam Industries International, Inc\Nevamar: www.nevamar.com.
3. Wilsonart International, Inc: www.wilsonart.com.
4. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. High Pressure Decorative Laminate (HPDL): NEMA LD 3, types as recommended for specific applications.

C. Color: Chosen from typical manufacturer colors, as indicated on drawings.

D. Provide specific types as follows:

1. Horizontal Surfaces: HGS, 0.048 inch nominal thickness, through color, color as selected, matte finish.
2. Vertical Surfaces: VGS, 0.028 inch nominal thickness, through color, color as selected, matte finish.
3. Post-Formed Horizontal Surfaces: HGP, 0.039 inch nominal thickness, through color, color as selected, matte finish.
4. Post-Formed Vertical Surfaces: VGP, 0.028 inch nominal thickness, through color, color as selected, matte finish.
5. Cabinet Liner: CLS, 0.020 inch nominal thickness, through color, color as selected, matte finish.
6. Laminate Backer: BKL, 0.020 inch nominal thickness, undecorated; for application to concealed backside of panels faced with high pressure decorative laminate.

E. Plastic Laminate shall meet the requirements of the Architectural Woodwork Standards for its intended use.

2.06 COUNTERTOPS

A. Plastic Laminate Countertops: Specified in Section 12 3600 - Countertops.

2.07 ACCESSORIES

A. Adhesive: Type recommended by AWI/AWMAC to suit application.

B. Aluminum Edge Banding: Extruded convex shape; smooth surface finish; self locking serrated tongue; of width to match component thickness; natural mill finish.

C. Fasteners: Size and type to suit application.

D. Bolts, Nuts, Washers, Lags, Pins, and Screws: Of size and type to suit application; galvanized or chrome-plated finish in concealed locations and stainless steel finish in exposed locations.

E. Concealed Joint Fasteners: Threaded steel.

F. Grommets: Standard rubber grommets for cut-outs, in color as indicated.

2.08 HARDWARE

A. Hardware: BHMA A156.9, types as indicated for quality grade specified.

B. Adjustable Shelf Supports: Standard side-mounted system using recessed metal shelf standards or multiple holes for pin supports and coordinated self rests, polished chrome, or satin chrome finish, for nominal 1 inch spacing adjustments.

C. Drawer and Door Pulls: "U" shaped wire pull, steel with chrome finish, 4 inch centers.

D. Catches: Magnetic.

E. Drawer Slides:

1. Type: Full extension.
2. Static Load Capacity: Commercial grade.
3. Mounting: Side mounted.
4. Stops: Integral type.
5. Features: Provide self closing/stay closed type.
6. Manufacturers:
    a. Accuride International, Inc: www.accuride.com.
    b. Grass America Inc: www.grassusa.com.
    c. Knape & Vogt Manufacturing Company: www.knapeandvogt.com.
    d. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

F. Hinges: European style concealed self-closing type, steel with satin finish.

1. Manufacturers:
    a. Grass America Inc: www.grassusa.com.
    b. Hardware Resources: www.hardwareresources.com.
    c. Julius Blum, Inc: www.blum.com.
    d. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.09 FABRICATION

A. Cabinet Style: Flush overlay.

B. Cabinet Doors and Drawer Fronts: Flush style.

C. Drawer Construction Technique: Dovetail joints.

D. Assembly: Shop assemble cabinets for delivery to site in units easily handled and to permit passage through building openings.

E. Edging: Fit shelves, doors, and exposed edges with specified edging. Do not use more than one piece for any single length.

F. Fitting: When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide matching trim for scribing and site cutting.

G. Plastic Laminate: Apply plastic laminate finish in full uninterrupted sheets consistent with manufactured sizes. Fit corners and joints hairline; secure with concealed fasteners. Slightly bevel arises. Locate counter butt joints minimum 2 feet from sink cut-outs.

1. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.
2. Cap exposed plastic laminate finish edges with material of same finish and pattern.

H. Mechanically fasten back splash to countertops with steel brackets at 16 inches on center.

I. Provide cutouts for plumbing fixtures, appliances, and outlet boxes. Verify locations of cutouts from on-site dimensions. Prime paint cut edges.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify adequacy of backing and support framing.

B. Verify location and sizes of utility rough-in associated with work of this section.

C. Verify that mechanical, electrical, plumbing and other building components affecting work in this Section are in place and ready.

3.02 INSTALLATION

A. Set and secure custom cabinets in place, assuring that they are rigid, plumb, and level.

B. Use fixture attachments in concealed locations for wall mounted components.

C. Use concealed joint fasteners to align and secure adjoining cabinet units and countertops.

D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch. Do not use additional overlay trim for this purpose.

E. Secure cabinets to floor using appropriate angles and anchorages.

F. Countersink anchorage devices at exposed locations. Conceal with solid wood plugs of species to match surrounding wood; finish flush with surrounding surfaces.

G. Equipment cutouts shown on plans shall be cut by the installer.

3.03 ADJUSTING

A. Installer shall adjust all moving and operating parts to function smoothly and correctly.

B. All nicks, chips and scratches in the finish shall be filled and retouched. Damaged items that cannot by repaired shall be replaced.

3.04 CLEANING

A. Clean casework, counters, shelves, hardware, fittings, and fixtures.

END OF SECTION

SECTION 07 9005

JOINT SEALERS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Sealants and joint backing.

B. Precompressed foam sealers.

C. Hollow gaskets.

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

A. ASTM C 834 - Standard Specification for Latex Sealants; 2010.

B. ASTM C 919 - Standard Practice for Use of Sealants in Acoustical Applications; 2008.

C. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants; 2010.

D. ASTM C 1193 - Standard Guide for Use of Joint Sealants; 2009.

E. SCAQMD 1168 - South Coast Air Quality Management District Rule No.1168; current edition; www.aqmd.gov.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with other sections referencing this section.

1.05 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Provide data indicating sealant chemical characteristics, performance criteria, limitations, and color availability.

C. Samples: Submit two samples,.25x4 inch in size illustrating sealant colors for selection.

D. Manufacturer's Installation Instructions: Indicate special procedures, surface preparation, and perimeter conditions requiring special attention.

E. Submit Applicator Qualifications, as noted below in 1.06 Quality Assurance, line C.

1.06 QUALITY ASSURANCE

A. Maintain one copy of each referenced document covering installation requirements on site.

B. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

C. Applicator Qualifications: Company specializing in performing the work of this section with minimum 5 years experience.

1.07 FIELD CONDITIONS

A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.08 WARRANTY

A. See Administrative Requirements for Closeout Submittals and additional warrany requirements.

B. Correct defective work within a five year period after Date of Substantial Completion.

C. Warranty: Include coverage for installed sealants and accessories which fail to achieve airtight seal, exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Silicone Sealants:

1. Bostik Inc; Product CHEM-CALK 1200: www.bostik-us.com.
2. Pecora Corporation; Product 890 NST: www.pecora.com.
3. BASF Construction Chemicals-Building Systems; Product Omniseal 50: www.chemrex.com.
4. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

B. Polyurethane Sealants:

1. Bostik Inc; Product CHEM-CALK 900: www.bostik-us.com.
2. Pecora Corporation; Product DynaTrol I XL: www.pecora.com.
3. BASF Construction Chemicals-Building Systems; Product NP-2: www.chemrex.com.
4. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

C. Polysulfide Sealants:

1. Pecora Corporation; Product Synthacalk GC2+: www.pecora.com.
2. BASF Construction Chemicals-Building Systems; Product Sonalastic Polysulfide sealant: www.chemrex.com.
3. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

D. Acrylic Sealants:

1. Tremco Global Sealants; Product Tremflex 834: www.tremcosealants.com.
2. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

E. Butyl Sealants:

1. Bostik Inc; Product CHEM-CALK 300: www.bostik-us.com.
2. Pecora Corporation; Product BC-158: www.pecora.com.
3. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

F. Acrylic Emulsion Latex Sealants:

1. Bostik Inc; Product CHEM-CALK 600 ACRYLIC LATEX: www.bostik-us.com.
2. Pecora Corporation; Product AC-20 +SILICONE: www.pecora.com.
3. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

G. Preformed Compressible Foam Sealers:

1. Sandell Manufacturing Company, Inc; Product Polyseal: www.sandellmfg.com.
2. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

2.02 SEALANTS

A. Sealants and Primers - General: Provide only products having lower volatile organic compound (VOC) content than required by South Coast Air Quality Management District Rule No.1168.

B. Type A - General Purpose Exterior Sealant: Polyurethane; ASTM C 920, Grade NS, Class 25, Uses M, G, and A; single, or multi- component.

1. Color: color as selected.

2. Applications: Use for:

a. Control, expansion, and soft joints in masonry.

b. Joints between concrete and other materials.

c. Joints between metal frames and other materials.

d. Other exterior joints for which no other sealant is indicated.

C. Type B - Exterior Expansion Joint Sealer: Precompressed foam sealer; urethane with water-repellent;

1. Color: Black.

2. Size as required to provide weathertight seal when installed.

3. Provide product recommended by manufacturer for traffic-bearing use.

4. Applications: Use for:

a. Exterior wall expansion joints.

D. Type C - Exterior Metal Lap Joint Sealant: Butyl or polyisobutylene, nondrying, nonskinning, noncuring.

1. Applications: Use for:

a. Concealed sealant bead in sheet metal work.

b. Concealed sealant bead in siding overlaps.

E. Type D - General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C 834, Type OP, Grade NF single component, paintable.

1. Color: Colors as selected.

2. Applications: Use for:

a. Interior wall and ceiling control joints.

b. Joints between door and window frames and wall surfaces.

c. Other interior joints for which no other type of sealant is indicated.

F. Type E - Bathtub/Tile Sealant: White silicone; ASTM C 920, Uses I, M and A; single component, mildew resistant.

1. Applications: Use for:

a. Joints between plumbing fixtures and floor and wall surfaces.

b. Joints between kitchen and bath countertops and wall surfaces.

G. Type F - Acoustical Sealant: Butyl or acrylic sealant; ASTM C 920, Grade NS, Class 12-1/2, Uses M and A; single component, solvent release curing, non-skinning.

1. Applications: Use for concealed locations only:
    a. Sealant bead between top stud runner and structure and between bottom stud track and floor.

H. Type G - Interior Floor Joint Sealant: Polyurethane, self-leveling; ASTM C 920, Grade P, Class 25, Uses T, M and A; single or multi- component.
    1. Color: Colors as selected.
    2. Applications: Use for:
        a. Expansion joints in floors.

I. Type H - Sealant for Continuous Water Immersion: Polysulfide; ASTM C 920, Grade NS, Class 25, Uses I, M, and A; approved by manufacturer for continuous water immersion; single component.
    1. Color: Standard colors matching finished surfaces.

J. Type J - Concrete Paving Joint Sealant: Polyurethane, self-leveling; ASTM C 920, Class 25, Uses T, I, M and A; single component.
    1. Color: Color as selected.
    2. Applications: Use for:
        a. Joints in sidewalks and vehicular paving.

2.03 ACCESSORIES

A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.

B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.

C. Joint Backing: Round foam rod compatible with sealant; ASTM D 1667, closed cell PVC; oversized 30 to 50 percent larger than joint width.

D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces and joint openings are ready to receive work.

B. Verify that joint backing and release tapes are compatible with sealant.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.

B. Clean and prime joints in accordance with manufacturer's instructions.

C. Perform preparation in accordance with manufacturer's instructions and ASTM C 1193.

D. Protect elements surrounding the work of this section from damage or disfigurement.

3.03 INSTALLATION

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Perform installation in accordance with ASTM C 1193.

C. Perform acoustical sealant application work in accordance with ASTM C 919.

D. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.

E. Install bond breaker where joint backing is not used.

F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags.

G. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.

H. Tool joints concave.

I. Precompressed Foam Sealant: Do not stretch; avoid joints except at corners, ends, and intersections; install with face 1/8 to 1/4 inch below adjoining surface.

3.04 CLEANING

A. Clean adjacent soiled surfaces.

3.05 PROTECTION

A. Protect sealants until cured.

3.06 SCHEDULE

A. Exterior Joints for Which No Other Sealant Type is Indicated: Type A; colors as selected.

B. Control and Expansion Joints in Paving: Type J.

C. Exterior Wall Seismic Movement Joints: Type B.

D. Exterior Wall Expansion Joints: Type B.

E. Joints Between Concrete Panels and Between Panels and Adjacent Work: Type A.

F. Control, Expansion, and Soft Joints in Masonry, and Between Masonry and Adjacent Work: Type A.

G. Lap Joints in Exterior Sheet Metal Work: Type C.

H. Butt Joints in Exterior Metal Work and Siding: Type C.

I. Joints Between Exterior Metal Frames and Adjacent Work (except masonry): Type A.

J. Under Exterior Door Thresholds: Type A.

K. Interior Joints for Which No Other Sealant is Indicated: Type D; colors as shown on the drawings.

L. Control and Expansion Joints in Interior Concrete Slabs and Floors: Type G.

M. Joints Between Plumbing Fixtures and Walls and Floors, and Between Countertops and Walls: Type E.

N. In STC-Rated Walls, Between Metal Stud Track/Runner and Adjacent Construction and Between Outlet Boxes and Gypsum Board: Type F.

END OF SECTION

SECTION 08 1113

HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Non-fire-rated steel doors and frames.

B. Thermally insulated steel doors.

1.02 RELATED REQUIREMENTS

A. Section 08 7100 - Door Hardware.

1.03 REFERENCE STANDARDS

A. ANSI/ICC A117.1 - American National Standard for Accessible and Usable Buildings and Facilities; International Code Council; 2003.

B. ANSI A250.3 - Test Procedure and Acceptance Criteria for Factory-Applied Finish Painted Steel Surfaces for Steel Doors and Frames; 2007.

C. ANSI A250.8 - SDI-100 Recommended Specifications for Standard Steel Doors and Frames; 2003.

D. ANSI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames; 1998 (R2004).

E. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2009a.

F. BHMA A156.115 - Hardware Preparation in Steel Doors and Steel Frames; 2006.

G. NAAMM HMMA 840 - Guide Specifications for Installation and Storage of Hollow Metal Doors and Frames; The National Association of Architectural Metal Manufacturers; 2007.

H. NAAMM HMMA 863 - Guide Specifications for Detention Security Hollow Metal Doors and Frames; The National Association of Architectural Metal Manufacturers; 2004.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Materials and details of design and construction, hardware locations, reinforcement type and locations, anchorage and fastening methods, and finishes; and one copy of referenced grade standard.

C. Shop Drawings: Details of each opening, showing elevations, glazing, frame profiles, and identifying location of different finishes, if any.

1. Elevations of each door design.

2. Details of doors, including vertical and horizontal edge details and metal thicknesses.

3. Frame details for each frame type, including dimensioned profiles and metal thicknesses.

4. Locations of reinforcement and preparations for hardware.

5. Details of each different wall opening condition.

6. Details of anchorages, joints, field splices, and connections.
7. Details of accessories.
8. Details of moldings, removable stops, and glazing.

D. Samples: Submit two samples of metal, 2 x 2 inches in size showing factory finishes, colors, and surface texture.

E. Installation Instructions: Manufacturer's published instructions, including any special installation instructions relating to this project.

F. Manufacturer's Certificate: Certification that products meet or exceed specified requirements.

G. Submit Manufacturer Qualifications, as noted below in 1.05 Quality Assurance, line A.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Maintain at the project site a copy of all reference standards dealing with installation.

C. Source Limitations: Obtain hollow metal work from single source from single manufacturer.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store in accordance with NAAMM HMMA 840.

B. Deliver hollow metal work palletized, wrapped, or crated to provide protection during transit and Project-site storage. Do not use nonvented plastic.

1. Provide additional protection to prevent damage to finish of factory-finished units.

C. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.

D. Store hollow metal work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4-inch- high wood blocking. Do not store in a manner that traps excess humidity.

1. Provide minimum 1/4-inch space between each stacked door to permit air circulation.

1.07 PROJECT CONDITIONS

A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.08 COORDINATION

A. Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Steel Doors and Frames:

1. Assa Abloy Ceco, Curries, or Fleming: www.assaabloydss.com.

2. Windsor Republic Doors: www.republicdoor.com.

3. Steelcraft: www.steelcraft.com.
4. Door Components, Inc. (DCI): www.doorcomponents.com
5. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

2.02 MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.

B. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum G60 or A60 metallic coating.

C. Frame Anchors: ASTM A 591/A 591M, Commercial Steel (CS), 40Z coating designation; mill phosphatized.

1. For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.

D. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.

E. Powder-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hollow metal frames of type indicated.

F. Grout: ASTM C 476, except with a maximum slump of 4 inches, as measured according to ASTM C 143/C 143M.

G. Mineral-Fiber Insulation: ASTM C 665, Type I (blankets without membrane facing); consisting of fibers manufactured from slag or rock wool with 6- to 12-lb/cu. ft. density; with maximum flame-spread and smoke-development indexes of 25 and 50, respectively; passing ASTM E 136 for combustion characteristics.

H. Glazing: Comply with requirements in Division 8 Section "Glazing."

I. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil dry film thickness per coat. Provide inert-type noncorrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

2.03 HOLLOW METAL DOORS

A. General: Provide doors of design indicated, not less than thickness indicated; fabricated with smooth surfaces, without visible joints or seams on exposed faces unless otherwise indicated. Comply with ANSI/SDI A250.8.

1. Design: Flush panel.
2. Core Construction: Manufacturer's standard vertical steel-stiffener core, polystyrene, polyurethane, polyisocyanurate, or mineral-board to meet the performance requirements indicated.
3. Vertical Edges for Single-Acting Doors: Manufacturer's standard.
4. Top and Bottom Edges: Closed with flush or inverted 0.042-inch- thick, end closures or channels of same material as face sheets.
5. Tolerances: Comply with SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames."

B. Exterior Doors: Face sheets fabricated from metallic-coated steel sheet. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:

1. Level 3 and Physical Performance Level A (Extra Heavy Duty), Model 2 (Seamless).

a. Width: As indicated on Drawings.

C. Interior Doors: Face sheets fabricated from metallic-coated steel sheet. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:

1. Level 2 and Physical Performance Level B (Heavy Duty), Model 2 (Seamless).

a. Width: As indicated on Drawings.

D. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.

E. Fabricate concealed stiffeners and hardware reinforcement from either cold- or hot-rolled steel sheet.

2.04 HOLLOW METAL FRAMES

A. General: Comply with ANSI/SDI A250.8 and with details indicated for type and profile.

B. Exterior Frames: Fabricated from metallic-coated steel sheet.

1. Fabricate frames with mitered or coped corners.

2. Fabricate frames as full profile welded unless otherwise indicated.

3. Frames for Level 4 Steel Doors, 14 gauge.

B. Interior Frames: Fabricated from metallic-coated steel sheet.

1. Fabricate frames with mitered or coped corners.

2. Fabricate frames as full profile welded unless otherwise indicated.

3. Frames for Level 3 Steel Doors, 16 gauge.

C. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 with reinforcement plates from same material as frames.

2.05 FRAME ANCHORS

A. Jamb Anchors:

1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long; or wire anchors not less than 0.177 inch thick.

B. Floor Anchors: Formed from same material as frames, not less than 0.042 inch thick, and as follows:

1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.

2.06 MOULDINGS

A. Moldings for Panels in Doors: Minimum 0.032 inch thick, fabricated from same material as door face sheet in which they are installed.

B. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch high unless otherwise indicated.

2.07 ACCESSORY MATERIALS

A. Grout for Frames: Portland cement grout of maximum 4-inch slump for hand troweling; thinner pumpable grout is prohibited.

B. Silencers: Resilient rubber, fitted into drilled hole; 3 on strike side of single door, 3 on center mullion of pairs, and 2 on head of pairs without center mullions.

C. Temporary Frame Spreaders: Provide for all factory- or shop-assembled frames.

D. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.

E. Ceiling Struts: Minimum 1/4-inch-thick by 1-inch- wide steel.

F. Grout Guards: Formed from same material as frames, not less than 0.016 inch thick.

2.08 FABRICATION

A. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.

B. Tolerances: Fabricate hollow metal work to tolerances indicated in SDI 117.

C. Hollow Metal Doors:

1. Exterior Doors: Provide weep-hole openings in bottom of exterior doors to permit moisture to escape. Seal joints in top edges of doors against water penetration.

2. Infill Panels: Factory cut openings in doors.

D. Hollow Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.

1. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.

2. Sidelight Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.

3. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.

4. Grout Guards: Weld guards to frame at back of hardware mortises in frames to be grouted.

5. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.

6. Jamb Anchors: Provide number and spacing of anchors as follows:

a. Masonry Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:

1) Two anchors per jamb up to 60 inches high.

2) Three anchors per jamb from 60 to 90 inches high.

3) Four anchors per jamb from 90 to 120 inches high.

4) Four anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 120 inches high.

E. Fabricate concealed stiffeners, edge channels, and hardware reinforcement from either cold- or hot-rolled steel sheet.

F. Hardware Preparation: Factory prepare hollow metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door Hardware Schedule and templates furnished as specified in Division 8 Section "Door Hardware."

1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
2. Reinforce doors and frames to receive nontemplated, mortised and surface-mounted door hardware.
3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
4. Coordinate locations of conduit and wiring boxes for electrical connections with Division 16 Sections.

G. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints.

1. Single Infill Panel: Provide fixed stops and moldings welded on secure side of hollow metal work.
2. Provide fixed frame moldings on outside of exterior frames.
3. Provide loose stops and moldings on inside of hollow metal work.

2.09 FINISH MATERIALS

A. Prime and Paint Factory Finish: Apply manufacturer's standard primer immediately after cleaning and pretreating.

1. Shop Primer: Manufacturer's standard, fast-curing, lead- and chromate-free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; compatible with substrate and field-applied coatings despite prolonged exposure.
2. Color and Gloss: As selected by Architect from manufacturer's full range.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Examine roughing-in for embedded and built-in anchors to verify actual locations before frame installation.

C. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.

D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Remove welded-in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.

B. Prior to installation, adjust and securely brace welded hollow metal frames for squareness, alignment, twist, and plumbness to the following tolerances:

1. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.

2. Alignment: Plus or minus 1/16 in., measured at jambs on a horizontal line parallel to plane of wall.

3. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.

4. Plumbness: Plus or minus 1/16 in., measured at jambs on a perpendicular line from head to floor.

C. Drill and tap doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.

3.03 INSTALLATION

A. General: Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.

B. Hollow Metal Frames: Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11.

1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.

a. At fire-protection-rated openings, install frames according to NFPA 80.

b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.

c. Install frames with fixed infill panel stops located on secure side of opening.

d. Install door silencers in frames before grouting.

e. Remove temporary braces necessary for installation only after frames have been properly set and secured.

f. Check plumbness, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.

g. Field apply bituminous coating to backs of frames that are filled with grout containing antifreezing agents.

2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.

a. Floor anchors may be set with powder-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.

3. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with grout.

4. Installation Tolerances: Adjust hollow metal door frames for squareness, alignment, twist, and plumb to the following tolerances:

a. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.

b. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.

c. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.

d. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.

C. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.

1. Non-Fire-Rated Standard Steel Doors:

a. Jambs and Head: 1/8 inch plus or minus 1/16 inch.

b. Between Edges of Pairs of Doors: 1/8 inch plus or minus 1/16 inch.

c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch.

d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch.

D. Infill Panels: Comply with installation requirements in Section 05 5305 Steel Gratings and with hollow metal manufacturer's written instructions.

1. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9 inches o.c. and not more than 2 inches o.c. from each corner.

3.04 TOLERANCES

A. Clearances Between Door and Frame: As specified in ANSI A250.8.

B. Maximum Diagonal Distortion: 1/16 in measured with straight edge, corner to corner.

3.05 ADJUSTING AND CLEANING

A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.

B. Remove grout and other bonding material from hollow metal work immediately after installation.

C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.

D. Metallic-Coated Surfaces: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

3.06 SCHEDULE

A. Refer to Door Schedule on the drawings.

END OF SECTION

SECTION 08 1416

FLUSH WOOD DOORS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Flush wood doors; flush configuration; non-rated.

1.02 RELATED REQUIREMENTS

A. Section 06 2000 - Finish Carpentry.

B. Section 08 7100 - Door Hardware.

C. Section 09 9000 - Painting and Coating: Site finishing of doors.

1.03 REFERENCE STANDARDS

A. ANSI A135.4 - American National Standard for Basic Hardboard; 2004.

B. AWI/AWMAC (QSI) - Architectural Woodwork Quality Standards Illustrated; Architectural Woodwork Institute and Architectural Woodwork Manufacturers Association of Canada; 2005, 8th Ed., Version 2.0.

C. WDMA I.S.1-A - Architectural Wood Flush Doors; Window and Door Manufacturers Association; 2004.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data: Indicate door core materials and construction; veneer species, type and characteristics.

C. Specimen warranty.

D. Shop Drawings: Illustrate door opening criteria, elevations, sizes, types, swings, undercuts required, special blocking for hardware.

E. Manufacturer's Installation Instructions: Indicate special installation instructions.

F. Warranty, executed in Resident Engineer's name.

1.05 QUALITY ASSURANCE

A. Maintain one copy of the specified door quality standard on site for review during installation and finishing.

B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Package, deliver and store doors in accordance with specified quality standard.

B. Accept doors on site in manufacturer's packaging. Inspect for damage.

C. Protect doors with resilient packaging sealed with heat shrunk plastic. Do not store in damp or wet areas; or in areas where sunlight might bleach veneer. Seal top and bottom edges if stored more than one week. Break seal on site to permit ventilation.

1.07 WARRANTY

A. See GREENBOOK, 2010 City Supplement and Supplemental Special Provisions (SSP for additional warranty requirements.

B. Interior Doors: Provide manufacturer's warranty for 2 years.

C. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Wood Veneer Faced Doors:

1. Graham Wood Doors: www.grahamdoors.com.

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.02 DOORS

A. All Doors: See drawings for locations and additional requirements.

1. Quality Level: Custom Grade, Heavy Duty performance, in accordance with WDMA I.S.1-A.

2. Hardboard Faced Doors: Faced with primed, paintable hardboard finish.

B. Interior Doors: 1-3/4 inches thick unless otherwise indicated; flush construction.

1. Provide solid core doors at all locations.

2. Hardboard facing for field opaque finish.

2.03 DOOR AND PANEL CORES

A. Non-Rated Solid Core and 20 Minute Rated Doors: Wood stave core.

2.04 DOOR FACINGS

A. Hardboard Facing for Opaque Finish: AHA A135.4, Class 4 - Service, S2S (smooth two sides) hardboard, composition face, 1/8 inch thick.

B. Facing Adhesive: Type I - waterproof.

2.05 DOOR CONSTRUCTION

A. Fabricate doors in accordance with door quality standard specified.

B. Cores Constructed with stiles and rails:

1. Provide solid blocks at lock edge and top of door for closer for hardware reinforcement.

2. Provide solid blocking for other throughbolted hardware.

C. Where supplementary protective edge trim is required, install trim after veneer facing has been applied full-width.

D. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.

E. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.

1. Exception: Doors to be field finished.

F. Provide edge clearances in accordance with the quality standard specified.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify that opening sizes and tolerances are acceptable.

C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

3.02 INSTALLATION

A. Install doors in accordance with manufacturer's instructions and specified quality standard.

B. Field-Finished Doors: Trimming to fit is acceptable.

1. Adjust width of non-rated doors by cutting equally on both jamb edges.

2. Trim maximum of 3/4 inch off bottom edges.

C. Use machine tools to cut or drill for hardware.

D. Coordinate installation of doors with installation of frames and hardware.

3.03 TOLERANCES

A. Conform to specified quality standard for fit and clearance tolerances.

B. Conform to specified quality standard for telegraphing, warp, and squareness.

C. Maximum Vertical Distortion (Bow): 1/8 inch measured with straight edge or taut string, top to bottom, over an imaginary 36 by 84 inches surface area.

D. Maximum Width Distortion (Cup): 1/8 inch measured with straight edge or taut string, edge to edge, over an imaginary 36 by 84 inches surface area.

3.04 ADJUSTING

A. Adjust doors for smooth and balanced door movement.

B. Adjust closers for full closure.

3.05 SCHEDULE - See Drawings

END OF SECTION

SECTION 08 3100

ACCESS DOORS AND PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Access door and frame units, non-fire-rated, in wall, and ceiling locations.

1.02 RELATED REQUIREMENTS

A. Section 09 9000 - Painting and Coating: Field paint finish.

1.03 REFERENCE STANDARDS

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data: Provide sizes, types, finishes, hardware, scheduled locations, and details of adjoining work.

C. Shop Drawings: Indicate exact position of all access door units.

D. Manufacturer's Installation Instructions: Indicate installation requirements and rough-in dimensions.

E. Project Record Documents: Record actual locations of all access units.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Access Doors:

1. Milcor by Commercial Products Group of Hart & Cooley, Inc: www.milcorinc.com.

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.02 ACCESS DOORS AND PANELS

A. All Units: Factory fabricated, fully assembled units with corner joints welded, filled, and ground flush; square and without rack or warp; coordinate requirements with assemblies units are to be installed in.

2.03 WALL AND CEILING UNITS

A. Door and Frame Units: Formed stainless steel.

1. Frames and flanges: 0.058 inch stainless steel.

2. Door panels: 0.070 inch single thickness stainless steel sheet.

3. Sizes:

a. Walls: 12 x 12 inches. or as required for application.

b. Ceilings: 12 x 12 inches. or as required for application.

c. Lay-in Grid Ceilings: To match grid module.

4. Hardware:

a. Hinge: 175 degree stainless steel piano hinge with removable pin.

b. Lock: Cylinder lock with latch, two keys for each unit.

5. Finish: No. 4 finish.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that rough openings are correctly sized and located.

3.02 INSTALLATION

A. Install units in accordance with manufacturer's instructions.

B. Install frames plumb and level in openings. Secure rigidly in place.

C. Position units to provide convenient access to the concealed work requiring access.

END OF SECTION

SECTION 08 4500

TRANSLUCENT WALL AND ROOF ASSEMBLIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Self supporting aluminum framed vertical and sloped glazing system.

B. Insulated metal infill panels.

C. Integral air barrier and vapor retarder.

D. Perimeter sealant.

1.02 RELATED REQUIREMENTS

A. Section 08 8000 - Glazing.

1.03 REFERENCE STANDARDS

A. AAMA CW-10 - Care and Handling of Architectural Aluminum From Shop to Site; American Architectural Manufacturers Association; 2004.

B. ASTM A 36/A 36M - Standard Specification for Carbon Structural Steel; 2008.

C. ASTM A 123/A 123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2009.

D. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2009a.

E. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2007.

F. ASTM B 209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate [Metric]; 2007.

G. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2008.

H. ASTM B 221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes [Metric]; 2007.

I. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009.

J. ASTM E 283 - Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004.

K. ASTM E 330 - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference; 2002 (Reapproved 2010).

L. ASTM E 331 - Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference; 2000 (Reapproved 2009).

M. ASTM E 413 - Classification for Rating Sound Insulation; 2004.

N. SSPC-Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); Society for Protective Coatings; 2002 (Ed. 2004).

O. SSPC-Paint 25 - Zinc Oxide, Alkyd, Linseed Oil Primer for Use Over Hand Cleaned Steel, Type I and Type II; Society for Protective Coatings; 1997 (Ed. 2004).

1.04 PERFORMANCE REQUIREMENTS

A. System Design: Design and size components to withstand dead loads and live loads caused by snow, hail, and positive and negative wind loads acting on plane of panel without damage or permanent set.

1. Design Loads: Calculate in accordance with applicable code.

2. Measure performance in accordance with ASTM E 330, using test load of 1.5 times the design wind pressure and 10 second duration of maximum load.

B. Seismic Loads: Design and size components to withstand seismic loads and sway displacement as calculated in accordance with applicable code.

C. Deflection: Limit mullion deflection to 3/4 inch with full recovery of glazing materials.

D. System Assembly: Accommodate without damage to system, components or deterioration of seals; movement within system; movement between system and perimeter framing components; dynamic loading and release of loads; deflection of structural support framing, tolerance of supporting components, shortening of building concrete structural columns

E. Light Transmission: to match existing.

F. Sound Attenuation Through Wall System (Exterior to Interior): STC of 50, minimum, calculated in accordance with ASTM E 413, tested in accordance with ASTM E 90.

G. Air Infiltration: Limit air infiltration through assembly to 0.06 cu ft/min/sq ft of sloped glazed area, measured at a reference differential pressure across assembly of 1.57 psf as measured in accordance with ASTM E 283.

H. Vapor Seal: No vapor seal failure at interior static pressure of 1 inch, 72 degrees F, and 40 percent relative humidity.

I. Water Leakage: None, when measured in accordance with ASTM E 331 at a test pressure difference of 2.86 lbf/sq ft.

J. Expansion / Contraction: System to provide for expansion and contraction within system components caused by a cycling temperature range of 170 degrees F over a 12 hour period without causing detrimental effect to system components.

K. System Internal Drainage: Drain water entering joints, condensation occurring in framing system, or migrating moisture occurring within system, to the exterior by a weep drainage network.

L. Air and Vapor Seal: Maintain continuous air barrier and vapor retarder throughout assembly, primarily in line with inside face of glazing panel and heel bead of glazing compound.

M. Not Permitted: Vibration harmonics, wind whistles, noises caused by thermal movement, thermal movement transmitted to other building elements, loosening, weakening, or fracturing of attachments or components of system.

1.05 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data: Provide component dimensions, describe components within assembly, anchorage and fasteners, panel configuration, internal drainage details.

C. Design Data: Provide framing member structural and physical characteristics, calculations, dimensional limitations.

D. Shop Drawings: Indicate system dimensions, framed opening requirements and tolerances, anticipated deflection under load, affected related Work, weep drainage network, expansion and contraction joint location and details, and field welding required.

E. Samples: Submit two Framing Member profile, 6 inch in size, illustrating prefinished aluminum surface, specified panel with skins, glazing materials illustrating edge and corner.

F. Test Reports: Submit substantiating engineering data, test results of previous tests which purport to meet performance criteria, and other supportive data.

G. Installation Data: Special installation requirements.

1.06 QUALITY ASSURANCE

A. Designer Qualifications: Design structural support framing components under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in California.

B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

C. Installer Qualifications: Company specializing in performing the work of this section with minimum 3 years of experience.

1.07 REGULATORY REQUIREMENTS

A. Conform to applicable code for fire resistance ratings and minimum sound transmission requirements.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Handle work of this section in accordance with AAMA CW-10.

B. Protect prefinished aluminum surfaces with wrapping. Do not use adhesive papers or sprayed coatings which bond when exposed to sunlight or weather. Puncture wrappings at ends for ventilation.

1.09 FIELD CONDITIONS

A. Do not install sealants when ambient temperature is less than 40 degrees F.

B. Maintain this minimum temperature during and after installation of sealants.

PART 2 PRODUCTS

2.01 MATERIALS

A. Extruded Aluminum: ASTM B 221 (ASTM B 221M).

B. Sheet Aluminum: ASTM B 209 (ASTM B 209M).

C. Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A 653/A 653M, with G90/Z275 coating.

D. Steel Sections: ASTM A 36/A 36M; shaped to suit mullion sections.

E. Fasteners: Stainless steel.

2.02 COMPONENTS

A. Panels: Bonded to both sides of structural extruded aluminum grid of indicated pattern; exposed surfaces of exterior sheet chemically and permanently treated to protect against surface erosion and extreme weather conditions:

B. Infill Panel: Internally reinforced, glazing edge sealed permitting internal air movement to glazing space, outside air barrier line:

C. Support Framing Members: Profile of width and depth to match profile of existing framing system. Thickness of extruded aluminum wall to match or excede thickness of existing framing system.

D. Reinforced Members: Same profile dimensions as Support Framing Members of extruded aluminum cladding with internal reinforcement of shaped steel structural section.

E. Battens, Cover Strips, Cover Plates, and Integral Flashings: Extruded aluminum, to suit location and application; sized to rigidly retain panels in place.

F. Weather Seals: To suit application; non-bleeding; non-staining.

2.03 GLAZING MATERIALS

A. Glazing Materials: As specified in Section 08 8000.

2.04 SEALANT MATERIALS

A. Sealant and Backing Materials: As specified in Section 07 9005 of Types described below.

2.05 FABRICATION

A. Fabricate system components with minimum clearances and shim spacing around perimeter of assembly, yet enabling installation and dynamic movement of perimeter seal.

B. Accurately fit and secure joints and corners. Make joints flush, hairline, and weatherproof.

C. Prepare components to receive anchor devices. Fabricate anchors.

D. Arrange fasteners and attachments to ensure concealment from view.

E. Reinforce framing members for external imposed loads.

2.06 FINISHES

A. Exterior Exposed Aluminum Surfaces:

1. PVDF coating, 4 mil thick to color as selected.

B. Interior Exposed Aluminum Surfaces:

1. PVDF coating, 4 mil thick to color as selected.

C. Interior Exposed Aluminum Beam Covers:

1. PVDF coating, 4 mil thick to color as selected.

D. Interior Surface of Infill Panel Surfaces:

1. PVDF coating, 4 mil thick to color as selected.

E. Shop and Touch-Up Primer for Steel Components: SSPC-Paint 25, zinc oxide, alkyd, linseed oil primer.

F. Touch-Up Primer for Galvanized Steel Surfaces: SSPC-Paint 20, zinc rich.

G. Concealed Steel Items:

1. Galvanized in accordance with requirements of ASTM A 123/A 123M.

2. Primed with iron oxide paint.

H. Apply one coat of bituminous paint to concealed aluminum and steel surfaces in contact with cementitious or dissimilar materials.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify dimensions, tolerances, and method of attachment with other work.

B. Verify wall openings and adjoining air barrier and vapor retarder materials are ready to receive work of this section.

3.02 INSTALLATION

A. Install translucent panel system in accordance with manufacturer instructions.

B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.

C. Provide alignment attachments and shims to permanently fasten system to building structure.

D. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances and align with adjacent work.

E. Provide thermal isolation where components penetrate or disrupt building insulation.

F. Install sill flashings.

G. Install air stop at edge of construction.

H. Coordinate attachment and seal of perimeter air and vapor barrier materials.

I. Pack fibrous insulation in shim spaces at perimeter of assembly to maintain continuity of thermal barrier.

J. Install infill panels in accordance with Section 08 8000, to glazing method required to achieve performance criteria.

K. Install perimeter sealant, backing materials, and installation criteria in accordance with Section 07 9005.

3.03 TOLERANCES

A. Maximum Variation from Plumb: 0.06 inches every 3 ft non-cumulative or 0.5 inches per 100 ft, whichever is less.

B. Maximum Misalignment of Two Adjoining Members Abutting in Plane: 1/32 inch.

C. Sealant Space Between Panel System Members and Adjacent Construction: Maximum of 3/4 inch and minimum of 1/4 inch.

3.04 FIELD QUALITY CONTROL

A. Independent inspection and testing will be provided under provisions of Administrative Requirements section.

B. Replace curtain wall components that have failed field testing and retest until performance is satisfactory.

3.05 CLEANING

A. Remove protective material from prefinished aluminum surfaces.

B. Wash down surfaces with a solution of mild detergent in warm water, applied with soft, clean wiping cloths. Take care to remove dirt from corners. Wipe surfaces clean.

C. Remove excess sealant by moderate use of mineral spirits or other solvent acceptable to sealant manufacturer.

3.06 PROTECTION

A. Protect finished work from damage.

END OF SECTION

SECTION 08 7100

DOOR HARDWARE

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Door Hardware, Including Electric Hardware.
2. Storefront and Entrance Door Hardware.
3. Cylinders For Doors Fabricated With Locking Hardware.

B. Related Sections:

1. Section 06 2000 - Finish Carpentry: Finish Hardware Installation
2. Section 07 9005 - Joint Sealers – exterior thresholds
3. Section 08 1416 – Flush Wood Doors
4. Section 08 4500 - Translucent Wall and Roof Assemblies

C. Specific Omissions: Hardware for the following is specified or indicated elsewhere.

1. Windows.
2. Cabinets, including open wall shelving and locks.
3. Signs, except where scheduled.
4. Toilet accessories, including grab bars.
5. Installation.
6. Rough hardware.
7. Conduit, junction boxes & wiring.
8. Folding partitions, except cylinders where detailed.
9. Sliding aluminum doors, except cylinders where detailed.
10. Access doors and panels, except cylinders where detailed.
11. Corner Guards.
12. Wrought Iron railing gates and supports.

1.2 REFERENCES:

Use date of standard in effect as of Bid date.

A. American National Standards Institute – ANSI 156.18 – Materials and Finishes.

B. ICC/ANSI A117.1 - 1998 – Specifications for making buildings and facilities usable by physically handicapped people.

C. ADA – Americans with Disabilities Act of 1990

D. BHMA – Builders Hardware Manufacturers Association

E. DHI – Door and Hardware Institute

F. NFPA – National Fire Protection Association

G. NFPA 80 – Fire Doors and Windows

H. NFPA 105 – Smoke and Draft Control Door Assemblies

I. NFPA 252 – Fire Tests of Door Assemblies

J. UL – Underwriters Laboratories

K. UL10C – Positive Pressure Fire Tests of Door Assemblies.

L. UL 305 – Panic Hardware

M. WHI – Warnock Hersey Incorporated State of California Building Code

N. Local applicable codes

O. SDI – Steel Door Institute

P. WI – Woodwork Institute

Q. AWI – Architectural Woodwork Institute

R. NAAMM – National Association of Architectural Metal Manufacturers

1.3 SUBMITTALS & SUBSTITUTIONS

A. SUBMITTALS: Submit six copies of schedule per GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals. Only submittals printed one sided will be accepted and reviewed. Organize vertically formatted schedule into "Hardware Sets" with index of doors and headings, indicating complete designations of every item required for each door or opening. Include following information:

1. Type, style, function, size, quantity and finish of hardware items.
2. Use BHMA Finish codes per ANSI A156.18.
3. Name, part number and manufacturer of each item.
4. Fastenings and other pertinent information.
5. Description of door location using space names and numbers as published in the drawings.
6. Explanation of abbreviations, symbols, and codes contained in schedule.
7. Mounting locations for hardware.
8. Door and frame sizes, handing, materials, fire-rating and degrees of swing.
9. List of manufacturers used and their nearest representative with address and phone number.
10. Catalog cuts.
11. Wiring Diagrams.
12. Manufacturer's technical data and installation instructions for electronic hardware.

B. Bid and submit manufacturer's updated/improved item if scheduled item is discontinued.

C. Deviations: Highlight, encircle or otherwise identify deviations from "Schedule of Finish Hardware" on submittal with notations clearly designating those portions as deviating from this section.

D. If discrepancy between drawings and scheduled material in this section, bid the more expensive of the two choices, note the discrepancy in the submittal and request direction from Resident Engineer for resolution.

E. Substitutions per GREENBOOK and 2010 City Supplement, section 4-1.6. Include product data and indicate benefit to the Project. Furnish operating samples on request.

F. Furnish as-built/as-installed schedule with closeout documents, including keying schedule, wiring diagrams, manufacturers' installation, adjustment and maintenance information, and supplier's final inspection report.

1.4 QUALITY ASSURANCE:

A. Qualifications:

1. Hardware supplier: direct factory contract supplier who employs a certified architectural hardware consultant (AHC), available at reasonable times during course of work for project hardware consultation to Resident Engineer.

2. Responsible for detailing, scheduling and ordering of finish hardware. Detailing implies that the submitted schedule of hardware is correct and complete for the intended function and performance of the openings.

3. Hardware: Free of defects, blemishes and excessive play. Obtain each kind of hardware (latch and locksets, exit devices, hinges and closers) from one manufacturer.

4. Exit Doors: Operable from inside with single motion without the use of a key or special knowledge or effort.

5. Fire-Rated Openings: NFPA 80 compliant. Hardware UL10C / California State Fire Marshal Standard 12-7-4 (positive pressure) compliant for given type/size opening and degree of label. Provide proper latching hardware, non-flaming door closers, approved-bearing hinges, and resilient seals. Coordinate with wood door section for required intumescent seals. Furnish openings complete.

   Note: scheduled resilient seals may exceed selected door manufacturer's requirements.

B. See 2.6.E for added information regarding resilient and intumescent seals.

C. Testing and Field inspection of Fire and Egress door installation shall be in compliance with GREENBOOK and 2010 City Supplement, section 4-1.4 for instructions for testing procedures. Punch list shall be developed by a current member of CAFDI.org. CAFDI inspector shall not be an employee of Distributor, Suppiler, or Mfg. of material on this project.

D. Furnish hardware items required to complete the work in accordance with specified performance level and design intent, complying with manufacturers' instructions.

E. Pre-Installation Meetings: Initiate and conduct with supplier, installer and related trades, coordinate materials and techniques, and sequence complex hardware items and systems installation.

1.5 DELIVERY, STORAGE AND HANDLING:

A. Delivery: coordinate delivery to appropriate locations (shop or field).

B. Permanent keys and cores: secured delivery direct to Resident Engineer.

C. Acceptance at Site: Items individually packaged in manufacturers' original containers, complete with proper fasteners and related pieces. Clearly mark packages to indicate contents, locations in hardware schedule and door numbers.

D. Storage: Provide securely locked storage area for hardware, protect from moisture, sunlight, paint, chemicals, dust, excessive heat and cold, etc.

1.6 PROJECT CONDITIONS AND COORDINATION:

A. Where exact types of hardware specified are not adaptable to finished shape or size of members requiring hardware, provide suitable types having as nearly as practical the same operation and quality as type specified, subject to Resident Engineer's approval.

B. Coordination: Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents. Furnish related trades with the following information:

1. Location of embedded and attached items to concrete.
2. Location of wall-mounted hardware, including wall stops.
3. Location of finish floor materials and floor-mounted hardware.
4. Locations for conduit and raceways as needed for electrical, electronic and electro-pneumatic hardware items. Fire/life-safety system interfacing. Point-to-point wiring diagrams plus riser diagrams to related trades.
5. Manufacturer templates to door and frame fabricators.

C. Check Shop Drawings for doors and entrances to confirm that adequate provisions will be made for proper hardware installation. Do not order hardware until the submittal has been reviewed by the frame and door suppliers for compatibility with their products.

D. Prior to submittal, carefully inspect existing conditions at each opening to verify finish hardware required to complete Work, including sizes, quantities, existing hardware scheduled for re-use, and sill condition material. If conflict or incompatibility between the specified/scheduled hardware and existing conditions, submit request for direction from Resident Engineer. Include date of jobsite visit in the submittal.

E. Submittals prepared without thorough jobsite visit by qualified hardware expert will be rejected as non-compliant.

1.7 WARRANTY:

A. Part of respective manufacturers' regular terms of sale. Provide manufacturers' written warranties:

Locksets:	Three years
Extra Heavy Duty Cylindrical Lock:	Seven Years
Exit Devices:	Three years mechanical One year electrical
Closers:	Ten years mechanical Two years electrical
Hinges:	Three years
Other Hardware	Two years

1.8 COMMISSIONING:

A. Conduct these tests prior to request for certificate of substantial completion:

1. With installer present, test door hardware operation with climate control system and stairwell pressurization system both at rest and while in full operation.

2. With installer, access control contractor and electrical contractor present, test electrical, electronic and electro-pneumatic hardware systems for satisfactory operation.

3. With installer and electrical contractor present, test hardware interfaced with fire/life-safety system for proper operation and release.

PART 2 PRODUCTS

2.1 MANUFACTURERS:

A. Manufacturers and their abbreviations used in this schedule:

IVE	H. B. Ives
GLY	Glynn-Johnson Hardware
LCN	LCN Closers
NGP	National Guard Products
SCH	Schlage Lock Company
VON	Von Duprin

2.2 HINGING METHODS:

A. Drawings typically depict doors at 90 degrees, doors will actually swing to maximum allowable. Use wide-throw conventional or continuous hinges as needed up to 8 inches in width to allow door to stand parallel to wall for true 180-degree opening. Advise Resident Engineer if 8-inch width is insufficient.

B. Conform to manufacturer's published hinge selection standard for door dimensions, weight and frequency, and to hinge selection as scheduled. Where manufacturer's standard exceeds the scheduled product, furnish the heavier of the two choices, notify Resident Engineer of deviation from scheduled hardware.

1. Conventional Hinges: Steel or stainless steel pins and concealed bearings. Hinge open widths minimum, but of sufficient throw to permit maximum door swing.

   a. Outswinging exterior doors: non-ferrous with non-removable (NRP) pins and security studs.

   b. Non-ferrous material exteriors and at doors subject to corrosive atmospheric conditions.

2. Continuous Hinges:

   a. Geared-type aluminum.

      1) Use wide-throw units where needed for maximum degree of swing, advise Resident Engineer if commonly available hinges are insufficient.

   b. Pinned steel/stainless steel type: continuous stainless steel, 0.25-inch diameter stainless-steel hinge pin.

      1) Use engineered application-specific wide-throw units as needed to provide maximum swing degree of swing, advise Resident Engineer if required width exceeds 8 inches.

a. Pivots: high-strength forged bronze or stainless steel, tilt-on precision bearing and bearing pin.

1) Bottom and intermediate pivots: adjustability of minus 1/16 inch, plus 1/8 inch.

3. Floor Closers: hydraulically controlled, cement case, maximum degree dead stop permitted by trim or adjacent structure. Special pins, floor pans and longer spindles when needed to accommodate floor and jamb conditions.

2.3 LOCKSETS, LATCHSETS, DEADBOLTS:

A. Mortise Locksets and Latchsets: as scheduled.

1. Chassis: cold-rolled steel, handing field-changeable without disassembly.

2. Latchbolts: 3/4 inch throw stainless steel anti-friction type.

3. Lever Trim: through-bolted, accessible design, cast lever or solid extruded bar type levers as scheduled. Filled hollow tube design unacceptable.

a. Spindles: security design independent breakaway. Breakage of outside lever does not allow access to inside lever's hubworks to gain wrongful entry.

4. Furnish solid cylinder collars with wave springs. Wall of collar to cover rim of mortise cylinder.

5. Thumbturns: accessible design not requiring pinching or twisting motions to operate.

6. Deadbolts: stainless steel 1-inch throw.

7. Electric operation: Manufacturer-installed continuous duty solenoid.

8. Strikes: 16 gage curved steel, bronze or brass with 1 inch deep box construction, lips of sufficient length to clear trim and protect clothing.

9. Scheduled Lock Series and Design: Schlage L series, 17A design.

10. Certifications:

a. ANSI A156.13, 1994, Grade 1 Operational, Grade 1 Security.

b. ANSI/ASTM F476-84 Grade 31 UL Listed.

2.4 EXIT DEVICES / PANIC HARDWARE

A. General features:

1. Independent lab-tested 1,000,000 cycles.

2. Push-through push-pad design. No exposed push-pad fasteners, no exposed cavities when operated. Return stroke fluid dampeners and rubber bottoming dampeners, plus anti-rattle devices.

3. End caps: impact-resistant, flush-mounted. No raised edges or lips to catch carts or other equipment.

4. No exposed screws to show through glass doors.

5. Non-handed basic device design with center case interchangeable with all functions, no extra parts required to effect change of function.

6. Releasable in normal operation with 15-lb. maximum operating force per California State Fire Marshal Standard 12-10-3, and with 32 lb. maximum pressure under 250-lb. load to the door.

7. Exterior doors scheduled with XP-series devices: Static load force resistance of at least 2000 pounds.

8. Where devices span over door lite frame and the face of the selected lite manufacturer's frame is raised from the face of the door, furnish panic hardware manufacturer's fitted shims or glass-bead kits at no additional cost to the project.

9. Comply with CBC Section 1003.3.1.9.

B. Specific features:

1. Non-Fire Rated Devices: cylinder dogging.

2. Lever Trim: breakaway type, forged brass or bronze escutcheon min .130" thickness, compression spring drive, match lockset lever design.

3. Rod and latch guards with sloped full-width kickplates for doors fitted with surface vertical rod devices with bottom latches.

4. Fire-Labeled Devices: UL label indicating "Fire Exit Hardware". Vertical rod devices less bottom rod (LBR) unless otherwise scheduled.

5. Inpact recessed devices: 1-1/4 inch projection when push-pad is depressed. Sloped metal end caps to deflect carts, etc. No pinch points to catch skin between touchbar and door.

6. Delayed Egress Devices: Function achieved within single exit device component, including latch, delayed locking device, request-to-exit switch, nuisance alarm, remote alarm, key switch, indicator lamp, relay, internal horn, door position input, external inhibit input plus fire alarm input. NFPA 101 "Special Locking Arrangement" compliant.

7. Electrically Operated Devices: Single manufacturer source for electric latch retraction devices, electrically controlled trim, power transfers, power supplies, monitoring switches and controls.

8. Removable Mullions: Removable with single turn of building key. Securely reinstalled without need for key. Furnish storage brackets for securely stowing the mullion away from the door when removed.

2.5 CLOSERS

A. Surface Closers:

1. Full rack-and-pinion type cylinder with removable non-ferrous cover and cast iron body. Double heat-treated pinion shaft, single piece forged piston, chrome-silicon steel spring.

2. ISO 2000 certified. Units stamped with date-of-manufacture code.

3. Independent lab-tested 10,000,000 cycles.

4. Non-sized, non-handed, and adjustable. Place closer inside building, stairs, and rooms.

5. Plates, brackets and special templating when needed for interface with particular header, door and wall conditions and neighboring hardware.

6. Adjustable to open with not more than 5.0lbs pressure to open at exterior doors and 5.0lbs at interior doors. As allowed per California Building Code, Section 1133B.2.5, local authority may increase the allowable pressure for fire doors to achieve positive latching, but not to exceed 15lbs.

7. Separate adjusting valves for closing speed, latching speed and backcheck, fourth valve for delayed action where scheduled.

8. Extra-duty arms (EDA) at exterior doors scheduled with parallel arm units.

9. Exterior door closers: tested to 100 hours of ASTM B117 salt spray test, furnish data on request.

10. Exterior doors: seasonal adjustments not required for temperatures from 120 degrees F to -30 degrees F, furnish checking fluid data on request.

11. Non-flaming fluid, will not fuel door or floor covering fires.

12. Pressure Relief Valves (PRV) not permitted.

B. Floor Closers: See 2.2: HINGING METHODS.

C. High Security Closers: Removable heavy gage metal case. Cylinders independent test lab certified to exceed 10,000,000 cycles. Vandal and tamper resistant forged steel arm. Exposed fasteners: pinned TORX type.

1. Advanced Variable Backcheck (AVB): where scheduled, these units commence backcheck at approximately 45 degrees.

D. Overhead Concealed Closers: Power transmitted to door separately from hanging means. Closer spindle does not support the door. Cast iron cylinders with hydraulically checked rack and pinion construction and single piece forged pistons. Separate non-critical sweep and latch speed valves.

1. (2030) concealable in 1-3/4inch x 4inch tube, single-lever arm & track power transmission, concealed-in-track bumpers where scheduled.

2. Electromagnetic Hold-Open Closers: Integrate with UL listed fire/life-safety alarm systems.

3. Detectors: UL228 listed, photoelectric type with normally-open and normally-closed alarm system contacts.

4. Multi-point units: hold-open bypass at 80 degree or 140 degree. Swing-free/no-drift arms at pull-side mounted units.

2.6 OTHER HARDWARE

A. Automatic Flush Bolts: Low operating force design.

B. Overhead Stops: Non-plastic mechanisms and finished metal end caps. Field-changeable hold-open, friction and stop-only functions.

C. Kick Plates: Four beveled edges, .050 inches minimum thickness, height and width as scheduled. Sheet-metal screws of bronze or stainless steel to match other hardware.

D. Door Stops: Provide stops to protect walls, casework or other hardware.

1. Unless otherwise noted in Hardware Sets, provide floor type with appropriate fasteners. Where floor type cannot be used, provide wall type. If neither can be used, provide overhead type.

2. Locate overhead stops for maximum possible opening. Consult with Resident Engineer for furniture locations. Minimum: 90deg stop / 95deg deadstop. Note degree of opening in submittal.

E. Seals: Finished to match adjacent frame color. Resilient seal material: polyurethane, polypropylene, nylon brush, silicone rubber or solid high-grade neoprene as scheduled. Do not furnish vinyl seal material. UL label applied to seals on rated doors. Substitute products: certify that the products equal or exceed specified material's thickness and durability.

1. Proposed substitutions: submit per GREENBOOK and 2010 City Supplement, section 4-1.6.

2. Solid neoprene: MIL Spec. R6855-CL III, Grade 40.

3. Non-corroding fasteners at in-swinging exterior doors.

4. Sound control openings: Use components tested as a system using nationally accepted standards by independent laboratories. Ensure that the door leafs have the necessary sealed-in-place STC ratings. Fasten applied seals over bead of sealant.

5. Fire-rated Doors, Resilient Seals: UL10C / UBC Standard 7-2 compliant. Coordinate with selected door manufacturers' and selected frame manufacturers' requirements. Where rigid housed resilient seals are scheduled in this section and the selected door manufacturer only requires an adhesive-mounted resilient seal, furnish rigid housed seal at minimum, or both the rigid housed seal plus the adhesive applied seal. Adhesive applied seals alone are deemed insufficient for this project where rigid housed seals are scheduled.

6. Fire-rated Doors, Intumescent Seals: Furnished by selected door manufacturer. Furnish fire-labeled opening assembly complete and in full compliance with UL10C / UBC Standard 7-2. Where required, intumescent seals vary in requirement by door type and door manufacture -- careful coordination required

F. Automatic door bottoms: low operating force units. Doors with automatic door bottoms plus head and jamb seals cannot require more than two pounds operating force to open when closer is disconnected.

G. Thresholds: As scheduled and per details. Comply with CBC Section 1133B.2.4.1. Substitute products: certify that the products equal or exceed specified material's thickness. Proposed substitutions: submit for approval per GREENBOOK and 2010 City Supplement, section 4-1.6.

1. Exteriors: Seal perimeter to exclude water and vermin. Use sealant complying with requirements in Division 7 "Thermal and Moisture Protection". Non-ferrous 1/4inch fasteners and lead expansion shield anchors, or Red-Head #SFS-1420 (or approved equivalent) Flat Head Sleeve Anchors (SS/FHSL).

2. Fire-rated openings, 90min or less duration: use thresholds to interrupt floor covering material under the door where that material has a critical radiant flux value less than 0.22 watts per square centimeter, per NFPA 253. Use threshold unit as scheduled. If none scheduled, request direction from Resident Engineer.

3. Fire-rated openings, 3hour duration: Thresholds, where scheduled, to extend full jamb depth.

4. Acoustic openings: Set units in full bed of Division-7-compliant, leave no air space between threshold and substrate.

5. Plastic plugs with wood or sheet metal screws are not an acceptable substitute for specified fastening methods.

6. Fasteners: Generally, exposed screws to be Phillips or Robertson drive. Pinned TORX drive at high security areas. Flat head sleeve anchors (FHSL) may be slotted drive. Sheet metal and wood screws: full-thread. Sleeve nuts: full length to prevent door compression.

H. Exposed Through-Bolts: Do not use SNB, grommet nuts, sleeve nuts or other such clamping type fasteners, intent is for minimal exposed hardware. Coordinate with wood doors; ensure provision of proper blocking to support wood screws for mounting panic hardware and door closers. Coordinate with metal doors and frames; ensure provision of proper reinforcement to support machine screws for mounting panic hardware and door closers.

I. Silencers: Interior hollow metal frames, 3 for single doors, 4 for pairs of doors. Omit where adhesive mounted seal occurs. Leave no unfilled/uncovered pre-punched silencer holes.

J. Wall- & Floor-mounted electromagnetic door holders: LCN's SEM series or approved equivalent. Incorporate into U.L. listed fire & life-safety system, doors release to allow closure and latching when door's zone is in alarm state. Use minimum projection required to allow door to open as widely as allowed by wall conditions and projection of door hardware.

2.7 FINISH:

A. Generally BHMA 630 Satin Stainless.

1. Areas using BHMA 626 to have push-plates, pulls and protection plates of BHMA 630, Satin Stainless Steel, unless otherwise noted.

B. Door closers: factory powder coated to match other hardware, unless otherwise noted.

C. Aluminum items: match predominant adjacent material. Seals to coordinate with frame color.

2.8 KEYING REQUIREMENTS:

A. Key System: existing small format interchangeable core. For estimate use factory GMK charge. Initiate and conduct meeting(s) with Resident Engineer to determine system structure and keybow styles, furnish Resident Engineer’s written approval of the system. Resident Engineer will order and supply permanent cores. Resident Engineer will install permanent cores.

B. Keys

1. Construction keying: furnish keyed-alike temporary cores plus 10 operating keys. Temporary cores and keys remain property of hardware supplier.

C. Interchangeable Cores: 7-pin solid brass construction.

D. Permanent cores: furnish factory-keyed.

E. Permanent keys and cores: use secured shipment direct from point of origination to Resident Engineer.

a. For estimate: 3 keys per change combination, 5 master keys per group, 5 grand-master keys, 3 control keys.

1. For estimate: VKC stamping plus “Do Not Duplicate”.

F. Bitting List: use secured shipment direct from point of origination to Resident Engineer upon completion.

PART 3 -EXECUTION

3.1 ACCEPTABLE INSTALLERS:

A. Can read and understand manufacturers' templates, suppliers' hardware schedules and printed installation instructions. Can readily distinguish drywall screws from manufacturers' furnished fasteners. Available to meet with manufacturers' representatives and related trades to discuss installation of hardware.

3.2 PREPARATION:

A. Ensure that walls and frames are square and plumb before hardware installation. Make corrections before commencing hardware installation.

B. Locate hardware per SDI-100 and applicable building, fire, life-safety, accessibility, and security codes.

1. Notify Resident Engineer of code conflicts before ordering material.

2. Locate levers, key cylinders, t-turn pieces, touchbars and other operable portions of latching hardware between 30 inches to 44 inches above the finished floor, per CBC Section 1133B.2.5.1.

3. Where new hardware is to be installed near existing doors/hardware scheduled to remain, match locations of existing hardware.

C. Overhead stops: before installing, determine proposed locations of furniture items, fixtures, and other items to be protected by the overhead stop's action.

D. Existing frames and doors to be retrofitted with new hardware:

1. Field-verify conditions and dimensions prior to ordering hardware. Fill existing hardware cut outs not being reused by the new hardware. Remove existing hardware not being reused, return to Resident Engineer unless directed otherwise.

2. Remove existing floor closers not scheduled for reuse, fill cavities with concrete and finish smooth

3. Cut and weld existing steel frames currently prepared with 2-¾" height strikes. Cut an approx. 8" section from the strike jamb and weld in a reinforced section to accommodate specified hardware's strike.

4. Patch and weld flush filler pieces into existing door hardware preparations in steel doors and frames, leave surfaces smooth.

5. Glue in solid wood block fillers to fill cut outs in existing wood doors, sand surfaces smooth. Alternatively, use an approved epoxy-based wood filler product, submit product data for approval.

3.3 INSTALLATION

A. Install hardware per manufacturer's instructions and recommendations. Do not install surface-mounted items until finishes have been completed on substrate. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate for proper installation and operation. Remove and reinstall or replace work deemed defective by Resident Engineer.

1. Gaskets: install jamb-applied gaskets before closers, overhead stops, rim strikes, etc; fasten hardware over and through these seals. Install sweeps across bottoms of doors before astragals, cope sweeps around bottom pivots, trim astragals to tops of sweeps.

2. When hardware is to be attached to existing metal surface and insufficient reinforcement exists, use RivNuts, NutSerts or similar anchoring device for screws.

3. Use manufacturers' fasteners furnished with hardware items, or submit Request for Substitution with Resident Engineer, per GREENBOOK and 2010 City Supplement, section 4-1.6.

4. Replace fasteners damaged by power-driven tools.

B. Locate floor stops no more that 4 inches from walls and not within paths of travel. See paragraph 2.2 regarding hinge widths, door should be well clear of point of wall reveal. Point of door contact no closer to the hinge edge than half the door width. Where situation is questionable or difficult, contact Resident Engineer for direction.

C. Core concrete for exterior door stop anchors. Set anchors in approved non-shrink grout.

D. Locate overhead stops for minimum 90 degrees and maximum allowable degree of swing.

E. Drill pilot holes for fasteners in wood doors and/or frames. Centerpunch hole locations before using self-drilling type screws to prevent skating. Replace screws that are not centered in their holes.

F. Lubricate and adjust existing hardware scheduled to remain. Carefully remove and give to Resident Engineer items not scheduled for reuse.

G. Field verify existing conditions and measurements prior to ordering hardware. Fill existing hardware cut outs not being used by the new hardware. Remove existing hardware not being reused.

H. Disable or remove existing floor closers where they exist. If disabled cut or remove spindle.

I. Where existing wall conditions will not allow door to swing using the scheduled hinges, provide wide-throw hinges and if needed extended arms on closers.

J. Provide proper brackets to accommodate the mounting of closers on doors with flush transoms.

3.4. ADJUSTING

A. Adjust and check for proper operation and function. Replace units, which cannot be adjusted to operate freely and smoothly.

1. Hardware damaged by improper installation or adjustment methods: repair or replace to Resident Engineer’s satisfaction.

2. Adjust doors to fully latch with no more than 1 pound of pressure.

3. Adjust delayed-action closers on fire-rated doors to fully close from fully-opened position in no more than 10 seconds.

4. Adjust door closers per 1.9 this section.

5. Inspection: Use hardware supplier’s consultant or consultant’s agent. Include supplier's report with closeout documents.

6. Final inspection: Installer to provide letter to Resident Engineer that upon completion installer has visited the Project and has accomplished the following:

7. Re-adjust hardware.

8. Evaluate maintenance procedures and recommend changes or additions, and instruct Resident Engineer’s personnel.

9. Identify items that have deteriorated or failed.

10. Submit written report identifying problems

3.5 DEMONSTRATION:

A. Demonstrate mechanical hardware and electrical, electronic and pneumatic hardware systems, including adjustment and maintenance procedures.

3.6 PROTECTION/CLEANING:

A. Cover installed hardware, protect from paint, cleaning agents, weathering, carts/barrows, etc. Remove covering materials and clean hardware just prior to substantial completion.

B. Clean adjacent wall, frame and door surfaces soiled from installation/reinstallation process.

3.7 SCHEDULE OF FINISH HARDWARE

A. See door schedule in drawings for hardware set assignments.

B. Miscellaneous Material:

HW SET: 01

1	EA	CONTINUOUS HINGE	700	630	IVE
1	EA	PANIC HARDWARE	CD-CI 35A-NL-OP	626	VON
1	EA	RIM CYLINDER	20-057-ICX	626	SCH
1	EA	MORTISE CYLINDER	20-061-ICX	626	SCH
2	EA	CORE ONLY	23-030	626	SCH
1	EA	VANDAL DOOR PULL	VR910NL	630	IVE
1	EA	SURFACE CLOSER	4041 DEL SHCUSH	689	LCN
1	EA	FLOOR STOP & HOLDER	FS41	626	IVE
1			ALL SEALS AND THRESHOLDS BY ALUM DOOR MFGR		B/O
1	EA	DOOR POSITION SWITCH	7764	628	SCE

DOOR POSITION SWITCH WIRED TO INTRUSION DETECTION SYSTEM

DURING SCHOOL HOURS PANIC EXIT DEVICE IS "DOGGED" IN THE UNLOCKED POSITION,BECOMMING A PUSH PULL OPERATION WITHOUT LATCHING, PROVIDE 9 VOLT BATTERY FOR LED INDICATOR. WHEN DOGGING IS RELEASED LED IN PANIC BAR WILL FLASH THAT THE DOOR IS LOCKED. DOOR IS ALWAYS FREE TO EGRESS VIA PANIC BAR AT ALL TIMES.

HW SET: 02

1			EXISTING HARDWARE TO REMAIN		B/O

CHCONFIRM BY VISUAL AND MECHANICAL INSPECTION THAT DOOR IS COMPLETLY OPERATIONAL.
PROVIDE SELF CLOSING AND SELF LATCHING HARDWARE IN WORKING CONDITION THAT MATCHES EXISTING. WHEN EXISTING DOOR IS FIRE LABELED, THE COMPLETE OPENING IS TO BE IN COMPLIANCE WITH FIRE DOORS AS REQUIRED BY CBC AND NFPA80-07

HW SET: 03

1	SET	SEALS	9550 (BATWING SEAL FOR WD FRAME)	GRY	NGP
1			EXISTING HARDWARE TO REMAIN		B/O

CHCONFIRM BY VISUAL AND MECHANICAL INSPECTION THAT DOOR IS COMPLETLY OPERATIONAL.
PROVIDE SELF CLOSING AND SELF LATCHING HARDWARE IN WORKING CONDITION THAT MATCHES EXISTING. WHEN EXISTING DOOR IS FIRE LABELED, THE COMPLETE OPENING IS TO BE IN COMPLIANCE WITH FIRE DOORS AS REQUIRED BY CBC AND NFPA80-07

HW SET: 04

3	EA	HINGE	3CB1HW 4.5 X 4.5	630	IVE
1	EA	CLASSROOM LOCK	L9076T 17A	630	SCH
1	EA	MORTISE CYLINDER	20-061-ICX	626	SCH
1	EA	CORE ONLY	23-030	626	SCH
1	EA	SURFACE CLOSER	4041 DEL	689	LCN
1	EA	10" KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	FLOOR STOP & HOLDER	FS41	626	IVE
1	EA	SILENCER	SR64	GRY	IVE

HW SET: 05

3	EA	HINGE	3CB1 4.5 X 4.5	630	IVE
1	EA	STOREROOM LOCK	L9080T 17A	630	SCH
1	EA	MORTISE CYLINDER	20-061-ICX	626	SCH
1	EA	CORE ONLY	23-030	626	SCH
1	EA	OVERHEAD HOLDER	900F	630	GLY
3	EA	SILENCER	SR64	GRY	IVE

Door Schedule

Qty	Mark	Arch Door No	HwSet	Mode	Width	Height	Thick	Door	Frame	Rating	Outside Location	Inside Location
1	100	100	03		-	-	-	WD	WDF	NON-RTD	EXTERIOR	RECEPTION
1	101	101	02		-	-	-	WD	WDF	NON-RTD	RECEPTION	OFFICE
1	102	102	02		-	-	-	WD	WDF	NON-RTD	OFFICE	CLOSET
1	103	103	03		-	-	-	WD	WDF	NON-RTD	EXISTING STORAGE	KITCHEN
1	104	104	02		-	-	-	WD	WDF	NON-RTD	CONFERENCE	RECEPTION
1	105	105	02		-	-	-	WD	WDF	NON-RTD	OFFICE AREA	MEN
1	106	106	02		-	-	-	WD	WDF	NON-RTD	SOLARIUM	SOLARIUN
1	107	107	02		-	-	-	WD	WDF	NON-RTD	EXISTING OFFICE	EXISTING STORAGE
1	108	108	03		-	-	-	WD	WDF	NON-RTD	EXTERIOR	EXISTING STORAGE
1	109	109	02		-	-	-	WD	WDF	NON-RTD	VESTIBULE	SOLARIUM
1	110	110	02		-	-	-	WD	WDF	NON-RTD	CONFERENCE RM	WOMEN
1	201	201	04	SGL	3'0"	6'8"	1-3/4"	WD	WDF	NON-RTD	CONFERENCE	KITCHEN
1	202	202	04	SGL	3'0"	6'8"	1-3/4"	WD	WDF	NON-RTD	VESTIBULE	CONFERENCE
1	203	203	01	SGL	3'0"	6'8"	1-3/4"	ALD	ALF	NON-RTD	EXTERIOR	VESTIBULE
1	204	204	01	SGL	3'0"	6'8"	1-3/4"	ALD	ALF	NON-RTD	EXTERIOR	SOLARIUM
1	205	205	05	SGL	2'6"	6'8"	1-3/4"	WD	WDF	NON-RTD	MEN	JANITOR

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END OF SECTION

SECTION 08 8000

GLAZING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Glass.

B. Plastic glazing film.

C. Glazing compounds and accessories.

1.02 RELATED REQUIREMENTS

A. Section 07 2500 - Weather Barriers.

B. Section 07 9005 - Joint Sealers: Sealant and back-up material.

C. Section 08 4500 - Translucent Wall and Roof Assemblies.

1.03 REFERENCE STANDARDS

A. 16 CFR 1201 - Safety Standard for Architectural Glazing Materials; current edition.

B. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers; 2005.

C. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2011.

D. ASTM C1048 - Standard Specification for Heat-Treated Flat Glass--Kind HS, Kind FT Coated and Uncoated Glass; 2004.

E. ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass; 2009e1.

F. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2009.

G. ASTM E1300 - Standard Practice for Determining Load Resistance of Glass in Buildings; 2009a.

H. ASTM E2190 - Standard Specification for Insulating Glass Unit Performance and Evaluation; 2010.

I. GANA (GM) - GANA Glazing Manual; Glass Association of North America; 2009.

J. GANA (SM) - FGMA Sealant Manual; Glass Association of North America; 2008.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data on Glass Types: Provide structural, physical and environmental characteristics, size limitations, special handling or installation requirements.

C. Product Data on Glazing Compounds: Provide chemical, functional, and environmental characteristics, limitations, special application requirements. Identify available colors.

D. Samples: Submit two samples 12x12 inch in size of glass units, showing coloration.

E. Certificates: Certify that products meet or exceed specified requirements.

F. Manufacturer's Certificate: Certify that tempered glass meets or exceeds specified requirements.

G. Maintenance Materials: Furnish the following for Resident Engineer's use in maintenance of project.

1.05 QUALITY ASSURANCE

A. Perform Work in accordance with GANA Glazing Manual and FGMA Sealant Manual for glazing installation methods.

B. Installer Qualifications: Company specializing in performing the work of this section with minimum 3 years documented experience.

1.06 FIELD CONDITIONS

A. Do not install glazing when ambient temperature is less than 50 degrees F.

B. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.07 WARRANTY

A. See GREENBOOK and 2010 City Supplement, Project Closeout Submittals section, for additional warranty requirements.

B. Sealed Insulating Glass Units: Provide a five (5) year warranty to include coverage for seal failure, interpane dusting or misting, including replacement of failed units.

C. Laminated Glass: Provide a five (5) year warranty to include coverage for delamination, including replacement of failed units.

PART 2 PRODUCTS

2.01 GLAZING TYPES

A. Type A - Sealed Insulating Glass Units: Vision glazing.

1. Application(s): All exterior wall glazing unless otherwise indicated.
2. Outboard Lite: Fully tempered float glass, 1/4 inch thick, minimum.
    a. Tint: Gray.
    b. Coating: Low-E type, on #2 surface.
3. Inboard Lite: Fully tempered float glass, 1/4 inch thick, minimum.
    a. Tint: Clear.
4. Total Thickness: 1 inch.
5. Total Visible Light Transmittance: _____ percent, nominal.
6. Total Solar Heat Gain Coefficient: _____ percent, nominal.
7. Glazing Method: Gasket glazing.

B. Type B - Security Glazing: Laminated glass/plastic glazing.

1. Application: Locations indicated on the drawings.
2. Application: All new exterior roof glazing.

2.02 EXTERIOR GLAZING ASSEMBLIES

A. Structural Design Criteria: Select type and thickness to withstand dead loads and wind loads acting normal to plane of glass at design pressures calculated in accordance with California Building code.

1. Use the procedure specified in ASTM E1300 to determine glass type and thickness.
2. Limit glass deflection to 1/200 or flexure limit of glass, whichever is less, with full recovery of glazing materials.
3. Thicknesses listed are minimum.

B. See Section 08 4500 - Translucent Wall and Roof Assemblies for assembly specification.

C. Air and Vapor Seals: Provide completed assemblies that maintain continuity of building enclosure vapor retarder and air barrier:

1. In conjunction with vapor retarder and joint sealer materials described in other sections.
2. To utilize the inner pane of multiple pane sealed units for the continuity of the air barrier and vapor retarder seal.
3. To maintain a continuous air barrier and vapor retarder throughout the glazed assembly from glass pane to heel bead of glazing sealant.

2.03 GLASS MATERIALS

A. Float Glass Manufacturers:

1. Zeledyne: www.versaluxglass.com.
2. AGC Flat Glass North America, Inc: www.afgglass.com.
3. Guardian Industries Corp: www.sunguardglass.com.
4. Pilkington North America Inc: www.pilkington.com/na.
5. PPG Industries, Inc: www.ppgglazing.com.
6. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. Float Glass: All glazing is to be float glass unless otherwise indicated.

1. Heat-Strengthened and Fully Tempered Types: ASTM C1048.
2. Tinted Types: Color and performance characteristics as indicated.
3. Thicknesses: As indicated; for exterior glazing comply with specified requirements for wind load design regardless of specified thickness.

C. Laminated Glass: Float glass laminated in accordance with ASTM C1172.

1. Laminated Safety Glass: Comply with 16 CFR 1201 test requirements for Category II.
2. Plastic Interlayer: 0.060 inch thick, minimum.
3. Where fully tempered is specified or required, provide glass that has been tempered by the tong-less horizontal method.
4. Manufacturers:
    a. AGC Flat Glass North America, Inc: www.afgglass.com.
    b. Cardinal Glass Industries: www.cardinalcorp.com.
    c. Viracon, Apogee Enterprises, Inc: www.viracon.com.
    d. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.04 SEALED INSULATING GLASS UNITS

A. Manufacturers:

1. Any of the manufacturers specified for float glass.
2. Substitutions: Refer to Section 01 6000 - Product Requirements.

B. Sealed Insulating Glass Units: Types as indicated.

1. Durability: Certified by an independent testing agency to comply with ASTM E2190.
2. Edge Spacers: Aluminum, bent and soldered corners.
3. Edge Seal: Glass to elastomer with supplementary silicone sealant.
4. Purge interpane space with dry hermetic air.

2.05 GLAZING COMPOUNDS

A. Manufacturers:

1. Bostik Inc: www.bostik-us.com.
2. Momentive Performance Materials, Inc (formerly GE Silicones): www.momentive.com.
3. Pecora Corporation: www.pecora.com.
4. BASF Construction Chemicals-Building Systems: www.chemrex.com.
5. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. Butyl Sealant: Single component; ASTM C 920, Grade NS, Class 12-1/2, Uses M and A; Shore A hardness of 10 to 20; black color; non-skinning.

2.06 GLAZING ACCESSORIES

A. Setting Blocks: Neoprene, 80 to 90 Shore A durometer hardness, ASTM C864 Option I. Length of 0.1 inch for each square foot of glazing or minimum 4 inch x width of glazing rabbet space minus 1/16 inch x height to suit glazing method and pane weight and area.

B. Spacer Shims: Neoprene, 50 to 60 Shore A durometer hardness, ASTM C 864 Option I. Minimum 3 inch long x one half the height of the glazing stop x thickness to suit application, self adhesive on one face.

C. Glazing Tape: Preformed butyl compound with integral resilient tube spacing device; 10 to 15 Shore A durometer hardness; coiled on release paper; size as recommended by glazing system manufacturer; black color.

1. Manufacturers:
   a. Pecora Corporation: www.pecora.com.
   b. Tremco Global Sealants: www.tremcosealants.com.
   c. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

D. Glazing Gaskets: Resilient silicone extruded shape to suit glazing channel retaining slot; ASTM c 864 Option I; color as selected from manufacturer's standard colors.

E. Glazing Clips: Manufacturer's standard type.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that openings for glazing are correctly sized and within tolerance.

B. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement, weeps are clear, and ready to receive glazing.

3.02 PREPARATION

A. Clean contact surfaces with solvent and wipe dry.

B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.

C. Prime surfaces scheduled to receive sealant.

D. Install sealants in accordance with ASTM C1193 and FGMA Sealant Manual.

E. Install sealant in accordance with manufacturer's instructions.

3.03 INSTALLATION - EXTERIOR/INTERIOR DRY METHOD (GASKET GLAZING)

A. Place setting blocks at 1/4 points with edge block no more than 6 inches from corners.

B. Rest glazing on setting blocks and push against fixed stop with sufficient pressure on gasket to attain full contact.

C. Install removable stops without displacing glazing gasket; exert pressure for full continuous contact.

3.04 MANUFACTURER'S FIELD SERVICES

A. Glass and Glazing product manufacturers to provide field surveillance of the installation of their products.

B. Monitor and report installation procedures and unacceptable conditions.

3.05 CLEANING

A. Remove glazing materials from finish surfaces.

B. Remove labels after Work is complete.

C. Clean glass and adjacent surfaces.

3.06 PROTECTION

A. After installation, mark pane with an 'X' by using removable plastic tape or paste.

END OF SECTION

SECTION 09 2900

GYPSUM BOARD

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Interior gypsum wallboard:

a. Impact-Resistant Gypsum Board, Type X.

B. Joint treatment and accessories.

1.02 RELATED REQUIREMENTS

A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.

B. Section 09 2216 – Non-Structural Metal Framing.

C. Section 09 9000 – Painting and Coating.

1.03 REFERENCE STANDARDS

A. ASTM C 475/C 475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board; 2002 (Reapproved 2007).

B. ASTM C 840 - Standard Specification for Application and Finishing of Gypsum Board; 2008.

C. ASTM C 954 - Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs From 0.033 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness; 2007.

D. ASTM C 1002 - Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2007.

E. ASTM C 1047 - Standard Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base; 2009.

F. ASTM C 1396/C 1396M - Standard Specification for Gypsum Board; 2009a.

G. ASTM C 1658/C 1658M - Standard Specification for Glass Mat Gypsum Panels; 2006.

H. ASTM D 3273 - Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber; 2000 (Reapproved 2005).

I. ASTM E 72 - Standard Test Methods of Conducting Strength Tests of Panels for Building Construction; 2005.

J. GA-216 - Application and Finishing of Gypsum Board; Gypsum Association; 2010.

1.04 PERFORMANCE REQUIREMENTS

A. Low Emitting Materials: For ceiling and wall assemblies, provide materials and construction identical to those tested in assembly and complying with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on gypsum board, accessories, and joint finishing system.

1.06 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing gypsum board application and finishing, with minimum 3 years of documented experience.

B. Copies of Documents at Site: Maintain at the project site a copy of each referenced document that prescribes execution requirements.

1.07 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.08 FIELD CONDITIONS

A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written recommendations, whichever are more stringent.

B. Unless using gypsum products that are specifically manufactured for limited exposure, do not install interior products until installations areas are protected from moisture.

C. Do not install panels that are wet, those that are moisture damaged, and those that are mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.

2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

1.09 WARRANTY

A. Special Manufacturer’s Warranty: Manufacturer’s standard form in which manufacturer agrees to repair or replace components of weather-resistant sheathing paper system that fail in materials or workmanship within specified warranty period.

1. Six months of coverage against in-place weather exposure damage (delamination, deterioration, U-V exposure, and decay)

2. Three years against manufacturing defects.

PART 2 PRODUCTS

2.01 GYPSUM BOARD - GENERAL

A. Recycled Content of Gypsum Panel Products: Postconsumer recycled content plus one-half of preconsumer recycled content not less than 25 percent by weight.

B. Regional Materials: Gypsum panel products shall be manufactured within 500 miles of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within 500 miles of Project site.

C. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.

2.02 GYPSUM BOARD MATERIALS

A. Gypsum Wallboard: Paper-faced gypsum panels as defined in ASTM C 1396/C 1396M; sizes to minimize joints in place; ends square cut.

1. Application: Use for vertical surfaces, unless otherwise indicated.

2. Glass-mat-faced gypsum panels as defined in ASTM C 1658/C 1658M, suitable for paint finish, of the same core type and thickness may be substituted for paper-faced board.
3. Mold Resistance: Score of 10, when tested in accordance with ASTM D 3273.
    a. Mold-resistant board is required at all locations.
4. Thickness:
    a. Vertical Surfaces: 5/8 inch.
5. Mold-Resistant Paper-Faced Products:
    a. American Gypsum; M-Bloc.
    b. CertainTeed Corporation; ProRoc Brand Moisture & Mold Resistant Gypsum Board.
    c. Lafarge North America Inc; Mold Defense Drywall.
    d. Lafarge North America Inc; Protecta AR 100 with Mold Defense.
    e. National Gypsum Company; Gold Bond Brand XP Gypsum Board.
    f. National Gypsum Company; Gold Bond Hi-Abuse Brand XP Wallboard.
    g. Pacific Coast Building Products, Inc; PABCO Mold Curb Gypsum Wallboard.
    h. Temple-Inland Inc; ComfortGuard Mold Resistant Gypsum Board.
    i. USG Corporation; Sheetrock Brand Mold Tough Gypsum Panels.
    j. USG Corporation; Sheetrock Brand Mold Tough Gypsum Panels AR.
    k. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. Backing Board For Wet Areas:
1. Application: Surfaces behind tile in wet areas including both restrooms at areas of wall furring over masonry.
2. Mold Resistance: Score of 10, when tested in accordance with ASTM D 3273.
3. ANSI Cement-Based Board: Non-gypsum-based; aggregated Portland cement panels with glass fiber mesh embedded in front and back surfaces complying with ANSI A118.9 or ASTM C 1325.
    a. Thickness: 5/8 inch.
    b. Products:
        1) Custom Building Products; Wonderboard.
        2) National Gypsum Company; PermaBase Brand Cement Board.
        3) National Gypsum Company; PermaBase Flex Brand Cement Board.
        4) USG Corporation; Durock Brand Cement Board.
        5) See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

C. Ceiling Board: Special sag-resistant gypsum ceiling board as defined in ASTM C 1396/C 1396M; sizes to minimize joints in place; ends square cut.
1. Application: Ceilings, unless otherwise indicated.

2. Thickness: 1/2 inch.
3. Edges: Tapered.
4. Products:
    a. American Gypsum; Interior Ceiling Board.
    b. CertainTeed Corporation; ProRoc Interior Ceiling.
    c. Georgia-Pacific Gypsum LLC; ToughRock CD Ceiling Board.
    d. Lafarge North America Inc; Sagcheck.
    e. National Gypsum Company; High Strength Brand Ceiling Board.
    f. Pacific Coast Building Products, Inc; PABCO Ceiling Board.
    g. Temple-Inland Inc; Span24 Ceiling Board.
    h. USG Corporation; Sheetrock Brand Sag-Resistant Interior Gypsum Ceiling Board.
    i. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.03 TRIM ACCESSORIES

A. Interior Trim: ASTM C 1047.
    1. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized steel sheet.
    2. Shapes:
        a. Cornerbead.
        b. Bullnose bead.
        c. LC-Bead: J-shaped; exposed long flange receives joint compound.
        d. L-Bead: L-shaped; exposed long flange receives joint compound.
        e. U-Bead: J-shaped; exposed short flange does not receive joint compound.
        f. Expansion (control) joint.
        g. Curved-Edge Cornerbead: With notched or flexible flanges.
B. Exterior Trim: ASTM C 1047.
    1. Material: Hot-dip galvanized steel sheet, plastic, or rolled zinc.
    2. Shapes:
        a. Cornerbead.
        b. LC-Bead: J-shaped; exposed long flange receives joint compound.
        c. Expansion (Control) Joint: One-piece, rolled zinc with V-shaped slot and removable strip covering slot opening.

2.04 JOINT TREATMENT ACCESSORIES

A. General: Comply with ASTM C 475/C 475M.
B. Joint Tape:
    1. As recommended by panel manufacturer.

C. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.

1. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.

2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.

a. Use setting-type compound for installing paper-faced metal trim accessories.

3. Fill Coat: For second coat, use setting-type, sandable topping compound.

4. Finish Coat: For third coat, use setting-type, sandable topping compound.

5. Skim Coat: For final coat of Level 5 finish, use setting-type, sandable topping compound.

D. Joint Compound for Exterior Applications:

1. Exterior Gypsum Soffit Board: Use setting-type taping compound and setting-type, sandable topping compound.

2. Glass-Mat Gypsum Sheathing Board: As recommended by sheathing board manufacturer.

2.05 AUXILLIARY ACCESSORIES

A. General: Provide auxiliary materials that comply with referenced installation standards and manufacturer's written recommendations.

B. Steel Drill Screws: ASTM C 1002, unless otherwise indicated.

1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch thick.

2. For fastening cementitious backer units, use screws of type and size recommended by panel manufacturer.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine areas and substrates including welded hollow-metal frames and framing, with Installer present, for compliance with requirements and other conditions affecting performance.

B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 APPLYING AND FINISHING PANELS - GENERAL

A. Comply with ASTM C 840.

B. Install ceiling panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.

C. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch of open space between panels. Do not force into place.

D. Locate edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Do not place tapered edges against cut edges or ends. Stagger vertical joints on opposite sides of partitions. Do not make joints other than control joints at corners of framed openings.

E. Form control and expansion joints with space between edges of adjoining gypsum panels.

F. Cover both faces of support framing with gypsum panels in concealed spaces (above ceilings, etc., except in chases braced internally.

1. Unless concealed application is indicated or required for sound, fire, air, or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. in area.

2. Fit gypsum panels around ducts, pipes, and conduits.

3. Where partitions intersect structural members projecting below underside of floor/roof slabs and decks, cut gypsum panels to fit profile formed by structural members; allow 1/4- to 3/8-inch- wide joints to install sealant.

G. Isolate perimeter of gypsum board applied to non-load-bearing partitions at structural abutments, except floors. Provide 1/4- to 1/2-inch- wide spaces at these locations and trim edges with edge trim where edges of panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.

H. Attachment to Steel Framing: Attach panels so leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.

I. Wood Framing: Install gypsum panels over wood framing, with floating internal corner construction. Do not attach gypsum panels across the flat grain of wide-dimension lumber, including floor joists and headers. Float gypsum panels over these members or provide control joints to counteract wood shrinkage.

3.03 APPLYING INTERIOR GYPSUM BOARD

A. Install interior gypsum board in the following locations:

1. Glass-Mat Interior Gypsum Board Type X:

a. Vertical and horizontal surfaces installed prior to completion of building envelope.

b. At wet walls in toilet rooms not indicated to receive ceramic tile.

2. Impact-Resistant Gypsum Board Type X: Vertical surfaces at walls in toilet rooms.

3. Type X: Vertical and horizontal surfaces unless otherwise indicated.

B. Single-Layer Application:

1. On partitions/walls, apply gypsum panels vertically (parallel to framing) unless otherwise indicated, and minimize end joints.

a. Stagger abutting end joints not less than one framing member in alternate courses of panels.

b. At high walls, install panels horizontally unless otherwise indicated.

2. Fastening Methods: Apply gypsum panels to supports with steel drill screws.

B. Single-Layer Non-Rated: Install gypsum board in most economical direction, with ends and edges occurring over firm bearing.

1. Exception: Tapered edges to receive joint treatment at right angles to framing.

C. Installation on Metal Framing: Use screws for attachment of all gypsum board.

D. Moisture Protection: Treat cut edges and holes in moisture resistant gypsum board with sealant.

3.04 INSTALLATION OF TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

B. Control Joints: Install control joints at locations indicated on Drawings, according to ASTM C 840 (with Architect approval of locations), and in specific locations approved by Architect for visual effect.

C. Interior Trim: Install in the following locations:

1. Cornerbead: Use at outside corners.

2. LC-Bead: Use at exposed panel edges.

3. L-Bead: Use where indicated.

4. U-Bead: Use at exposed panel edges.

5. Curved-Edge Cornerbead: Use at curved openings.

D. Exterior Trim: Install in the following locations:

1. Cornerbead: Use at outside corners.

2. LC-Bead: Use at exposed panel edges.

3.05 JOINT TREATMENT

A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.

B. Prefill open joints and damaged surface areas.

C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.

D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:

1. Level 2: Ceiling plenum areas, concealed areas, and panels that are substrates for tile.

2. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated.

a. Primer and its application to surfaces are specified in other Division 09 Sections.

3. Level 5: Provide at the following locations:

a. All exposed gypsum board surfaces in spaces open to the public, including, but not limited to the following: lobbies, atriums, corridors and hallways exceeding 30 feet in length, and where indicated.

b. Primer and its application to surfaces are specified in other Division 09 Sections.

E. Glass-Mat Gypsum Sheathing Board: Finish according to manufacturer's written instructions for use as exposed soffit board.

F. Glass-Mat Faced Panels: Finish according to manufacturer's written instructions.

G. Cementitious Backer Units: Finish according to manufacturer's written instructions.

3.06 PROTECTION

A. Protect adjacent surfaces from drywall compound and promptly remove from floors and other non-drywall surfaces. Repair surfaces stained, marred, or otherwise damaged during drywall application.

B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.

C. Remove and replace panels that are wet, moisture damaged, and mold damaged.

1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.

2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

3.07 TOLERANCES

A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

END OF SECTION

SECTION 09 3000

TILING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Tile for floor applications.

B. Tile for wall applications.

C. Ceramic accessories.

D. Ceramic trim.

E. Non-ceramic trim.

1.02 RELATED REQUIREMENTS

A. Section 07 9005 - Joint Sealers.

1.03 REFERENCE STANDARDS

A. ANSI A108 Series/A118 Series/A136.1 - American National Standard Specifications for the Installation of Ceramic Tile (Compendium); 2005.

1. ANSI A108.1a - American National Standard Specifications for Installation of Ceramic Tile in the Wet-Set Method, with Portland Cement Mortar; 2005.

2. ANSI A108.1b - American National Standard Specifications for Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set or Latex Portland Cement Mortar; 1999 (R2005).

3. ANSI A108.1c - Specifications for Contractors Option: Installation of Ceramic Tile in the Wet-Set Method with Portland Cement Mortar or Installation of Ceramic Tile on a Cured Portland Cement Mortar Bed with Dry-Set or Latex Portland Cement Mortar; 1999 (R2005).

4. ANSI A108.4 - American National Standard Specifications for Installation of Ceramic Tile with Organic Adhesives or Water Cleanable Tile-Setting Epoxy Adhesive; 1999 (R2005).

5. ANSI A108.5 - American National Standard Specifications for Installation of Ceramic Tile with Dry-Set Portland Cement Mortar or Latex-Portland Cement Mortar; 1999 (R2005).

6. ANSI A108.6 - American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant, Water Cleanable Tile-Setting and -Grouting Epoxy; 1999 (R2005).

7. ANSI A108.8 - American National Standard Specifications for Installation of Ceramic Tile with Chemical Resistant Furan Resin Mortar and Grout; 1999 (R2005).

8. ANSI A108.9 - American National Standard Specifications for Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout; 1999 (R2005).

9. ANSI A108.10 - American National Standard Specifications for Installation of Grout in Tilework; 1999 (R2005).

10. ANSI A108.11 - American National Standard for Interior Installation of Cementitious Backer Units; 1999 (R2005).

11. ANSI A118.6 - American National Standard Specifications for Standard Cement Grouts for Tile Installation; 1999 (R2005).
12. ANSI A118.7 - American National Standard Specifications for Polymer Modified Cement Grouts for Tile Installation; 1999 (R2005).
13. ANSI A118.8 - American National Standard Specifications for Modified Epoxy Emulsion Mortar/Grout; 1999 (R2005).
14. ANSI A118.9 - American National Standard Specifications for Test Methods and Specifications for Cementitious Backer Units; 1999 (R2005).
15. ANSI A136.1 - American National Standard for Organic Adhesives for Installation of Ceramic Tile; 1999 (R2005).
16. ANSI A137.1 - American National Standard Specifications for Ceramic Tile; 2008.

B. TCNA (HB) - Handbook for Ceramic Tile Installation; 2010.

1.04 PERFORMANCE REQUIREMENTS

A. Static Coefficient of Friction: Tile on walkway surfaces shall be provided with the following values as determined by testing in conformance with ASTM C 1028.
   1. Level Surfaces (up to 2% grade): Minimum of 0.60 in wet condition.
   2. Step Treads: Minimum of 0.60 in wet condition.
   3. Ramp Surfaces: Minimum of 0.80 in wet condition.

1.05 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data: Provide manufacturers' data sheets on tile, mortar, grout, and accessories. Include instructions for using grouts and adhesives.

C. Shop Drawings: Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, control and expansion joints, thresholds, ceramic accessories, and setting details.

D. Samples: Mount tile and apply grout on two plywood panels, minimum 18 x 18 inches in size illustrating pattern, color variations, and grout joint size variations.

E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

F. Maintenance Data: Include recommended cleaning methods, cleaning materials, stain removal methods, and polishes and waxes.

G. Maintenance Materials: Furnish the following for Resident Engineer's use in maintenance of project.
   1. Extra Tile: 1 percent percent of each size, color, and surface finish combination, but not less than 10 of each type.

1.06 QUALITY ASSURANCE

A. Maintain one copy of The Tile Council of North America Handbook and ANSI A108 Series/A118 Series on site.

B. Manufacturer Qualifications: Company specializing in manufacturing the types of products specified in this section, with minimum 5 years of documented experience.

C. Installer Qualifications: Company specializing in performing tile installation, with minimum of 5 years of documented experience.

D. Single Source Responsibility: Obtain each type and color of tile from a single source. Obtain each type and color of mortar, adhesive and grout from the same source.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

B. Deliver and store products in manufacturer’s unopened packaging until ready for installation.

C. Store tile and setting materials on elevated platforms, under cover and in a dry location and protect from contamination, dampness, freezing or overheating.

1.08 FIELD CONDITIONS

A. Do not install adhesives in an unventilated environment.

B. Maintain ambient and substrate temperature of 50 degrees F during installation of mortar materials.

PART 2 PRODUCTS

2.01 TILE

A. Acceptable Manufacturer: DalTile Corporation, 7834 C.F. Hawn Fwy, P.O.Box 170130; Dallas, TX, 75217; tel: 800-933-TILE or 214-398-1411; www.daltileproducts.com

1. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. Glazed Wall Tile: ANSI A137.1, and as follows:

1. Semi-Gloss manufactured by DalTile or approved equivalent product.
2. Moisture Absorption: less than 20%. ASTM C 373.
3. Size and Shape: 4-1/4 inch square.
4. Thickness: 5/16 inch.
5. Grout Joint Recommendation: 1/16 inch.
6. Edges: Square.
7. Surface Finish: Semi-Gloss.
8. Colors: Per Finish Schedule on drawings.
9. Pattern: Per interior elevations on drawings.

C. Paver Tile: ANSI A137.1, and as follows:

1. Porcealto Colorbody Porcelain - Graniti series manufactured by DalTile.
2. Moisture Absorption: 0 to 0.5 percent. ASTM C 373.
3. Breaking Strength: >520 lbs, textured finish. ASTM C 648.
4. Chemical Resistance: All resistant. ASTM C 650.
5. Coefficient of Friction: Wet $\geq$ 0.60, Dry $\geq$ 0.82. ASTM C 1028
6. Size and Shape: 12 inch square.
7. Grout Joint Recommendation: 1/4 inch.

7. Thickness: 5/16 inch
8. Edges: Square.
9. Surface Finish: Textured.
10. Colors: Per Finish Schedule on drawings.

2.02 TRIM AND ACCESSORIES

A. Ceramic Trim: Matching bullnose, double bullnose, cove base, and cove ceramic shapes in sizes coordinated with field tile.
   1. Applications: Use in the following locations:
      a. Open Edges: Bullnose.
      b. Inside Corners: Coved.
      c. Floor to Wall Joints: Cove base.
   2. Manufacturer: Same as for tile.

B. Non-Ceramic Trim: Satin natural anodized extruded aluminum, style and dimensions to suit application, for setting using tile mortar or adhesive.
   1. Applications: Use in the following locations:
      a. Thresholds at door openings.
      b. Open edges of floor tile.
      c. Transition between floor finishes of different heights.
      d. Expansion and control joints, floor and wall.
   2. Manufacturer:
      a. Schluter-Systems: www.schluter.com.
         1. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.03 ADHESIVE MATERIALS

A. Manufacturers:
   1. Bonsal American, Inc: www.sakrete.com
   2. Bostik Inc: www.bostik-us.com.
   3. Mapei Corporation: www.mapei.com.
   4. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. Organic Adhesive: ANSI A136.1, thinset bond type; use Type I in areas subject to prolonged moisture exposure.

2.04 MORTAR BED MATERIALS

A. Portland Cement: ASTM C 150, type 1, gray or white.

B. Hydrated Lime: ASTM C 207, Type S.

C. Sand: ASTM C 144, fine.

D. Latex Adhesive: As approved.

E. Water: Clean and potable.

2.05 MORTAR BOND COAT MATERIALS

A. Dry-Set Portland Cement type: ANSI 118.1.

B. Latex-Portland Cement type: ANSI 118.4.

C. Epoxy: ANSI A118.3, 100 percent solids.

2.06 GROUT MATERIALS

A. Manufacturers:

1. Bonsal American, Inc: www.sakrete.com

2. Bostik Inc: www.bostik-us.com.

3. Custom Building Products: www.custombuildingproducts.com.

4. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

B. Standard Grout: Any type specified in ANSI A118.6 or A118.7.

1. Colors: To be selected by Architect from manufacturer's standard range.

C. Epoxy Grout: ANSI A118.8, 100 pecent solids, color as selected.

2.07 ACCESSORY MATERIALS

A. Cleavage Membrane: 4 mil thick polyethylene film. ASTM D 4397.

B. Uncoupling Membrane: 1/8 inch thick polyurethane matting with three-dimensional grid structure with dovetail shaped cavities and fleece webbing laminated to the underside to provide a mechanical bond to the substrate adhesive (DITRA).

1. Acceptable Product: Schluter Systems "DITRA."

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

D. Waterproofing Membrane at Floors: Membrane in accordance with ANSI 118.10 and as follows:

1. Fabric-reinforced, Fluid-Applied elastomeric membrane.

C. Membrane at Walls: 4 mil thick polyethylene film. ASTM D 4397.

D. Metal Lath: ASTM C 847, flat expanded diamond mesh, not less than 2.5 lbs/SY, galvanized finish.

D. Cementitious Backer Board: ANSI A118.9; High density, cementitious, glass fiber reinforced, 5/8 inch thick; 2 inch wide coated glass fiber tape for joints and corners.

E. Mesh Tape: 2-inch wide self-adhesive fiberglass mesh tape.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that sub-floor surfaces are smooth and flat within the tolerances specified for that type of work and are ready to receive tile.

B. Verify that wall surfaces are smooth and flat within the tolerances specified for that type of work, are dust-free, and are ready to receive tile.

C. Verify that sub-floor surfaces are dust-free and free of substances that could impair bonding of setting materials to sub-floor surfaces.

D. Verify that concrete sub-floor surfaces are ready for tile installation by testing for moisture emission rate and alkalinity; obtain instructions if test results are not within limits recommended by tile manufacturer and setting materials manufacturer.

E. Verify that required floor-mounted utilities are in correct location.

3.02 PREPARATION

A. Protect surrounding work from damage.

B. Vacuum clean surfaces and damp clean.

C. Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.

D. Install cementitious backer board in accordance with ANSI A108.11 and board manufacturer's instructions. Tape joints and corners, cover with skim coat of dry-set mortar to a feather edge.

E. Install tile backer board in strict accordance with manufacturer's instructions, using galvanized roofing nails or corrosion-resistant bugle head drywall screws. Bed fiberglass self-adhesive tape at all joints and corners with material used to set tiles.

F. Prepare substrate surfaces for adhesive installation in accordance with adhesive manufacture’s instructions.

3.03 INSTALLATION - GENERAL

A. Install tile and grout in accordance with applicable requirements of ANSI A108.1 through A108.13, manufacturer's instructions, and The Tile Council of North America Handbook recommendations.

B. Lay tile to pattern indicated. Do not interrupt tile pattern through openings.

C. Cut and fit tile to penetrations through tile, leaving sealant joint space. Form corners and bases neatly. Align wall joints.

D. Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make joints watertight, without voids, cracks, excess mortar, or excess grout.

E. Form internal angles square and external angles bullnosed.

F. Install non-ceramic trim in accordance with manufacturer's instructions.

G. Install thresholds where indicated.

H. Sound tile after setting. Replace hollow sounding units.

I. Keep expansion joints free of adhesive or grout. Apply sealant to joints.

J. Allow tile to set for a minimum of 48 hours prior to grouting.

K. Grout tile joints. Use standard grout unless otherwise indicated.

L. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.

3.04 INSTALLATION - FLOORS - THIN-SET METHODS (where applies based on existing conditions)

A. Over interior concrete substrates, install in accordance with TCA Handbook Method F113, dry-set or latex-portland cement bond coat, with standard grout, unless otherwise indicated.

1. Use uncoupling membrane under all tile unless other underlayment is indicated.

2. Where waterproofing membrane is indicated, install in accordance with The Tile Council of North America Handbook Method F122, with latex-Portland cement grout.

3. Where epoxy bond coat and grout are indicated, install in accordance with The Tile Council of North America Handbook Method F131.

4. Where epoxy or furan grout is indicated, but not epoxy or furan bond coat, install in accordance with The Tile Council of North America Handbook Method F115.

3.05 INSTALLATION – FLOORS – MORTAR BED METHODS

A. Over exterior concrete substrates, install in accordance with TCA F101, bonded with standard grout.

B. Over interior concrete substrates, install in accordance with TCA F111, with cleavage membrane, unless otherwise indicated.

1. Where waterproofing membrane is indicated,with standard grout or no mention of grout type, install in accordance with The Tile Council of North America Handbook Method F121.

2. Where epoxy bond coat and grout are indicated, install in accordance with The Tile Council of North America Handbook Method F132, bonded.

3. Where epoxy or furan grout is indicated, but not epoxy or furan bond coat, install in accordance with The Tile Council of North America Handbook Method F114, with cleavage membrane.

C. Cleavage Membrane: Lap edges and ends.

D. Waterproofing Membrane: Install as specified in ANSI A108.13.

E. Mortar Bed Thickness: 1-1/4 to 2 inch maximum, unless otherwise indicated.

3.06 INSTALLATION - SHOWERS

A. At tiled shower receptors, install in accordance with TCA Handbook method B415, mortar bed floor, and W202, W211 or W221 as appropriate to match existing wall construction and required final thickness so that new tiles are flush with existing.

B. Grout with standard grout as specified above.

C. Seal joints between tile work and other work with sealant specified in Section 07 9005 Joint Sealers.

3.07 INSTALLATION - WALL TILE

A. Over cementitious backer units on studs, install in accordance with The Tile Council of North America Handbook Method W244, using membrane at toilet rooms.

B. Over gypsum wall board on wood or metal studs install in accordance with TCA Handbook Method W243, thin-set with dry-set or latex-portland cement bond coat, unless otherwise indicated.

1. Where mortar bed is indicated, install in accordance with TCA Handbook Method W222, one coat method.

2. Where waterproofing membrane is indicated other than at showers and bathtub walls, install in accordance with TCA Handbook Method W222, one coat method.

C. Over interior concrete and masonry install in accordance with TCA Handbook Method W202, thin-set with dry-set or latex-portland cement bond coat.

D. Over wood studs without backer install in accordance with TCA Handbook Method W231, mortar bed, with membrane where indicated.

E. Over metal studs without backer install in accordance with TCA Handbook Method W241, mortar bed, with membrane where indicated.

3.08 CLEANING

A. Clean tile and grout surfaces.

3.09 PROTECTION

A. Do not permit traffic over finished floor surface for 4 days after installation.

B. Cover floor with kraft paper and protect from dirt and residue from other trades.

C. Where floor with be exposed for prolonged periods cover with plywood or other similar type walkways.

3.08 SCHEDULE

A. As indicated on architectural drawings.

END OF SECTION

SECTION 09 9000

PAINTING AND COATING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface preparation.

B. Field application of paints.

C. Scope: Finish all interior and exterior surfaces exposed to view, unless fully factory-finished and unless otherwise indicated, including the following:

1. Mechanical and Electrical:

a. In finished areas, paint all insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, mechanical equipment, and electrical equipment, unless otherwise indicated.

b. In finished areas, paint shop-primed items.

c. Paint interior surfaces of air ducts and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint to visible surfaces.

D. Do Not Paint or Finish the Following Items:

1. Items fully factory-finished unless specifically so indicated; materials and products having factory-applied primers are not considered factory finished.

2. Items indicated to receive other finishes.

3. Items indicated to remain unfinished.

4. Fire rating labels, equipment serial number and capacity labels, and operating parts of equipment.

5. Stainless steel, anodized aluminum, bronze, terne, and lead items.

6. Marble, granite, slate, and other natural stones.

7. Floors, unless specifically so indicated.

8. Ceramic and other tiles.

9. Brick, architectural concrete, cast stone, integrally colored plaster and stucco.

10. Glass.

11. Concrete masonry in utility, mechanical, and electrical spaces.

12. Acoustical materials, unless specifically so indicated.

13. Concealed pipes, ducts, and conduits.

1.02 DEFINITIONS

A. Conform to ASTM D 16 for interpretation of terms used in this section.

1.03 REFERENCE STANDARDS

A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.

B. ASTM D 16 - Standard Terminology for Paint, Related Coatings, Materials, and Applications; 2008.

C. ASTM D 4442 - Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials; 2007.

D. GreenSeal GS-11 - Paints; 1993.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Product Data: Provide data on all finishing products and special coatings, including VOC content.

C. Samples: Submit two “draw-down” samples on paper, 8-1/2x11 inch in size illustrating each color, texture and sheen for each product scheduled for use on the project.

D. Certification: By manufacturer that all paints and coatings comply with VOC limits specified.

E. Certification: By manufacturer that all paints and coatings do not contain any of the prohibited chemicals specified; GreenSeal GS-11 certification is not required but if provided shall constitute acceptable certification.

F. Manufacturer's Instructions: Indicate special surface preparation procedures and substrate conditions requiring special attention.

G. Maintenance Data: Submit data on cleaning, touch-up, and repair of painted and coated surfaces.

H. Maintenance Materials: Furnish the following for Resident Engineer's use in maintenance of project.

1. Extra Paint and Coatings: 1 gallon of each color; store where directed.

2. Label each container with color in addition to the manufacturer's label.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified, with minimum three years documented experience.

B. Quality: Paint shall be of manufacturer’s highest, or ‘best’, quality appropriate for the substrate and project conditions. No construction grade paint shall be used on City of San Diego projects or facilities.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.07 FIELD CONDITIONS

A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.

B. Follow manufacturer's recommended procedures for producing best results, including testing of substrates, moisture in substrates, and humidity and temperature limitations.

C. Do not apply exterior coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.

D. Minimum Application Temperatures for Latex Paints: 45 degrees F for interiors; 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.

E. Minimum Application Temperature for Varnish Finishes: 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.

F. Provide lighting level of 80 ft candles measured mid-height at substrate surface.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Provide all paint and coating products used in any individual system from the same manufacturer; no exceptions.

B. Paints:

1. Base Manufacturer: Dunn Edwards. www.dunnedwards.com

C. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.02 PAINTS AND COATINGS - GENERAL

A. Paints and Coatings: Ready mixed, unless intended to be a field-catalyzed coating.

1. Provide paints and coatings of a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating, with good flow and brushing properties, and capable of drying or curing free of streaks or sags.

2. Provide materials that are compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.

3. Supply each coating material in quantity required to complete entire project's work from a single production run.

4. Do not reduce, thin, or dilute coatings or add materials to coatings unless such procedure is specifically described in manufacturer's product instructions.

B. Primers: Where the manufacturer offers options on primers for a particular substrate, use primer categorized as "best" by the manufacturer.

C. Volatile Organic Compound (VOC) Content:

1. Provide coatings that comply with the most stringent requirements specified in the following:

a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards for Architectural Coatings.

b. Architectural coatings VOC limits of California.

2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water added at project site; or other method acceptable to authorities having jurisdiction.

D. Flammability: Comply with applicable code for surface burning characteristics.

E. Colors: As indicated on drawings

1. Extend colors to surface edges; colors may change at any edge as directed by Architect.
2. In finished areas, finish pipes, ducts, conduit, and equipment the same color as the wall/ceiling they are mounted on/under.
3. In utility areas, finish equipment, piping, conduit, and exposed duct work in colors according to the color coding scheme indicated.

2.03 PAINT SYSTEMS - EXTERIOR

A. Wood, Opaque, Alkyd, 3 Coat:

1. One coat of acrylic primer sealer. EZ-PRIME PREMIUM (EZPR00) EXTERIOR WOOD PRIMER.
2. Gloss: Two coats of 100% acrylic enamel; SPARTAGLOSS (W7600V) EXTERIOR ACRYLIC GLOSS PAINT.

B. Gypsum Board and Plaster, Opaque, Acrylic, 3 Coat:

1. One coat of modified copolymer primer sealer. FLEX-PRIME (W6315) FLEXIBLE CRACK-RESISTANT PRIMER.
2. Flat: Two coats of 100% Acrylic enamel; ACRI-HUES (W 720) EXTERIOR ACRYLIC FLAT PAINT.

C. Ferrous Metals, Unprimed, Alkyd, 3 Coat:

1. One coat of waterborne alkyd primer. BLOC-RUST PREMIUM (BRPR00-1-WH) EXTERIOR RUST PREVENTATIVE METAL PRIMER.
2. Semi-gloss: Two coats of 100% Acrylic enamel; SYN-LUSTRO (W 9) RUST-PREVENTATIVE ACRYLIC SEMI-GLOSS PAINT.

D. Galvanized Metals, Alkyd, 3 Coat:

1. One coat epoxy ester. GALV-ALUM PREMIUM (GAPR00) EXTERIOR NON-FERROUS METAL PRIMER.
2. Semi-gloss: Two coats of Acrylic enamel; SPARTAGLO (W7500V) EXTERIOR ACRYLIC SEMI-GLOSS PAINT.

E. Coating E-Graffiti - Masonry/Concrete, Clear finish:

1. Base Coat: One flood coat silane/siloxane oligomeric; Monochem AQUASEAL ME 12 (#5200).
2. Coats 2 and 3: Two coats aliphatic polyurethane; Monochem PERMA SHIELD BASE (#6100).
3. Coats 4 and 5: Two coats; Monochem PERMA SHIELD PREMIUM (#5600/5650).
4. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions. Any proposed Substitutions MUST meet or exceed published performance criteria for the above graffiti control system AND be approved by City Parks and Recreation Department for use on project.

2.04 PAINT SYSTEMS - INTERIOR

A. Wood, Opaque, latex/acrylic, 3 Coat:

1. One coat modified copolymer primer sealer; ECOSHIELD (W600) ZERO VOC INTERIOR LATEX PRIMER.

2. Semi-gloss: Two coats of 100% Acrylic enamel; ECOSHIELD (W603) LOW ODOR ZERO VOC INTERIOR ACRYLIC SEMI-GLOSS PAINT.

B. Wood, Transparent, Varnish, Stain:

1. One coat of stain; STAINSEAL (V-QYB and V-QYR SERIES) INTERIOR WIPING OIL STAIN.

2. Satin: Two coats of varnish; DEFTHANE POLYURETHANE CLEAR SATIN.

C. Ferrous Metals, Unprimed, Alkyd, 3 Coat:

1. One coat of waterborne alkyd primer. BLOC-RUST PREMIUM (BRPR00-1-WH) EXTERIOR RUST PREVENTATIVE METAL PRIMER.

2. Semi-gloss: Two coats of Acrylic enamel; SPARTAGLO (W7500V) INTERIOR ACRYLIC SEMI-GLOSS PAINT.

D. Galvanized Metals, Alkyd, 3 Coat:

1. One coat Epoxy Ester. GALV-ALUM PREMIUM (GAPR00) EXTERIOR NON-FERROUS METAL PRIMER.

2. Semi-gloss: Two coats of alkyd enamel; SPARTAGLO (W7500V) INTERIOR ACRYLIC SEMI-GLOSS PAINT.

E. Gypsum Board/Plaster, Latex-Acrylic, 3 Coat:

1. One coat of modified copolymer primer sealer. ECOSHIELD (W600) ZERO VOC INTERIOR LATEX PRIMER.

2. Semi-gloss: Two coats of 100% Acrylic enamel; ECOSHEILD (W 603) LOW-ODOR ZERO VOC INTERIOR ACRYLIC SEMI-GLOSS PAINT.

2.05 ACCESSORY MATERIALS

A. Accessory Materials: Provide all primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required to achieve the finishes specified whether specifically indicated or not; commercial quality.

B. Patching Material: Latex filler.

C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin application of coatings until substrates have been properly prepared.

B. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

C. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

D. If substrate preparation is the responsibility of another installer, notify Resident Engineer of unsatisfactory preparation before proceeding.

E. Test shop-applied primer for compatibility with subsequent cover materials.

F. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:

1. Gypsum Wallboard: 12 percent.
2. Plaster and Stucco: 12 percent.
3. Interior Wood: 15 percent, measured in accordance with ASTM D 4442.
4. Exterior Wood: 15 percent, measured in accordance with ASTM D 4442.

3.02 PREPARATION

A. Clean surfaces thoroughly and correct defects prior to coating application.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Remove or repair existing coatings that exhibit surface defects.

D. Remove or mask surface appurtenances, including electrical plates, hardware, light fixture trim, escutcheons, and fittings, prior to preparing surfaces or finishing.

E. Seal surfaces that might cause bleed through or staining of topcoat.

F. Remove mildew from impervious surfaces by scrubbing with solution of tetra-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

G. Gypsum Board Surfaces to be Painted: Fill minor defects with filler compound. Spot prime defects after repair.

H. Plaster Surfaces to be Painted: Fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.

I. Galvanized Surfaces to be Painted: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.

J. Corroded Steel and Iron Surfaces to be Painted: Prepare using at least SSPC-PC 2 (hand tool cleaning) or SSPC-SP 3 (power tool cleaning) followed by SSPC-SP 1 (solvent cleaning).

K. Uncorroded Uncoated Steel and Iron Surfaces to be Painted: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand or power tool wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime after repairs.

L. Shop-Primed Steel Surfaces to be Finish Painted: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces. Re-prime entire shop-primed item.

M. Interior Wood Surfaces to Receive Opaque Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats. Back prime concealed surfaces before installation.

N. Interior Wood Surfaces to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats. Prime concealed surfaces with gloss varnish reduced 25 percent with thinner.

O. Exterior Wood Surfaces to Receive Opaque Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior calking compound after prime coat has been applied. Back prime concealed surfaces before installation.

P. Exterior Wood to Receive Transparent Finish: Remove dust, grit, and foreign matter; seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes with tinted exterior calking compound after sealer has been applied. Prime concealed surfaces.

Q. Wood Doors to be Field-Finished: Seal wood door top and bottom edge surfaces with clear sealer.

3.03 APPLICATION

A. Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.

B. Exterior Wood to Receive Opaque Finish: If final painting must be delayed more than 2 weeks after installation of woodwork, apply primer within 2 weeks and final coating within 4 weeks.

C. Apply products in accordance with manufacturer's instructions.

D. Where adjacent sealant is to be painted, do not apply finish coats until sealant is applied.

E. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.

F. Apply each coat to uniform appearance.

G. Dark Colors and Deep Clear Colors: Regardless of number of coats specified, apply as many coats as necessary for complete hide.

H. Sand wood and metal surfaces lightly between coats to achieve required finish.

I. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.

J. Wood to Receive Transparent Finishes: Tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.

K. Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.04 FIELD QUALITY CONTROL

A. See Quality Requirements section, for general requirements for field inspection.

3.05 CLEANING

A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.06 PROTECTION

A. Protect finished coatings until completion of project.

B. Touch-up damaged coatings after Substantial Completion.

3.07 SCHEDULE - COLORS

A. Colors as indicated on architectural drawings.

END OF SECTION

SECTION 10 1400

SIGNAGE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Etched Metal Room and Door signs.

B. Directional and informational signs.

1.02 RELATED REQUIREMENTS

A. Section 08 1113 – Hollow Metal Doors and Frames

1.03 REFERENCE STANDARDS

A. ANSI/ICC A117.1 - American National Standard for Accessible and Usable Buildings and Facilities; International Code Council; 2003.

B. ATBCB ADAAG - Americans with Disabilities Act Accessibility Guidelines; 2010.

1.04 DEFINITIONS

A. Braille: California 'Contracted Grade 2 Braille' including 189 part-word or whole word contractions in addition to Grade 1 Braille 63 characters. Tactile is required whenever braille is required.

B. Letters and numbers: characters on signs with width-to-height ratio between 3:5 and 1:1 and stroke width ratio between 1:5 and 1:10 using upper case "X" to calculate ratios. Use typestyles with medium weight; upper and lower case lettering is permitted; serif typestyles are permitted.

C. Symbols: Symbol itself is not required to be tactile but equivalent verbal description is required both in tactile letters and braille.

D. Tactile: In addition to requiring Braille, 1/32" raised capital letters and numbers without serifs at least 5/8" height and not more than 2" height.

1.05 SYSTEM DESCRIPTION

A. Signage under this section is intended to include items for identification, direction, control, and information of building where installed as complete integrated system from a single manufacturer.

B. Access code and ADA design requirements:

1. Signage requiring tactile graphics:

a. Wall mounted signs designating permanent rooms and spaces such as, room numbers and restroom, department, office, and fire exit identifications.

b. Individually applied characters are prohibited.

2. Signage not requiring tactile graphics but require compliance to other ADA requirements: All other signs providing direction to or information about function of space such as, directional signs (signs with arrow), informational signs (operating hours, policies, etc.), regulatory signs (no smoking, do not enter), ceiling and projected wall mount signs and International Symbol of Accessibility signs denoting the compliance of certain building features with current access code.

C. ADA performance requirements:

1. Tactile graphics signs mounting requirements:

a. Single doors: Mount 60" to sign centerline above finish floor and on wall adjacent to latch side of door.

b. Openings: Mount 60" to sign centerline above finish floor adjacent opening.

c. No wall space adjacent latch side of door, opening, or double doors: Mount 60" to sign centerline above finish floor on nearest adjacent wall.

1.06 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Manufacturer's printed product literature for each type of sign, indicating sign styles, font, foreground and background colors, locations, overall dimensions of each sign.

C. Signage Schedule: Provide information sufficient to completely define each sign for fabrication, including room number, room name, other text to be applied, sign and letter sizes, fonts, colors and location.

1. When content of signs is indicated to be determined later, request such information from Resident Engineer at least 2 months prior to start of fabrication; upon request, submit preliminary schedule.

2. Submit for approval by Resident Engineer prior to fabrication.

D. Shop Drawings:

1. Indicate materials, sizes, configurations and applicable substrate mountings.

2. Typography sample for copy, for each sign.

3. Dimensions showing spacing of symbol, text and Braille blocks on each sign.

E. Samples: Submit one sample, of size similar to that required for project, illustrating sign style, font, and method of attachment.

F. Selection Samples: Where colors are not specified, submit two sets of color selection charts or chips.

G. Verification Samples: Submit samples showing colors specified.

H. Manufacturer's Installation Instructions: Include installation templates and attachment devices.

I. Closeout Submittal: Maintenance data and cleaning requirements for exterior surfaces.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Package signs as required to prevent damage before installation.

B. Package room and door signs in sequential order of installation, labeled by floor or building.

C. Store tape adhesive at normal room temperature.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Flat Signs:

1. APCO; Metal Etch Signs; 388 Grant Street SE, Atlanta, Georgia, 30312, USA; Phone 404-688-9000; www.apcosigns.com.

2. See GREENBOOK and 2010 City Supplement, Section 4-1.6 for Substitutions.

2.02 SIGNAGE APPLICATIONS

A. Accessibility Compliance: All signs are required to comply with ADAAG and ANSI/ICC A 117.1 and applicable building codes, unless otherwise indicated; in the event of conflicting requirements, comply with the most comprehensive and specific requirements.

B. Room/Area Identification Signs: Provide a sign for every doorway, whether it has a door or not, not including corridors, lobbies, and similar open areas.

1. Sign Type: Type A - Flat metal signs with etched metal panel media.

2. Provide "tactile" signage, with letters raised minimum 1/32 inch and California Contracted Grade II Braille.

3. Copy Contents: Identify with Room Name, copy content to be verified at time of submittal and approved by Resident Engineer prior to fabrication.

4. Character Height: 1 inch.

5. Sign Height: 6 inches, unless otherwise indicated.

6. See signage details on Drawings for more specific information on copy and preferred sign layout.

C. Restroom/Locker Room/ Shower Room Identification Signs - WALL: Provide a sign for every room that can be identified by WOMENS, MENS or UNISEX.

1. Sign Type: Type A - Flat metal signs with etched metal panel media.

2. Provide "tactile" signage, with letters raised minimum 1/32 inch and California Contracted Grade II Braille.

3. Copy Contents: Identify with male and female pictograms, International Symbol of Accessibility, the name WOMEN, MEN or UNISEX as applies; and Braille.

4. Character Height: 1 inch.

5. Sign Height: 6 inches, unless otherwise indicated.

6. See signage details on Drawings for more specific information on copy and preferred sign layout.

D. Restroom/Locker Room/ Shower Room Identification Signs - DOOR: Provide a sign for every room that can be identified by WOMENS, MENS or UNISEX.

1. Sign Type: Type B - Flat signs, cast acrylic with sub-surface printing.

2. NON—tactile Signs: No raised characters, symbols or Braille to be used on restroom door signs. Surface of sign to be completely flush.

3. Copy Contents: Identify with male and female pictograms, International Symbol of Accessibility and the name WOMEN, MEN or UNISEX as applies.

4. Character Height: 1 inch.
5. Sign Height/Shape: Provide geometric shape as described in CBC Section 1115B.6.
6. See signage details on Drawings for more specific information on copy and preferred sign layout.

D. Interior Directional and Informational Signs:
1. Sign Type: Type A - Flat metal signs with etched metal panel media.
2. Exit Wall Signs: Identify with the word EXIT and Braille.
3. See signage details on Drawings for more specific information on copy and preferred sign layout.

E. International Symbol of Accessibility (ISA):
1. Sign Type: Type A - Flat metal sign.
2. Locations:
a. At each primary entrance to facility. This will include main entry gates as well as building entry doors.
b. At each partition door to each accessible stall or compartment in toilet or changing rooms.
c. At area of reception counter meeting current access code requirements.
d. At other work counters or phone counters meeting current access code requirements.
e. At each locker door to locker meeting current access code requirements, IF the locker does not already have a manufacturer-applied ISA.

2.03 SIGN TYPES

A. Flat Signs – Type A: Metal signage media without frame, etched copy.
1. Material: Light weight zinc metal alloy, suitable for chemical etch.
2. Thickness: 1/8 inch.
1. Edges: Eased.
2. Corners: Radiused to eliminate any sharp edges or points.
3. Wall Mounting of One-Sided Signs: Tape adhesive AND vandal-proof concealed or exposed screws.

B. Flat Signs – Type B: Cast acrylic media without frame.
1. Material: Clear non-glare, optically corrected, cast virgin acrylic sheet ready for second surface (backside) graphics application.
2. Thickness: 1/4 inch.
3. Edges: Eased.
4. Corners: Radiused to eliminate any sharp edges or points.
5. Graphics Media: 0.015" thickness clear non-glare optically correct scuff resistant plastic with computer generated photo screen printing chemically bonded to back surface with background surface subsequently applied.

6. Door Mounting of One-Sided Signs: Tape adhesive AND vandal-proof concealed or exposed screws.

C. Color and Font:

1. Character Font: as chosen from manufacturer's standard sans-serif fonts.
2. Character Case: Upper case only.
3. Background Color: as chosen from manufacturer's standard colors, to contrast with substrate and adjacent finish color.
4. Character Color: as chosen from manufacturer's standard colors, to contrast with sign background color.

2.04 ACCESSORIES

A. Concealed Screws: Stainless steel, galvanized steel, chrome plated, or other non-corroding metal. Vandal-proof.

B. Exposed Screws: Stainless steel. Vandal-proof.

C. Tape Adhesive: Double sided tape, permanent adhesive.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces are ready to receive work.

3.02 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install neatly, with horizontal edges level.

C. Locate signs where indicated:

1. Tactile Room and Exit Signs: Locate on wall at latch side of door with centerline of sign at 60 inches above finished floor.
2. Door Signs: Center on door with centerline of sign at 60 inches above finished floor.
3. If no location is indicated obtain Resident Engineer's instructions.

D. Protect from damage until Substantial Completion; repair or replace damage items.

END OF SECTION

SECTION 10 2113.19

PLASTIC TOILET COMPARTMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Solid plastic toilet compartments.

1.02 RELATED REQUIREMENTS

A. Section 10 2800 - Toilet, Bath, and Laundry Accessories.

1.03 REFERENCE STANDARDS

A. ASTM A 666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2003.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Shop Drawings: Indicate project specific partition plan, elevation views, dimensions, details of wall and floor supports, door swings.

C. Product Data: Provide data on panel construction, hardware, and accessories.

D. Color Samples: Submit two samples of partition panels, 4x4 inch in size illustrating panel finish, color, and sheen. To be submitted upon request of Resident Engineer.

E. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.

F: Manufacturers Certificate: Signed by toilet partitions manufacturer stating that partition materials meets or exceeds requirements specified in Performance Requirements article.

1.05 PERFORMANCE REQUIREMENTS

A. Fire Resistance: Partition materials shall comply with the following requirements, when tested in accordance with ASTM E 84 – Standard Test Method for Surface Burning Characteristics of Building Materials.

1. Smoke Developed Index: Not to exceed 450.

2. Flame Spread Index: Not to exceed 75.

3. Material Fire Ratings:

a. National Fire Protection Association (NFPA): Class B

b. International Code Council (ICC): Class B

1.06 QUALITY ASSURANCE

A. Manufacturers Qualifications: A company regularly engaged in manufacture of products specified in this section, and whose products have been in satisfactory use under similar service conditions for not less than 5 years.

B. Installer Qualifications: A Company or Individual, regularly engaged in installation of products specified in this section, with a minimum of 5 years experience.

1.07 WARRANTY

A. Warranty guaranteeing plastic against breakage, corrosion and delamination under normal conditions for 25 years from date of Substantial Completion. If materials are found to be defective during that period for reasons listed above, the materials will be replaced free of charge.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Plastic Toilet Compartments:

1. Scranton Products (Santanta/Comtec/Capital): www.scrantonproducts.com.

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.02 COMPONENTS

A. Toilet Compartments: Floor-mounted headrail-braced.

1. Materials: Doors, panel and pilasters to be 1 inch thick constructed of High Density Polyethylene (HDPE) resins. Partitions shall be fabricated fro polymer resins compounded under high pressure, forming a single component which is waterproof, nonabsorbent and has a self-lubricating surface that resists marks from pens, pencils, markers and other writing instruments. All plastic components shall be delivered with a protective plastic masking.

2. Color and Pattern: To be selected from manufacturer's full range of colors.

B. Door, Panel and Pilaster Dimensions:

1. Thickness of doors, panels and pilasters: 1 inch, all edges rounded to a radius.

2. Door Width: 24 inch.

3. Door Width for Accessible Use: 36 inch.

4. Door and Panel Height: 55 inch, mounted at 14 inches above finished floor.

5. Pilaster Height: 82 inches, mounted into a 3 inch high pilaster shoe

5. Accessory: Aluminum heat sink shall be fastened to the bottom of all exposed horizontal edges.

2.03 HARDWARE AND ACCESSORIES

A. Pilaster Shoes: Formed ASTM A 666, Type 304 stainless steel with No. 4 finish, 20 gauge, 3 in high, concealing floor fastenings.

1. Provide adjustment for floor variations with screw jack through steel saddles integral with pilaster.

B. Head Rails: Heavy-duty extruded aluminum (6463-T5 alloy) with anti-grip design, clear anodized finish, fastened to headrail bracket and top of pilaster with vandal-proof stainless steel fasteners. Head Rail Brackets shall be stainless steel, 20 gauge, satin finish and secured to wall with vandal proof stainless steel fasteners.

C. Wall and Pilaster Brackets: 54 inch continuous stainless steel bracket, double ear.

D. Attachments, Screws, and Bolts: Stainless steel, vandal proof type.

1. For attaching panels and pilasters to brackets: Vandal proof, stainless steel Torx-head sex bolts.

E. Hinges: 54 inch continuous stainless steel helix hinge.

F. Door Strike/Keeper: 54 inch continuous aluminum (6463-T5 alloy) strike. Bumper shall be made of extruded black vinyl.

G. Door Latch and Housing: Latch and Housing to be stainless steel.

H. Coat hook and Bumper: Each door shall be supplied with one coat hook/bumper. At accessible compartment, bumper should be of dimension so that door does not strike grab bar.

I. Door Pull: Each door to be supplied with a door pull as indicated in drawings. At accessible compartments, loop-style door pull to be supplied for inside and outside of door. Door pulls to be fabricated of stainless steel and fastened with vandal proof stainless steel fasteners.

J. Install an International Symbol of Accessibility plaque on exterior face of accessible compartment door. Symbol to be centered on door and centered at 60 inches above finish floor surface. ISA plaque per Section 10 1400 – Signage.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that field measurements are as indicated on shop drawings.

B. Verify correct spacing of and between plumbing fixtures.

C. Verify correct location of built-in framing, anchorage, and bracing.

3.02 INSTALLATION

A. Install partitions secure, rigid, plumb, and level in accordance with manufacturer's instructions.

B. Maintain 3/8 to 1/2 inch space between wall and panels and between wall and end pilasters.

C. Attach panel brackets securely to walls using anchor devices.

D. Attach panels and pilasters to brackets. Locate head rail joints at pilaster center lines.

E. Field touch-up of scratches or damaged finish will not be permitted. Replace damaged or scratched materials with new materials.

F. No evidence of cutting, drilling and/or patching shall be visible on the finished work.

3.03 TOLERANCES

A. Maximum Variation From True Position: 1/4 inch.

B. Maximum Variation From Plumb: 1/8 inch.

3.04 ADJUSTING AND CLEANING

A. Adjust and align hardware to uniform clearance at vertical edge of doors, not exceeding 3/16 inch.

B. Adjust hinges to position doors in partial opening position when unlatched. Return out-swinging doors to closed position.

C. Adjust adjacent components for consistency of line or plane.

D. Finished surfaces shall be cleaned after installation and left free of all imperfections.

END OF SECTION

SECTION 10 2800

TOILET AND UTILITY ROOM ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Accessories for toilet rooms.

B. Accessories for utility room.

B. Grab bars.

1.02 RELATED REQUIREMENTS

A. Section 06 1000 - Rough Carpentry: Placement of reinforcement for backing plate reinforcement.

B. Section 09 2900 - Gypsum Board: Concealed supports for accessories, including in wall framing and plates and above ceiling framing.

C. Section 09 3000 - Tiling: Ceramic washroom accessories.

D. Section 10 2113.19 - Plastic Toilet Compartments.

1.03 REFERENCE STANDARDS

A. ASTM A 269 - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service; 2008.

B. ASTM A 666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2003.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Provide data on accessories describing model, material, size, finish, details of function, attachment methods.

C. Manufacturer's Installation Instructions: Indicate special procedures and conditions requiring special attention.

D. Manufacturer’s Cleaning and Maintenance Instructions.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Toilet Accessories:

1. Bobrick, Inc: www.bobrick.com.

2. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2.02 MATERIALS

A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.

1. Grind welded joints smooth.

2. Fabricate units made of metal sheet of seamless sheets, with flat surfaces.

B. Keys: Provide 4 keys for each accessory to Resident Engineer; master key all lockable accessories.

C. Stainless Steel Sheet: ASTM A 666, Type 304.

D. Stainless Steel Tubing: ASTM A 269, Type 304 or 316.

E. Adhesive: Two component epoxy type, waterproof.

F. Fasteners, Screws, and Bolts: Hot dip galvanized or stainless steel, tamper-proof, security type.

G. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.03 FINISHES

A. Stainless Steel: No. 4 satin brushed finish, unless otherwise noted.

2.04 TOILET ROOM ACCESSORIES

A. Accessories as indicated on drawings. See Restroom Accessory Schedule.

B. Grab Bars: Stainless steel, 1-1/4 inches outside diameter, minimum 0.05 inch wall thickness, nonslip grasping surface finish, concealed flange mounting; 1-1/2 inches clearance between wall and inside of grab bar, satin finish.

1. Provide per schedule on plans, custom lengths fabricated where indicated.

2. Compliance: Barrier-free accessibility guidelines, including ADA-ABA and ICC/ANSI. for structural strength.

a. Capacity: Designed to support 900 lbs in compliant installations.

3. Description: Grab bar with 90 degree return to flange. Clearance between grab bar and finished wall is 1-1/2 inches.

4. Grab Bar Materials: 18-8 S, Type 304, 18 gauge stainless steel tubing with satin finish, ends of grab bar pass through flanges and are heliarc welded to flanges to form one structural unit, outside diameter 1-1/2 inches.

5. Mounting Flanges: Concealed, 18-8 S, Type 304, 1/8 inch thick, stainless steel plate.

a. End Flanges: 2 inches x 3-1/8 inches with two holes for attachment to wall.

b. Intermediate Flanges: 2-5/8 inches x 3-1/8 inches wide x 3-1/8 inch diameter.

6. Snap Flange Covers: 18-8 S, Type 304, 22 gauge drawn stainless steel with satin finish, 3-1/4 inch diameter x 1/2 inches deep; snap over mounting flange to conceal mounting screws.

7. Mounting Accessories: Provide the following optional mounting accessories as scheduled and indicated on the Drawings and as required for complete installation.

a. Mounting Kits: Provide Bobrick Mounting Kit appropriate for project conditions and substrate.

2.05 UTILITY ROOM ACCESSORIES

A. Combination Utility Shelf/Mop and Broom Holder: 0.05 inch thick stainless steel, Type 304, with 1/2 inch returned edges, 0.06 inch steel wall brackets.

1. Drying rod: Stainless steel, 1/4 inch diameter.

2. Hooks: 3, 0.06 inch stainless steel rag hooks at shelf front.

3. Mop/broom holders: 4 spring-loaded rubber cam holders at shelf front.

4. Length: 36 inches.

5. Product: B-224x36: Utility Shelft with Mop/Broom Holders and Rag Hooks manufactured by Bobrick Washroom Equipment, Inc., or approved equal.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify exact location of accessories for installation.

C. Verify that field measurements are as indicated on drawings.

D. See Sections 05 5000 – Metal Fabrications and 06 1000 - Rough Carpentry for installation of blocking, reinforcing plates, and concealed anchors in walls, and ceilings.

3.02 PREPARATION

A. Deliver inserts and rough-in frames to site for timely installation.

B. Provide templates and rough-in measurements as required.

3.03 INSTALLATION

A. Install products in strict compliance with manufacturer's written instructions and recommendations, including the following:

1. Verify blocking has been installed properly.
2. Verify location does not interfere with door swings or use of fixtures.
3. Comply with manufacturer's recommendations for backing and proper support.
4. Use fasteners and anchors suitable for substrate and project conditions
5. Install units rigid, straight, plumb, and level, in accordance with manufacturer's installation instructions and approved shop drawings.
6. Conceal evidence of drilling, cutting, and fitting to room finish.
7. Test for proper operation.

B. Install plumb and level, securely and rigidly anchored to substrate.

C. Mounting Heights and Locations: As required by CBC, ADAAG, City of San Diego Accessibility Guidelines, as indicated on drawings, and as follows:

1. Bottom of Mirrors: Top of Sink Backsplash, or 40 inches Max above finished floor.
2. Grab Bars at Barrier-Free Stalls: 33 inches above finished floor to centerline.
3. No operable part of any accessory to be mounted greater than 40 inches above finished floor.

3.04 CLEANING AND PROTECTION

A. Clean exposed surfaces of compartments, hardware, and fittings using methods acceptable to the manufacturer.

B. Touch-up, repair or replace damaged products until Substantial Completion.

3.05 SCHEDULE

A. As indicated on architectural drawings.

END OF SECTION

SECTION 12 3600

COUNTERTOPS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Countertops for architectural cabinetwork.

1.02 RELATED REQUIREMENTS

A. Section 06 4100 - Architectural Wood Casework.

1.03 REFERENCE STANDARDS

A. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2010.

B. NEMA LD 3 - High-Pressure Decorative Laminates; 2005.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.

2. Storage and handling requirements and recommendations.

3. Specimen warranty.

C. Shop Drawings: Complete details of materials and installation; combine with shop drawings of cabinets and casework specified in other sections.

D. Selection Samples: For each finish product specified, color chips representing manufacturer's full range of available colors and patterns.

E. Verification Samples: For each finish product specified, minimum size 6 inches square, representing actual product, color, and patterns.

F. Test Reports: Chemical resistance testing, showing compliance with specified requirements.

G. Installation Instructions: Manufacturer's installation instructions and recommendations.

H. Maintenance Data: Manufacturer's instructions and recommendations for maintenance and repair of countertop surfaces.

1.05 QUALITY ASSURANCE

A. Fabricator Qualifications: Same fabricator as for cabinets on which tops are to be installed.

B. Installer Qualifications: Fabricator.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.07 FIELD CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.01 COUNTERTOP ASSEMBLIES

A. Plastic Laminate Countertops: High pressure decorative laminate sheet bonded to substrate.

1. Laminate Sheet, Unless Otherwise Indicated: NEMA LD 3 Grade HGS, 0.048 inch nominal thickness.

a. Surface Burning Characteristics: Flame spread 25, maximum; smoke developed 450, maximum; when tested in accordance with ASTM E 84.

b. NSF approved for food contact.

c. Wear Resistance: In addition to specified grade, comply with NEMA LD 3 High Wear Grade requirements for wear resistance.

d. Laminate Core Color: Same as decorative surface.

e. Finish: Matte or suede, gloss rating of 5 to 20.

f. Surface Color and Pattern: As selected by Architect from the manufacturer's standard line.

g. Manufacturers:

1) Formica Corporation: www.formica.com.

2) Wilsonart International, Inc: www.wilsonart.com.

3) See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2. Back and End Splashes: Same material, same construction.

2.02 FABRICATION

A. Fabricate tops and splashes in the largest sections practicable, with top surface of joints flush.

1. Join lengths of tops using best method recommended by manufacturer.

2. Fabricate to overhang fronts and ends of cabinets 1 inch except where top butts against cabinet or wall.

3. Prepare all cutouts accurately to size; replace tops having improperly dimensioned or unnecessary cutouts or fixture holes.

B. Provide back/end splash wherever counter edge abuts vertical surface unless otherwise indicated.

1. Secure to countertop with concealed fasteners and with contact surfaces set in waterproof glue.

2. Height: 4 inches, unless otherwise indicated.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Resident Engineer of unsatisfactory preparation before proceeding.

C. Verify that wall surfaces have been finished and mechanical and electrical services and outlets are installed in proper locations.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Securely attach countertops to cabinets using concealed fasteners. Make flat surfaces level; shim where required.

B. Attach plastic laminate countertops using screws with minimum penetration into substrate board of 5/8 inch.

C. Seal joint between back/end splashes and vertical surfaces.

3.04 CLEANING

A. Clean countertops surfaces thoroughly.

3.05 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 13 05 41

SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS

PART 1 – GENERAL

1.1 DESCRIPTION:

A. Provide seismic restraint in accordance with the requirements of this section in order to maintain the integrity of nonstructural components of the building so that they remain safe and functional in case of seismic event.

B. Definitions: Non-structural building components are components or systems that are not part of the building's structural system whether inside or outside, above or below grade. Non-structural components of buildings include:

1. Architectural Elements: Facades that are not part of the structural system and its shear resistant elements; cornices and other architectural projections and parapets that do not function structurally; glazing; nonbearing partitions; suspended ceilings; stairs isolated from the basic structure; cabinets; bookshelves; medical equipment; and storage racks.

2. Electrical Elements: Power and lighting systems; substations; switchgear and switchboards; auxiliary engine-generator sets; transfer switches; motor control centers; motor generators; selector and controller panels; fire protection and alarm systems; special life support systems; and telephone and communication systems.

3. Mechanical Elements: Heating, ventilating, and air-conditioning systems; medical gas systems; plumbing systems; sprinkler systems; pneumatic systems; boiler equipment and components.

4. Transportation Elements: Mechanical, electrical and structural elements for transport systems, i.e., elevators and dumbwaiters, including hoisting equipment and counterweights.

1.2 RELATED WORK:

A. Section No. 22 13 00 SANITARY SEWER

1.3 QUALITY CONTROL:

A. Shop-Drawing Preparation:

1. Have seismic-force-restraint shop drawings and calculations prepared by a professional structural engineer experienced in the area of seismic force restraints. The professional structural engineer shall be registered in the state of California.

2. Submit design tables and information used for the design-force levels, stamped and signed by a professional structural engineer registered in the State of California.

B. Coordination:

1. Do not install seismic restraints until seismic restraint submittals are approved by the Resident Engineer.

2. Coordinate and install trapezes or other multi-pipe hanger systems prior to pipe installation.

1.4 SUBMITTALS:

A. Submit prior to installation, a coordinated set of bracing drawings for seismic protection of piping, with data identifying the various support-to-structure connections and seismic bracing structural connections, include:

1. Single-line piping diagrams on a floor-by-floor basis. Show all suspended piping for a given floor on the same plain.
2. Type of pipe (Copper, steel, cast iron, insulated, non-insulated, etc.).
3. Pipe contents.
4. Structural framing.
5. Location of all gravity load pipe supports and spacing requirements.
6. Numerical value of gravity load reactions.
7. Location of all seismic bracing.
8. Numerical value of applied seismic brace loads.
9. Type of connection (Vertical support, vertical support with seismic brace etc.).
10. Seismic brace reaction type (tension or compression). Details illustrating all support and bracing components, methods of connections, and specific anchors to be used.

B. Submit design calculations prepared and sealed by the registered structural engineer specified above in paragraph 1.3A.

E. Submit for concrete anchors, the appropriate ICBC evaluation reports or lab test reports verifying compliance with Regulations 28-6.

1.5 APPLICABLE PUBLICATIONS:

A. The Publications listed below (including amendments, addenda revisions, supplements and errata) form a part of this specification to the extent referenced. The publications are referenced in text by basic designation only.

B. American Concrete Institute (ACI):

355.2-07..... Qualification for Post-Installed Mechanical Anchors in Concrete and Commentary

C. American Institute of Steel Construction (AISC):

Load and Resistance Factor Design, Volume 1, Second Edition.

D. American Society for Testing and Materials (ASTM):

A36/A36M-05 ..... Standard Specification for Carbon Structural Steel.

A53/A53M-07 ..... Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.

A307 (REV A-07) ..... Standard Specification for Carbon Steel Bolts and Studs; 60,000 PSI Tensile Strength.

A325-07..... Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.

A325M-05 ..... Standard Specification for High-Strength Bolts for Structural Steel Joints [Metric].

A490-06..... Standard Specification for Heat-Treated Steel Structural Bolts, 150 ksi Minimum Tensile Strength.

A490M (REV A-04)..... Standard Specification for High-Strength Steel Bolts, Classes 10.9 and 10.9.3, for Structural Steel Joints [Metric].

A500/A500M-07	Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
A501-07	Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
A615/A615M-07	Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
A992/A992M (REV A-06)	Standard Specification for Steel for Structural Shapes for Use in Building Framing.
A996/A996M (REV A-06)	Standard Specification for Rail-Steel and Axel-Steel Deformed Bars for Concrete Reinforcement.
E488-96(R2003)	Standard Test Method for Strength of Anchors in Concrete and Masonry Elements.

E. California Building Code (CBC) 2007 Edition.

F. National Uniform Seismic Installation Guidelines (NUSIG).

G. Sheet Metal and Air Conditioning Contractors National Association (SMACNA):

Seismic Restraint Manual - Guidelines for Mechanical Systems, 2008 Edition.

1.6 REGULATORY REQUIREMENT:

A. CBC 2007.

B. Exceptions: The seismic restraint of the following items may be omitted:

1. Equipment weighing less than 400 pounds, which is supported directly on the floor or roof.
2. Equipment weighing less than 20 pounds, which is suspended from the roof or floor or hung from a wall.
3. All other piping less than 2 ½ inches inside diameter, except for automatic fire suppression systems.
4. All piping suspended by individual hangers, 12 inches or less in length from the top of pipe to the bottom of the support for the hanger.

PART 2 – PRODUCTS

2.1 STEEL:

A. Structural Steel: ASTM A36, A36M, A992.

B. Structural Tubing: ASTM A500, Grade B.

C. Structural Tubing: ASTM A501.

D. Steel Pipe: ASTM A53/A53M, Grade B.

E. Bolts & Nuts: ASTM A307, A325, A325M, A490, A490M.

PART 3 – EXECUTION

3.1 CONSTRUCTION, GENERAL:

A. Provide piping, ceiling and light supports and anchoring devices to withstand the seismic design forces, so that when seismic design forces are applied, the piping, ceiling and lights cannot displace, overturn, or become inoperable.

B. Construct seismic restraints and anchorage to allow for thermal expansion.

C. Testing Before Final Inspection:

1. Test 10-percent of anchors in masonry and concrete per ASTM E488, and ACI 355.2 to determine that they meet the required load capacity. If any anchor fails to meet the required load, test the next 20 consecutive anchors, which are required to have zero failure, before resuming the 10-percent testing frequency.

2. Before scheduling Final Inspection, submit a report on this testing indicating the number and location of testing, and what anchor-loads were obtained.

3.2 PIPING

A. Support and brace piping to resist directional forces (lateral, longitudinal and vertical).

B. Brace piping with a minimum of 1 brace per branch.

C. Provide supports and anchoring so that, upon application of seismic forces, piping remains fully connected as operable systems which will not displace sufficiently to damage adjacent or connecting equipment, or building members.

D. Seismic Restraint of Piping:

1. Design criteria:

a. Piping resiliently supported: Restrain to support 120-percent of the weight of the systems and components and contents.

b. Piping not resiliently supported: Restrain to support 60-percent of the weight of the system components and contents.

E. Piping Connections: Provide flexible connections where pipes connect to equipment. Make the connections capable of accommodating relative differential movements between the pipe and equipment under conditions of earthquake shaking.

3.3 CEILINGS AND LIGHTING FIXTURES

A. At regular intervals, laterally brace suspended ceilings against lateral and vertical movements, and provide with a physical separation at the walls.

B. Independently support and laterally brace all lighting fixtures. Refer to applicable portion of lighting specification, Section 26 00 00, ELECTRICAL REQUIREMENTS.

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SECTION 22 0511

COMMON WORK RESULTS FOR PLUMBING

PART 1 - GENERAL

1.1 DESCRIPTION

A. The requirements of this Section shall apply to all sections of Division 22.

B. Definitions:

1. Option or optional: Contractor's choice of an alternate means or method.

1.2 RELATED WORK

C. Section 09 90 00, PAINTS AND COATINGS.

D. Section 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS

1.3 QUALITY ASSURANCE

A. Products Criteria:

1. Standard Products: Material and equipment shall be the standard products of a manufacturer regularly engaged in the manufacture of the products for at least 3 years.

2. All items furnished shall be free from defects that would adversely affect the performance, maintainability and appearance of individual components and overall assembly.

3. The products and execution of work specified in Division 22 shall conform to the referenced codes and standards as required by the specifications. Local codes and amendments enforced by the local code official shall be enforced, if required by local authorities such as the natural gas supplier. If the local codes are more stringent, then the local code shall apply. Any conflicts shall be brought to the attention of the Resident Engineer.

4. Multiple Units: When two or more units of materials or equipment of the same type or class are required, these units shall be products of one manufacturer.

5. Nameplates: Nameplate bearing manufacturer's name or identifiable trademark shall be securely affixed in a conspicuous place on equipment, or name or trademark cast integrally with equipment, stamped or otherwise permanently marked on each item of equipment.

8. Asbestos products or equipment or materials containing asbestos shall not be used.

B. Manufacturer's Recommendations: Where installation procedures or any part thereof are required to be in accordance with the recommendations of the manufacturer of the material being installed, printed copies of these recommendations shall be furnished to the Resident Engineer prior to installation. Installation of the item will not be allowed to proceed until the recommendations are received. Failure to furnish these recommendations can be cause for rejection of the material.

D. Execution (Installation, Construction) Quality:

1. All items shall be applied and installed in accordance with manufacturer's written instructions. Conflicts between the manufacturer's instructions and the contract drawings and specifications shall be referred to the Resident Engineer for resolution. Written hard copies or computer files of manufacturer’s installation instructions shall be provided to the Resident Engineer at least two weeks prior to commencing installation of any item.

2. Complete layout drawings shall be required by Paragraph, SUBMITTALS. Construction work shall not start on any system until the layout drawings have been approved.

E. Guaranty: Warranty of Construction.

F. Plumbing Systems: CPC, California Plumbing Code.

1.4 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for Shop Drawing and Submittal requirements.

B. Information and material submitted under this section shall be marked "SUBMITTED UNDER SECTION 22 05 11, COMNON WORK RESULTS FOR PLUMBING", with applicable paragraph identification.

C. Contractor shall make all necessary field measurements and investigations to assure that the assemblies will meet contract requirements.

D. Layout drawings.

1.5 DELIVERY, STORAGE AND HANDLING

A. Protection of Material:

1. Material placed on the job site shall remain in the custody of the Contractor until acceptance, whether or not the Resident Engineer has reimbursed the Contractor for the equipment and material. The Contractor is solely responsible for the protection of such equipment and material against any damage.

2. Damaged equipment shall be replaced with an identical unit as determined and directed by the Resident Engineer. Such replacement shall be at no additional cost to the Resident Engineer.

3. New piping systems shall be protected against entry of foreign matter. Both inside and outside shall be cleaned before painting or placing system in operation.

4. Existing equipment and piping being worked on by the Contractor shall be under the custody and responsibility of the Contractor and shall be protected as required for new work.

B. Cleanliness of Piping and Equipment Systems:

1. Care shall be exercised in the storage and handling of equipment and piping material to be incorporated in the work. Debris arising from cutting of piping shall be removed.

2. Piping systems shall be flushed, blown or pigged as necessary to deliver clean systems.

3. Contractor shall be fully responsible for all costs, damage, and delay arising from failure to provide clean systems.

1.6 APPLICABLE PUBLICATIONS

A. The publications listed below shall form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. American Society for Testing and Materials (ASTM):

A36/A36M-2008 ..... Standard Specification for Carbon Structural Steel

A575-96 (R 2007) ..... Standard Specification for Steel Bars, Carbon, Merchant Quality, M-Grades R (2002)

E84-2005 ..... Standard Test Method for Surface Burning Characteristics of Building Materials

E119-2008a ..... Standard Test Methods for Fire Tests of Building Construction and Materials

C. Manufacturers Standardization Society (MSS) of the Valve and Fittings Industry, Inc:

SP-58-02..... Pipe Hangers and Supports-Materials, Design and Manufacture

SP 69-2003 (R 2004)..... Pipe Hangers and Supports-Selection and Application

D. Code Council:

CBC, (2007) ..... California Building Code

CPC, (2007)..... California Plumbing Code

PART 2 - PRODUCTS

2.1 FACTORY-ASSEMBLED PRODUCTS

A. Components of equipment shall bear manufacturer's name and trademark, model number, serial number and performance data on a name plate securely affixed in a conspicuous place, or cast integral with, stamped or otherwise permanently marked upon the components of the equipment.

2.2 COMPATIBILITY OF RELATED EQUIPMENT

A. Equipment and materials installed shall be compatible in all respects with other items being furnished and with existing items so that the result will be a complete and fully operational system that conforms to contract requirements.

2.3 EQUIPMENT AND MATERIALS IDENTIFICATION

A. Identification for piping is specified in Section 09 91 00, PAINTING.

2.4 GALVANIZED REPAIR COMPOUND

A. Mil. Spec. DOD-P-21035B, paint.

2.5 PIPE AND EQUIPMENT SUPPORTS AND RESTRAINTS

A. In lieu of the paragraph which follows, suspended equipment support and restraints may be designed and installed in accordance with the 2007 California Building Code (CBC), latest edition, and SECTION 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS. Submittals based on the International Building Code (IBC), latest edition, SECTION 13 05 41 requirements, or the following paragraphs of this Section shall be stamped and signed by a professional engineer registered in a state where the project is located. The Support system of suspended equipment over 227 kg (500 pounds) shall be submitted for approval of the Resident Engineer in all cases. See these specifications for lateral force design requirements.

B. For Attachment to Concrete Construction:

1. Self-drilling expansion shields and machine bolt expansion anchors: Permitted in concrete not less than 102 mm (4 inches) thick when approved by the Resident Engineer for each job condition.

2. Power-driven fasteners: Permitted in existing concrete or masonry not less than 102 mm (4 inches) thick when approved by the Resident Engineer for each job condition.

C. For Attachment to Steel Construction: MSS SP-58.

1. Welded attachment: Type 22.

2. Beam clamps: Types 20, 21, 28 or 29. Type 23 C-clamp may be used for individual copper tubing up to 23 mm (7/8-inch) outside diameter.

D. Hanger Rods: Hot rolled steel, ASTM A36 or A575 for allowable load listed in MSS SP-58. For piping, provide adjustment means for controlling level or slope. Types 13 or 15 turn-buckles shall provide 38 mm (1-1/2 inches) minimum of adjustment and incorporate locknuts. All-thread rods are acceptable.

E. Multiple (Trapeze) Hangers: Galvanized, cold formed, lipped steel channel horizontal member, not less than 41 mm by 41 mm (1-5/8 inches by 1-5/8 inches), 2.7 mm (No. 12 gage), designed to accept special spring held, hardened steel nuts.

1. Allowable hanger load: Manufacturers rating less 91kg (200 pounds).

2. Guide individual pipes on the horizontal member of every other trapeze hanger with 6 mm (1/4-inch) U-bolt fabricated from steel rod. Provide Type 40 insulation shield, secured by two 13 mm (1/2-inch) galvanized steel bands, or insulated calcium silicate shield for insulated piping at each hanger.

I. Pipe Hangers and Supports: (MSS SP-58), use hangers sized to encircle insulation on insulated piping. To protect insulation, provide Type 39 saddles for roller type supports or insulated calcium silicate shields. Provide Type 40 insulation shield or insulated calcium silicate shield at all other types of supports and hangers including those for insulated piping.

1. General Types (MSS SP-58):

a. Standard clevis hanger: Type 1; provide locknut.

b. Riser clamps: Type 8.

c. Wall brackets: Types 31, 32 or 33.

d. Roller supports: Type 41, 43, 44 and 46.

e. Saddle support: Type 36, 37 or 38.

f. Turnbuckle: Types 13 or 15.

g. U-bolt clamp: Type 24.

2. Plumbing Piping (Other Than General Types):

a. Horizontal piping: Type 1, 5, 7, 9, and 10.

J. Pre-insulated Calcium Silicate Shields:

1. Provide 360 degree water resistant high density 965 kPa (140 psi) compressive strength calcium silicate shields encased in galvanized metal.

2. Pre-insulated calcium silicate shields to be installed at the point of support during erection.

3. Shield thickness shall match the pipe insulation.

4. The type of shield is selected by the temperature of the pipe, the load it must carry, and the type of support it will be used with.

a. Shields for supporting cold water shall have insulation that extends a minimum of one inch past the sheet metal.

b. The insulated calcium silicate shield shall support the maximum allowable water filled span as indicated in MSS-SP 69. To support the load, the shields shall have one or more of the following features: structural inserts 4138 kPa (600 psi) compressive strength, an extra bottom metal shield, or formed structural steel (ASTM A36) wear plates welded to the bottom sheet metal jacket.

5. Shields may be used on steel clevis hanger type supports, roller supports or flat surfaces.

K. Seismic Restraint of Piping: Refer to Section 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS.

2.6 ASBESTOS

Materials containing asbestos are not permitted.

PART 3 - EXECUTION

3.1 ARRANGEMENT AND INSTALLATION OF EQUIPMENT AND PIPING

A. Location of piping, hangers, and equipment, access provisions shall be coordinated with the work of all trades. Piping, sleeves, inserts, hangers, and equipment shall be located clear of windows, doors, openings, light outlets, and other services and utilities. Equipment layout drawings shall be prepared to coordinate proper location and personnel access of all facilities. The drawings shall be submitted for review.

Manufacturer's published recommendations shall be followed for installation methods not otherwise specified.

B. Operating Personnel Access and Observation Provisions: All equipment and systems shall be arranged to provide clear view and easy access, without use of portable ladders, for maintenance and operation of all devices including, but not limited to: all equipment items, valves, filters, strainers, transmitters, sensors, control devices. All gages and indicators shall be clearly visible by personnel standing on the floor or on permanent platforms. Maintenance and operating space and access provisions that are shown on the drawings shall not be changed nor reduced.

C. Structural systems necessary for pipe and equipment support shall be coordinated to permit proper installation.

D. Location of pipe sleeves, trenches and chases shall be accurately coordinated with equipment and piping locations.

E. Cutting Holes:

1. Holes through concrete and masonry shall be cut by rotary core drill. Pneumatic hammer, impact electric, and hand or manual hammer type drill will not be allowed, except as permitted by Resident Engineer where working area space is limited.

2. Holes shall be located to avoid interference with structural members such as beams or grade beams. Holes shall be laid out in advance and drilling done only after approval by Resident Engineer. If the Contractor considers it necessary to drill through structural members, this matter shall be referred to Resident Engineer for approval.

3. Waterproof membrane shall not be penetrated. Pipe floor penetration block outs shall be provided outside the extents of the waterproof membrane.

F. Protection and Cleaning:

1. Equipment and materials shall be carefully handled, properly stored, and adequately protected to prevent damage before and during installation, in accordance with the manufacturer's recommendations and as approved by the Resident Engineer. Damaged or defective items in the opinion of the Resident Engineer, shall be replaced.

2. Close pipe openings with caps or plugs during installation. Pipe openings shall be tightly covered against dirt or mechanical injury. At completion of all work thoroughly clean fixtures, exposed materials and equipment.

L. Work in Existing Building:

1. As specified in Section 01 00 00, GENERAL REQUIREMENTS, Article, OPERATIONS AND STORAGE AREAS, make alterations to existing service piping at times that will cause the least interfere with normal operation of the facility.

M. Work in bathrooms, restrooms, housekeeping closets: All pipe penetrations behind escutcheons shall be sealed with plumbers putty.

3.2 TEMPORARY PIPING AND EQUIPMENT

A. Continuity of operation of existing facilities may require temporary installation or relocation of piping. Temporary pipe installation or relocation shall be provided to maintain continuity of operation of existing facilities.

B. The Contractor shall provide all required facilities in accordance with the requirements of phased construction and maintenance of service. All piping shall be properly supported, sloped to drain, operate without excessive stress, and shall be insulated where injury can occur to personnel by contact with operating facilities. The requirements of Paragraph 3.1 shall apply.

C. Temporary facilities and piping shall be completely removed and any openings in structures sealed. Necessary blind flanges and caps shall be provided to seal open piping remaining in service.

3.3 RIGGING

A. Openings in building structures shall be planned to accommodate design scheme.

B. Alternative methods of material delivery may be offered and will be considered by Resident Engineer under specified restrictions of phasing and service requirements as well as structural integrity of the building.

C. All openings in the building shall be closed when not required for rigging operations to maintain proper environment in the facility for operation and maintenance of service.

D. Contractor shall provide all facilities required to deliver specified material. Attachments to structures for rigging purposes and support of material on structures shall be Contractor's full responsibility.

E. Contractor shall check all clearances, weight limitations and shall provide a rigging plan designed by a Registered Professional Engineer. All modifications to structures, including reinforcement thereof, shall be at Contractor's cost, time and responsibility.

F. Rigging plan and methods shall be referred to Resident Engineer for evaluation prior to actual work.

3.4 PIPE AND EQUIPMENT SUPPORTS

A. Where hanger spacing does not correspond with joist or rib spacing, use structural steel channels secured directly to joist and rib structure that will correspond to the required hanger spacing, and then suspend the equipment and piping from the channels. Holes shall be drilled or burned in structural steel ONLY with the prior written approval of the Resident Engineer.

B. The use of chain pipe supports, wire or strap hangers; wood for blocking, stays and bracing, or hangers suspended from piping above shall not be permitted. Rusty products shall be replaced.

C. Hanger rods shall be used that are straight and vertical. Turnbuckles for vertical adjustments may be omitted where limited space prevents use. A minimum of 15 mm (1/2-inch) clearance between pipe or piping covering and adjacent work shall be provided.

D. For horizontal and vertical plumbing pipe supports, refer to the California Plumbing Code (CPC), latest edition, and these specifications.

E. Overhead Supports:

1. The basic structural system of the building is designed to sustain the loads imposed by piping to be supported overhead.

2. Provide steel structural members, in addition to those shown, of adequate capability to support the imposed loads, located in accordance with the final approved layout of piping.

3.5 PLUMBING SYSTEMS DEMOLITION

A. Not Used.

3.6 CLEANING AND PAINTING

A. Prior to final inspection and acceptance of the plant and facilities for beneficial use by the Resident Engineer, the plant facilities systems shall be thoroughly cleaned, per WHITEBOOK section 6-8.1.1.

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SECTION 22 11 00

FACILITY WATER DISTRIBUTION

PART 1 - GENERAL

1.1 DESCRIPTION

Domestic water systems, including piping, equipment and all necessary accessories as designated in this section.

1.2 RELATED WORK

A. Section 22 05 11, COMMON WORK RESULTS FOR PLUMBING.

1.3 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for shop drawings and submittals.

B. Manufacturer's Literature and Data:

1. Piping.

2. Strainers.

3. All items listed in Part 2 - Products.

1.4 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. Federal Specifications (Fed. Spec.):

A-A-1427C ..... Sodium Hypochlorite Solution

A-A-59617 ..... Unions, Brass or Bronze Threaded, Pipe Connections and Solder-Joint Tube Connections

C. American National Standards Institute (ANSI):

American Society of Mechanical Engineers (ASME): (Copyrighted Society)

A13.1-96..... Scheme for Identification of Piping Systems

B16.3-98..... Malleable Iron Threaded Fittings ANSI/ASME

B16.15-85(R 1994)..... Cast Bronze Threaded Fittings ANSI/ASME

B16.18-01 ..... Cast Copper Alloy Solder-Joint Pressure Fittings ANSI/ASME

B16.22-01 ..... Wrought Copper and Copper Alloy Solder Joint Pressure Fittings ANSI/ASME

Element ANSI/ASME

D. American Society for Testing and Materials (ASTM):

A47-99..... Ferritic Malleable Iron Castings Revision 1989

A53-02..... Pipe, Steel, Black And Hot-Dipped, Zinc-coated Welded and Seamless

A183-83(R1998) ..... Carbon Steel Track Bolts and Nuts

A536-84(R1999) E1 ..... Ductile Iron Castings

B32-03 ..... Solder Metal

B61-02 ..... Steam or Bronze Castings

B62-02 ..... Composition Bronze or Ounce Metal Castings

B75-99(Rev A) ..... Seamless Copper Tube

B88-03 ..... Seamless Copper Water Tube

B584-00 ..... Copper Alloy Sand Castings for General Applications Revision A

B687-99 ..... Brass, Copper, and Chromium-Plated Pipe Nipples

C564-03 ..... Rubber Gaskets for Cast Iron Soil Pipe and Fittings

D4101-03b Propylene Plastic Injection and Extrusion Materials

D2447-93 ..... Polyethylene (PE) Plastic Pipe, Schedule 40 and 80, Based on Outside Diameter

D2564-94 ..... Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings

D2665-94 Revision A..... Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings

D4101-03b ..... Propylene Plastic Injection and Extrusion Materials

E1120 ..... Standard Specification For Liquid Chlorine

E1229 ..... Standard Specification For Calcium Hypochlorite

E. American Water Works Association (AWWA):

C110-03/ A21.10-03 ..... Ductile Iron and Gray Iron Fittings - 3 inch thru 48 inches for Water and other liquids AWWA/ ANSI

C151-00/ A21.51-02 ..... Ductile-Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds, for Water or Other Liquids AWWA/ ANSI

C203-02 ..... Coal-Tar Protective Coatings and Linings for Steel Water Pipelines - Enamel and Tape - Hot Applied AWWA/ ANSI

C651-99 ..... Disinfecting Water Mains

F. American Welding Society (AWS):

A5.8-92 ..... Filler Metals for Brazing

G. National Association of Plumbing - Heating - Cooling Contractors (PHCC):

National Standard Plumbing Code - 1996

H. International Association of Plumbing and Mechanical Officials (IAPMO):

Uniform Plumbing Code - 2000

IS6-93 ..... Installation Standard

I. Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS):

SP-72-99..... Ball Valves With Flanged or Butt Welding For General Purpose

SP-110-96..... Ball Valve Threaded, Socket Welding, Solder Joint, Grooved and Flared Ends

J. American Society of Sanitary Engineers (ASSE):

1001-02..... Pipe Applied Atmospheric Type Vacuum Breakers

1018-01..... Performance for trap seal primer valve-water supply fed

1020-04..... Vacuum Breakers, Anti-Siphon, Pressure Type

K. Plumbing and Drainage Institute (PDI):

PDI WH-201 ..... Water Hammer Arrestor

PART 2 - PRODUCTS

2.1 WATER SERVICE CONNECTIONS TO BUILDINGS

A. From inside face of exterior wall to a distance of approximately 25 feet outside of building and underground inside building, material selected shall be the same for the size specified.

B. Under 3 inch diameter: Copper tubing, ASTM B88, Type K, seamless, annealed. Use brazing alloys, AWS A5.8, Classification BCuP.

C. Flexible Expansion Joint: Ductile iron with ball joints rated for 1725 kPa (250 psi) working pressure conforming to ANSI/AWWA A21.53/C153, capable of deflecting a minimum of 30 degrees and expanding simultaneously to the amount shown on the drawings. Flexible expansion joint shall have the expansion capability designed as an integral part of the ductile iron ball castings. Pressure containing parts shall be lined with a minimum of 15 mils of fusion bonded epoxy conforming to the applicable requirements of ANSI/AWWA C213 and shall be factory holiday tested with a 1500 volt spark test. Flexible expansion joint shall have flanged connections conforming to ANSI/AWWA A21.11/C110. Bolts and nuts shall be 316 stainless steel and gaskets shall be neoprene.

2.2 INTERIOR DOMESTIC WATER PIPING

A. Pipe: Copper tube, ASTM B88, Type K or L, drawn.

B. Fittings for Copper Tube:

1. Wrought copper or bronze castings conforming to ANSI B16.18 and B16.22. Unions shall be bronze, MSS SP72 & SP 110, Solder or braze joints.

2. Mechanically formed tee connection: Form mechanically extracted collars in a continuous operation by drilling pilot hole and drawing out tube surface to form collar, having a height of not less than three times the thickness of tube wall. Adjustable collaring device shall insure proper tolerance and complete uniformity of the joint. Notch and dimple joining branch tube in a single process to provide free flow where the branch tube penetrates the fitting. Braze joints.

C. Adapters: Provide adapters for joining screwed pipe to copper tubing.

D. Solder: ASTM B32 Composition Sb5 HA or HB. Provide non-corrosive flux.

E. Brazing alloy: AWS A5.8, Classification BCuP.

2.3 EXPOSED WATER PIPING

A. Unfinished Rooms, Mechanical Rooms and Kitchens: Chrome-plated brass piping is not required. Paint piping systems as specified in Section 09 91 00, PAINTING.

2.4 TRAP PRIMER WATER PIPING:

A. Pipe: Copper tube, ASTM B88, type K, hard drawn.

B. Fittings: Bronze castings conforming to ANSI B16.18 Solder joints.

C. Solder: ASTM B32 composition Sb5. Provide non-corrosive flux.

2.5 WATERPROOFING

A. Provide at points where pipes pass through membrane waterproofed floors or walls in contact with earth.

B. Floors: Provide cast iron stack sleeve with flashing device and a underdeck clamp. After stack is passed through sleeve, provide a waterproofed caulked joint at top hub.

C. Walls: See detail shown on drawings.

2.6 DIELECTRIC FITTINGS

Provide dielectric couplings or unions between ferrous and non-ferrous pipe.

2.7 STERILIZATION CHEMICALS

A. Liquid Chlorine: ASTM E1120.

B. Hypochlorite: ASTM E1229, or Fed. Spec. AA-1427C, grade B.

2.8 WATER HAMMER ARRESTER:

Closed copper tube chamber with permanently sealed 410 kPa (60 psig) air charge above a Double O-ring piston. Two high heat Buna-N 0-rings pressure packed and lubricated with FDA approved Dow Corning No. 11 silicone compound. All units shall be designed in accordance with ASSE 1010 for sealed wall installations without an access panel. Size and install in accordance with Plumbing and Drainage Institute requirements (PDI WH 201). Unit shall be as manufactured by Precision Plumbing Products Inc., Watts or Zurn. Provide water hammer arrestors at all solenoid valves, at all groups of two or more flush valves, at all quick opening or closing valves.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Comply with the PHCC National Standard Plumbing Code and the following:

1. Install branch piping for water from the piping system and connect to all fixtures, valves, cocks, outlets.

2. Pipe shall be round and straight. Cutting shall be done with proper tools. Pipe shall be reamed to full size after cutting.

3. All pipe runs shall be laid out to avoid interference with other work.

4. Install union and shut-off valve on pressure piping at connections to equipment.

5. Pipe Hangers, Supports and Accessories:

a. All piping shall be supported per of the National Standard Plumbing Code, Chapter No. 8.

b. Shop Painting and Plating: Hangers, supports, rods, inserts and accessories used for Pipe supports shall be shop coated with red lead or zinc Chromate primer paint. Electroplated copper hanger rods, hangers and accessories may be used with copper tubing.

c. Floor, Wall and Ceiling Plates, Supports, Hangers:

1) Solid or split unplated cast iron.

2) All plates shall be provided with set screws.

3) Pipe Hangers: Height adjustable clevis type.

4) Adjustable Floor Rests and Base Flanges: Steel.

5) Concrete Inserts: "Universal" or continuous slotted type.

6) Hanger Rods: Mild, low carbon steel, fully threaded or Threaded at each end with two removable nuts at each end for positioning rod and hanger and locking each in place.

7) Riser Clamps: Malleable iron or steel.

8) Rollers: Cast iron.

9) Self-drilling type expansion shields shall be "Phillips" type, with case hardened steel expander plugs.

10) Miscellaneous Materials: As specified, required, directed or as noted on the drawings for proper installation of hangers, supports and accessories.

6. Penetrations:

a. Waterproofing: At floor penetrations, completely seal clearances around the pipe and make watertight with sealant as specified in Section 07 92 00, JOINT SEALANTS.

B. Piping shall conform to the following:

1. Domestic Water:

a. Where possible, grade all lines to facilitate drainage. Provide drain valves at bottom of risers. All unnecessary traps in circulating lines shall be avoided.

b. Connect branch lines at bottom of main serving fixtures below and pitch down so that main may be drained through fixture.

3.2 TESTS

A. General: Test system in its entirety.

B. Potable Water System: Test after installation of piping and domestic water heaters, but before piping is concealed, before covering is applied, and before plumbing fixtures are connected. Fill systems with water and maintain hydrostatic pressure of 100 psi gage for two hours. No decrease in pressure is allowed. Provide a pressure gage with a shutoff and bleeder valve at the highest point of the piping being tested.

3.3 STERILIZATION

A. After tests have been successfully completed, thoroughly flush and sterilize the interior domestic water distribution system in accordance with AWWA C651.

B. Use either liquid chlorine or hypochlorite for sterilization.

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SECTION 22 13 00

FACILITY SANITARY AND VENT PIPING

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section pertains to sanitary sewer and vent systems, including piping, equipment and all necessary accessories as designated in this section.

1.2 RELATED WORK

A. Section 09 90 00, PAINTS AND COATINGS: Preparation and finish painting and identification of piping systems.

B. Section 22 05 11, COMMON WORK RESULTS FOR PLUMBING: Pipe Hangers and Supports, Materials Identification.

1.3 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for Shop Drawing and Submittal requirements.

B. Manufacturer's Literature and Data:

1. Piping.
2. All items listed in Part 2 - Products.

C. Detailed shop drawing of clamping device and extensions when required in connection with the waterproofing membrane or the floor drain.

1.4 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. American Society of Mechanical Engineers (ASME): (Copyrighted Society)

A13.1-07..... Scheme for Identification of Piping Systems

C. American Society for Testing and Materials (ASTM):

A53/A53M-07 ..... Standard Specification for Pipe, Steel, Black And Hot-Dipped, Zinc-coated, Welded and Seamless

A74-06..... Standard Specification for Cast Iron Soil Pipe and Fittings

C564-03a ..... Standard Specification for Rubber Gaskets for Cast Iron Soil Pipe and Fittings

D. Code Council:

CPC-07 ..... California Plumbing Code

E. Cast Iron Soil Pipe Institute (CISPI):

301-05..... Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

310-04..... Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications

F. American Society of Sanitary Engineers (ASSE):

1018-01..... Trap Seal Primer Valves – Potable, Water Supplied

PART 2 - PRODUCTS

2.1 SANITARY WASTE, DRAIN, AND VENT PIPING

A. Cast iron waste, drain, and vent pipe and fittings

1. Cast iron waste, drain, and vent pipe and fittings shall be used for the following applications:

a. pipe buried in or in contact with earth

b. sanitary pipe extensions to a distance of approximately 1500 mm (5 feet) outside of the building.

c. interior waste and vent piping above grade.

2. Cast iron Pipe shall be bell and spigot or hubless (plain end or no-hub or hubless).

3. The material for all pipe and fittings shall be cast iron soil pipe and fittings and shall conform to the requirements of CISPI Standard 301, ASTM A-888, or ASTM A-74.

4. Joints for hubless pipe and fittings shall conform to the manufacturer's installation instructions. Couplings for hubless joints shall conform to CISPI 310. Joints for hub and spigot pipe shall be installed with compression gaskets conforming to the requirements of ASTM Standard C-564 or be installed with lead and oakum.

2.2 SPECIALTY PIPE FITTINGS

A. Transition pipe couplings shall join piping with small differences in outside diameters or different materials. End connections shall be of the same size and compatible with the pipes being joined. The transition coupling shall be elastomeric, sleeve type reducing or transition pattern and include shear and corrosion resistant metal, tension band and tightening mechanism on each end. The transition coupling sleeve coupling shall be of the following material:

1. For cast iron soil pipes, the sleeve material shall be rubber conforming to ASTM C564.

2. For dissimilar pipes, the sleeve material shall be PVC conforming to ASTM D5926, or other material compatible with the pipe materials being joined.

2.3 CLEANOUTS

A. Cleanouts shall be the same size as the pipe, up to 100 mm (4 inches); and not less than 100 mm (4 inches) for larger pipe. Cleanouts shall be easily accessible and shall be gastight and watertight. Minimum clearance of 600 mm (24 inches) shall be provided for clearing a clogged sanitary line.

B. Floor cleanouts shall be gray iron housing with clamping device and round, secured, scoriated, gray iron cover conforming to ASME A112.36.2M. A gray iron ferrule with hubless, socket, inside calk or spigot connection and counter sunk, taper-thread, brass or bronze closure plug shall be included. The frame and cover material and finish shall be nickel-bronze copper alloy with a square shape. The cleanout shall be vertically adjustable for a minimum of 50 mm (2 inches). When a waterproof membrane is used in the floor system, clamping collars shall be provided on the cleanouts. Cleanouts shall consist of wye fittings and eighth bends with brass or bronze screw plugs. Cleanouts in the resilient tile floors, quarry tile and ceramic tile floors shall be provided with square top covers recessed for tile insertion. In the carpeted areas, carpet cleanout markers shall be provided. Two way cleanouts shall be provided where indicated on drawings and at every building exit. The loading classification for cleanouts in sidewalk areas or subject to vehicular traffic shall be heavy duty type.

C. Cleanouts shall be provided at or near the base of the vertical stacks with the cleanout plug located approximately 600 mm (24 inches) above the floor. If there are no fixtures installed on the lowest floor, the cleanout shall be installed at the base of the stack. The cleanouts shall be extended to the wall access cover. Cleanout shall consist of sanitary tees. Nickel-bronze square frame and stainless steel cover with minimum opening of 150 by 150 mm (6 by 6 inches) shall be furnished at each wall cleanout. Where the piping is concealed, a fixture trap or a fixture with integral trap, readily removable without disturbing concealed pipe, shall be accepted as a cleanout equivalent providing the opening to be used as a cleanout opening is the size required.

D. In horizontal runs above grade, cleanouts shall consist of cast brass tapered screw plug in fitting or caulked/hubless cast iron ferrule. Plain end (hubless) piping in interstitial space or above ceiling may use plain end (hubless) blind plug and clamp.

2.4 TRAPS

A. Traps shall be provided on all sanitary branch waste connections from fixtures or equipment not provided with traps. Exposed brass shall be polished brass chromium plated with nipple and set screw escutcheons. Concealed traps may be rough cast brass or same material as pipe connected to. Slip joints are not permitted on sewer side of trap. Traps shall correspond to fittings on cast iron soil pipe or steel pipe respectively, and size shall be as required by connected service or fixture.

2.9 WATERPROOFING

A. A sleeve flashing device shall be provided at points where pipes pass through membrane waterproofed floors or walls. The sleeve flashing device shall be manufactured, cast iron fitting with clamping device that forms a sleeve for the pipe floor penetration of the floor membrane. A galvanized steel pipe extension shall be included in the top of the fitting that will extend 50 mm (2 inches) above finished floor and galvanized steel pipe extension in the bottom of the fitting that will extend through the floor slab. A waterproof caulked joint shall be provided at the top hub.

PART 3 - EXECUTION

3.1 PIPE INSTALLATION

A. The pipe installation shall comply with the requirements of the California Plumbing Code (CPC) and these specifications.

B. Branch piping shall be installed for waste from the respective piping systems and connect to all fixtures and outlets.

C. Pipe shall be round and straight. Cutting shall be done with proper tools. Pipe shall be reamed to full size after cutting.

D. All pipe runs shall be laid out to avoid interference with other work.

E. The piping shall be installed above accessible ceilings where possible.

F. The piping shall be installed to permit valve servicing or operation.

G. Unless specifically indicated on the drawings, the minimum slope shall be 1% slope.

H. The piping shall be installed free of sags and bends.

I. Seismic restraint shall be installed where required by code.

J. Changes in direction for soil and waste drainage and vent piping shall be made using appropriate branches, bends and long sweep bends. Sanitary tees and short sweep quarter bends may be used on vertical stacks if change in direction of flow is from horizontal to vertical. Long turn double wye branch and eighth bend fittings shall be used if two fixtures are installed back to back or side by side with common drain pipe. Straight tees, elbows, and crosses may be used on vent lines. Do not change direction of flow more than 90 degrees. Proper size of standard increaser and reducers shall be used if pipes of different sizes are connected. Reducing size of drainage piping in direction of flow is prohibited.

K. Cast iron piping shall be installed according to CISPI's "Cast Iron Soil Pipe and Fittings Handbook," Chapter IV, "Installation of Cast Iron Soil Pipe and Fittings"

3.2 JOINT CONSTRUCTION

A. Hub and spigot, cast iron piping with gasket joints shall be joined in accordance with CISPI's "Cast Iron Soil Pipe and Fittings Handbook" for compression joints.

B. Hub and spigot, cast iron piping with calked joints shall be joined in accordance with CISPI's "Cast Iron Soil Pipe and Fittings Handbook" for lead and oakum calked joints.

C. Hubless or No-hub, cast iron piping shall be joined in accordance with CISPI's "Cast Iron Soil Pipe and Fittings Handbook" for hubless piping coupling joints.

3.3 SPECIALTY PIPE FITTINGS

A. Transition coupling shall be installed at pipe joints with small differences in pipe outside diameters.

B. Dielectric fittings shall be installed at connections of dissimilar metal piping and tubing.

3.3 PIPE HANGERS, SUPPORTS AND ACCESSORIES:

A. All piping shall be supported according to the California Plumbing Code (CPC), and these specifications. Where conflicts arise between the two, the most restrictive or the requirement that specifies supports with highest loading or shortest spacing shall apply.

B. Hangers, supports, rods, inserts and accessories used for pipe supports shall be shop coated with zinc chromate primer paint.

C. Horizontal piping and tubing shall be supported within 300 mm (12 inches) of each fitting or coupling.

D. Horizontal cast iron piping shall be supported with the following maximum horizontal spacing and minimum hanger rod diameters:

1. 40 mm or DN40 to 50 mm or DN50 (NPS 1-1/2 inch to NPS 2 inch): 1500 mm (60 inches) with 10 mm (3/8 inch) rod.
2. 80 mm or DN 80 (NPS 3 inch): 1500 mm (60 inches) with 13 mm (½ inch) rod.
3. 100 mm or DN100 to 125 mm or DN125 (NPS 4 to NPS 5): 1500 mm (60 inches) with 16 mm (5/8 inch) rod.
4. 150 mm or DN150 to 200 mm or DN200 (NPS 6 inch to NPS 8 inch): 1500 mm (60 inches) with 19 mm (¾ inch) rod.
5. 250 mm or DN250 to 300 mm or DN 300 (NPS 10 inch to NPS 12 inch): 1500 mm (60 inch) with 22 mm (7/8 inch) rod.

E. Vertical piping and tubing shall be supported at the base, at each floor, and at intervals no greater than 4.57 m (15 feet).

G. In addition to the requirements in Section 22 05 11, COMMON WORK RESULTS FOR PLUMBING, floor, Wall and Ceiling Plates, Supports, Hangers shall have the following characteristics:

1. Solid or split unplated cast iron.
2. All plates shall be provided with set screws.
3. Height adjustable clevis type pipe hangers.
4. Adjustable floor rests and base flanges shall be steel.
5. Hanger rods shall be low carbon steel, fully threaded or threaded at each end with two removable nuts at each end for positioning rod and hanger and locking each in place.
7. Riser clamps shall be malleable iron or steel.
8. Rollers shall be cast iron.
9. See Section 22 05 11, COMMON WORK RESULTS FOR PLUMBING, for requirements on insulated pipe protective shields at hanger supports.

H. Miscellaneous materials shall be provided as specified, required, directed or as noted on the drawings for proper installation of hangers, supports and accessories. If the vertical distance exceeds 6 m (20 feet) for cast iron pipe additional support shall be provided in the center of that span. All necessary auxiliary steel shall be provided to provide that support.

I. Cast escutcheon with set screw shall be provided at each wall, floor and ceiling penetration in exposed finished locations and within cabinets and millwork.

J. Piping shall conform to the following:

1. Waste and Vent Drain to main stacks:

Pipe Size	Minimum Pitch
80 mm or DN 80 (3 inches) and smaller	2%
100 mm or DN 100 (4 inches) and larger	1%

2. Exhaust vents shall be extended separately through roof. Sanitary vents shall not connect to exhaust vents.

3.4 TESTS

A. Sanitary waste and drain systems shall be tested either in its entirety or in sections.

B. Waste System tests shall be conducted before trenches are backfilled or fixtures are connected. A water test or air test shall be conducted, as directed.

1. If entire system is tested for a water test, tightly close all openings in pipes except highest opening, and fill system with water to point of overflow. If the waste system is tested in sections, tightly plug each opening except highest opening of section under test, fill each section with water and test with at least a 3 m (10 foot) head of water. In testing successive sections, test at least upper 3 m (10 feet) of next preceding section so that each joint or pipe except upper most 3 m (10 feet) of system has been submitted to a test of at least a 3 m (10 foot) head of water. Water shall be kept in the system, or in portion under test, for at least 15 minutes before inspection starts. System shall then be tight at all joints.

2. For an air test, an air pressure of 35 kPa (5 psig) gage shall be maintained for at least 15 minutes without leakage. A force pump and mercury column gage shall be used for the air test.
3. After installing all fixtures and equipment, open water supply so that all p-traps can be observed. For 15 minutes of operation, all p-traps shall be inspected for leaks and any leaks found shall be corrected.
3. Final Tests: Either one of the following tests may be used.
    a. Smoke Test: After fixtures are permanently connected and traps are filled with water, fill entire drainage and vent systems with smoke under pressure of 1.3 kPa (1 inch of water) with a smoke machine. Chemical smoke is prohibited.
    b. Peppermint Test: Introduce (2 ounces) of peppermint into each line or stack.

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SECTION 22 4000
PLUMBING FIXTURES

PART 1 - GENERAL

1.1 DESCRIPTION

Plumbing fixtures, associated trim and fittings necessary to make a complete installation from wall or floor connections to rough piping, and certain accessories.

1.2 RELATED WORK

A. Sealing between fixtures and other finish surfaces: Section 07 92 00, JOINT SEALANTS.

B. Section 22 05 11, COMMON WORK RESULTS FOR PLUMBING.

1.3 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, section 2-5.3 for Shop Drawing and Submittal requirements.

B. Submit plumbing fixture information in an assembled brochure, showing cuts and full detailed description of each fixture.

1.4 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. American National Standard Institute (ANSI):

The American Society of Mechanical Engineers (ASME):

A112.6.1M-02(R2008)..... Floor Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use

A112.19.1M-04 ..... Enameled Cast Iron Plumbing fixtures

A112.19.3-2001(R2008) ..... Stainless Steel Plumbing fixtures (Designed for Residential Use)

C. American Society for Testing and Materials (ASTM):

A276-2003..... Stainless and Heat-Resisting Steel Bars and Shapes

D. National Association of Architectural Metal Manufacturers (NAAMM): NAAMM AMP 500-505 Metal Finishes Manual (1988)

E. National Sanitation Foundation (NSF)/American National Standards Institute (ANSI):

61-03..... Drinking Water System Components-Health Effects

F. American with Disabilities Act(A.D.A) Section 4-19.4 Exposed Pipes and Surfaces

PART 2 - PRODUCTS

2.1 STAINLESS STEEL

A. Corrosion-resistant Steel (CRS):

1. Plate, Sheet and Strip: CRS flat products shall conform to chemical composition requirements of any 300 series steel specified in ASTM A276.

2. Finish: Exposed surfaces shall have standard polish (ground and polished) equal to NAAMM finish Number 4.

B. Die-cast zinc alloy products are prohibited.

2.2 STOPS

A. Provide lock-shield loose key or screw driver pattern angle stops, straight stops or stops integral with faucet, with each compression type faucet whether specifically called for or not, including sinks in wood and metal casework, laboratory furniture and pharmacy furniture. Locate stops centrally above or below fixture in accessible location.

B. Furnish keys for lock shield stops to Resident Engineer.

C. Supply from stops not integral with faucet shall be chrome plated copper flexible tubing or flexible stainless steel with inner core of non-toxic polymer.

D. Supply pipe from wall to valve stop shall be rigid threaded IPS copper alloy pipe, i.e. red brass pipe nipple.

2.3 ESCUTCHEONS

Heavy type, chrome plated, with set screws. Provide for piping serving plumbing fixtures and at each wall, ceiling and floor penetrations in exposed finished locations and within cabinets and millwork.

2.4 LAMINAR FLOW CONTROL DEVICE

A. Smooth, bright stainless steel or satin finish, chrome plated metal laminar flow device shall provide non-aeration, clear, coherent laminar flow that will not splash in basin. Device shall also have a flow control restrictor and have vandal resistant housing.

B. Flow Control Restrictor:

1. Capable of restricting flow from 1.5 to 1.7 GPM for lavatories; 2.0 to 2.2 GPM for sinks.

2. Compensates for pressure fluctuation maintaining flow rate specified above within 10 percent between 25 and 80 psi.

3. Operates by expansion and contraction, eliminates mineral/sediment build-up with self-clearing action, and is capable of easy manual cleaning.

C. Device manufactured by OMNI Products, Inc. or equal.

2.5 CARRIERS

A. ASME/ANSI A112.6.1M, with adjustable gasket faceplate chair carriers for wall hung closets with auxiliary anchor foot assembly, hanger rod support feet, and rear anchor tie down.

B. ASME/ANSI A112.6.1M, lavatory, chair carrier for 8" wall construction. All lavatory chair carriers shall be capable of supporting the lavatory with a 250-pound vertical load applied at the front of the fixture.

2.6 WATER CLOSETS

A. Water Closet (Wall Hung, ASME/ANSI A112.19.2M, Figure 9) office and industrial, elongated bowl, siphon jet 1.6 gallons per flush, wall outlet. Top of rim shall be between 16 to 17 inches above finished floor. Handicapped water closet shall have rim set 18 inches above finished floor.

1. Seat: Institutional/Industrial, extra heavy duty, chemical resistant, solid plastic, open front less cover for elongated bowls, integrally molded bumpers, concealed check hinge with stainless steel post. Seat shall be posture contoured body design. Color shall be white.

2. Fittings and Accessories: Gaskets - neoprene; bolts with chromium plated caps nuts and washers.

3. Flush valve: Large chloramines resistant diaphragm, semi-red brass valve body, exposed chrome plated, non-hold open ADA approved side oscillating handle, water saver design 1.6 gallons per flush with maximum 10 percent variance one-inch screwdriver back check angle stop with vandal resistant cap, adjustable tailpiece, a high back pressure vacuum breaker, spud coupling for 1-1/2 inch top spud, wall and spud flanges, and sweat solder adapter with cover tube and set screw wall flange. Valve body, cover, tailpiece and control stop shall be in conformance with ASTM alloy classification for semi-red brass. Seat bumpers shall be integral part of flush valve. Set centerline of inlet 11-1/2 inches above rim.

2.7 LAVATORIES

A. Dimensions for lavatories are specified, Length by width (distance from wall) and depth.

B. Brass components in contact with water shall contain no more than 3 percent lead content by dry weight.

C. Lavatory: Single Lever Handle Control ASME/ANSI A112.19.2M, Figure 16) angled backsplash, approximately 18 inches in diameter and a 5-inch maximum apron, stainless steel. Push button metering valve centered on backsplash. Set with rim 34 inches above finished floor.

1. Faucet: Solid cast brass construction, vandal resistant, deck mounted push button, center set. Control shall be washerless ceramic disc cartridge type. Provide laminar flow control device and vandal proof screws.

2. Drain: Cast or wrought brass with flat grid strainer offset tailpiece, chrome plated. Provide cover per A.D.A 4-19.4.

3. Stops: Angle type, see paragraph 2.2 Stops. Provide cover per A.D.A 4-19.4.

4. Trap: Cast copper alloy, 1-1/2 by 1-1/4 inch P-trap. Adjustable with connected elbow and 17 gauge tubing extensions to wall. Exposed metal trap surface and connection hardware shall be chrome plated with a smooth bright finish. Set trap parallel to wall. Provide cover per A.D.A 4-19.4.

2.8 SERVICE SINK

A. Dimensions for sinks and laundry tubs are specified, length by width (distance from wall) and depth.

B. Service Sink (Regular, ASME/ANSI A112.19.1M, Figure 24) service sink, class 1, single bowl, acid resistant enameled cast iron, approximately 24 by 20 inches with a 9 to 12-inch raised back with faucet holes. Equip sink with CRS rim guard, and mounted on trap standard. Set sinks rim 28-inches above finished floor.

1. Faucet: Part B, Type II, solid brass construction, combination faucet with replaceable monel seat, removable replacement unit containing all parts subject to wear, integral stops, mounted on wall above sink. Spout shall have a pail hook, 3/4-inch hose coupling threads, vacuum breaker, and top or bottom brace to wall. Four-arm handles on faucets shall be cast, formed, or drop forged copper alloy. Escutcheons shall be either forged copper alloy or CRS. Exposed metal parts, including exposed part under valve handle when in open position, shall have a smooth bright finish.

2. Drain: Grid.

4. Trap: Trap standard, painted outside and enameled inside with acid-resistant enamel, drain through adjoining wall.

2.9 DISPENSER, DRINKING WATER

A. Drinking Fountain:

1. pedestal mount, barrier free vandal resistant with attached pet fountain, cold rolled steel, with stainless steel receptor, 18 gage, type 304 with satin finish. Unit dimensions, 25 inches wide by 14 inches front to back by 42 inches high. Lead free.

2. Wall mounted at ADA height, barrier free vandal resistant with, cold rolled steel, with stainless steel receptor, 18 gage, type 304 with satin finish. Unit dimensions, 11 inches wide by 20 inches front to back by 11 inches high. Lead free.

   a. Provide frost-proof self-closing, drain back valve assembly with automatic stream height control and an 3-3/8 inch high bubbler.

   b. Provide 1-1/2 inch cast brass P-trap mounted in pipe space, with opening to accept drain back from the frost-proof valve assembly.

   c. All exposed accessories shall be chrome plated. Set receptor rim 42-inches above grade.

2.10 HYDRANT, HOSE BIBB AND MISCELLANEOUS DEVICES

A. (P-801) Wall Hydrant: Cast bronze non-freeze hydrant with detachable T-handle. Brass operating rod within casing of bronze pipe of sufficient length to extend through wall and place valve inside building. Brass valve with coupling and union elbow having metal-to-metal seat. Valve rod and seat washer removable through face of hydrant; 3/4-inch hose thread on spout; 3/4-inch pipe thread on inlet. Finish may be rough; exposed surfaces shall be chrome plated. Set not less than 1-1/2 feet nor more than 3-feet above grade. Provide integral vacuum breaker which automatically drains when shut off. Provide vandal resistant cover with "T" handle key access.

PART 3 - EXECUTION

A. Fixture Setting: Opening between fixture and floor and wall finish shall be sealed as specified under Section 07 9005, JOINT SEALANTS.

B. Supports and Fastening: Secure all fixtures, equipment and trimmings to partitions, walls and related finish surfaces. Exposed heads of bolts and nuts in finished rooms shall be hexagonal, polished chrome plated brass with rounded tops.

C. Toggle Bolts: For hollow masonry units, finished or unfinished.

D. Expansion Bolts: For brick or concrete or other solid masonry. Shall be 6 mm (1/4-inch) diameter bolts, and to extend at least 75 mm (3-inches) into masonry and be fitted with loose tubing or sleeves extending into masonry. Wood plugs, fiber plugs, lead or other soft metal shields are prohibited.

E. Power Set Fasteners: May be used for concrete walls, shall be 6 mm (1/4-inch) threaded studs, and shall extend at least 35 mm (1-1/4 inches) into wall.

F. Tightly cover and protect fixtures and equipment against dirt, water and chemical or mechanical injury.

G. Where water closet waste pipe has to be offset due to beam interference, provide correct and additional piping necessary to eliminate relocation of water closet.

H. Do not use aerators on lavatories and sinks.

3.2 CLEANING

A. At completion of all work, fixtures, exposed materials and equipment shall be thoroughly cleaned.

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SECTION 23 34 00
HVAC FANS

PART 1 - GENERAL

1.1 DESCRIPTION

A. Fans for heating, ventilating, air conditioning and exhaust.

B. Product Definitions: AMCA Publication 99, Standard l-66.

1.2 RELATED WORK

A. Section 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS.

1.3 QUALITY ASSURANCE

A. Fans and power ventilators shall be listed in the current edition of AMCA 26l, and shall bear the AMCA performance seal.

B. Operating Limits for Centrifugal Fans: AMCA 99 (Class I, II, and III).

C. Fans and power ventilators shall comply with the following standards:

1. Testing and Rating: AMCA 2l0.

2. Sound Rating: AMCA 300.

D. Performance Criteria:

1. The fan schedule shall show the design air volume and static pressure. Select the fan motor HP by increasing the fan BHP by 10 percent to account for the drive losses and field conditions.

2. Select the fan operating point as follows:

a. Forward Curve and Axial Flow Fans: Right hand side of peak pressure point

b. Air Foil, Backward Inclined, or Tubular: At or near the peak static efficiency

E. Safety Criteria: Provide manufacturer's standard screen on fan inlet and discharge where exposed to operating and maintenance personnel.

F. Corrosion Protection:

1. Except for fans in fume hood exhaust service, all steel shall be mill-galvanized, or phosphatized and coated with minimum two coats, corrosion resistant enamel paint. Manufacturers paint and paint system shall meet the minimum specifications of: ASTM D1735 water fog; ASTM B117 salt spray; ASTM D3359 adhesion; and ASTM G152 and G153 for carbon arc light apparatus for exposure of non-metallic

G. Spark resistant construction: If flammable gas, vapor or combustible dust is present in concentrations above 20% of the Lower Explosive Limit (LEL), the fan construction shall be as recommended by AMCA's Classification for Spark Resistant Construction. Drive set shall be comprised of non-static belts for use in an explosive.

1.4 SUBMITTALS

A. Submittals shall be submitted in accordance with City of San Diego Requirements.

B. Manufacturers Literature and Data:

1. Fan sections, motors and drives.

2. Centrifugal fans, motors, drives, accessories and coatings.
    a. In-line centrifugal fans.
3. Centrifugal ceiling fans.

C. Certified Sound power levels for each fan.

D. Motor ratings types, electrical characteristics and accessories.

E. Certified fan performance curves for each fan showing cubic feet per minute (CFM) versus static pressure, efficiency, and horsepower for design point of operation.

1.5 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

B. Air Movement and Control Association International, Inc. (AMCA):

99-86	Standards Handbook
2l0-06	Laboratory Methods of Testing Fans for Aerodynamic Performance Rating
26l-09	Directory of Products Licensed to bear the AMCA Certified Ratings Seal - Published Annually
300-08	Reverberant Room Method for Sound Testing of Fans

C. American Society for Testing and Materials (ASTM):

B117-07a	Standard Practice for Operating Salt Spray (Fog) Apparatus
D1735-08	Standard Practice for Testing Water Resistance of Coatings Using Water Fog Apparatus
D3359-08	Standard Test Methods for Measuring Adhesion by Tape Test
G152-06	Standard Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Non-Metallic Materials
G153-04	Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Non-Metallic Materials

D. Underwriters Laboratories, Inc. (UL):

181-2005	Factory Made Air Ducts and Air Connectors

PART 2 - PRODUCTS

2.1 CENTRIFUGAL CEILING FANS (SMALL CABINET FAN)

A. Standards and Performance Criteria: Refer to Paragraph, QUALITY ASSURANCE.

B. Steel housing, baked enamel finish, direct connected fan assembly, attached grille. Provide gravity back draft assembly, aluminum wall cap and bird or insect screen. Provide electric motor operated damper where indicated.

C. Acoustical Lining: 12.5 mm (1/2 inch) thick mineral fiber, dark finish. Comply with UL 181 for erosion.

D. Motor: Shaded pole or permanent split capacitor, sleeve bearings, supported by steel brackets in combination with rubber isolators.

E. Ceiling Grille, (Where indicated): White plastic egg crate design, 80 percent free area.

F. Control: Provide solid state speed control (located at unit) for final air balancing.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install fan, motor and drive in accordance with manufacturer's instructions.

B. Align fan and motor sheaves to allow belts to run true and straight.

C. Bolt equipment to curbs with galvanized lag bolts.

3.2 PRE-OPERATION MAINTENANCE

A. Lubricate bearings, pulleys, belts and other moving parts with manufacturer recommended lubricants.

B. Rotate impeller by hand and check for shifting during shipment and check all bolts, collars, and other parts for tightness.

C. Clean fan interiors to remove foreign material and construction dirt and dust.

3.3 START-UP AND INSTRUCTIONS

A. Verify operation of motor, drive system and fan wheel according to the drawings and specifications.

B. Check vibration and correct as necessary for air balance work.

C. After air balancing is complete and permanent sheaves are in place perform field mechanical.

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SECTION 26 0000

ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.01 GENERAL CONDITIONS:

A. The Bidding Requirements, Conditions of the Contract, General Provisions, Special Conditions and Division 1 are a part of this section and the contract for this work and apply to this Section as fully as if repeated herein.

1.02 SCOPE:

A. Work Included: All labor, materials, appliances, tools, equipment necessary for and incidental to performing all operations in connection with furnishing, delivery and installation of the work of this Section, complete, as shown on the drawings and/or specified herein. Work includes, but is not necessarily limited to the following:

1. Examine all other sections for work related to those other sections and required to be included as work under this section.

2. Examine the general provisions and requirements for electrical work.

1.03 GENERAL SUMMARY OF ELECTRICAL WORK:

A. These specifications and drawings are intended to cover a complete operation of systems. The omission of expressed references to any item of labor or material for the proper execution of the work in accordance with present practice of the trade shall not relieve the Contractor from providing such additional labor and materials.

B. This specification, the drawings and General Conditions over the complete furnishing and installation of the electrical system and all related work including, but not limited to the following:

1. Lighting fixtures and related controls

2. Panelboards

3. Feeders

4. Branch circuits

5. Grounding

6. Empty raceway for telecommunications where shown

7. Telecommunications backboard

1.04 WORK NOT INCLUDED:

A. The furnishing and/or installation of electrical motors are by Division 15.

B. The painting of any conduits, equipment or devices, unless specifically noted otherwise.

1.05 COORDINATION:

A. Examine all other sections of these specifications and drawings to determine the complete scope of the electrical work and coordinate all of the electrical work required for the entire project. Provide the correct electrical service to each piece of electrical equipment, and check and coordinate the required electrical service and controls with the actual equipment provided under the other sections of the project.

1.06 INTERPRETATION OF DRAWING:

A. These drawings showing the layout of the electrical system indicate approximate locations of outlets, apparatus and equipment. The runs of feeders and branch circuits shown on the drawings are schematic only and are not intended to show the exact routing and location of conduits and conduit termination.

1.07 ORDINANCES AND REGULATIONS:

A. All work and materials shall be in full accordance with the latest rules of the Municipal Agency, the National Board of Fire Underwriters and State of California Code of Regulations (CCR) Title 24.

B. Nothing in these plans and specifications is to be construed as permitting work not conforming to these codes.

1.08 PERMITS AND INSPECTIONS:

A. Apply and pay for all permits required by any of the legally constituted public authorities for the installation or construction of the work included under this Division.

1.09 REFERENCE STANDARDS:

A. Materials and workmanship shall conform to the editions of the following standards, codes, or specifications in effect on the date of this specification, unless otherwise specified.

Codes and Regulations of the Jurisdictional Authorities

CEC	2007 California Electrical Code (CCR Title 24 Part 3), based on the 2005 National Electrical Code.
CCR	California Code of Regulations (CCR) Title 24 Parts 1 through 12.
NEMA	National Electrical Manufacturers Association - applicable standards
NFPA	National Fire Protection Association – applicable sections referenced by CCR Title 24
UL	Underwriter's Laboratories, Inc. - applicable standards

B. UL Label: All electrical materials and equipment falling within the scope of the underwriters' standards shall bear the UL Label.

1.10 EXAMINATION OF DRAWINGS AND SITE:

A. Contractor shall carefully examine the site and existing building, shall compare the drawings with the existing electrical installations, and shall thoroughly familiarize himself with all existing conditions within the scope of this work.

1.11 SEQUENCING AND SCHEDULING OF WORK:

A. Coordinate work with the work of the other trades, so that the work may proceed as expeditiously as possible.

1.12 INTERRUPTION OF SERVICE:

A. The electrical services, including feeders and branch circuits, shall remain in service at all times. Where interruption of any electrical service is necessary, prepare a written Method of Procedure (MOP) for review by the Resident Engineer.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. All material shall be new unless specifically noted otherwise.

2.02 OUTLET BOXES:

A. Outlet boxes shall be used as pull boxes wherever possible, and junction boxes or pull boxes shall be installed only as required by the drawings or specifications, or as directed.

B. Unless otherwise specified or noted on the drawings, boxes for the various outlets shall be as follows:

1. For convenience outlets, use metallic 4" boxes with single gang plaster ring.

C. All outlet boxes shall be accurately placed and securely fastened to the structure independent of the conduit.

2.03 CAST BOXES:

A. Outlet boxes installed on fan units, mechanical equipment or other areas where cast boxes are required shall be cast metal with threaded plugged conduit openings and a gasket cover plate specifically designed for the box use and intend function. Cast boxes shall be Rayco or approved equal.

2.04 PULL BOXES

A. Indoor dry locations: Unless otherwise noted provide UL listed NEMA 250 Type 1 ANSI 61 grey painted Code gauge steel boxes with flat removable covers, keyhole screw slots, fastened with plated steel screws.

B. Damp and Wet Locations: Unless otherwise noted provide UL listed NEMA 250 Type 3R ANSI 61 grey painted Code gauge steel boxes with drip shield top, embossed mounting holes on rear of enclosure, provisions for padlocking, and slip-on removable cover fastened with stainless steel screws.

2.05 CIRCUIT AND MOTOR DISCONNECT SWITCHES:

A. Provide circuit and motor disconnect switches in types, sizes, duties, features, ratings, and enclosures as indicated. Provide NEMA 1 enclosures except for outdoor switches and other indicated locations provide NEMA 3R enclosures with rain-tight hubs. For motor and motor starter disconnects, provide units with horsepower ratings suitable for the loads. All current carrying parts shall be plated copper.

B. Fusible Switches: Heavy-duty switches, with fuses of classes and voltage and current ratings indicated. Where current limiting fuses are indicated, provide switches with non-interchangeable features suitable only for Class R current limiting type fuses.

C. Non-fusible Disconnects: Heavy-duty switches, of the voltage and current ratings indicated.

D. Acceptable Manufacturers: Allen-Bradley, Cutler-Hammer, General Electric, Siemens, or Square D.

2.06 CIRCUIT AND MOTOR DISCONNECT SWITCH ACCESSORIES:

A. Electrical Interlocks: Provide number and arrangement of interlock contacts in switches as indicated.

B. Captive Fuse Pullers: Provide built-in fuse puller arranged to facilitate fuse removal.

C. Provide an operating handle capable of being padlocked in the OFF position with as many as three padlocks each with 5/16-inch diameter shanks. Use a dividable, front accessible, coin proof door interlock to prevent opening the door when the switch is in ON position and to prevent turning the switch to ON when the door is open.

D. Provide incoming line terminals with an insulated shield so that no live parts are exposed when the door is open.

E. Provide ground bar.

2.07 RECEPTACLES:

A. Duplex convenience receptacles shall be [ivory] [brown] [grey], grounding type, 125 volt, 20 ampere, and shall have two current carrying contacts and one grounding contact which is internally connected to the frame. Outlet shall accommodate standard parallel blade cap and shall be side wired only. Receptacles shall have self-grounding straps that are UL listed for installation without the bonding jumper described above. Only these receptacles listed hereinafter shall be used:

Manufacturer	Receptacle
Arrow-Hart	#5242-SI
Bryant-Hubbell, Leviton or PS	#5242-I
Sierra	#1402

B. On exposed conduit runs, weatherproof convenience outlets shall be duplex grounding type as herein specified, installed in a cast outlet box with one of the following spring door type covers:

Manufacturer	Cover
Arrow-Hart	#4500-FS
Bryant or PS	#4510
Hubbell	#5211
Leviton	#4942

C. Ground fault interrupter (GFCI) type duplex receptacles shall be rated for 20 ampere, 120 volt, and shall be installed as specified for standard duplex receptacles. GFCI receptacles shall be Leviton, Hubbell, Arrow-Hart or Bryant as required.

2.08 CONNECTORS TERMINAL LUGS AND FITTINGS:

A. All connectors shall be UL listed for the intended use.

B. For #10 AWG and smaller conductor cable: Tin-plated copper pressure connectors with nonflammable, self-extinguishing insulation grip with temperature rating equal to that of conductor insulation.

C. For #8 AWG to #4/0 AWG conductor cable: Tin-plated copper compression connectors and terminal lugs with nylon insulating sleeve for insulation grip.

2.09 INSULATING TAPE:

A. Plastic tape: Vinyl plastic tape with rubber-based pressure-sensitive adhesive, pliable at zero degrees F.

B. Rubber tape: Silicone-rubber tape with silicone pressure-sensitive adhesive.

C. Acceptable Manufacturers: Minnesota Mining and Minerals Co. (3M) #33 or an approved equal.

2.10 ELECTRICAL METALLIC TUBING:

A. Electrical metallic tubing shall be galvanized or sherardized. Couplings and connectors shall be galvanized or cadmium plated and shall be of the compression type, equal to Appleton 95T series for couplings and 86T series for insulated box connectors.

2.11 FLEXIBLE METALLIC CONDUIT:

A. Flexible metallic conduit shall be hot dipped galvanized steel and shall have all fittings hot dipped galvanized or sherardized. Fittings shall be the squeeze type. Fittings, which use a screw to bind against tubing, will not be accepted. Neoprene jacketed flexible metallic conduit and connectors shall be used in all moist or weatherproof applications. Fittings shall be equal to Appleton "STN" series.

B. Flexible conduit shall be by one of the manufacturers listed for rigid conduit. "Jake" connectors shall be provided. Setscrew type connectors shall not be acceptable.

C. Flexible conduit exposed to weather or located in wet or damp locations shall be the weatherproof type with an extruded polyvinyl chloride jacket, as manufactured by American Brass Company, Columbia, Anaconda or Electri-Flex Co.

2.12 WIRE AND CABLE:

A. Furnish and install Anaconda, General Cable, General Electric, Habirshaw, Okonite, Paranite, Phelps-Dodge, Cerro, Collyer, Rome or Triangle Wire and Cable. All wire shall be delivered to the job in unbroken packages, and each package shall bear the Underwriters' and Manufacturer's labels, showing the date of manufacture and the maximum allowable voltage.

B. Wire smaller than #8 AWG may be solid or stranded conductor. #8 AWG and larger wire shall be stranded conductor.

C. Conductors shall be soft drawn annealed copper, ninety-eight (98%) percent conductivity, continuous from outlet to outlet, without welds, splices or joints.

D. All conductors shall be copper.

E. The minimum conductor size shall be #12 AWG for all power and lighting systems unless specifically noted otherwise on drawings or in other sections of this specification.

2.13 INSULATION:

A. Conductors of the follow types shall be used in the following locations:

1. Indoor branch circuit and feeder cables in all sizes shall have "THHN-2" or "THWN-2", 600-volt insulation unless noted otherwise.

2. Type "XHHW-2" 90 degree C rated shall be used for feeders installed underground, on roofs or in areas of direct solar exposure.

B. All conductors supplied under the scope of this project shall be insulated for 600 volts minimum. Wire and cable shall meet the applicable requirements of CEC and UL 83 for the type of insulation, jacket, and conductor specified or indicated. Wires and cables manufactured more than 12 months prior to date of delivery to the site shall not be used.

C. Temperature rating: comply with CEC 110.14(C).

D. Color-Coding of Secondary Phase Conductors: Use the following colors:

1. 208Y/120-V Conductors:
    a. Phase A: Black
    b. Phase B: Red
    c. Phase C: Blue
    d. Neutral: White
    e. Ground: Green
2. 480Y/277-V Conductors:
    a. Phase A: Brown
    b. Phase B: Orange
    c. Phase C: Yellow
    d. Neutral: Gray
    e. Ground: Green
3. DC Wiring:
    a. Negative: Black
    b. Positive: Red

PART 3.00 - EXECUTION

3.01 INSTALLATION:

A. All work shall be in conformance with recognized practices of the National Electrical Contractors Association (NECA) NECA 1 – Standard Practices for Good Workmanship in Electrical Contracting.

1. The Contractor shall perform all cutting and patching of construction work that may be required for the proper installation of the electrical work. All patching shall be of the same materials, workmanship, and finish as, and shall accurately match all surrounding work.
2. All work shall be done under the Resident Engineer's instructions, and, when so required, by the trade which performed the original work.

B. Electrical outlets, devices and equipment furnished by disciplines under the scope of this project shall be installed and fully connected to the electric circuits.

1. The Contractor shall furnish the necessary flexible conduit, connectors, cords, and other equipment that may be required for the proper connection of equipment.

2. The Contractor shall furnish and install conduit, wiring, and connections required by the heating ventilating and air conditioning system for line and low voltage devices as required.

3.02 LOCATIONS AND DIMENSIONS:

A. Install all material and equipment in such a manner as to avoid obstructions, preserve clearances, maintain code spacing and keep openings and passageways clear.

B. These drawings are diagrammatic to the extent that many offsets, bends, fittings and exact locations are not shown. Determine the best methods, exact locations and routes for installation and note any conflicts or obstructions. The locations shown for conduits, outlets, materials and equipment may be refined to meet the architectural, structural and mechanical conditions with the approval of the Resident Engineer.

3.03. OUTLET BOXES:

A. Outlet boxes shall be installed. All devices shall be installed in outlet boxes sized per CEC according to the conductor fill. Where oversized boxes are necessary due to the number of conductors, the contractor shall furnish the required box size.

B. Outlet boxes shall be independently supported to framing, ceiling slabs or other structures in an approved manner. Conduit shall not be the sole support of outlet boxes.

3.04 INSTALLATION OF CIRCUIT AND MOTOR DISCONNECTS:

A. Provide circuit and motor disconnect switches as indicated and where required by CEC. Comply with switch manufacturers' printed installation instructions.

B. Attach disconnect switches directly to packaged mechanical equipment where shown on the plans, at point of connection. Coordinate location with equipment submittals before rough-in. Do not block nameplates or install on removable panels. Mount at fifty-four (54) inches above finished surface where shown as wall-mounted on the plans.

3.05 EQUIPMENT GROUNDING:

A. Comply with CEC and local amendments.

B. A green insulated copper ground wire, sized per CEC shall be provided with each feeder and branch circuit of operating over 50 volts to ground. This ground wire shall be used for the grounding of all equipment.

C. Ground conductors for branch circuit wiring shall be attached at each outlet to the back of the box using drilled and tapped holes and washer head screws, 6-32 or larger.

D. Each panelboard, switchboard, pullbox or any other enclosure in which several ground wires are terminated shall be equipped with a ground bus secured to the interior of the enclosure. The bus ampacity shall be equal to the phase bus size and shall have a separate lug for each ground conductor. No more than one conductor shall be installed per lug.

3.07 FLEXIBLE METALLIC CONDUIT:

A. Final connections of conduit systems to all motors, generators and direct wired vibrating equipment (including transformers) for interior and exterior locations not to exceed three (3) foot length.

B. Light fixture connections in accessible locations (6 feet maximum)

3.08 INSTALLING WIRE:

A. All circuit and feeder wires shall be continuous from switch to terminal or farthest outlet. No joints shall be made except in pull, junction or outlet boxes, or in panel or switchboard.

B. All branch circuit and fixture wiring joints, splices and tapes for conductors #10 and smaller shall be made with UL listed connectors listed for 600 volts. Connector bodies shall consist of a cone shape expandable coil spring insert, insulated with Teflon or plastic shell. The connectors shall be the "Wing Nut" as manufactured by "Ideal Industries" or "Scotchlok" as manufactured by Minnesota Mining Manufacturing Company.

C. Make all connections and splices necessary to properly install and complete the work. All splices shall be taped. All connections and splices shall be electrically and mechanically perfect, and in strict accordance with all Code requirements.

END OF SECTION

SECTION 31 2200

GRADING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Removal of topsoil.

B. Rough grading the site for site structures.

C. Finish grading.

1.02 RELATED REQUIREMENTS

A. Section 31 2323 - Fill: Filling and compaction.

1.03 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Project Record Documents: Accurately record actual locations of utilities remaining by horizontal dimensions, elevations or inverts, and slope gradients.

PART 2 PRODUCTS

2.01 MATERIALS

A. Other Fill Materials: See Section 31 2323.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that survey bench mark and intended elevations for the Work are as indicated.

3.02 PREPARATION

A. Identify required lines, levels, contours, and datum.

B. Stake and flag locations of known utilities.

C. Locate, identify, and protect from damage above- and below-grade utilities to remain.

D. Protect site features to remain, including but not limited to bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs, from damage by grading equipment and vehicular traffic.

E. Protect trees to remain by providing substantial fencing around entire tree at the outer tips of its branches; no grading is to be performed inside this line.

F. Protect plants, lawns, rock outcroppings, and other features to remain as a portion of final landscaping.

3.03 ROUGH GRADING

A. Remove topsoil from landscaped areas to be affected by construction activities, without mixing with foreign materials.

B. Do not remove topsoil when wet.

C. Remove subsoil from areas to be re-paved.

D. Do not remove wet subsoil, unless it is subsequently processed to obtain optimum moisture content.

E. When excavating through roots, perform work by hand and cut roots with sharp axe.

F. See Section 31 2323 for filling procedures.

G. Stability: Replace damaged or displaced subsoil to same requirements as for specified fill.

3.04 SOIL REMOVAL

A. Stockpile excavated topsoil on site.

B. Stockpile subsoil to be re-used on site; remove remainder from site.

C. Stockpiles: Use areas designated on site; pile depth not to exceed 8 feet; protect from erosion.

3.05 FINISH GRADING

A. Before Finish Grading:

1. Verify building and trench backfilling have been inspected.

2. Verify subgrade has been contoured and compacted.

B. Remove debris, roots, branches, stones, in excess of 1/2 inch in size. Remove soil contaminated with petroleum products.

C. Where topsoil is to be placed, scarify surface to depth of 3 inches.

D. In areas where vehicles or equipment have compacted soil, scarify surface to depth of 3 inches.

E. Place topsoil in landscaped areas affected by construction activities.

F. Place topsoil during dry weather.

G. Remove roots, weeds, rocks, and foreign material while spreading.

H. Near plants spread topsoil manually to prevent damage.

I. Fine grade topsoil to eliminate uneven areas and low spots. Maintain profiles and contour of subgrade.

J. Lightly compact placed topsoil.

3.06 TOLERANCES

A. Top Surface of Subgrade: Plus or minus 0.10 foot (1-3/16 inches) from required elevation.

B. Top Surface of Finish Grade: Plus or minus 0.04 foot (1/2 inch).

3.07 REPAIR AND RESTORATION

A. Existing Facilities, Utilities, and Site Features to Remain: If damaged due to this work, repair or replace to original condition.

B. Other Existing Vegetation to Remain: If damaged due to this work, replace with vegetation of equivalent species and size.

3.08 FIELD QUALITY CONTROL

A. See Section 31 2323 for compaction density testing.

3.09 CLEANING

A. Remove unused stockpiled topsoil and subsoil. Grade stockpile area to prevent standing water.

B. Leave site clean and raked, ready to receive landscaping.

END OF SECTION

SECTION 31 2323

FILL

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Filling, backfilling, and compacting for paving and site structures.

B. Filling holes, pits, and excavations generated as a result of removal (demolition) operations.

1.02 RELATED REQUIREMENTS

A. Section 31 2200 - Grading: Removal and handling of soil to be re-used.

1.03 DEFINITIONS

A. Finish Grade Elevations: Indicated on drawings.

B. Subgrade Elevations: 4 inches below finish grade elevations indicated on drawings, unless otherwise indicated.

1.04 REFERENCE STANDARDS

A. AASHTO T 180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54 kg (10-lb) Rammer and a 457 mm (18 in.) Drop; American Association of State Highway and Transportation Officials; 2010.

B. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)); 2007.

C. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method; 2007.

D. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN m/m3)); 2009.

E. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method; 2008.

F. ASTM D 2922 - Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth); 2005.

G. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth); 2005.

1.05 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Samples: 10 lb sample of each type of fill; submit in air-tight containers to testing laboratory.

C. Materials Sources: Submit name of imported materials source.

D. Fill Composition Test Reports: Results of laboratory tests on proposed and actual materials used.

E. Compaction Density Test Reports.

1.06 DELIVERY, STORAGE, AND HANDLING

A. When necessary, store materials on site in advance of need.

B. When fill materials need to be stored on site, locate stockpiles where designated.

1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
2. Prevent contamination.
3. Protect stockpiles from erosion and deterioration of materials.

PART 2 PRODUCTS

2.01 FILL MATERIALS

A. General Fill: Conforming to City of San Diego Public Works Department standard.

B. Granular Fill: Coarse aggregate, conforming to City of San Diego Public Works Department standard.

C. Sand: Conforming to City of San Diego Public Works Department standard.

D. Topsoil: Conforming to City of San Diego Public Works Department standard.

2.02 SOURCE QUALITY CONTROL

A. See Quality Requirments section, for general requirements for testing and analysis of soil material.

B. Where fill materials are specified by reference to a specific standard, testing of samples for compliance will be provided before delivery to site.

C. If tests indicate materials do not meet specified requirements, change material and retest.

D. Provide materials of each type from same source throughout the Work.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that survey bench marks and intended elevations for the Work are as indicated.

B. Identify required lines, levels, contours, and datum locations.

C. See Section 31 2200 for additional requirements.

D. Verify subdrainage, dampproofing, or waterproofing installation has been inspected.

3.02 PREPARATION

A. Scarify subgrade surface to a depth of 6 inches to identify soft spots.

B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with general fill.

C. Compact subgrade to density equal to or greater than requirements for subsequent fill material.

D. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.

3.03 FILLING

A. Fill to contours and elevations indicated using unfrozen materials.

B. Fill up to subgrade elevations unless otherwise indicated.

C. Employ a placement method that does not disturb or damage other work.

D. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen or spongy subgrade surfaces.

E. Maintain optimum moisture content of fill materials to attain required compaction density.

F. Granular Fill: Place and compact materials in equal continuous layers not exceeding 6 inches compacted depth.

G. Soil Fill: Place and compact material in equal continuous layers not exceeding 8 inches compacted depth.

H. Slope grade away from building minimum 2 inches in 10 ft, unless noted otherwise. Make gradual grade changes. Blend slope into level areas.

I. Correct areas that are over-excavated.

1. Other areas: Use general fill, flush to required elevation, compacted to minimum 95 percent of maximum dry density.

J. Compaction Density Unless Otherwise Specified or Indicated:

1. Under paving, slabs-on-grade, and similar construction: 95 percent of maximum dry density.

2. At other locations: 95 percent of maximum dry density.

3.04 FIELD QUALITY CONTROL

A. See Quality Requirements section, for general requirements for field inspection and testing.

B. Perform compaction density testing on compacted fill in accordance with ASTM D1556, ASTM D2167, ASTM D2922, or ASTM D3017.

C. Evaluate results in relation to compaction curve determined by testing uncompacted material in accordance with ASTM D698 ("standard Proctor"), ASTM D1557 ("modified Proctor"), or AASHTO T 180.

D. If tests indicate work does not meet specified requirements, remove work, replace and retest.

3.05 CLEANING

A. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.

END OF SECTION

SECTION 32 1123

AGGREGATE BASE COURSES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Aggregate base course.

1.02 RELATED REQUIREMENTS

A. Section 31 2200 - Grading: Preparation of site for base course.

B. Section 31 2323 - Fill: Compacted fill under base course.

C. Section 32 1313 - Concrete Paving: Finish concrete surface course.

1.03 REFERENCE STANDARDS

A. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method; 2007.

B. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN m/m3)); 2009.

C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2010.

1.04 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Samples: 10 lb sample of each type of aggregate; submit in air-tight containers to testing laboratory.

C. Materials Sources: Submit name of imported materials source.

D. Aggregate Composition Test Reports: Results of laboratory tests on proposed and actual materials used.

E. Compaction Density Test Reports.

1.05 DELIVERY, STORAGE, AND HANDLING

A. When necessary, store materials on site in advance of need.

B. When aggregate materials need to be stored on site, locate stockpiles where indicated.

1. Separate differing materials with dividers or stockpile separately to prevent intermixing.

2. Prevent contamination.

3. Protect stockpiles from erosion and deterioration of materials.

PART 2 PRODUCTS

2.01 MATERIALS

A. Aggregate: Coarse aggregate, conforming to City of San Diego Public Works Department standard.

B. Fine Aggregate: Sand; conforming to City of San Diego Public Works Department standard.

2.02 SOURCE QUALITY CONTROL

A. Where aggregate materials are specified using ASTM D2487 classification, test and analyze samples for compliance before delivery to site.

B. If tests indicate materials do not meet specified requirements, change material and retest.

C. Provide materials of each type from same source throughout the Work.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that survey bench marks and intended elevations for the work are as indicated.

B. Verify substrate has been inspected, gradients and elevations are correct, and is dry.

3.02 PREPARATION

A. Correct irregularities in substrate gradient and elevation by scarifying, reshaping, and re-compacting.

B. Do not place aggregate on soft, muddy, or frozen surfaces.

3.03 INSTALLATION

A. Under Portland Cement Concrete Paving:

1. Place coarse aggregate to a total compacted thickness of 4 inches.

2. Compact to 95 percent of maximum dry density.

B. Place aggregate in maximum 4 inch layers and roller compact to specified density.

C. Level and contour surfaces to elevations and gradients indicated.

D. Add small quantities of fine aggregate to coarse aggregate as appropriate to assist compaction.

E. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.

F. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

3.04 TOLERANCES

A. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.

3.05 FIELD QUALITY CONTROL

A. See Quality Requirements section, for general requirments for field inspection and testing.

B. Compaction density testing will be performed on compacted aggregate base course in accordance with ASTM D1556.

C. Results will be evaluated in relation to compaction curve determined by testing uncompacted material in accordance with ASTM D1557 ("modified Proctor").

D. If tests indicate work does not meet specified requirements, remove work, replace and retest.

E. Proof roll compacted aggregate at surfaces that will be under slabs-on-grade.

3.06 CLEANING

A. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.

END OF SECTION

SECTION 32 1313

CONCRETE PAVING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete curbs and gutters.

B. Concrete walks.

1.02 RELATED REQUIREMENTS

A. Section 03 3000 - Cast-in-Place Concrete.

B. Section 07 9005 - Joint Sealers: Sealant for joints.

C. Section 31 2200 - Grading: Preparation of site for paving and base and preparation of subsoil at pavement perimeter for planting.

D. Section 31 2323 - Fill: Compacted subbase for paving.

1.03 REFERENCE STANDARDS

A. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; American Concrete Institute International; 1991 (Reapproved 2002).

B. ACI 301 - Specifications for Structural Concrete for Buildings; American Concrete Institute International; 2005.

C. ACI 305R - Hot Weather Concreting; American Concrete Institute International; 2010.

D. ACI 306R - Cold Weather Concreting; American Concrete Institute International; 1988 (Reapproved 2002).

E. ASTM C 39/C 39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2009a.

F. ASTM C 94/C 94M - Standard Specification for Ready-Mixed Concrete; 2009a.

G. ASTM D 1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (nonextruding and Resilient Bituminous Types); 2004 (Reapproved 2008).

H. ASTM D 1752 - Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction; 2004a (Reapproved 2008).

1.04 PERFORMANCE REQUIREMENTS

A. Static Coefficient of Friction: For concrete pavement installed as walkway surfaces, provide values equivalent to the following values as determine by testing per ASTM C 1028:

1. Level Surfaces: Minimum 0.6.

2. Step Treads: Minimum 0.6.

3. Ramp Surfaces: Minimum 0.6

B. Area Paving: Portland cement concrete paving shall have a medium broom finish on all surfaces sloped less than 6% and slip resistant (heavy broom finish) on all surfaces sloped greater than 6%. CBC Section 1133B.7.1.

1.05 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Provide data on joint filler, admixtures, and curing compound.

C. Samples: Submit two sample panels, 12 x 12 inch in size illustrating exposed aggregate finish.

D. Design Data: Indicate pavement thickness, design mixture, designed concrete strength, reinforcement, and typical details.

E. Qualification Data: For qualified Installer of detectable warnings ready-mix concrete manufacturer and testing agency.

F. Material Certificates: For the following, from manufacturer:

1. Cementitious materials.
2. Steel reinforcement and reinforcement accessories.
3. Fiber reinforcing.
4. Admixtures.
5. Curing compounds.
6. Applied finish materials.
7. Bonding agent or epoxy adhesive.
8. Joint fillers.

1.06 QUALITY ASSURANCE

A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

B. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.

1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

C. Concrete Testing Service: Engage a qualified testing agency to perform material evaluation tests and to design concrete mixtures.

D. ACI Publications: Comply with ACI 301 unless otherwise indicated.

E. Preinstallation Conference: Conduct conference at Project site.

1. Review methods and procedures related to concrete paving, including but not limited to, the following:
    a. Concrete mixture design.
    b. Quality control of concrete materials and concrete paving construction practices.
2. Require representatives of each entity directly concerned with concrete paving to attend, including the following:

a. Contractor's superintendent.

b. Independent testing agency responsible for concrete design mixtures.

c. Ready-mix concrete manufacturer.

d. Concrete paving subcontractor.

e. Manufacturer's representative of stamped concrete paving system used for detectable warnings.

F. Concrete paving will comply with the City of San Diego Standards, including the following guidelines:

1. All concrete to provide a minimum 2,500 psi compressive strength with a maximum .5 water-cement ratio.

2. Sidewalks should be no less 3’ wide and replace entire walkway if this cannot be achieved. All repairs should be doweled into existing concrete

3. Provide 3000 psi or greater concrete for heavy traffic area

4. Pedestrian paving to provide safe, durable, carefully thought-out ADA Accessible pedestrian access to support all facility functions.

a. Design all paving for maintenance vehicle traffic

b. Ponding is not acceptable. Ensure proper drainage, with 1% to drain slope minimum and 1.5% maximum cross slope.

c. Provide expansion joints and control joints to control cracking

d. Control joints in walkways and mow curbs should be located a maximum of 5 feet on center with expansion joints at 40 feet. No panel should be larger than 100 square feet.

e. Secondary fibrous reinforcement of concrete paving is desirable.

f. Control joint preference is to hand tool prior to curing; where saw cut control joints must be used, cut 1/3 the slab depth minimum.

g. Concrete paving expansion joints shall receive sealant. Use only elastomeric expansion joint sealants.

h. Downspouts should not drain across pedestrian flatwork

i. Slope flatwork away from utility vault lids

j. Finish for concrete walks is a medium broom finish, with brush strokes perpendicular to the primary direction of travel. Do not use salt finish or stamped textures.

k. At stairs, use metal nosings. Provide access that is as direct as possible between building entrances and activity areas.

l. Minimum reinforcing standard shall be #4 bars at 24 inches each way; not wire web fabric.

8. Curb Ramps: Curb ramps shall be provided where there is a change in grade from the street to the sidewalk and along any walkway that is on the Accessible Path of Travel, as required. Refer to current ADA, Title 24 and City of San Diego requirements for curb ramp design.

10. When existing concrete flatwork is cut into, replacement concrete will be 3/4" rock; 2500 psi concrete at least 4" thick set on a 2" sand base. On both sides of cut, the contractor will dowel into the existing concrete and place #4 rebar at 24 inch on center to tie the new concrete into the existing concrete.

1.07 PROJECT CONDITIONS

A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 PRODUCTS

2.01 FORMS

A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.

1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less. Do not use notched and bent forms.

B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.02 STEEL REINFORCEMENT

A. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, fabricated from as-drawn steel wire into flat sheets.

B. Deformed-Steel Welded Wire Reinforcement: ASTM A 497/A 497M, flat sheet.

C. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.

D. Galvanized Reinforcing Bars: ASTM A 767/A 767M, Class II zinc coated, hot-dip galvanized after fabrication and bending; with ASTM A 615/A 615M, Grade 60 deformed bars.

E. Epoxy-Coated Reinforcing Bars: ASTM A 775/A 775M or ASTM A 934/A 934M; with ASTM A 615/A 615M, Grade 60 deformed bars.

F. Steel Bar Mats: ASTM A 184/A 184M; with ASTM A 615/A 615M, Grade 60, deformed bars; assembled with clips.

G. Plain-Steel Wire: ASTM A 82/A 82M, as drawn.

H. Deformed-Steel Wire: ASTM A 496/A 496M.

I. Epoxy-Coated-Steel Wire: ASTM A 884/A 884M, Class A coated, deformed.

J. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 plain-steel bars; . Cut bars true to length with ends square and free of burrs.

K. Epoxy-Coated, Joint Dowel Bars: ASTM A 775/A 775M; with ASTM A 615/A 615M, Grade 60, plain-steel bars.

L. Tie Bars: ASTM A 615/A 615M, Grade 60, deformed.

M. Hook Bolts: ASTM A 307, Grade A, internally and externally threaded. Design hook-bolt joint assembly to hold coupling against paving form and in position during concreting operations, and to permit removal without damage to concrete or hook bolt.

N. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or

precast concrete of greater compressive strength than concrete specified, and as follows:

1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.

O. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating, compatible with epoxy coating on reinforcement.

P. Zinc Repair Material: ASTM A 780.

2.03 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of same type, brand, and source throughout Project:

1. Portland Cement: ASTM C 150, gray portland cement Type II Type I/II Type V. Supplement with the following:
   a. Fly Ash: ASTM C 618, Class C or Class F.
   b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.
2. Blended Hydraulic Cement: ASTM C 595, Type IP, portland-pozzolan cement.

B. Normal-Weight Aggregates: ASTM C 33, Class 4S Class 4M Class 1N Insert class, uniformly graded. Provide aggregates from a single source with documented service-record data of at least 10 years' satisfactory service in similar paving applications and service conditions using similar aggregates and cementitious materials.

1. Maximum Coarse-Aggregate Size: 1 inch nominal.
2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

C. Exposed Aggregate: Selected, hard, and durable; washed; free of materials with deleterious reactivity to cement or that cause staining; from a single source, with gap-graded coarse aggregate as follows:

1. Aggregate Sizes: 3/8 to 5/8 inch nominal.
2. Aggregate Source, Shape, and Color.

D. Water: Potable and complying with ASTM C 94/C 94M.

E. Air-Entraining Admixture: ASTM C 260.

F. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

2.04 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.

B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

C. Water: Potable.

D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.

1. Products: Subject to compliance with requirements, provide the following provide one of the following available products that may be incorporated into the Work include, but are not limited to, the following:

a. Axim Italcementi Group, Inc.; Caltexol CIMFILM.

b. BASF Construction Chemicals, LLC; Confilm.

c. ChemMasters; Spray-Film.

d. Conspec by Dayton Superior; Aquafilm.

e. Dayton Superior Corporation; Sure Film (J-74).

f. Or Equal.

2.05 RELATED MATERIALS

A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber in preformed strips.

B. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.

C. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

D. Epoxy Bonding Adhesive: ASTM C 881/C 881M, two-component epoxy resin capable of humid curing and bonding to damp surfaces; of class suitable for application temperature, of grade complying with requirements, and of the following types:

1. Types I and II, non-load bearing Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.

E. Chemical Surface Retarder: Water-soluble, liquid, set retarder with color dye, for horizontal concrete surface application, capable of temporarily delaying final hardening of concrete to a depth of 1/8 to 1/4 inch.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

a. ChemMasters; Exposee.

b. Conspec by Dayton Superior; Delay S.

c. Dayton Superior Corporation; Sure Etch (J-73).

d. Edoco by Dayton Superior; True Etch Surface Retarder.

e. Euclid Chemical Company (The), an RPM company; Surface Retarder Formula S.

f. Or Equal.

F. Mineral Dry-Shake Hardener: Factory-packaged, dry combination of portland cement, graded quartz aggregate, and plasticizing admixture.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:

a. Anti-Hydro International, Inc.; A-H S-Q Hardener.

b. BASF Construction Chemicals, LLC; Mastercron.

c. ChemMasters; ConColor.

d. Conspec by Dayton Superior; Conshake 600 Colortone.

e. Dayton Superior Corporation; Quartz Tuff.

f. Or Equal.

2.06 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M Furnish batch certificates for each batch discharged and used in the Work.

1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.

1. For concrete batches of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.

2. For concrete batches larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.

3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 SUBBASE

A. See Section 32 1123 for construction of base course for work of this Section.

3.03 PREPARATION

A. Remove loose material from compacted subbase surface immediately before placing concrete.

B. Coat surfaces of manhole frames with oil to prevent bond with concrete pavement.

C. Notify Resident Engineer minimum 24 hours prior to commencement of concreting operations.

3.04 EDGE FORMS AND SCREED GUIDES

A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.05 REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.

C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.

D. Install welded wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

E. Zinc-Coated Reinforcement: Use galvanized-steel wire ties to fasten zinc-coated reinforcement. Repair cut and damaged zinc coatings with zinc repair material.

F. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D 3963/D 3963M.

G. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch overlap of adjacent mats.

3.06 JOINTS

A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.

1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.

B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.

1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.

2. Provide tie bars at sides of paving strips where indicated.

3. Butt Joints: Use epoxy bonding adhesive at joint locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

4. Keyed Joints: Provide preformed keyway-section forms or bulkhead forms with keys unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.

5. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.

C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.

1. Locate expansion joints at intervals of 45 feet unless otherwise indicated.
2. Extend joint fillers full width and depth of joint.
3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
6. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.

D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows, to match jointing of existing adjacent concrete paving:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch 3/8-inch radius. Repeat grooving of contraction joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.

   a. Tolerance: Ensure that grooved joints are within 2 inches either way from centers of dowels.

2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.

   a. Tolerance: Ensure that sawed joints are within 2 inches either way from centers of dowels.

3. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.

E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 3/8-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

3.07 PLACING CONCRETE

A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in.

B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.

C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.

D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.

E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.

F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

G. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.

1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement dowels and joint devices.

H. Screed paving surface with a straightedge and strike off.

I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

J. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.

K. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.

    1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.

L. Cold-Weather Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306R and the following:

    1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.

    2. Do not use frozen materials or materials containing ice or snow.

    3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.

M. Hot-Weather Placement: Comply with ACI 305R and as follows when hot-weather conditions exist:

    1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

    2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.

    3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

3.08 FLOAT FINISHING

A. General: Do not add water to concrete surfaces during finishing operations.

B. Area Paving - General: Portland cement concrete paving shall have a medium broom finish on all surfaces sloped less than 6% and slip resistant (heavy broom finish) on all surfaces sloped greater than 6%. CBC Section 1133B.7.1.

C. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.

2. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

3.09 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

B. Comply with ACI 306.1 for cold-weather protection.

C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.

D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

E. Curing Methods: Cure concrete by moisture curing moisture-retaining-cover curing curing compound or a combination of these as follows:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

a. Water.

b. Continuous water-fog spray.

c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover, placed in widest practicable width, with sides and ends lapped at least 12 inches and sealed by waterproof tape or adhesive. Immediately repair any holes or tears occurring during installation or curing period using cover material and waterproof tape.

3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas that have been subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating, and repair damage during curing period.

3.10 PAVING TOLERANCES

A. Comply with tolerances in ACI 117 and as follows:

1. Elevation: 3/4 inch.
2. Thickness: Plus 3/8 inch, minus 1/4 inch.
3. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/2 inch.
4. Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch per 12 inches of tie bar.
5. Lateral Alignment and Spacing of Dowels: 1 inch.
6. Vertical Alignment of Dowels: 1/4 inch.
7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
8. Joint Spacing: 3 inches.
9. Contraction Joint Depth: Plus 1/4 inch, no minus.
10. Joint Width: Plus 1/8 inch, no minus.

3.11 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

B. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:

1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. 5000 sq. ft. or fraction thereof of each concrete mixture placed each day.

   a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when it is 80 deg F and above, and one test for each composite sample.
5. Compression Test Specimens: ASTM C 31/C 31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
6. Compressive-Strength Tests: ASTM C 39/C 39M; test one specimen at seven days and two specimens at 28 days.

   a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.

C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.

D. Test results shall be reported in writing to the Resident Engineer, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.

E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.

F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.

G. Concrete paving will be considered defective if it does not pass tests and inspections.

H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

I. Prepare test and inspection reports.

3.13 REPAIRS AND PROTECTION

A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.

B. Drill test cores, where directed by Resident Engineer, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.

C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.

D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

SECTION 32 1723.13

PAINTED PAVEMENT MARKINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Parking space markings, including curb markings and International Symbol of Accessibility.

B. Curb Painting.

1.02 REFERENCE STANDARDS

A. FS TT-P-1952 - Paint, Traffic Black, and Airfield Marking, Waterborne; Rev. E, 2007.

B. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; current edition, www.paintinfo.com.

C. FHWA MUTCD - Manual on Uniform Traffic Control Devices for Streets and Highways; U.S. Department of Transportation, Federal Highway Administration; http://mutcd.fhwa.dot.gov; current edition.

1.03 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.

2. Storage and handling requirements and recommendations.

3. Installation methods.

C. Certificates: Submit for each batch of paint stating compliance with specified requirements.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver paint in containers of at least 5 gallons accompanied by batch certificate.

B. Store products in manufacturer's unopened packaging until ready for installation.

C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.05 FIELD CONDITIONS

A. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.01 MATERIALS

A. Line and Zone Marking Paint: MPI No. 97 Latex Traffic Marking Paint; color(s) as indicated.

1. Handicapped Symbols: Blue and White.

2. Curb Markings: Blue and Red.

B. Paint For Obliterating Existing Markings: FS TT-P-1952; black for bituminous pavements, gray for portland cement pavements.

C. Temporary Marking Tape: Preformed, reflective, pressure sensitive adhesive tape in color(s) required; Contractor is responsible for selection of material of sufficient durability as to perform satisfactorily during period for which its use is required.

PART 3 EXECUTION

3.01 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Allow new pavement surfaces to cure for a period of not less than 14 days before application of marking materials.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

C. Obliteration of existing markings using paint is acceptable in lieu of removal; apply the black paint in as many coats as necessary to completely obliterate the existing markings.

D. Clean surfaces thoroughly prior to installation.

1. Remove dust, dirt, and other granular surface deposits by sweeping, blowing with compressed air, rinsing with water, or a combination of these methods.

2. Completely remove rubber deposits, existing paint markings, and other coatings adhering to the pavement, by scraping, wire brushing, sandblasting, mechanical abrasion, or approved chemicals.

3. Sandblasting: Use equipment of size and capacity necessary, providing not less than 150 cfm of air at pressure not less than 90 psi at each nozzle used.

E. Where oil or grease are present, scrub affected areas with several applications of trisodium phosphate solution or other approved detergent or degreaser, and rinse thoroughly after each application; after cleaning, seal oil-soaked areas with cut shellac to prevent bleeding through the new paint.

F. Establish survey control points to determine locations and dimensions of markings; provide templates to control paint application by type and color at necessary intervals.

G. Temporary Pavement Markings: When required or directed by Architect, apply temporary markings of the color(s), width(s) and length(s) as indicated or directed.

1. After temporary marking has served its purpose, remove temporary marking by carefully controlled sandblasting, approved grinding equipment, or other approved method so that surface to which the marking was applied will not be damaged.

2. At Contractor's option, temporary marking tape may used in lieu of temporary painted marking; remove unsatisfactory tape and replace with painted markings at no additional cost to Resident Engineer.

3.03 INSTALLATION

A. Begin pavement marking as soon as practicable after surface has been cleaned and dried.

B. Do not apply paint if temperature of surface to be painted or the atmosphere is less than 50 degrees F or more than 95 degrees F.

C. Apply in accordance with manufacturer's instructions using an experienced technician that is thoroughly familiar with equipment, materials, and marking layouts.

D. Comply with FHWA MUTCD manual (http://mutcd.fhwa.dot.gov) for details not shown.

E. Apply markings in locations determined by measurement from survey control points; preserve control points until after markings have been accepted.

F. Apply uniformly painted markings of color(s), lengths, and widths as indicated on the drawings true, sharp edges and ends.

1. Apply paint in one coat only.

2. Wet Film Thickness: 0.015 inch, minimum.

3. Length Tolerance: Plus or minus 3 inches.

4. Width Tolerance: Plus or minus 1/8 inch.

G. Parking Spaces: Apply parking space lines, painted curbs, and other markings indicated on drawings.

1. Mark the International Symbol of Accessibility at indicated parking spaces, in relative location, size and color per City Standard Drawings.

2. Hand application by pneumatic spray is acceptable.

H. Symbols: Use a suitable template that will provide a pavement marking with true, sharp edges and ends, of the design and size indicated.

3.04 DRYING, PROTECTION, AND REPLACEMENT

A. Protect newly painted markings so that paint is not picked up by tires, smeared, or tracked.

B. Provide barricades, warning signs, and flags as necessary to prevent traffic crossing newly painted markings.

C. Allow paint to dry at least the minimum time specified by the applicable paint standard and not less than that recommended by the manufacturer.

D. Remove and replace markings that are applied at less than minimum material rates; deviate from true alignment; exceed length and width tolerances; or show light spots, smears, or other deficiencies or irregularities.

E. Remove markings in manner to avoid damage to the surface to which the marking was applied, using carefully controlled sand blasting, approved grinding equipment, or other approved method.

F. Replace removed markings at no additional cost to Resident Engineer.

END OF SECTION

SECTION 32 1726

DETECTABLE/TACTILE WARNING SURFACES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Stainless Steel Cast In Place Detectable/Tactile Warning Surface Tiles

1.02 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Special Conditions and Division 1 Specifications Section, apply to this Section.

1.03 SUBMITTALS

A. See GREENBOOK and 2010 City Supplement, Section 2-5.3 for Shop Drawings and Submittals.

B. Product Data: Submit manufacturer's literature describing products, installation procedures and routine maintenance.

C. Samples for Verification Purposes: Submit two (2) tile samples minimum 6"x6" of the kind proposed for use.

D. Shop drawings are required for products specified showing fabrication details, composite structural system, tile surface profile, sound on cane contact amplification feature, plans of tile placement including joints, and material to be used as well as outlining installation materials and procedure.

E. Material Test Reports: Submit complete test reports from qualified accredited independent testing laboratories to qualify that materials proposed for use are in compliance with requirements and meet or exceed the properties indicated on the specifications. All tests shall be conducted on a Cast In Place Detectable/Tactile Warning Surface Tile system as certified by a qualified independent testing laboratory and be current within a 24 month period.

F. Maintenance Instructions: Submit copies of manufacturer's specified installation and maintenance practices for each type of Detectable Warning Surface Tile and accessory as required.

G: Certification: Letter signed by manufacturer certifying Installer that meets the qualifications listed below.

H: Certification: Letter signed by manufacturer certifying that product meets all requirements and regulations of the American's with Disabilities Act (ADA) and the California Code of Regulations (CCR).

1.04 QUALITY ASSURANCE

A. Provide Cast In Place Detectable/Tactile Warning Surface Tiles and accessories as produced by a single manufacturer that specializes in manufacturing the products specified in this section, with a minimum of three (3) years experience.

B. Installer's Qualifications: Engage an experienced Installer certified in writing by Cast In Place Detectable/Tactile Warning Surface Tile manufacturer as qualified for installation, who has successfully completed installations similar in material, design, and extent to that indicated for Project.

C. Americans with Disabilities Act (ADA): Provide Cast In Place Detectable/Tactile Warning Surface Tiles which comply with the detectable warnings on walking surfaces section of the Americans with Disabilities Act (Title III Regulations, 28 CFR Part 36 ADA STANDARDS FOR ACCESSIBLE DESIGN, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES).

D. California Code of Regulations (CCR): Provide only approved DSAAC detectable warning products as provided in the California Code of Regulations (CCR) Title 24, Part 2, Section 205 definition of ”Detectable Warning”. Section 1117A.4 and 1127B.5 for ”Curb Ramps” and Section 1133B.8.5 for "Detectable Warnings at Hazardous Vehicular Areas”.

E. Tile and installation to comply with San Diego City Standard Drawing SDG-130.

1.05 DELIVERY, STORAGE AND HANDLING

A. Cast In Place Detectable/Tactile Warning Surface Tiles shall be suitably packaged or crated to prevent damage in shipment or handling. Finished surfaces shall be protected by sturdy plastic wrappings to protect tile from concrete residue during installation and tile type shall be identified by part number.

B. Cast In Place Detectable/Tactile Warning Surface Tiles shall be delivered to location at building site for storage prior to installation.

1.06 SITE CONDITIONS

A. Environmental Conditions and Protection: Maintain minimum temperature of 40°F in spaces to receive Cast In Place Detectable/Tactile Warning Surface Tiles for at least 24 hours prior to installation, during installation, and for not less than 24 hours after installation.

B. The use of water for work, cleaning or dust control, etc. shall be contained and controlled and shall not be allowed to come into contact with the general public. Provide barricades or screens to protect the general public.

1.07 GUARANTEE

A. Cast In Place Detectable/Tactile Warning Surface Tiles shall be guaranteed in writing for a period of five (5) years (minimum) from date of final completion. The guarantee includes defective work, breakage, deformation, fading and loosening of tiles.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Approved Manufacturer: Advantage Tactile Systems Inc. (800-679-4022); www.advantagetactile.com. Or approved equal.

1. See GREENBOOK and 2010 City Supplement, section 4-1.6 for substitutions.

2. Any product submitted for this project must be on the City of San Diego’s Approved Materials List (AML) for Detectable Warning Tiles (DWT), published November 2011.

B. Color: Yellow conforming to Federal Color No. 33538.

C. Material: Stainless Steel, with ultra violet stabilized color coating.

D. Product Characteristics: Cast In Place Detectable/Tactile Warning Surface Tiles shall have an integral non-slip surface stamped into the stainless steel plate on the top of the domes and in the field surface between the domes. The tile shall incorporate an in-line pattern of truncated domes measuring nominal 0.2” height, 0.9” base diameter, and 0.45” top diameter, spaced center-to-center 2.4” as measured on a diagonal and 1.7” as measured side by side. For wheelchair and high heel shoe safety the field area shall consist of an integral non-slip surface (within the stainless steel plate) that measure 0.03 above the adjacent surface.

1. Dimensions: Cast In Place Detectable/Tactile Warning Surface Tiles shall be held within the following dimensions and tolerances:

   a. Length and Width: 24x48 nominal

2. Slip Resistance: The combined Wet and Dry Static Co-Efficients of Friction not to be less than 0.80 on top of domes and field area, ASTM C 1028-96.

2. Chemical Stain Resistance: To withstand without discoloration or staining - saturated calcium chloride, red enamel spray paint, red lipstick, red wax crayon, black liquid ink, chewing gum, mustard, ketchup, urine, coffee, diesel fuel, asphalt, tobacco juice, hydraulic oil and motor oil. ASTM D 543-95 (re approved 2001)

3. Abrasive Wear of Tile: Average wear depth shall not exceed 0.010 after 1,000 abrasion cycles when measured on the top surface of the dome representing the average of three measurement locations per sample. Tested by BYK – Gardener Tester ASTM D 2486-00 with reciprocating linear motion of 37± cycles per minute over a 10" travel. The abrasive medium, a 40 grit Norton Metallite sand paper, to be fixed and leveled to a holder. The combined mass of sled, weight and wood block is to be 3.2 lb.

4. Abrasive Wear of Tile: Average wear index shall be a minimum of 480 after 1,000 abrasion cycles with ASTM C 501-84 parameters and 210 with SS-T-308b parameters when measured on the top surface of the dome representing the average of four sample measurements. When tested by Taber Tester ASTM C 501-84 and US Specifications SS-T-308b with H22 coarse Calibrade Wheels with each testing coupon weighed to the nearest 0.01 gram

5. Gardner Impact to Geometry "GE" of the standard when tested by ASTM D 5420-04 to have a mean failure energy expressed as a function of specimen thickness of not less than 550 in. lbf/in. A failure is noted when a crack is visible in coating or a 3mm depression on domes for coated tile.

6. Accelerated Weathering of Tile when tested by ASTM G 155-05a for 3,000 hours shall exhibit the following result – $\Delta E < 2.6$, as well as no deterioration, fading or chalking of surface of federal yellow color tile (federal No. 33538).

7. Accelerated Aging and Freeze Thaw Test of Tile and Adhesive System when tested to ASTM D 1037-99 shall show no evidence of cracking, delamination, warpage, checking, blistering, color change, loosening of tiles or other detrimental defects.

8. Salt and Spray Performance of Tile when tested to ASTM B 117-03 not to show any deterioration or other defects after 1,000 hours of exposure.

9. Tensile Strength of Concrete Repair and Overlay Materials by Direct Pull-off Method ASTM C 153-04 tensile bond strength shall not be less than 160 psi

10. Determining the Adhesion of Lamination Films to Prints Utilizing Mechanical Stress by Four (4) Different Test Methods -Score/Tape, Cross Hatch, X-Cut, and Crease Folding by ASTM F 2296-04 not to show any failure of coating delaminating from metal panel.

11. Crazing resistance by thermal shock with breaches in coating by ASTM C 554-93 no failure up to 450 degrees Fahrenheit

12. AASHTO HB-17 single wheel HS20-44 loading "Standard Specifications for Highways and Bridges". The Cast In Place Tile shall be mounted on a concrete platform then subjected to the specified maximum load of 10,400 lbs., corresponding to an 8,000 lb individual wheel load and a 30% impact factor. The tile shall exhibit no visible damage at the maximum load of 10,400 lbs.

PART 3 EXECUTION

3.01 INSTALLATION

A. During Cast In Place Detectable/Tactile Warning Surface Tile installation procedures, ensure adequate safety guidelines are in place and that they are in accordance with the applicable industry and government standards.

B. Prior to placement of the Cast In Place Detectable/Tactile Warning Surface Tile system, review manufacturer and contract drawings with the Contractor prior to the construction and refer any and all discrepancies to the Resident Engineer.

C. The structural embedment flange system and related materials shall be installed in strict accordance with their respective manufacturers written instructions. Not recommended for asphalt applications.

D. The physical characteristics of the concrete shall be consistent with the contract specifications while maintaining a slump range of 4 - 7 to permit solid placement of the Cast In Place Detectable/Tactile Warning Surface Tile system. An overly wet mix will cause the tile to float. Under these conditions, suitable weights such as 2 concrete blocks or sandbags (25 lb) shall be placed on each tile.

E. The concrete pouring and finishing operations require typical mason's tools, however, a 4' long level with electronic slope readout, 25 lb. weights, and a large non-marring rubber mallet are specific to the installation of the Cast In Place Detectable/Tactile Warning Surface Tile system. A vibrating mechanism such as that manufactured by Vibco can be employed, if desired. The vibrating unit should be fixed to a soft base such as wood, at least 1 foot square.

F. The factory-installed plastic sheeting must remain in place during the entire installation process to prevent the splashing of concrete onto the finished surface of the tile.

G. When preparing to set the tile, it is important that no concrete be removed in the area to accept the tile. It is imperative that the installation technique eliminates any air voids under the tile. Holes in the tile perimeter allow air to escape during the installation process. Concrete will flow through the large holes in each embedment flange on the underside of the tile. This will lock the tile solidly into the cured concrete.

H. The concrete shall be poured and finished true and smooth to the required dimensions and slope prior to the tile placement. Immediately after finishing concrete, the electronic level should be used to check that the required slope is achieved. The tile shall be placed true and square to the curb edge in accordance with the contract drawings. The Cast In Place Detectable/Tactile Warning Surface Tiles shall be tamped (or vibrated) into the fresh concrete to ensure that the field level of the tile is flush to the adjacent concrete surface. The embedment process should not be accomplished by stepping on the tile as this may cause uneven setting which can result in air voids under the tile surface. The contract drawings indicate that the tile field level (base of truncated dome) is flush to adjacent surfaces to permit proper water drainage and eliminate tripping hazards between adjacent finishes.

I. In cold weather climates it is recommended that the Cast In Place Detectable/Tactile Warning Surface Tiles be set deeper such that the top of domes are level to the adjacent concrete on the top and sides of ramp and that the base of domes to allow water drainage. This installation will reduce the possibility of damage due to snow clearing operations.

J. Immediately after placement, the tile elevation is to be checked to adjacent concrete. The elevation and slope should be set consistent with contract drawings to permit water drainage to curb as the design dictates. Ensure that the field surface of the tile is flush with the surrounding concrete and back of curb so that no ponding is possible on the tile at the back side of curb.

K. While concrete is workable, a 3/8" radius edging tool shall be used to create a finished edge of concrete, then a steel trowel shall be used to finish the concrete around the tile's perimeter, flush to the field level of the tile.

L. During and after the tile installation and the concrete curing stage, it is imperative that there is no walking, leaning or external forces placed on the tile that may rock the tile causing a void between the underside of tile and concrete.

M. Following tile placement, review installation tolerances to contract drawings and adjust tile before the concrete sets. Two suitable weights of 25 lb each may be required to be placed on each tile as necessary to ensure solid contact of the underside of tile to concrete.

N. Following the concrete curing stage, protective plastic wrap is to be removed from the tile surface by cutting the plastic with a sharp knife, tight to the concrete/tile interface. If concrete bled under the plastic, a soft brush will clean the residue without damage to the tile surface.

3.02 CLEANING, PROTECTING AND MAINTENANCE

A. Protect tiles against damage during construction period to comply with Tactile Tile manufacturer's specification.

B. Protect tiles against damage from rolling loads following installation by covering with plywood or hardwood.

C. Clean Tactile Tiles not more than four days prior to date scheduled for inspection intended to establish date of substantial completion in each area of project. Clean Tactile Tile by method specified by Tactile Tile manufacturer.

D. Comply with manufacturers maintenance manual for cleaning and maintaining tile surface and it is recommended to perform annual inspections for safety and tile integrity.

END OF SECTION

APPENDIX A

CEQA NOTICE OF EXEMPTION

NOTICE OF EXEMPTION

(Check one or both)

TO: __X__ RECORDER/COUNTY CLERK
P.O. BOX 1750, MS A-33
1600 PACIFIC HWY, ROOM 260
SAN DIEGO, CA 92101-2422

_____ OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET, ROOM 121
SACRAMENTO, CA 95814

FROM: CITY OF SAN DIEGO
DEVELOPMENT SERVICES DEPARTMENT
1222 FIRST AVENUE, MS 501
SAN DIEGO, CA 92101

PROJECT NO.: **WBS #** PROJECT TITLE: **The Mid City Adult Center, East San Diego**

PROJECT LOCATION-SPECIFIC: The Mid City Adult Center is located at 4077 Fairmount Avenue in the Mid City, City Heights area Community Plan.

PROJECT LOCATION-CITY/COUNTY: San Diego/San Diego

DESCRIPTION OF NATURE AND PURPOSE OF THE PROJECT: This project will provide an accessible path of travel from the sidewalk to the building entrance and the parking lot in accordance with the Americans with Disabilities Act (ADA). Other improvements include upgrades to the restrooms and building facilities to comply with ADA requirements and re-striping the parking lot to meet current ADA standards. The project will require demolition of existing walkways, parking lot, and the entrance stairs to construct the new improvements. Other demolition and construction will occur within the building to upgrade the restrooms and kitchen.

NAME OF PUBLIC AGENCY APPROVING PROJECT: City of San Diego

NAME OF PERSON OR AGENCY CARRYING OUT PROJECT: City of San Diego, E&CP Dept/Siavash Haghkhah
600 B Street, Suite 800 (MS 908A)
San Diego, CA 92101
619- 533-5186

EXEMPT STATUS: (CHECK ONE)

( ) MINISTERIAL (SEC. 21080(b)(1); 15268);
( ) DECLARED EMERGENCY (SEC. 21080(b)(3); 15269(a));
( ) EMERGENCY PROJECT (SEC. 21080(b)(4); 15269 (b)(c)
(X) CATEGORICAL EXEMPTION: 15301(A) (EXISTING FACILITIES)
( ) STATUTORY EXEMPTIONS:

REASONS WHY PROJECT IS EXEMPT: The City of San Diego conducted an Initial Study which determined that this project does would not result in any impacts to the environment. The project will be constructed entirely within the existing developed site and would not have an impact on any historical or biological resources. This project meets the criteria set forth in CEQA Section 15301 which allows for minor alteration of existing structures and facilities involving a negligible or no expansion of use and where exceptions listed in CEQA Section 15300.2 would not apply.

LEAD AGENCY CONTACT PERSON: JEAN CAMERON TELEPHONE: (619) 446-5379

IF FILED BY APPLICANT:

1. ATTACH CERTIFIED DOCUMENT OF EXEMPTION FINDING.
2. HAS A NOTICE OF EXEMPTION BEEN FILED BY THE PUBLIC AGENCY APPROVING THE PROJECT?
   ( ) YES ( ) NO

IT IS HEREBY CERTIFIED THAT THE CITY OF SAN DIEGO HAS DETERMINED THE ABOVE ACTIVITY TO BE EXEMPT FROM CEQA

Jean Cameron Senior Planner

SIGNATURE/TITLE

December 28, 2010
DATE

CHECK ONE:
(X) SIGNED BY LEAD AGENCY

DATE RECEIVED FOR FILING WITH COUNTY CLERK OR OPR:

APPENDIX B

LOCATION MAP


POLK AV
FAIRMOUNT AV
ALLEY
ALLEY
East San Diego Adult Center
4077 Fairmount Ave., S.D. 92105

APPENDIX C

FIRE HYDRANT METER PROGRAM

CITY OF SAN DIEGO CALIFORNIA DEPARTMENT INSTRUCTIONS	NUMBER DI 55.27	DEPARTMENT Water Department
SUBJECT FIRE HYDRANT METER PROGRAM (FORMERLY: CONSTRUCTION METER PROGRAM)	PAGE 1OF 10	EFFECTIVE DATE October 15, 2002
	SUPERSEDES DI 55.27	DATED April 21, 2000

1. **PURPOSE**

1.1 To establish a Departmental policy and procedure for issuance, proper usage and charges for fire hydrant meters.

2. **AUTHORITY**

2.1 All authorities and references shall be current versions and revisions.

2.2 San Diego Municipal Code (NC) Chapter VI, Article 7, Sections 67.14 and 67.15

2.3 Code of Federal Regulations, Safe Drinking Water Act of 1986

2.4 California Code of Regulations, Titles 17 and 22

2.5 California State Penal Code, Section 498B.0

2.6 State of California Water Code, Section 110, 500-6, and 520-23

2.7 Water Department Director

Reference

2.8 State of California Guidance Manual for Cross Connection Programs

2.9 American Water Works Association Manual M-14, Recommended Practice for Backflow Prevention

2.10 American Water Works Association Standards for Water Meters

2.11 U.S.C. Foundation for Cross Connection Control and Hydraulic Research Manual

3. **DEFINITIONS**

3.1 **Fire Hydrant Meter:** A portable water meter which is connected to a fire hydrant for the purpose of temporary use. (These meters are sometimes referred to as Construction Meters.)

3.2 **Temporary Water Use:** Water provided to the customer for no longer than twelve (12) months.

3.3 **Backflow Preventor:** A Reduced Pressure Principal Assembly connected to the outlet side of a Fire Hydrant Meter.

4. POLICY

4.1 The Water Department shall collect a deposit from every customer requiring a fire hydrant meter and appurtenances prior to providing the meter and appurtenances (see Section 7.1 regarding the Fees and Deposit Schedule). The deposit is refundable upon the termination of use and return of equipment and appurtenances in good working condition.

4.2 Fire hydrant meters will have a 2 ½" swivel connection between the meter and fire hydrant. The meter shall not be connected to the 4" port on the hydrant. All Fire Hydrant Meters issued shall have a Reduced Pressure Principle Assembly (RP) as part of the installation. Spanner wrenches are the only tool allowed to turn on water at the fire hydrant.

4.3 The use of private hydrant meters on City hydrants is prohibited, with exceptions as noted below. All private fire hydrant meters are to be phased out of the City of San Diego. All customers who wish to continue to use their own fire hydrant meters must adhere to the following conditions:

a. Meters shall meet all City specifications and American Water Works Association (AWWA) standards.

b. Customers currently using private fire hydrant meters in the City of San Diego water system will be allowed to continue using the meter under the following conditions:

1. The customer must submit a current certificate of accuracy and calibration results for private meters and private backflows annually to the City of San Diego, Water Department, Meter Shop.

2. The meter must be properly identifiable with a clearly labeled serial number on the body of the fire hydrant meter. The serial number shall be plainly stamped on the register lid and the main casing. Serial numbers shall be visible from the top of the meter casing and the numbers shall be stamped on the top of the inlet casing flange.

3. All meters shall be locked to the fire hydrant by the Water Department, Meter Section (see Section 4.7).

4. All meters shall be read by the Water Department, Meter Section (see Section 4.7).

5. All meters shall be relocated by the Water Department, Meter Section (see Section 4.7).

6. These meters shall be tested on the anniversary of the original test date and proof of testing will be submitted to the Water Department, Meter Shop, on a yearly basis. If not tested, the meter will not be allowed for use in the City of San Diego.

7. All private fire hydrant meters shall have backflow devices attached when installed.

8. The customer must maintain and repair their own private meters and private backflows.

9. The customer must provide current test and calibration results to the Water Department, Meter Shop after any repairs.

10. When private meters are damaged beyond repair, these private meters will be replaced by City owned fire hydrant meters.

11. When a private meter malfunctions, the customer will be notified and the meter will be removed by the City and returned to the customer for repairs. Testing and calibration results shall be given to the City prior to any re-installation.

12. The register shall be hermetically sealed straight reading and shall be readable from the inlet side. Registration shall be in hundred cubic feet.

13. The outlet shall have a 2 ½ "National Standards Tested (NST) fire hydrant male coupling.

14. Private fire hydrant meters shall not be transferable from one contracting company to another (i.e. if a company goes out of business or is bought out by another company).

4.4 All fire hydrant meters and appurtenances shall be installed, relocated and removed by the City of San Diego, Water Department. All City owned fire hydrant meters and appurtenances shall be maintained by the City of San Diego, Water Department, Meter Services.

4.5 If any fire hydrant meter is used in violation of this Department Instruction, the violation will be reported to the Code Compliance Section for investigation and appropriate action. Any customer using a fire hydrant meter in violation of the requirements set forth above is subject to fines or penalties pursuant to the Municipal Code, Section 67.15 and Section 67.37.

4.6 **Conditions and Processes for Issuance of a Fire Hydrant Meter**

Process for Issuance

a. Fire hydrant meters shall only be used for the following purposes:

1. Temporary irrigation purposes not to exceed one year.

2. Construction and maintenance related activities (see Tab 2).

b. No customer inside or outside the boundaries of the City of San Diego Water Department shall resell any portion of the water delivered through a fire hydrant by the City of San Diego Water Department.

c. The City of San Diego allows for the issuance of a temporary fire hydrant meter for a period not to exceed 12 months (365 days). An extension can only be granted in writing from the Water Department Director for up to 90 additional days. A written request for an extension by the consumer must be submitted at least 30 days prior to the 12 month period ending. No extension shall be granted to any customer with a delinquent account with the Water Department. No further extensions shall be granted.

d. Any customer requesting the issuance of a fire hydrant meter shall file an application with the Meter Section. The customer must complete a "Fire Hydrant Meter Application" (Tab 1) which includes the name of the company, the party responsible for payment, Social Security number and/or California ID, requested location of the meter (a detailed map signifying an exact location), local contact person, local phone number, a contractor's license (or a business license), description of specific water use, duration of use at the site and full name and address of the person responsible for payment.

e. At the time of the application the customer will pay their fees according to the schedule set forth in the Rate Book of Fees and Charges, located in the City Clerk's Office. All fees must be paid by check, money order or cashiers check, made payable to the City Treasurer. Cash will not be accepted.

f. No fire hydrant meters shall be furnished or relocated for any customer with a delinquent account with the Water Department.

g. After the fees have been paid and an account has been created, the

meter shall be installed within 48 hours (by the second business day). For an additional fee, at overtime rates, meters can be installed within 24 hours (within one business day).

4.7 **Relocation of Existing Fire Hydrant Meters**

a. The customer shall call the Fire Hydrant Meter Hotline (herein referred to as "Hotline"), a minimum of 24 hours in advance, to request the relocation of a meter. A fee will be charged to the existing account, which must be current before a work order is generated for the meter's relocation.

b. The customer will supply in writing the address where the meter is to be relocated (map page, cross street, etc). The customer must update the original Fire Hydrant Meter Application with any changes as it applies to the new location.

c. Fire hydrant meters shall be read on a monthly basis. While fire hydrant meters and backflow devices are in service, commodity, base fee and damage charges, if applicable, will be billed to the customer on a monthly basis. If the account becomes delinquent, the meter will be removed.

4.8 **Disconnection of Fire Hydrant Meter**

a. After ten (10) months a "Notice of Discontinuation of Service" (Tab 3) will be issued to the site and the address of record to notify the customer of the date of discontinuance of service. An extension can only be granted in writing from the Water Department Director for up to 90 additional days (as stated in Section 4.6C) and a copy of the extension shall be forwarded to the Meter Shop Supervisor. If an extension has not been approved, the meter will be removed after twelve (12) months of use.

b. Upon completion of the project the customer will notify the Meter Services office via the Hotline to request the removal of the fire hydrant meter and appurtenances. A work order will be generated

for removal of the meter.

c. Meter Section staff will remove the meter and backflow prevention assembly and return it to the Meter Shop. Once returned to the Meter Shop the meter and backflow will be tested for accuracy and functionality.

d. Meter Section Staff will contact and notify Customer Services of the final read and any charges resulting from damages to the meter and backflow or its appurtenance. These charges will be added on the customer's final bill and will be sent to the address of record. Any customer who has an outstanding balance will not receive additional meters.

e. Outstanding balances due may be deducted from deposits and any balances refunded to the customer. Any outstanding balances will be turned over to the City Treasurer for collection. Outstanding balances may also be transferred to any other existing accounts.

5. EXCEPTIONS

5.1 Any request for exceptions to this policy shall be presented, in writing, to the Customer Support Deputy Director, or his/her designee for consideration.

6. MOBILE METER

6.1 Mobile meters will be allowed on a case by case basis. All mobile meters will be protected by an approved backflow assembly and the minimum requirement will be a Reduced Pressure Principal Assembly. The two types of Mobile Meters are vehicle mounted and floating meters. Each style of meters has separate guidelines that shall be followed for the customer to retain service and are described below:

a) **Vehicle Mounted Meters**: Customer applies for and receives a City owned Fire Hydrant Meter from the Meter Shop. The customer mounts the meter on the vehicle and brings it to the Meter Shop for

inspection. After installation is approved by the Meter Shop the vehicle and meter shall be brought to the Meter Shop on a monthly basis for meter reading and on a quarterly basis for testing of the backflow assembly. Meters mounted at the owner's expense shall have the one year contract expiration waived and shall have meter or backflow changed if either fails.

b) **Floating Meters**: Floating Meters are meters that are not mounted to a vehicle. **(Note: All floating meters shall have an approved backflow assembly attached.)** The customer shall submit an application and a letter explaining the need for a floating meter to the Meter Shop. The Fire Hydrant Meter Administrator, after a thorough review of the needs of the customer, (i.e. number of jobsites per day, City contract work, lack of mounting area on work vehicle, etc.), may issue a floating meter. At the time of issue, it will be necessary for the customer to complete and sign the "Floating Fire Hydrant Meter Agreement" which states the following:

    1) The meter will be brought to the Meter Shop at 2797 Caminito Chollas, San Diego on the third week of each month for the monthly read by Meter Shop personnel.

    2) Every other month the meter will be read and the backflow will be tested. This date will be determined by the start date of the agreement.

If any of the conditions stated above are not met the Meter Shop has the right to cancel the contract for floating meter use and close the account associated with the meter. The Meter Shop will also exercise the right to refuse the issuance of another floating meter to the company in question.

Any Fire Hydrant Meter using reclaimed water shall not be allowed use again with any potable water supply. The customer shall incur the cost of replacing the meter and backflow device in this instance.

7. FEE AND DEPOSIT SCHEDULES

7.1 **Fees and Deposit Schedules:** The fees and deposits, as listed in the Rate Book of Fees and Charges, on file with the Office of the City Clerk, are based on actual reimbursement of costs of services performed, equipment and materials. Theses deposits and fees will be amended, as needed, based on actual costs. Deposits, will be refunded at the end of the use of the fire hydrant meter, upon return of equipment in good working condition and all outstanding balances on account are paid. Deposits can also be used to cover outstanding balances.

All fees for equipment, installation, testing, relocation and other costs related to this program are subject to change without prior notification. The Mayor and Council will be notified of any future changes.

8. UNAUTHORIZED USE OF WATER FROM A HYDRANT

8.1 Use of water from any fire hydrant without a properly issued and installed fire hydrant meter is theft of City property. Customers who use water for unauthorized purposes or without a City of San Diego issued meter will be prosecuted.

8.2 If any unauthorized connection, disconnection or relocation of a fire hydrant meter, or other connection device is made by anyone other than authorized Water Department personnel, the person making the connection will be prosecuted for a violation of San Diego Municipal Code, Section 67.15. In the case of a second offense, the customer's fire hydrant meter shall be confiscated and/or the deposit will be forfeited.

8.3 Unauthorized water use shall be billed to the responsible party. Water use charges shall be based on meter readings, or estimates when meter readings are not available.

8.4 In case of unauthorized water use, the customer shall be billed for all applicable charges as if proper authorization for the water use had been obtained, including but not limited to bi-monthly service charges, installation charges and removal charges.

8.5 If damage occurs to Water Department property (i.e. fire hydrant meter, backflow, various appurtenances), the cost of repairs or replacements will be charged to the customer of record (applicant).

Water Department Director

Tabs: 1. Fire Hydrant Meter Application
2. Construction & Maintenance Related Activities With No Return To Sewer
3. Notice of Discontinuation of Service

APPENDIX

Administering Division: Customer Support Division

Subject Index:
Construction Meters
Fire Hydrant
Fire Hydrant Meter Program
Meters, Floating or Vehicle Mounted
Mobile Meter
Program, Fire Hydrant Meter

Distribution: DI Manual Holders

City of San Diego
Water Department

Application For Fire Hydrant Meter

(EXHIBIT A)

For Office Use Only	
NS Rec:	FAC #:
Date:	By:

2797 Caminito Chollas • San Diego, California 92105-5097 METER SHOP 619 527 7449 FAX 619 527 3125

Meter Information

Application Date:	Requested Install Date:

Fire Hydrant Location: (Attach detailed map, Thomas Bros. map location or construction drawing.)

Specific Use of Water:

Any return to Sewer or Storm Drain, if so, explain:

Estimated Duration of Meter Use: ☐ ☐ Check Box if Reclaimed Water

Company Information

Company Name:			
Mailing Address:			
City:	State:	Zip Code:	Phone: ( )
*Business License #:		*Contractor License #:	

*A copy of the Contractor's License and/or Business License is required at the time of meter issuance.

Name and Title of Agent:	Phone: ( )
Site Contact Name and Title:	Phone: ( )
Pager #:	Cell : ( )
Responsible Party Name:	Title:
Social Security or Cal ID #:	Phone: ( )

Signature: Date:

Guarantees payment of all charges resulting from the use of this meter. Insures that employees of this organization understand the proper use of Fire Hydrant Meter.

Fire Hydrant Meter Removal Request

☐ Check Box to Request Removal of Above Meter | Requested Removal Date:

Provide current Meter location if different from above:

Signature:	Title:	Date:
Phone: ( )	Pager: ( )	

For Office Use Only

☐ City Meter ☐ Private Meter

CIS Account #:	Deposit Amount: $	Fees Amount: $	
Meter Serial #:	Meter Size:	Meter Make & Style:	
Backflow #:	Backflow Size:	Meter Make & Style:	
Name:	Signature:	Date:	

$1,108.45 - FOR 24 HR INSTALLATION
$1,052.26 - FOR 48 HR INSTALLATION

FHM App Created: 11/2/00-htp

"Exhibit B"

CONSTRUCTION AND MAINTENANCE RELATED ACTIVITIES WITH NO RETURN TO SEWER:

Auto Detailing
Backfilling
Combination Cleaners (Vactors)
Compaction
Concrete Cutters
Construction Trailers
Cross Connection Testing
Dust Control
Flushing Water Mains
Hydro blasting
Hydro Seeding
Irrigation (for establishing irrigation only; not continuing irrigation)
Mixing Concrete
Mobile Car Washing
Special Events
Street Sweeping
Water Tanks
Water Trucks
Window Washing

Note: If there is any return to sewer or storm drain, then sewer and/or storm drain fees will be charged.

"Exhibit C"

Date

Name of Responsible Party
Company Name and address
Account Number: _____

Subject: Discontinuation of Fire Hydrant Meter Service

Dear Water Department Customer:

The authorization for use of Fire Hydrant Meter #_____, located at (Meter location address) ends in 60 days and will be removed on or after (Date authorization expires). Extension requests for an additional 90 days must be submitted in writing for consideration 30 days prior to the discontinuation date. If you require an extension, please refer to the Water Departments', Department Instruction (D.I.) 55.27 for further information and procedure.

Mail your request for an extension to :

City of San Diego, Water Department
Attn: Meter Services
2797 Caminito Chollas
San Diego, Ca. 92105-5097

Should you have any questions regarding this matter, please call the Fire Hydrant "Hot Line" at: (xxx) xxx-xxxx.

Sincerely,

City of San Diego Water Department

City of San Diego Water Department

Fire Hydrant Meter Relocate/Removal Request

(EXHIBIT D)

For Office Use Only	
NS Req:	FHM Fac #:
Date	By

Date:

Instruction: Complete pertinent information then FAX both form and map to (xxx) xxx-xxxx, mail, or hand-deliver to the City of San Diego, Water Deparmtnet/Meter Shop at: 2707 Caminito Chollas San Diego, CA 92105

Meter Information

Billing Account #:	Requested Move Date:
Current Fire Hydrant Meter Location:	
New Meter Location: (Attach a detailed map, Thomas Bros map location or construction drawing.)	

Company Information

Company Name:			
Mailing Address			
City:	State:	Zip Code:	Phone: ( )
Name and Title of Requestor:			Phone: ( )
Site Contact Name and Title			Phone: ( )
Pager #:			Cell : ( )
Responsible Party Name authorizing relocation fee:			
Signature:	Title:		Date:

Fire Hydrant Meter Removal Request

☐ Check Box to Request Removal of Above Meter	Requested Removal Date:
Provide current Meter location if different from above:	

Signature:	Title:	Date:
Phone: ( )	Pager: ( )	

For Office Use Only

CIS Account #:	Fees Amount: $		
Meter Serial #:	Size:	Make/Style	
Backflow #:	Size:	Make/Style	
Name:	Signature:		Date:

FHM Relocate_Removal Form

FHM App Created: 11/2/00-htp

APPENDIX D

SAMPLE CITY INVOICE

City of San Diego, Field Engineering Div., 9485 Aero Drive, SD CA 92123						Contractor's Name:					
Project Name:						Contractor's Address:					
SAP No. (WBS/IO/CC)											
City Purchase Order No.						Contractor's Phone #:				Invoice No.	
Resident Engineer (RE):						Contractor's Fax #:				Invoice Date:	
RE Phone#:		RE Fax#:				Contact Name:			Billing Period:		
Item #	Item Description	Contract Authorization				Previous Estimate		This Estimate		Totals to Date	
		Unit	Qty	Price	Extension	%/QTY	Amount	% / QTY	Amount	% / QTY	Amount
1	2 Parallel 4" PVC C900	LF	1,380	$34.00	$46,920.00						
2	48" Primary Steel Casing	LF	500	$1,000.00	$500,000.00						
3	2 Parallel 12" Secondary Steel	LF	1,120	$53.00	$59,360.00						
4	Construction and Rehab of PS 49	LS	1	$150,000.00	$150,000.00						
5	Demo	LS	1	$14,000.00	$14,000.00						
6	Install 6' High Chain Link Fence	LS	1	$5,600.00	$5,600.00						
7	General Site Restoration	LS	1	$3,700.00	$3,700.00						
8	10" Gravity Sewer	LF	10	$292.00	$2,920.00						
9	4" Blow Off Valves	EA	2	$9,800.00	$19,600.00						
10	Bonds	LS	1	$16,000.00	$16,000.00						
11	Field Orders	AL	1	80,000	$80,000.00						
11.1	**Field Order 1**	**LS**	**5,500**	**$1.00**	$5,500.00						
11.2	**Field Order 2**	**LS**	**7,500**	**$1.00**	$7,500.00						
11.3	**Field Order 3**	**LS**	**10,000**	**$1.00**	$10,000.00						
11.4	**Field Order 4**	**LS**	**6,500**	**$1.00**	$6,500.00						
12	**Certified Payroll**	**LS**	**1**	**$1,400.00**	$1,400.00						
CHANGE ORDERS											
Change Order 1		**4,890**									
Items 1-4					**$11,250.00**						
Item 5-Deduct Bid Item 3		**LF**	**120**	**-$53.00**	**($6,360.00)**						
Change Order 2		**160,480**									
Items 1-3					**$95,000.00**						
Item 4 Deduct Bid Item 1		**LF**	**380**	**-$340.00**	**($12,920.00)**						
Item 5-Encrease bid Item 9		**LF**	**8**	**$9,800.00**	**$78,400.00**						
Change Order 3 (Close Out)		**-121,500**									
Item 1 Deduct Bid Item 3			**53**	**-500.00**	**($26,500.00)**						
Item 2 Deduct Bid Item 4		**LS**	**-1**	**45,000.00**	**($45,000.00)**						
Items 3-9			**1**	**-50,500.00**	**($50,500.00)**						
SUMMARY								Total This	$ -	**Total Billed**	$0.00
A. Original Contract Amount							**Retention and/or Escrow Payment Schedule**				
B. Approved Change Order 1 Thru 3							Total Retention Required as of this billing				
C. Total Authorized Amount (A+B)							Previous Retention Withheld in PO or in Escrow				
D. Total Billed to Date							Add'l Amt to Withhold in PO/Transfer in Escrow:				
E. Less Total Retention (5% of D)							Amt to Release to Contractor from PO/Escrow:				
F. Less Total Previous Payments											
G. Payment Due Less Retention						**Contractor Signature and Date:**					
H. Remaining Authorized Amount											

APPENDIX E

EAST SAN DIEGO ADULT CENTER – A & L SURVEY REPORT

THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: October 20, 2010

TO: Siavash Haghkhah, Engineering & Capital Projects

FROM: George Katsikaris, Asbestos & Lead Program Inspector
via Alan J. Johanns, Asbestos & Lead Program Manager, Environmental Services Department, Energy, Sustainability, and Environmental Protection Division

SUBJECT: Asbestos and Lead Results for the Sudanese Center ADA Project

---

Per your request, I have inspected the Sudanese Center Facility at 4077 Fairmont Avenue for lead and asbestos on September 14, 2010. The purpose of the inspection was to identify and test any suspect materials that will be impacted during the planned ADA upgrade project. The inspection did not include surveying the entire facility.

Asbestos containing materials were identified as a result of this inspection. Materials identified to be asbestos containing must be abated by the ALMP's as needed abatement contractor prior to construction activities. Materials sampled are identified in the table below:

Sample #	Material	Location	Condition	% Asbestos
493-1	Interior Plaster	Kitchen – East Wall	Fair	<0.1%*
493-2	Interior Plaster	Conference Room – N. Wall	Fair	ND
493-3	Interior Plaster	Conference Room – Ceiling	Fair	ND
493-4	Interior Plaster	Men's Room – W. Wall	Fair	ND
493-5	Interior Plaster	Women's Room – W. Wall	Fair	0.25%*
493-6	Interior Plaster	Women's Room – W. Wall	Fair	ND
493-7	Interior Plaster	Computer Room – W. Wall	Fair	<0.1%*
493-8	Acoustical Ceiling	North Solarium - Ceiling	Fair	<0.1%*
493-9	Acoustical Ceiling	North Solarium – Ceiling	Fair	ND
493-10	Acoustical Ceiling	South Solarium – Ceiling	Fair	<0.1%*
493-11	Baseboard Mastic	South Solarium – S. Wall	Fair	ND
493-12	Drywall	South Solarium – S. Wall	Fair	ND
493-13	Joint Compound	South Solarium – S. Wall	Fair	ND

*EPA recommended 1,000 Point Count Analysis was performed on samples identified as <1% by PLM Bulk Analysis.

If any materials beyond the locations sampled during this survey are to be disturbed, additional asbestos sampling may be necessary.

Components identified to have lead present above threshold concentrations are bolded in the following table. Threshold concentrations are levels of lead where if it is disturbed during renovations, maintenance, or repairs, exposure to lead may occur. Lead safe work practices must be adhered to while performing this type of work as outlined in SDMC, Section 54.1005.

Room	Side	Component	Substrate	Color	Condition	PbC Units
Kitchen	**S**	**Cabinet**	**Wood**	**Black**	**Fair**	**0.5**
Kitchen	W	Cabinet	Wood	White	Fair	0.25
Kitchen	S	Cabinet	Wood	Red	Fair	0.18
Kitchen	S	Cabinet	Wood	Yellow	Fair	0.16
Kitchen	W	Cabinet	Wood	Blue	Fair	0.19
Kitchen	W	Counter Top	Wood	Orange	Fair	0.15
Kitchen	**E**	**Door Casing**	**Wood**	**White**	**Fair**	**0.6**
Conference Room	**W**	**Door**	**Wood**	**Red**	**Fair**	**0.5**
Conference Room	**E**	**Door Casing**	**Wood**	**Tan**	**Fair**	**0.6**
Bathroom #1	**W**	**Door Casing**	**Wood**	**White**	**Fair**	**0.5**
Bathroom #1	**W**	**Door Casing**	**Wood**	**White**	**Fair**	**0.5**

All painted components and paint chips intended for disposal must have a waste characterization performed, or they must be assumed hazardous. If various components are consolidated into one trash receptacle then composite samples from the trash in that receptacle can be collected and the results can represent the entire contents of the receptacle. Complete asbestos lab results and lead XRF results are attached to this memo.

If there are any questions regarding this memo, please call me at (858) 627-3312 or email at gkatsikaris@sandiego.gov. Please let me know if you need a cost estimate for the removal of any asbestos and lead materials.

George Katsikaris
Asbestos and Lead Program Inspector

Attachments: Asbestos lab results
Lead XRF results

memo2010\1406

City of San Diego

CITY CONTACT: CLEMENTINA GIORDANO - Contract Specialist, Email: cgiordano@sandiego.gov
Phone: (619) 533-3481, Fax: (619) 533-3633

ADDENDUM "A"

FOR

ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)

BID NO.: **L-13-5263-DBB-1**
SAP NO. (WBS/IO/CC): **B-00944**
CLIENT DEPARTMENT: **2113**
COUNCIL DISTRICT: **3**
PROJECT TYPE: **BT**

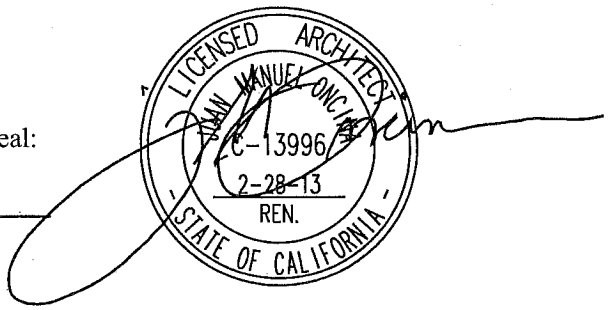
BID DUE DATE:

1:30 PM
JANUARY 3, 2013
CITY OF SAN DIEGO
PUBLIC WORKS DEPARTMENT
1010 SECOND AVENUE, SUITE 1400, MS 614C
SAN DIEGO, CA 92101

ENGINEER OF WORK

The engineering Specifications and Special Provisions contained herein have been prepared by or under the direction of the following Licensed Architect:

Seal:



J. Manuel Oncina
Licensed Architect

11/8/2012
Date

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

B. VOLUME 1

1. To the Invitation To Bids, page 7, item 5. CONTRACT TIME, DELETE in its entirety and SUBSTITUTE with the following:

5. CONTRACT TIME: The Contract Time for completion of the work shall be **80 Working Days**.

2. To the Supplementary Special Provisions (SSP), ADD the following:

2-14.3 Coordination. To the City Supplement, ADD the following:

The Adult Center building will continue to be operational and occupied during the construction by the tenant of the building. The work shall be accomplished in phases and in accordance with approved schedule provided by the Contractor. The Contractor shall coordinate its work and operation with the tenant of the building.

3. To the Supplementary Special Provisions (SSP), page 31, subsection "ADD: 2-17 Contractor Registration", DELETE in its entirety and SUBSTITUTE with the following:

ADD: 2-17 CONTRACTOR REGISTRATION AND ELECTRONIC REPORTING SYSTEM.

1. **Prior** to the Award of the Contract or each Task Order, you and your Subcontractors and Suppliers **must** register with Prism®, the City's web-based contract compliance portal at:

   https://pro.prismcompliance.com/default.aspx.

2. The City may not award the contract until registration of all subcontractors and suppliers is complete. In the event this requirement is not met within the time frame specified in the Notice of Intent to Award letter, the City reserves the right to rescind the Notice of Award / Intent to Award and to make the award to the next responsive and responsible bidder / proposer.

C. PLANS

1. To Drawing number 35608-4-D (G-4), DELETE in its entirety and REPLACE with page 5 of 10 of this Addendum.

2. To Drawing number 35608-5-D (G-5), DELETE in its entirety and REPLACE with page 6 of 10 of this Addendum.

3. To Drawing number 35608-9-D (A1.0), Demolition Floor Plan, DELETE in its entirety and REPLACE with page 7 of 10 of this Addendum.

4. To Drawing number 35608-10-D (A1.1), Proposed Floor Plan, DELETE in its entirety and REPLACE with page 8 of 10 of this Addendum.

5. To Drawing number 35608-14-D (A2.0), Interior Elevations, DELETE in its entirety and REPLACE with page 9 of 10 of this Addendum.

6. To Drawing number 35608-15-D (A3.0), Site Details and Finish Schedule, DELETE in its entirety and REPLACE with page 10 of 10 of this Addendum

Tony Heinrichs, Director
Public Works Department

Dated: *December 21, 2012*
San Diego, California

TH/NB/egz

GENERAL REQUIREMENTS

GENERAL REQUIREMENTS:

1. ALL WORK SHALL CONFORM TO THE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, 2010 EDITION CALIFORNIA BUILDING STANDARDS CODE AND ANY OTHER APPLICABLE STANDARDS ON WHICH THESE CODES ARE BASED. WHERE CONFLICT BETWEEN BUILDING CODES AND CONTRACT DOCUMENTS OCCUR, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN. ALL STANDARDS SHALL BE THE LATEST ADOPTED VERSIONS AS OF THE DATE OF THESE DRAWINGS AND SPECIFICATIONS.

2. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS FOR ALL OF THE WORK TO BE IN ACCORDANCE WITH THE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, 2010 EDITION CALIFORNIA BUILDING STANDARDS CODE. NOTIFY THE RESIDENT ENGINEER OF ANY EXISTING CONDITIONS DISCOVERED, WHICH WILL RESULT IN NON-COMPLIANT CONSTRUCTION, AND WHICH ARE NOT COVERED BY THESE CONTRACT DOCUMENTS.

4. CONTRACTOR SHALL NOT INSTALL WORK THAT VIOLATES THE CODES REFERENCED ABOVE AND ON TITLE SHEET. CONTRACTOR SHALL NOT ASSUME THAT NON-COMPLIANT WORK COMPLIES BASED ON ACCEPTANCE OF OVERALL WORK BY ANY BUILDING OFFICIAL HAVING JURISDICTION OVER THE WORK.

5. DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OF ANY DISCREPANCIES OR CONFLICTS.

6. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER FOR CLARIFICATION IF NECESSARY.

7. THE INFORMATION SHOWN BY CONSULTANTS OR DISCIPLINE DOCUMENTS IS NOT MEANT TO DEFINE THE SCOPE OF WORK OF SUBCONTRACTOR'S RESPONSIBILITY. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO DETERMINE SCOPE OF WORK BETWEEN SUBCONTRACTOR'S DURING THE BIDDING PROCESS.

8. ANY PENETRATIONS OR EMBEDMENT SHALL NOT BE PLACED IN STRUCTURAL MEMBERS, FIRE-RATED ASSEMBLIES, AND CEILING AND FLOOR SLABS; NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR SUCH ITEMS; UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS. ALL SUCH ITEMS REQUIRE THE RESIDENT ENGINEER'S APPROVAL PRIOR TO START OF ANY WORK.

9. ALL EXISTING LIFE-SAFETY FEATURES OF THE EXISTING FACILITY MUST BE PROTECTED AND MAINTAINED AT CONTRACTOR'S EXPENSE THROUGHOUT THE CONSTRUCTION PERIOD. ALL EXIT PATHS MUST BE KEPT UNOBSTRUCTED. ALL FIRE-RATED WALLS AND FLOORS SHALL BE KEPT INTACT AND ALL FIRE ALARM SYSTEMS SHALL BE KEPT IN WORKING ORDER.

10. ALL CONSTRUCTION MUST MEET OR EXCEED ALL REQUIREMENTS STATED IN SOILS REPORT. COPIES OF SOILS REPORT ARE AVAILABLE UPON REQUEST.

11. SATISFACTORY EXECUTION OF CONSTRUCTION IS DEPENDENT UPON CONFORMANCE WITH THE INTENT OF THESE DRAWINGS. ALL COORDINATION, FEES, TASKS, LABOR, MATERIALS, TOOLS, CONNECTIONS, EQUIPMENT, CLEANUP REQUIRED TO FULLY FINISH THE DESCRIBED PROJECT SHALL BE FURNISHED AND PAID FOR BY THE CONTRACTOR. ANY AND ALL EXCEPTIONS SHALL BE REQUESTED AND AGREED TO IN WRITING AT THE TIME OF THE SIGNING OF OWNER / CONTRACTOR AGREEMENT.

12. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL. WHEN WEIGHT OF MATERIALS OR EQUIPMENT MAY EXCEED DESIGN LOAD, STRUCTURAL SYSTEMS SHALL BE SHORED.

13. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK. THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK OR AS DIRECTED BY RESIDENT ENGINEER.

14. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER. WORK SHOULD NOT PROCEED UNTIL A SOLUTION IS GIVEN BY THE RESIDENT ENGINEER.

15. ALL EXISTING TO REMAIN MECHANICAL, ELECTRICAL, PLUMBING AND EQUIPMENT DISTURBED BY NEW CONSTRUCTION SHALL BE REROUTED OR MODIFIED AS REQUIRED TO PROVIDE A COMPLETE OPERATING SYSTEM.

CONTRACTOR RESPONSIBILITIES:

1. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS OF THE SITE DURING THE BIDDING PERIOD AND PRIOR TO STARTING WORK. ANY DISCREPANCIES OR INCONSISTENCIES DUE TO CURRENT FIELD CONDITIONS SHALL BE REPORTED TO THE RESIDENT ENGINEER PRIOR TO PROCEEDING. NO ADDITIONAL EXPENSE SHALL BE AWARDED RESULTING FROM THE FAILURE TO PERFORM THIS EXAMINATION.

2. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, AND THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

3. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE; DESIGN, FURNISH, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS. NEITHER THE OWNER NOR ARCHITECT WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE ARCHITECT FREE AND HARMLESS FROM ALL CLAIMS, DEMANDS AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT SHALL NOT INCLUDE INSPECTION OF THE ABOVE SAFETY ITEMS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS OR EQUIPMENT. SUCH DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE RESIDENT ENGINEER.

5. THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER AND SITE ADMINISTRATION REGARDING CONTRACTOR'S SITE USE AND ACCESS. IF SITE AND/OR BUILDING TO REMAIN OCCUPIED DURING CONSTRUCTION, MAINTAIN STAFF AND PUBLIC ACCESS AT ALL TIME SITE IS OPEN FOR USE, AND ENSURE ALL CONSTRUCTION WORK OCCURS INSIDE FENCED OR PARTITIONED AREA.

6. THE CONTRACTOR SHALL VERIFY ACCESS TO ALL AREAS WHERE NEW UTILITIES WILL BE INSTALLED. THE CONTRACTOR SHALL INCLUDE IN HIS BID, ANY COST ASSOCIATED WITH OBTAINING ACCESS, INSTALLATION OF ACCESS PANELS AND/OR REROUTING OF PIPES/CONDUITS OR REPLACING FINISHES AND FIXTURES TO MATCH ADJACENT IMPROVEMENTS.

7. BEFORE EXCAVATING FOR THIS PROJECT, CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS TO VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES, AND REPORT ANY CONFLICTS TO RESIDENT ENGINEER. THIS SHALL BE COMPLETED SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF NECESSARY. EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES SHOWN ON PLANS ARE RESULT OF A SEARCH OF AVAILABLE RECORDS, AND TO THE BEST OF THE DESIGN TEAM'S KNOWLEDGE, NO OTHER UTILITIES EXIST EXCEPT AS SHOWN ON DRAWINGS.

8. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UNDERGROUND UTILITIES SHOWN ON DRAWINGS AND ANY OTHER UTILITIES NOT OF RECORD OR NOT SHOWN.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR SURVEY BENCHMARK WHICH WILL BE DISTURBED OR DESTROYED BY CONSTRUCTION WITH THE ASSISTANCE OF A CIVIL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND AUTHORIZED TO PRACTICE LAND SURVEYING. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LAND CORNER RECORD, OR RECORD OF SURVEY, AND BE FILED BY A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYOR'S ACT.

10. THE CONTRACTOR SHALL NOTIFY THE CITY TRAFFIC ENGINEER AT LEAST FIVE (5) WORKING DAYS IN ADVANCE OR IMPLEMENTING ANY CONSTRUCTION DETOUR IN THE PUBLIC RIGHT OF WAY.

11. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK OF THIS PROJECT SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF THIS WORK.

12. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL IMPROVEMENTS ARE BUILT IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS. IF THERE IS ANY QUESTION, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION PRIOR TO DOING ANY WORK BY CONTACTING THE RESIDENT ENGINEER. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND, UNLESS OTHERWISE INDICATED, DO NOT INDICATE THE METHOD OF CONSTRUCTION.

DISABLED ACCESS REGULATIONS (CONT.)

PARKING:

1. EACH LOT OR PARKING STRUCTURE WHERE PARKING IS PROVIDED FOR THE PUBLIC AS CLIENTS, GUESTS OR EMPLOYEES, SHALL PROVIDE ACCESSIBLE PARKING. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO A PRIMARY ENTRANCE. TABLE 11B-6 ESTABLISHES THE NUMBER OF ACCESSIBLE PARKING SPACES REQUIRED.

2. WHERE SINGLE ACCESSIBLE PARKING SPACES ARE PROVIDED, THEY SHALL BE 14 FEET WIDE AND OUTLINED TO PROVIDE A 9-FOOT PARKING AREA AND A 5-FOOT LOADING AND UNLOADING ACCESS AISLE ON THE PASSENGER SIDE OF THE VEHICLE. THE MINIMUM LENGTH OF EACH PARKING SPACE SHALL BE 18 FEET.

3. WHERE MORE THAN ONE SPACE IS PROVIDED IN LIEU OF PROVIDING A 14-FOOT-WIDE SPACE FOR EACH PARKING SPACE, TWO SPACES CAN BE PROVIDED WITHIN A 23-FOOT-WIDE AREA LINED TO PROVIDE A 9-FOOT PARKING AREA ON EACH SIDE OF A 5-FOOT LOADING AND UNLOADING ACCESS AISLE IN THE CENTER.

4. ONE IN EVERY EIGHT SPACES, BUT NOT LESS THAN ONE, SHALL BE SERVED BY AN ACCESS AISLE 96 INCHES WIDE MINIMUM PLACED ON THE SIDE OPPOSITE THE DRIVER'S SIDE WHEN THE VEHICLE IS GOING FORWARD INTO THE PARKING SPACE AND SHALL BE DESIGNATED VAN ACCESSIBLE AS REQUIRED BY SECTION 1129B.3.

5. THE WORDS "NO PARKING" SHALL BE PAINTED ON THE GROUND WITHIN EACH 8 FOOT LOADING AND UNLOADING ACCESS AISLE. THIS NOTICE SHALL BE PAINTED IN WHITE LETTERS NO LESS THAN 12 INCHES HIGH AND LOCATED SO THAT IT IS VISIBLE TO TRAFFIC ENFORCEMENT OFFICIALS.

6. IN EACH PARKING AREA, A BUMPER OR CURB SHALL BE PROVIDED AND LOCATED TO PREVENT ENCROACHMENT OF CARS OVER THE REQUIRED WIDTH OF WALKWAYS. ALSO, THE SPACE SHALL BE LOCATED SO THAT PERSONS WITH DISABILITIES ARE NOT COMPELLED TO WHEEL OR WALK BEHIND CARS OTHER THAN THEIR OWN. PEDESTRIAN WAYS WHICH ARE ACCESSIBLE TO PEOPLE WITH DISABILITIES SHALL BE PROVIDED FROM EACH SUCH PARKING SPACE TO RELATED FACILITIES, INCLUDING CURB CUTS OR RAMPS AS NEEDED. RAMPS SHALL NOT ENCROACH INTO ANY ACCESSIBLE PARKING SPACE OR THE ADJACENT ACCESS AISLE. THE MAXIMUM CROSS SLOPE IN ANY DIRECTION OF AN ACCESSIBLE PARKING SPACE AND THE ADJACENT ACCESS AISLE SHALL NOT EXCEED 2%.

7. SURFACE SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE THE MINIMUM POSSIBLE AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

8. SIGN TO IDENTIFY ACCESSIBLE PARKING SPACES MAY BE CENTERED ON A WALL AT THE INTERIOR AND OF THE PARKING SPACE AT A MINIMUM HEIGHT OF 36 INCHES FROM THE PARKING SPACE FINISHED GRADE, GROUND OR SIDEWALK. AN ADDITIONAL SIGN OR ADDITIONAL LANGUAGE BELOW THE SYMBOL OF ACCESSIBILITY SHALL STATE "MINIMUM FINE $250".

9. AN ADDITIONAL SIGN SHALL BE POSTED, MINIMUM 17x22, IN A CONSPICUOUS PLACE, AT EACH ENTRANCE TO OFF-STREET PARKING FACILITIES, OR IMMEDIATELY ADJACENT TO AND VISIBLE FROM EACH STALL OR SPACE. THE SIGN SHALL BE NOT LESS THAN 17 INCHES x 22 INCHES IN SIZE WITH LETTERING NOT LESS THAN 1 INCH IN HEIGHT, WHICH CLEARLY AND CONSPICUOUSLY STATES THE FOLLOWING: "UNAUTHORIZED VEHICLES PARKED IN DESIGNATED ACCESSIBLE SPACES NOT DISPLAYING DISTINGUISHING PLACARDS OR LICENSE PLATES ISSUED FOR PERSONS WITH DISABILITIES MAY BE TOWED AT OWNER'S EXPENSE. TOWED VEHICLES MAY BE RECLAIMED AT _____, OR BY TELEPHONING ____." NOTE: BLANK SPACES ARE TO BE FILLED IN WITH APPROPRIATE INFORMATION AS A PERMANENT PART OF THE SIGN.

RAMPS:

1. GENERAL: ANY ACCESSIBLE ROUTE OF TRAVEL SHALL BE CONSIDERED A RAMP IF ITS SLOPE IS GREATER THAN 1 FOOT RISE IN 20 FEET OF HORIZONTAL RUN (5% GRADIENT).

2. WIDTH: PEDESTRIAN RAMPS SHALL HAVE A MINIMUM CLEAR WIDTH OF 48 INCHES.

3. SLOPE: THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP. THE MAXIMUM SLOPE SHALL BE 1 FOOT RISE IN 15 FEET HORIZONTAL RUN (6.67% GRADIENT) THE MAXIMUM RISE OF ANY RUN SHALL BE 30 INCHES. THE CROSS SLOPE OF RAMP SURFACES SHALL BE NO GREATER THAN 1 UNIT IN 75 UNITS HORIZONTAL (1.5% SLOPE).

4. LANDINGS: LEVEL RAMP LANDINGS SHALL BE PROVIDED AT THE TOP AND BOTTOM OF EACH RAMP. INTERMEDIATE LANDINGS SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 30 INCHES OF VERTICAL RISE AND AT EACH CHANGE OF DIRECTION. LANDINGS SHALL BE LEVEL. TOP LANDINGS SHALL NOT BE LESS THAN 60 INCHES WIDE AND SHALL HAVE LENGTH NOT LESS THAN 60 INCHES IN THE DIRECTION OF RAMP RUN. LANDINGS AT BOTTOM OF RAMP SHALL HAVE A DIMENSION IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 72 INCHES.

5. DOORS AT LANDINGS: DOORS IN ANY POSITION SHALL NOT REDUCE THE MINIMUM DIMENSION OF THE LANDING TO LESS THAN 42 INCHES AND SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 3 INCHES WHEN FULLY OPEN.

6. HAZARDS: RAMPS SHALL HAVE A CURB AT LEAST 2 INCHES HIGH, OR A WHEEL GUIDE RAIL 2 TO 4 INCHES HIGH ON EACH SIDE OF THE RAMP LANDING THAT HAS A VERTICAL DROP EXCEEDING 4 INCHES AND THAT IS NOT BOUND BY A WALL OR FENCE.

7. HANDRAILS: HANDRAILS ARE REQUIRED AT RAMPS, EXCEPT THAT AT EXTERIOR DOOR LANDINGS, HANDRAILS ARE NOT REQUIRED ON RAMPS LESS THAN 6 INCHES RISE OR 72 INCHES IN LENGTH. HANDRAILS SHALL BE PLACED ON EITHER SIDE OF THE RAMP, SHALL BE CONTINUOUS THE FULL LENGTH OF THE RAMP, SHALL BE 34 TO 38 INCHES ABOVE THE RAMP SURFACE TO TOP OF HANDRAILS, SHALL EXTEND 1 FOOT MINIMUM BEYOND THE TOP AND BOTTOM OF THE RAMP AND SHALL BE PARALLEL TO THE FLOOR OR GROUND SURFACE. THE INSIDE HANDRAIL ON SWITCHBACK OR DOGLEG RAMPS SHALL ALWAYS BE CONTINUOUS. THE ENDS OF HANDRAILS SHALL EITHER BE ROUNDED OR RETURNED SMOOTHLY TO THE FLOOR, WALL OR POST. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF 1-1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL. HANDRAILS MAY BE LOCATED IN A RECESS IF THE RECESS IS A MAXIMUM OF 3 INCHES DEEP AND EXTENDS AT LEAST 18 INCHES ABOVE THE TOP OF RAIL. THE GRIP PORTION SHALL NOT BE LESS THAN 1-1/4 INCH NOR MORE THAN 1-1/2 INCHES IN THE CROSS-SECTIONAL NOMINAL DIMENSION OF THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE, AND ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS. HANDRAILS SHALL NOT ROTATE IN THEIR FITTINGS.

8. WHEEL GUIDES: WHERE THE RAMP SURFACE IS NOT BOUNDED BY A WALL, THE RAMP SHALL HAVE A GUIDE CURB, A MINIMUM OF 2 INCHES IN HEIGHT PROVIDED AT EACH SIDE OF THE RAMP - OR - A WHEEL GUIDE RAIL CENTERED 3 INCHES +/- 1 INCH ABOVE THE SURFACE OF THE RAMP.

9. GUARDS: RAMPS MORE THAN 30 INCHES ABOVE ADJACENT GROUND SHALL BE PROVIDE WITH GUARDS. SUCH GUARDS SHALL BE CONTINUOUS FROM TOP TO BOTTOM OF RAMP.

10. OUTDOOR RAMPS: OUTDOOR RAMPS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

STAIRWAYS:

1. STAIRWAYS SHALL HAVE HANDRAILS ON EACH SIDE.

2. HANDRAILS SHALL BE 34 INCHES TO 38 INCHES ABOVE THE NOSING OF THE TREADS.

3. HANDRAILS SHALL EXTEND A MINIMUM OF 12 INCHES BEYOND THE TOP NOSING AND 12 INCHES, PLUS THE TREAD WIDTH, BEYOND THE BOTTOM NOSING.

4. ENDS SHALL BE RETURNED TO TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS.

5. WHERE THE EXTENSION OF THE HANDRAIL IN THE DIRECTION OF THE STAIR RUN WOULD CREATE A HAZARD, THE TERMINATION OF THE EXTENSION SHALL BE MADE EITHER ROUNDED OR RETURNED SMOOTHLY TO FLOOR, WALL OR POST. WHERE THE STAIRS ARE CONTINUOUS FROM LANDING TO LANDING, THE INNER RAIL SHALL BE CONTINUOUS AND NEED NOT EXTEND OUT INTO THE LANDING.

6. HANDRAILS PROJECTING FROM A WALL SHALL HAVE SPACE OF 1-1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL. HANDRAILS MAY BE LOCATED IN A RECESS IF THE RECESS IS A MAXIMUM OF 3 INCHES DEEP AND EXTENDS AT LEAST 18 INCHES ABOVE THE TOP OF THE RAIL. HANDRAILS SHALL NOT ROTATE IN THEIR FITTINGS. HANDRAILS IN EXISTING FACILITIES MAY HAVE A SPACE OF 1-1/4" BETWEEN THE WALL AND HANDRAIL.

7. THE HANDGRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN 1-1/4 INCHES NOR MORE THAN 1-1/2 INCHES IN CROSS-SECTIONAL NOMINAL DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. THE HANDGRIP PORTION OF HANDRAILS SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS.

8. THE UPPER APPROACH AND THE LOWER TREAD OF EACH STAIR SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2 INCHES AND NO MORE THAN 4 INCHES WIDE AND PLACED PARALLEL TO AND NOT MORE THAN 1 INCH FROM THE NOSE OF THE STEP OR LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR. A PAINTED STRIP SHALL BE ACCEPTABLE.

9. WHERE STAIRWAYS OCCUR OUTSIDE A BUILDING, THE UPPER APPROACH AND ALL THE TREADS SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2 INCHES AND NO MORE THAN 4 INCHES WIDE AND PLACED PARALLEL AND NOT MORE THAN 1 INCH FROM THE NOSE OF THE STEP OR LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR. A PAINTED STRIP SHALL BE ACCEPTABLE.

10. ALL TREAD SURFACES SHALL BE SLIP-RESISTANT. WEATHER-EXPOSED STAIRS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES. TREADS SHALL HAVE SMOOTH, ROUNDED OR CHAMFERED EXPOSED EDGES, AND NO ABRUPT EDGES AT THE NOSING (FRONT EDGE).

11. THE NOSING SHALL NOT PROJECT MORE THAN 1-1/4 INCHES PAST THE FACE OF THE RISER BELOW.

12. STAIR TREADS SHALL BE NO LESS THAN 11 INCHES DEEP, MEASURED FROM RISER TO RISER.

13. THE CONTRACTOR SHALL PROVIDE A SEPARATION OR BARRIER BETWEEN ALL DISSIMILAR METALS.

14. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY AND PUBLIC RIGHT OF WAY FROM ANY EROSION OR SILTATION THAT RESULTS FROM CONSTRUCTION OPERATIONS BY APPROPRIATE MEANS UNTIL SUCH TIME THE PROJECT IS COMPLETE AND ACCEPTED BY THE OWNER.

15. AN APPROVED SET OF PLANS (BUILDING, FIRE SPRINKLER, FIRE ALARM, ETC.) SHALL BE ON THE JOB SITE DURING CONSTRUCTION. NO INSPECTIONS WILL BE MADE WITHOUT COMPLIANCE WITH ABOVE.

16. THE CONTRACTOR SHALL MAINTAIN THE WORK SITE AT ALL TIMES IN ACCORDANCE WITH GREENBOOK AND 2010 CITY SUPPLEMENT, SECTION 7-8.

17. SOILS COMPACTION TESTING AND EXCAVATION INSPECTION REPORT ARE TO BE PAID FOR BY THE CONTRACTOR AND SUBMITTED TO THE RESIDENT ENGINEER AND BUILDING INSPECTOR PRIOR TO FOUNDATION INSPECTION. THE RESIDENT ENGINEER AND BUILDING INSPECTOR ARE TO INSPECT EXCAVATIONS PRIOR TO POURING ANY CONCRETE.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263 | G-4

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

GENERAL NOTES

CITY OF SAN DIEGO, CALIFORNIA
SHEET 4 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 12/20/12 — SIAVASH HAGHKHAH PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
1 'A' CHANGE	MOA		12/11/2012	
AS-BUILTS				

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

CCS27 COORDINATE
CCS83 COORDINATE

35608- 4 -D

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.
'A' CHANGE	12/11/12	35608-4-D,35608-5-D,35608-9-D, 35608-10-D,35608-14-D	
		35608-15-D	

CONSULTANT

MOA
MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE PLANNING INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-6900 PH
619/295-6955 FX
www.oncinaarc.com

SCALE — HORIZONTAL NO SCALE — VERTICAL NO SCALE

LICENSED ARCHITECT — No. C-13996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • 1850 • SEMPER VIGILANS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

DISABLED TOILET FACILITIES ACCESS REGULATIONS

GENERAL:

1. BATHING AND TOILET FACILITIES THAT SERVE BUILDINGS, FACILITIES OR PORTIONS OF BUILDINGS OR FACILITIES THAT ARE REQUIRED BY THESE STANDARDS TO BE ACCESSIBLE TO PERSONS WITH DISABILITIES, SHALL BE ON AN ACCESSIBLE ROUTE AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

2. THE ACCESSIBLE FIXTURES AND CONTROLS REQUIRED IN THIS SECTION SHALL BE ON AN ACCESSIBLE ROUTE. AN UNOBSTRUCTED TURNING SPACE COMPLYING WITH SECTION 1115B.3.1, ITEM 1, OR 1115B.32, ITEM 1, AS APPLICABLE, SHALL BE PROVIDED WITHIN AN ACCESSIBLE TOILET FACILITY. THE CLEAR FLOOR SPACES AT FIXTURES AND CONTROLS, THE ACCESSIBLE ROUTE AND THE TURNING SPACE MAY OVERLAP.

3. WHERE SEPARATE FACILITIES ARE PROVIDED FOR PERSONS OF EACH SEX, THESE FACILITIES SHALL BE ACCESSIBLE TO PERSONS WITH DISABILITIES. WHERE UNISEX FACILITIES ARE PROVIDED, THESE FACILITIES SHALL BE ACCESSIBLE TO PERSONS WITH DISABILIITIES.

MULTIPLE ACCOMMODATION TOILET FACILITIES:

1. WHEELCHAIR CLEARANCE: A CLEAR SPACE MEASURED FROM THE FLOOR TO A HEIGHT OF 27" ABOVE THE FLOOR, WITHIN THE SANITARY FACILITY ROOM, OF SUFFICIENT SIZE TO INSCRIBE A CIRCLE WITH A DIAMETER OF NOT LESS THAN 69 INCHES IN SIZE. OTHER THAN THE DOOR TO THE ACCESSIBLE WATER CLOSET COMPARTMENT, A DOOR IN ANY POSITION, MAY ENCROACH INTO THIS SPACE BY NOT MORE THAN 12 INCHES.

2. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE REQUIRED FOR ANY FIXTURE.

3. PROVIDE A MINIMUM OF ONE ACCESSIBLE WATER CLOSET IN COMPLIANCE WITH SECTION 1115B.4.1.

4. ACCESSIBLE WATER CLOSET COMPARTMENTS SHALL COMPLY WITH THE FOLLOWING:

4.1. THE COMPARTMENT SHALL BE A MINIMUM OF 60 INCHES WIDE.

4.2. IF THE COMPARTMENT HAS A SIDE OPENING DOOR, AN MINIMUM 60" WIDE AND 60" DEEP CLEAR FLOOR SPACE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET.

4.3. IF THE COMPARTMENT HAS AN END OPENING DOOR (FACING THE WATER CLOSET), A MINIMUM 60 INCHES WIDE AND 48 INCHES DEEP CLEAR FLOOR SPACE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET. THE DOOR SHALL BE LOCATED IN FRONT OF THE CLEAR FLOOR SPACE AND DIAGONAL TO THE WATER CLOSET, WITH A MAXIMUM STILE WIDTH OF 4 INCHES.

4.4. THE WATER CLOSET COMPARTMENT SHALL BE EQUIPPED WITH A DOOR THAT HAS AN AUTOMATIC CLOSING DEVICE, AND SHALL HAVE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WHEN LOCATED AT THE END AND 34 INCHES WHEN LOCATED AT THE SIDE WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

4.5. THE INSIDE AND OUTSIDE OF THE COMPARTMENT DOOR SHALL BE EQUIPPED WITH A LOOP OR U-SHAPED HANDLE IMMEDIATELY BELOW THE LATCH. THE LATCH SHALL BE FLOP-OVER STYLE, SLIDING OR OTHER HARDWARE NOT REQUIRING THE USER TO GRASP OR TWIST. EXCEPT FOR DOOR OPENING WIDTHS AND DOOR SWINGS, A CLEAR, UNOBSTRUCTED ACCESS OF NOT LESS THAN 44 INCHES SHALL BE PROVIDED TO WATERCLOSET COMPARTMENTS DESIGNED FOR USE BY PERSONS WITH DISABILITIES. MANEUVERING SPACE AT THE COMPARTMENT DOOR SHALL COMPLY WITH SECTION 1133B.2.4.2 AND 1133B.2.4.3, EXCEPT THAT THE SPACE IMMEDIATELY IN FRONT OF A WATER CLOSET COMPARTMENT SHALL NOT BE LESS THAN 48 INCHES AS MEASURED AT RIGHT ANGLE TO THE COMPARTMENT DOOR IN ITS CLOSED POSITION.

5. WHERE SIX OR MORE COMPARTMENTS ARE PROVIDED WITHIN A MULTIPLE ACCOMMODATION TOILET ROOM, AT LEAST ONE COMPARTMENT SHALL COMPLY WITH ITEMS 3 AND 4 ABOVE, AND AT LEAST ONE ADDITIONAL AMBULATORY ACCESSIBLE COMPARTMENT SHALL BE 36 INCHES WIDE WITH AN OUTWARD SWINGING SELF CLOSING DOOR AND PARALLEL GRAB BARS COMPLYING WITH SECTION 1115B.4.1, ITEM 3.

6. IN OTHER THAN DWELLING UNITS, TOILET ROOM FLOORS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE SUCH AS PORTLAND CEMENT, CONCRETE, CERAMIC TILE OR OTHER APPROVED MATERIAL WHICH EXTENDS UPWARD ONTO THE WALLS AT LEAST 5 INCHES. WALLS WITHIN WATER CLOSET COMPARTMENTS AND WALLS WITHIN 24 INCHES OF THE FRONT AND SIDE OF URINALS SHALL BE SIMILARLY FINISHED TO A HEIGHT OF 48 INCHES AND, EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIALS, USED IN SUCH WALLS SHALL BE A TYPE WHICH IS NOT ADVERSELY AFFECTED BY MOISTURE.

ACCESSIBLE WATER CLOSETS:

1. THE CENTERLINE OF THE WATER CLOSET FIXTURE SHALL BE 18 INCHES FROM THE SIDE WALL OR PARTITION. ON THE OTHER SIDE OF THE WATER CLOSET, PROVIDE A MINIMUM OF 32 INCHES WIDE CLEAR FLOOR SPACE IF THE WATER CLOSET IS ADJACENT TO THE WALL OR PARTITION. THIS CLEAR FLOOR SPACE SHALL EXTEND FROM THE REAR WALL WALL TO THE FRONT OF THE WATER CLOSET.

2. A MINIMUM 60 INCHES WIDE AND 48 INCHES DEEP CLEAR FLOOR SPACE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET.

3. GRAB BARS FOR WATER CLOSETS NOT LOCATED WITHIN A COMPARTMENT SHALL COMPLY WITH SECTION 1115B.7 AND SHALL BE PROVIDED ON THE SIDE WALL CLOSET TO THE WATER CLOSET AND ON THE REAR WALL. GRAB BARS FOR WATER CLOSETS LOCATED WITHIN AMBULATORY ACCESSIBLE COMPARTMENTS SHALL COMPLY WITH SECTION 1115B.7 AND SHALL BE PROVIDED ON BOTH SIDES OF THE COMPARTMENT.

GRAB BARS SHALL NOT PROJECT MORE THAN 3 INCHES INTO THE REQUIRED CLEAR FLOOR SPACE.

3.1. THE SIDE GRAB BAR SHALL BE 42 INCHES LONG MINIMUM, LOCATED 12 INCHES MAXIMUM FROM THE REAR WALL AND EXTEND 54 INCHES MINIMUM FROM THE REAR WALL WITH THE FRONT END POSITIONED 24 INCHES MINIMUM IN FRONT OF THE WATER CLOSET. THE SIDE GRAB BAR SHALL BE SECURELY ATTACHED AND CENTERED 33 INCHES ABOVE AND PARALLEL TO THE FLOOR.

3.2. THE REAR GRAB BAR SHALL BE 36 INCHES LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12 INCHES MINIMUM ON ONE SIDE AND 24 INCHES MINIMUM ON THE OTHER SIDE. THE REAR GRAB BAR SHALL BE SECURELY ATTACHED AND CENTERED 33 INCHES ABOVE AND PARALLEL TO THE FLOOR, EXCEPT THAT WHERE A TANK TYPE TOILET IS USED WHICH OBSTRUCTS PLACEMENT AT 33 INCHES, THE GRAB BAR MAY BE AS HIGH AS 36 INCHES AND THE SPACE BETWEEN THE GRAB BAR AND THE TOP OF THE TANK SHALL BE 1-1/2 INCHES MINIMUM.

4. THE HEIGHT OF ACCESSIBLE WATER CLOSETS SHALL BE A MINIMUM OF 17 INCHES AND A MAXIMUM OF 19 INCHES MEASURED TO THE TOP OF A MAXIMUM 2 INCH HIGH TOILET SEAT.

5. CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING. CONTROLS FOR THE FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE FOR TOILET AREAS, NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS FORCE (LBF).

6. SEE SECTION 1134A.7 FOR ADDITIONAL REQUIREMENTS FOR WATER CLOSETS IN PUBLICLY FUNDED HOUSING AND ALL NON RESIDENTIAL OCCUPANCIES.

7. AUTOMATIC SPRING TO LIFTED POSITION SEATS ARE NOT ALLOWED.

ACCESSORIES:

1. MIRRORS SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE NO HIGHER THAN 40 INCHES FROM THE FLOOR.

2. IF MEDICINE CABINETS ARE PROVIDED, AT LEAST ONE SHALL BE LOCATED WITH A USABLE SHELF NO HIGHER THAN 44 INCHES ABOVE THE FLOOR. A CLEAR FLOOR SPACE OF 30 INCHES BY 48 INCHES COMPLYING WITH SECTION 1118B.4 SHALL BE PROVIDED IN FRONT OF A MEDICINE CABINET TO ALLOW A FORWARD OR PARALLEL APPROACH.

3. WHERE TOWEL, SANITARY NAPKINS, WASTE RECEPTACLES, DISPENSERS, OTHER EQUIPMENT AND CONTROLS ARE PROVIDED, AT LEAST ONE OF EACH TYPE SHALL BE LOCATED ON AN ACCESSIBLE ROUTE, WITH ALL OPERABLE PARTS, INCLUDING COIN SLOTS, WITHIN 40 INCHES FROM THE FINISHED FLOOR AND SHALL COMPLY WITH SECTION 1117B.6, CONTROLS AND OPERATING MECHANISMS.

4. SHALL BE LOCATED ON THE WALL WITHIN 12 INCHES OF THE FRONT EDGE OF THE TOILET SEAT, MOUNTED BELOW THE GRAB BAR, AT A MINIMUM HEIGHT OF 19 INCHES, AND 36 INCHES MAXIMUM TO THE FAR EDGE FROM THE REAR WALL. DISPENSERS THAT CONTROL DELIVERY OR THAT DO NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

5. WHERE LOCKERS ARE PROVIDED FOR THE PUBLIC, CLIENTS, EMPLOYEES, MEMBERS OR PARTICIPANTS, AT LEAST ONE LOCKER AND NOT LESS THAN 1 PERCENT OF ALL LOCKERS SHALL BE MADE ACCESSIBLE TO PERSONS WITH DISABILITIES. A PATH OF TRAVEL NOT LESS THAN 36 IN CLEAR WIDTH SHALL BE PROVIDED TO THESE LOCKERS.

ACCESSIBLE LAVATORIES:

1. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5lbf. LEVER-OPERATED, PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

2. LAVATORIES, WHEN LOCATED ADJACENT TO A SIDE WALL OR PARTITION, SHALL BE A MINIMUM OF 18 INCHES TO THE CENTERLINE OF THE FIXTURE. ALL LAVATORIES THAT ARE DESIGNATED TO BE ACCESSIBLE SHALL BE A MIN 17 INCHES IN HORIZONTAL DEPTH AND MOUNTED WITH THE RIM OR COUNTER EDGE NO HIGHER THAN 34 INCHES ABOVE FINISHED FLOOR AND WITH VERTICAL CLEARANCE MEASURED FROM THE BOTTOM OF THE APRON OR THE OUTSIDE BOTTOM EDGE OF THE LAVATORY OF 29 INCHES REDUCING TO 27 INCHES AT A POINT LOCATED 8 INCHES BACK FROM THE FRONT EDGE. IN ADDITION, A MIN 9 INCH TOE CLEARANCE MUST BE PROVIDED EXTENDING BACK TOWARD THE WALL TO A DISTANCE NO MORE THAN 6 INCHES FROM THE BACK WALL. THE TOE CLEARANCE SPACE MUST BE FREE OF EQUIPMENT OR OBSTRUCTIONS.

3. A CLEAR FLOOR SPACE 30 INCHES BY 48 INCHES SHALL BE PROVIDED IN FRONT OF A LAVATORY TO ALLOW FORWARD APPROACH. SUCH CLEAR FLOOR SPACE SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE AND SHALL EXTEND A MIN OF 19 INCHES INTO KNEE AND TOE SPACE UNDERNEATH THE LAVATORY.

4. HOT WATER AND DRAINPIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.

GRAB BARS, TUB AND SHOWER SEATS:

1. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACE OF A GRAB BAR SHALL BE 1-1/4 INCHES TO 1-1/2 INCHES OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. IF GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2 INCHES.

2. THE STRUCTURAL STRENGTH OF GRAB BARS, TUB AND SHOWER SEATS, FASTENERS AND MOUNTING DEVICES SHALL MEET THE FOLLOWING SPECIFICATIONS:

A. BENDING STRESS IN A GRAB BAR OR SEAT INDUCED BY THE MAXIMUM BENDING MOMENT FROM THE APPLICATION OF A 250 POUND POINT LOAD SHALL BE LESS THAN THE ALLOWABLE STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT.

B. SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF A 250 POUND POINT LOAD SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT, AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESSES SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS.

C. SHEAR FORCE INDUCED IN A FASTENER OR MOUNTING DEVICE FROM THE APPLICATION OF A 250 POUND POINT LOAD SHALL BE LESS THAN THE ALLOWABLE LATERAL LOAD OF EITHER THE FASTENER OF MOUNTING DEVICE OR THE SUPPORTING STRUCTURE , WHICHEVER IS THE ALLOWABLE LOAD.

D. TENSILE FORCE INDUCED IN A FASTENER BY A DIRECT TENSION FORCE OF A 250 POUND POINT LOAD, PLUS THE MAXIMUM MOMENT FROM THE APPLICATION OF A 250 POUND POINT LOAD, SHALL BE LESS THAN THE ALLOWABLE WITHDRAWAL LOAD BETWEEN THE FASTENER AND SUPPORTING STRUCTURE.

E. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

3. A GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH.

ACCESSIBLE DRINKING FOUNTAINS:

1. WHERE ONLY ONE DRINKING FOUNTAIN AREA IS PROVIDED ON A FLOOR, THERE SHALL BE A DRINKING FOUNTAIN THAT IS ACCESSIBLE TO INDIVIDUALS WHO USE WHEELCHAIRS IN ACCORDANCE WITH THIS SECTION AND ONE ACCESSIBLE TO THOSE WHO HAVE DIFFICULTY BENDING OR STOOPING. THIS CAN BE ACCOMMODATED BY THE USE OF 'HI-LOW' FOUNTAINS, OR BY SUCH OTHER MEANS AS WOULD ACHIEVE THE REQUIRED ACCESSIBILITY FOR EACH GROUP ON EACH FLOOR.
WHERE MORE THAN ONE DRINKING FOUNTAIN IS PROVIDED ON A FLOOR, 50 PERCENT OF THOSE PROVIDED SHALL COMPLY WITH ITEMS 1,2 4 AND 5 OF THIS SECTION AND SHALL BE ON AN ACCESSIBLE ROUTE COMPLYING WITH SECTION 1114B.1.2. ALL DRINKING FOUNTAINS SHALL COMPLY WITH ITEM 3 OF THIS SECTION.

2. WALL AND POST MOUNTED CANTILEVERED DRINKING FOUNTAINS SHALL BE MINIMUM OF 18 INCHES AND A MAXIMUM OF 19 INCHES IN DEPTH AND SHALL HAVE A CLEAR KNEE SPACE BETWEEN THE BOTTOM OF THE APRON AND THE FLOOR OR GROUND NOT LESS THAN 27 INCHES IN HEIGHT, 30 INCHES IN WIDTH AND 8 INCHES IN DEPTH, THE DEPTH MEASUREMENTS BEING TAKEN FROM THE FRONT EDGE OF THE FOUNTAIN BACK TOWARD THE WALL OR MOUNTING POST. THE KNEE CLEARANCE SPACE MUST BE FREE OF EQUIPMENT OR OBSTRUCTIONS. ADDITIONALLY, THERE SHALL BE TOE CLEARANCE OF 9 INCHES IN HEIGHT ABOVE THE FLOOR AND 17 INCHES IN DEPTH FROM THE FRONT EDGE OF THE FOUNTAIN. THE TOE CLEARANCE SPACE MUST BE FREE OF EQUIPMENT OR OBSTRUCTIONS. A CLEAR FLOOR SPACE AT LEAST 30 INCHES BY 48 INCHES COMPLYING WITH SECTION 1118B.4 SHALL BE PROVIDED IN FRONT OF THE DRINKING FOUNTAIN TO ALLOW FORWARD APPROACH. A SIDE APPROACH DRINKING FOUNTAIN IS NOT ACCEPTABLE.

3. ALL DRINKING FOUNTAINS SHALL BE LOCATED COMPLETELY WITHIN ALCOVES OR OTHERWISE POSITIONED SO AS NOT TO ENCROACH INTO PEDESTRIAN WAYS. THE ALCOVE IN WHICH THE DRINKING FOUNTAIN IS LOCATED SHALL NOT BE LESS THAN 32 INCHES IN WIDTH AND 18 INCHES IN DEPTH. ADDITIONALLY, ALCOVES SHALL COMPLY WITH SECTION 1118B.4, ITEM 2. PROTRUDING OBJECTS LOCATED IN ALCOVES OR OTHERWISE POSITIONED SO AS LIMIT ENCROACHMENT INTO PEDESTRIAN WAYS ARE PERMITTED TO PROJECT 4 INCHES INTO WALKS, HALLS, CORRIDORS, PASSAGEWAYS OR AISLES.

4. THE BUBBLER SHALL BE ACTIVATED BY A MANUALLY OPERATED SYSTEM COMPLYING WITH SECTION 1117B.6, ITEM 4 THAT IS FRONT MOUNTED OR SIDE MOUNTED AND LOCATED WITHIN 6 INCHES OF THE FRONT EDGE OF THE FOUNTAIN OR AN ELECTRONICALLY CONTROLLED DEVICE. THE BUBBLER OUTLET ORIFICE SHALL BE LOCATED WITHIN 6 INCHES OF THE FRONT EDGE OF THE DRINKING FOUNTAIN AND WITHIN 36 INCHES OF THE FLOOR. THE WATER STREAM FROM THE BUBBLER SHALL BE SUBSTANTIALLY PARALLEL TO THE FRONT EDGE OF THE DRINKING FOUNTAIN.

5. THE SPOUT SHALL PROVIDE A FLOW OF WATER AT LEAST 4 INCHES HIGH SO AS TO ALLOW THE INSERTION OF A CUP OR GLASS UNDER THE FLOW OF WATER.

IDENTIFICATION SYMBOLS:

1. DOORWAYS LEADING TO MEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY AN EQUILATERAL TRIANGLE, 1/4 INCH THICK WITH EDGES 12 INCHES LONG AND A VERTEX POINTING UPWARD. WOMEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE, 1/4 INCH THICK AND 12 INCHES IN DIAMETER. UNISEX SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE 1/4 INCH THICK, 12 INCHES IN DIAMETER WITH A 1/4 INCH THICK TRIANGLE SUPERIMPOSED ON THE CIRCLE WITHIN THE 12 INCH DIAMETER. THESE GEOMETRIC SYMBOLS SHALL BE CENTERED ON THE DOOR AT A HEIGHT OF 60 INCHES AND THEIR COLOR AND CONTRAST OF THE DOOR. SEE ALSO SECTION 1117B.51, ITEM 1 FOR ADDITIONAL SIGNAGE REQUIREMENTS APPLICABLE TO SANITARY FACILITIES.

ACCESSIBLE URINALS:

1. URINALS SHALL BE FLOOR MOUNTED, STALL-TYPE OR WALL HUNG. WHERE ONE OR MORE WALL-HUNG URINALS ARE PROVIDED, AT LEAST ONE WITH AN ELONGATED RIM PROJECTING A MINIMUM OF 14 INCHES FROM THE WALL AND A MAXIMUM OF 17 INCHES FROM THE WALL AND A MAXIMUM OF 17 INCHES ABOVE THE FLOOR SHALL BE PROVIDED.

2. FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF. ELECTRONIC AUTOMATIC FLUSHING CONTROLS ARE ACCEPTABLE AND PREFERABLE.

3. WHERE URINALS ARE PROVIDED, AT LEAST ONE SHALL HAVE A CLEAR FLOOR SPACE 30 INCHES BY 48 INCHES IN FRONT OF THE URINAL TO ALLOW FORWARD APPROACH. THIS CLEAR SPACE SHALL COMPLY WITH SECTION 1118B.4

GENERAL NOTES

MEANS OF EGRESS

1. ALL EXIT DOORS SHALL BE EASILY OPENED FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. MANUALLY OPERATED LOCKING DEVICES SHALL NOT BE PROVIDED THAT DO NOT UNLATCH IN TANDEM WITH THE NORMAL OPERATION OF THE PASSAGE SET.

2. EXITS, EXIT SIGNS, FIRE ALARM PANELS, HOSE CABINETS, FIRE EXTINGUISHER LOCATIONS AND STANDPIPE CONNECTIONS SHALL NOT BE CONCEALED BY CURTAINS, MIRRORS OR OTHER MATERIAL.

3. THE MEANS OF EGRESS SHALL BE ILLUMINATED AT ALL TIMES THE BUILDING IS OCCUPIED IN ACCORDANCE WITH CBC 1006. THE MEANS OF EGRESS SHALL BE ILLUMINATED BY AN EMERGENCY POWER SYSTEM FOR NOT LESS THAN 90 MINUTES IN ACCORDANCE WITH CBC CHAPTER 27.

4. THE PATH OF EGRESS SHALL BE CLEARLY IDENTIFIED WITH EXIT SIGNS CONFORMING TO CBC 1011. EXITS SIGNS SHALL BE INTERNALLY OR EXTERNALLY ILLUMINATED (CBC 1011.2) AND MUST HAVE 90-MINUTE EMERGENCY POWER BACKUP. TACTILE EXIT SIGNS SHALL BE PROVIDED PER CBC 1011.3 IN PUBLIC AND COMMERCIAL BUILDINGS, AND SHALL CONFORM TO CBC 1117B.5.

5. THE PATH OF EGRESS SHALL BE MAINTAINED FREE AND CLEAR OF OBSTRUCTIONS AT ALL TIMES. NO STORAGE IS PERMITTED IN AISLES.

BUILDING EXTERIOR

1. ADDRESS NUMBERS SHALL BE PROVIDED IN A POSITION PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. (CBC 501.2, CFC 505) TEMPORARY ADDRESS NUMBERS SHALL BE PROVIDED ON CONSTRUCTION FENCING OR THE BUILDING UNTIL PERMANENT NUMBERS CAN BE PROVIDED.

2. CONTRACTOR TO PROVIDE AN APPROVED KNOX BOX KEY CABINET AT ALL LOCATIONS REQUIRED BY FIRE OFFICIAL. COORDINATE FINAL LOCATION(S) AND MOUNTING HEIGHT WITH FIRE OFFICIAL. MASTER BUILDING KEY(S) FOR FIRE DEPARTMENT EMERGENCY ACCESS TO BE SECURED IN KNOX BOX.

MISCELLANEOUS (FIRE)

1. ALL DECORATIVE MATERIALS SHALL BE MAINTAINED IN A FLAME-RETARDANT CONDITION. IF TREATED BY A PRODUCT OR PROCESS APPROVED BY THE STATE FIRE MARSHAL, PROVIDE DOCUMENTATION TO THE BUILDING OFFICIAL. (CAL. CODE REGS., TITLE 19, SEC. 1.14, 3.08, 3.21, AND CFC 804)

2. ALL INTERIOR FINISHES MUST COMPLY WITH THE CBC CHAPTER 8.

3. THE CONTRACTOR SHALL PROVIDE A 4A20BC FIRE EXTINGUISHER AT EACH MECHANICAL, ELECTRICAL, AND EQUIPMENT ROOM

4. THE CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS AT MIN SIZE AND LOCATIONS INDICATED IN CBC SECTION 906 AND AS REQUIRED BY FIRE OFFICIAL. MINIMUM 2A:10B:C RATED EXTINGUISHERS SHALL BE PROVIDED THROUGHOUT THE BUILDING SO THAT NO POINT IS GREATER THAN 75 FEET TRAVEL DISTANCE FROM AN EXTINGUISHER. EXTINGUISHERS SHALL BE LOCATED ALONG THE PATH OF EGRESS AND IN READILY VISIBLE AND ACCESSIBLE LOCATIONS. ADDITIONAL EXTINGUISHERS MAY BE REQUIRED BY INSPECTORS DEPENDING ON PROJECT OR SITE CONDITIONS, FINAL LOCATION IS SUBJECT TO THEIR APPROVAL. (CBC 906, CFC 906, CCR TITLE 19 DIV 1)

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263 | G-5

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

GENERAL NOTES

CITY OF SAN DIEGO, CALIFORNIA
SHEET 5 OF 25 SHEETS

W.B.S. B-00944

FOR CITY ENGINEER — DATE 12/20/12

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
1 'A' CHANGE	MOA		12/11/2012	
AS-BUILTS				

CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

35608- 5 -D

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.
'A' CHANGE	12/11/12	35608-4-D,35608-5-D,35608-9-D, 35608-10-D,35608-14-D	
		35608-15-D	

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ARCHITECTURE
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INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
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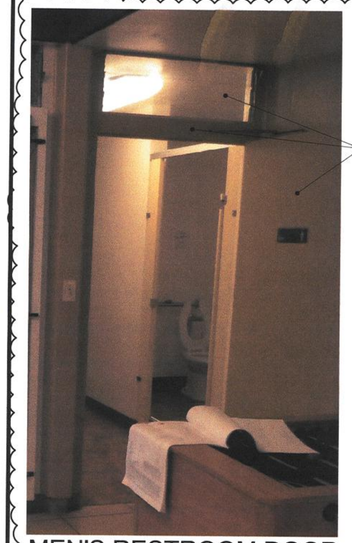
SCALE
HORIZONTAL NO SCALE
VERTICAL NO SCALE

LICENSED ARCHITECT — No. 13996 — 2-28-13 — REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

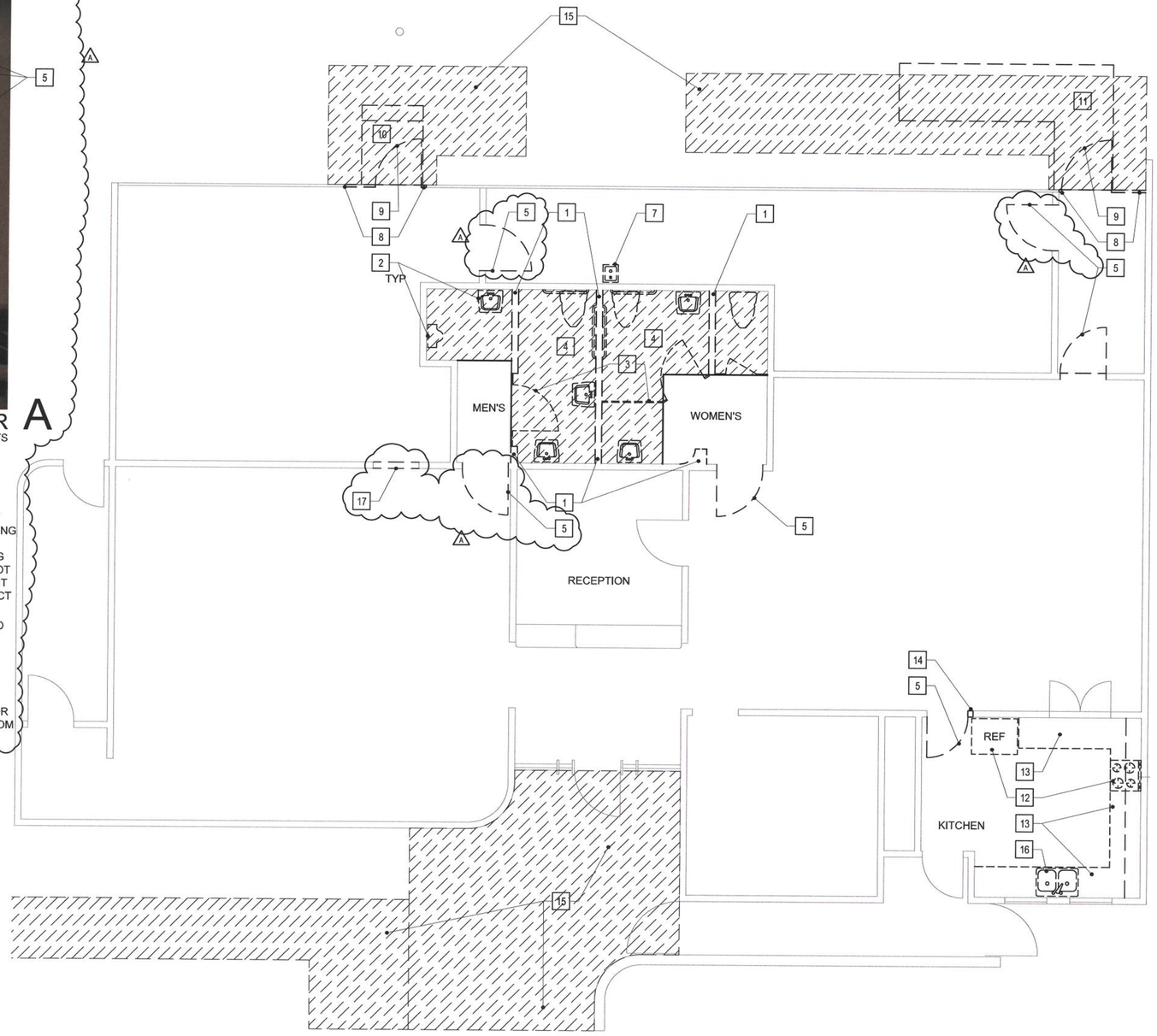
'A' CHANGE: ADD GENERAL NOTES



MEN'S RESTROOM DOOR A
NTS

(CONT.) GENERAL DEMOLITION NOTES

15. OWNER AND TENANT WILL OCCUPY BUILDING IMMEDIATELY ADJACENT TO DEMOLITION AREA. CONDUCT DEMOLITION SO BUILDING USE WILL NOT BE DISRUPTED. PROVIDE NOT LESS THAN 72 HOURS NOTICE TO RESIDENT ENGINEER OF ACTIVITIES THAT WILL AFFECT OWNER OR TENANT'S OPERATIONS.
16. REMOVE ALL PLASTER WALL SURFACES TO STUD AND CEILING FRAMING WITHIN RESTROOMS
17. CONTRACTOR TO PROVIDE SHORING AS REQUIRED AT ANY BEARING WALLS TO BE REMOVED.
18. COMPLETELY REMOVE ALL EXISTING FLOOR FINISHES WITHIN THRESHOLD OF RESTROOM DOORS.



EXISTING / DEMOLITION FLOOR PLAN 1
SCALE: 1/8" = 1'-0"
north

NOTES

1. REMOVE INTERIOR WALLS, WHERE INDICATED PER PLAN
2. REMOVE ALL RESTROOM FIXTURES AND ACCESSORIES
3. REMOVE ALL RESTROOM PARTITIONS AND ANCHOR COMPONENTS
4. REMOVE CONC FLOOR SLAB AS NECESSARY TO REMOVE EXISTING BELOW SLAB UTILITIES AND INSTALL NEW BELOW SLAB PLUMBING AND SEWER UTILITIES
5. REMOVE DOORS, WHERE INDICATED PER PLAN, REMOVE HEADER AND WINDOW ABOVE WHERE OCCURS
6. REMOVE THRESHOLDS WHERE EXISTING, AT DOORS TO BE REMOVED
7. REMOVE EXISTING DRINKING FOUNTAIN
8. CAREFULLY REMOVE SECTIONS OF GLASS SOLARIUM IN FULL INCREMENTS TO THE NEXT NEAREST MULLION, TAKING CARE NOT TO DAMAGE ADJACENT SECTIONS
9. REMOVE SOLARIUM DOORS AS INDICATED ON PLANS
10. REMOVE EXISTING STAIR AND CONC LANDING
11. REMOVE EXISTING RAMP AND LANDING
12. REMOVE APPLIANCES IN KITCHEN, PROTECT AND SAVE FOR REINSTALLATION
13. REMOVE ALL CABINETRY ON EAST, SOUTH AND WEST WALLS IN KITCHEN, UPPER AND LOWER
14. REMOVE JAMB AND PORTION OF WALL TO ALLOW ROUGH OPENING FOR NEW 36" WIDE DOOR
15. REMOVE EXISTING CONC FLATWORK, AND STAIR WHERE OCCURS, AND PREP FOR NEW WORK, SEE SITE DEMOLITION PLAN FOR FULL EXTENT
16. REMOVE EXISTING SINK
17. REMOVE OPENING HEADER AND WINDOW ABOVE

COORDINATE THIS SHEET WITH SITE DEMOLITION PLAN, SHEET A0.0

GENERAL DEMOLITION NOTES

1. PATCH, REPAIR AND RESTORE TO MATCH EXISTING CONDITIONS AT ANY DAMAGED AREA BEHIND OR SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED
2. EVERYTHING SHOWN ON DEMO PLAN IS EXISTING AND TO REMAIN EXCEPT WHERE INDICATED TO BE REMOVED. CONTRACTOR SHALL PROTECT ANYTHING THAT IS TO REMAIN FROM DAMAGE.
3. CONTRACTOR TO TEST ALL DOOR CLOSERS TO ENSURE EFFORT TO OPERATE DOORS IS WITHIN ALLOWED 5LBS MAX OF PRESSURE. IF EXISTING CLOSER DOES NOT MEET THIS REQUIREMENT, REMOVE AND INSTALL NEW.
4. ALL THRESHOLDS THAT DO NOT COMPLY WITH CBC SECTION 1133B.2.4.1 SHALL BE REMOVED AND REPLACED WITH COMPLIANT THRESHOLDS
5. COORDINATE DEMOLITION SHEET WITH REST OF SHEETS IN PLAN SET AND SPECIFICATIONS. ITEMS THAT WILL CONFLICT WITH THE SUCCESSFUL COMPLETION OF THE WORK DESCRIBED IN THESE CONSTRUCTION DOCUMENTS MUST BE REMOVED. WHERE EXISTING STRUCTURE OR MATERIALS CONFLICT WITH CONSTRUCTION OF FINISHED PROJECT, AND ARE NOT SPECIFICALLY SHOWN ON THIS SHEET, NOTIFY RESIDENT ENGINEER PRIOR TO REMOVAL.
6. COORDINATE SLAB TRENCHING WITH LOCATION ON PLAN SHEETS. NOTIFY RESIDENT ENGINEER BEFORE WORK FOR CLARIFICATION OF ANY DISCREPANCIES.
7. REMOVE EXTERIOR AND INTERIOR FINISHES WHERE NECESSARY TO COMPLETE NEW WORK AS SHOWN IN THIS PLAN SET, UNLESS SPECIFICALLY NOTED OTHERWISE.
8. COORDINATE RESTROOM DEMOLITION AND CONSTRUCTION WITH RESIDENT ENGINEER. TEMPORARY ACCESSIBLE, EQUIVALENT FACILITIES (TOILETS AND HAND SINKS) SHALL BE PROVIDED BY CONTRACTOR DURING CONSTRUCTION AND BE AVAILABLE TO USERS OF THE BUILDING.
9. REMOVE EXISTING RESTROOM DOOR IDENTIFICATION PLAQUES.
10. CAP CONNECTIONS WHERE UTILITIES REMOVED, AND TO BE ABANDONED
11. REMOVE NON-COMPLIANT HARDWARE FROM ALL DOORS TO REMAIN, TO BE REPLACED WITH CODE-COMPLIANT HARDWARE, SEE PLANS AND DOOR SCHEDULE.
12. CONTRACTOR TO FINISH ANY UNFINISHED SURFACES THAT ARE THE RESULT OF DEMOLITION, WITH MATERIAL OF LIKE KIND UNLESS OTHERWISE NOTED.
13. WHERE FIXTURE REMOVED, REMOVE ALL ASSOCIATED MOUNTING HARDWARE
14. WERE EXISTING ITEMS TO BE REMOVED EXTEND BELOW FINISH FLOOR, REMOVE AT LEAST 2" BELOW SURFACE OF EXISTING SLAB. FILL AND TROWEL TO SMOOTH. FINISH TO MATCH ADJACENT TEXTURE.

A1.0

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

DEMOLITION PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 9 OF 25 SHEETS

W.B.S. B-00944

SIAVASH HAGHKHAH
PROJECT MANAGER

APPROVED
FOR CITY ENGINEER — DATE 12/20/12

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
1 'A' CHANGE	MOA		12/11/2012	
AS-BUILTS				
CONTRACTOR			DATE STARTED	
INSPECTOR			DATE COMPLETED	

CCS27 COORDINATE

CCS83 COORDINATE

35608- 9 -D

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

WARNING
0 1
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CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.
'A' CHANGE	12/11/12	35608-4-D,35608-5-D,35608-9-D, 35608-10-D,35608-14-D 35608-15-D	

CONSULTANT

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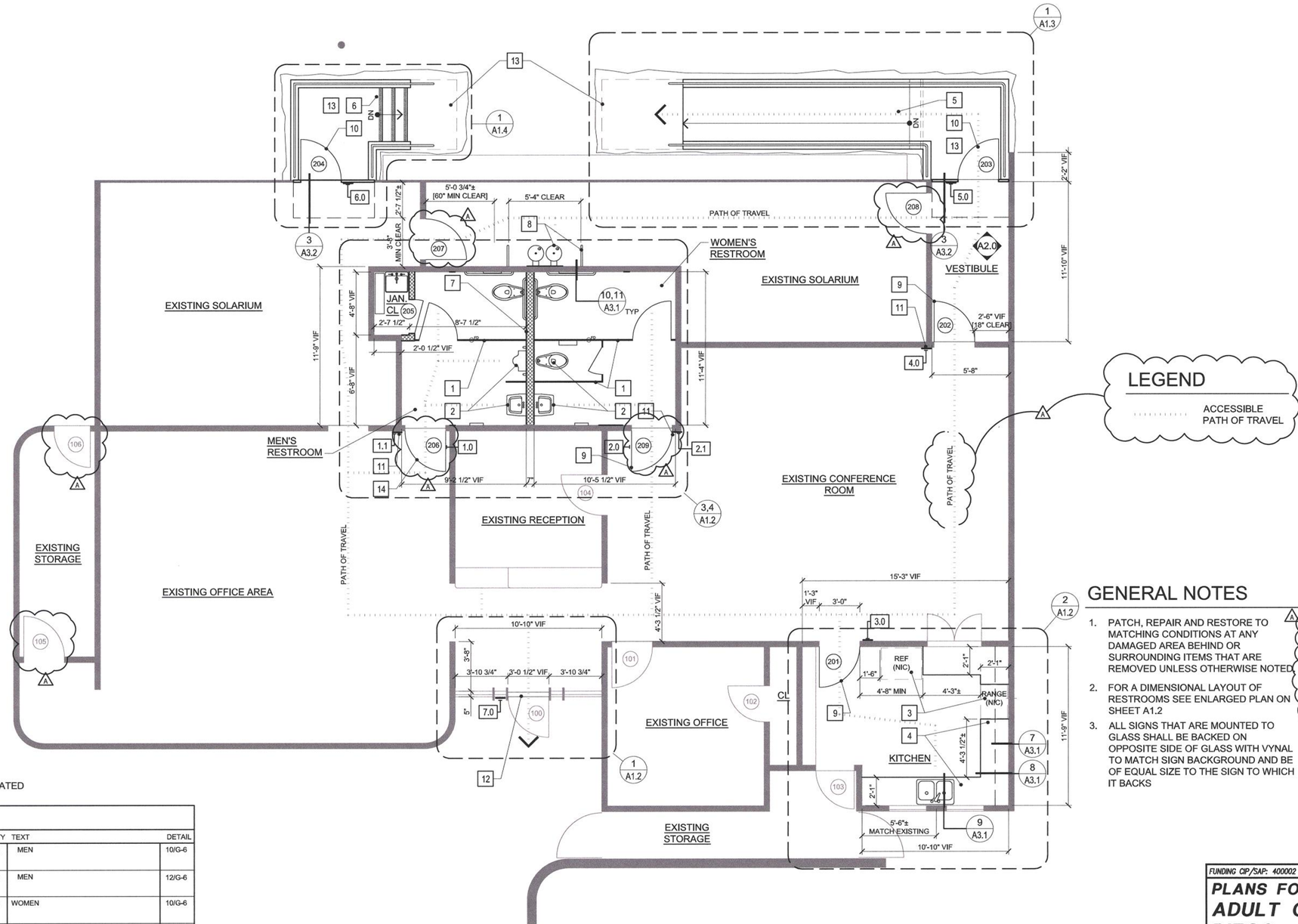
LICENSED ARCHITECT — C-13996 — 2-28-13 — RENEWAL — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • INCORPORATED 1850 • VIGILANT PROSPER

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

'A' CHANGE: REVISED PLAN, REVISE NOTES, ADD NOTES, ADD REFERENCE PHOTO



NOTES

1. NEW FLOOR MOUNTED TOILET PARTITIONS
2. NEW PLUMBING FIXTURE LOCATIONS, SEE PLUMBING DRAWINGS FOR MORE INFORMATION
3. RELOCATED EXISTING KITCHEN APPLIANCES, TYP OF ALL
4. NEW BASE AND UPPER CABINETRY, PLASTIC LAMINATE FINISH
5. NEW ACCESSIBLE RAMP, CONC, PER PLAN AND DETAIL 1/A3.2
6. NEW CONC STAIR, WITH CONTRASTING COLOR STRIPE AT EACH NOSING, PER PLAN AND DETAILS 2/A3.2
7. NEW GYP BOARD AND WOOD STUD PARTITION, PER DETAIL 1/A3.1, FINISH PER SCHEDULE ON SHEET A3.0
8. NEW HI-LOW DRINKING FOUNTAIN AND RAILING WING WALL, PER DETAIL 5/G-6, INSTALL CONCEALED BLOCKING AT LOCATION OF RAILING CONNECTION TO WALL, PATCH WALL TO MATCH EXISTING FINISH
9. NEW DOOR AND CODE COMPLIANT HARDWARE, PER SCHEDULE ON SHEET A2.0, NO LATCH
10. NEW SOLARIUM PARTITION AND DOOR WITH CODE-COMPLIANT HARDWARE, INSTALL WITH WATERTIGHT AND WEATHERPROOF SEAL WITH EXISTING CONSTRUCTION, SEE DETAIL 3/A3.2
11. INSTALL CODE-COMPLIANT ROOM SIGNAGE, PER SCHEDULE THIS SHEET, TYP
12. INSTALL NEW CODE-COMPLIANT THRESHOLD, VERIFY OPENING WIDTH MEETS ACCESSIBLE REQUIREMENTS WHEN DOOR OPEN AT 90 DEGREE ANGLE
13. LANDING, SLOPE 1.5% FOR POSITIVE DRAINAGE AT EXTERIOR CONDITION
14. DOORS 105 TO HAVE CLOSER AND NO LATCH

LEGEND

ACCESSIBLE PATH OF TRAVEL

GENERAL NOTES

1. PATCH, REPAIR AND RESTORE TO MATCHING CONDITIONS AT ANY DAMAGED AREA BEHIND OR SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED.
2. FOR A DIMENSIONAL LAYOUT OF RESTROOMS SEE ENLARGED PLAN ON SHEET A1.2
3. ALL SIGNS THAT ARE MOUNTED TO GLASS SHALL BE BACKED ON OPPOSITE SIDE OF GLASS WITH VYNAL TO MATCH SIGN BACKGROUND AND BE OF EQUAL SIZE TO THE SIGN TO WHICH IT BACKS

A
4. ALL NEW GLAZING ON PROJECT TO BE FULLY TEMPERED.
5. ERECT TEMPORARY PARTITIONS AT WORK AREAS TO CONTROL DUST, NOISE AND ACCESS BY PUBLIC.
6. FINISH ALL RESTROOMS WALLS PER DETAILS 1,12/A3.1 AND CEILINGS WITH 1/2" CEILING GYP BD PER SPEC.

SYMBOLS LEGEND

1.00 WALL / DOOR MOUNTED SIGNS, AS INDICATED

SIGNAGE SCHEDULE

SIGN #	LOCATION	SIGN TYPE	QTY	TEXT	DETAIL
1.0	ON ENTRY SIDE OF DOOR 105	RESTROOM DOOR I.D.	1	MEN	10/G-6
1.1	ON ENTRY SIDE OF DOOR 105	RESTROOM WALL I.D. WITH BRAILE	1	MEN	12/G-6
2.0	ON ENTRY SIDE OF DOOR 110	RESTROOM DOOR I.D.	1	WOMEN	10/G-6
2.1	ON ENTRY SIDE OF DOOR 110	RESTROOM WALL I.D. WITH BRAILE	1	WOMEN	12/G-6
3.0	CONF ROOM SIDE OF DOOR 201	DOOR I.D.	1	KITCHEN	8/G-6
4.0	INTERIOR SIDE OF DOOR 202	EXIT	1	EXIT	11/G-6
5.0	INTERIOR SIDE OF DOOR 203	EXIT	1	EXIT	11/G-6
6.0	INTERIOR SIDE OF DOOR 204	EXIT	1	EXIT	11/G-6
7.0	EXTERIOR SIDE OF DOOR 100	ISA	1	NONE (INT'L SYMBOL OF ACCESSIBILITY)	2/A3.0

PROPOSED FLOOR PLAN 1
SCALE: 1/4" = 1'-0"
north

CONSTRUCTION CHANGE / ADDENDUM			
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VERTICAL NO SCALE

LICENSED ARCHITECT MANUEL ONCINA C-23996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

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WARNING
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FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263 | A1.1

PLANS FOR THE CONSTRUCTION OF
ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

FLOOR PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 10 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER 12/20/12 DATE
SIAVASH HAGHKHAH PROJECT MANAGER

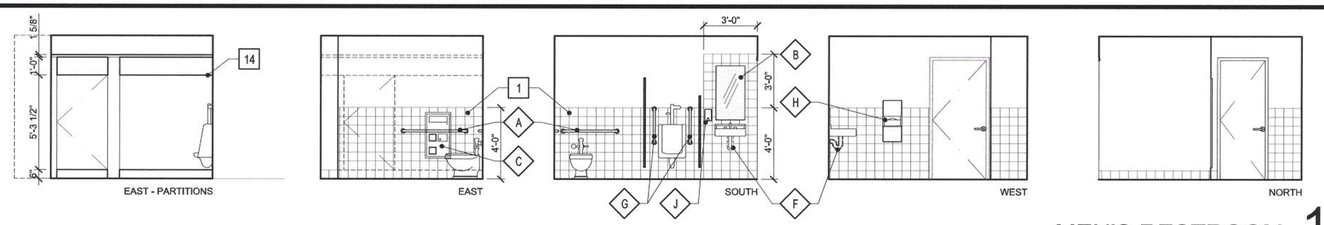
DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
'A' CHANGE	MOA		12/11/2012	
AS-BUILTS				

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

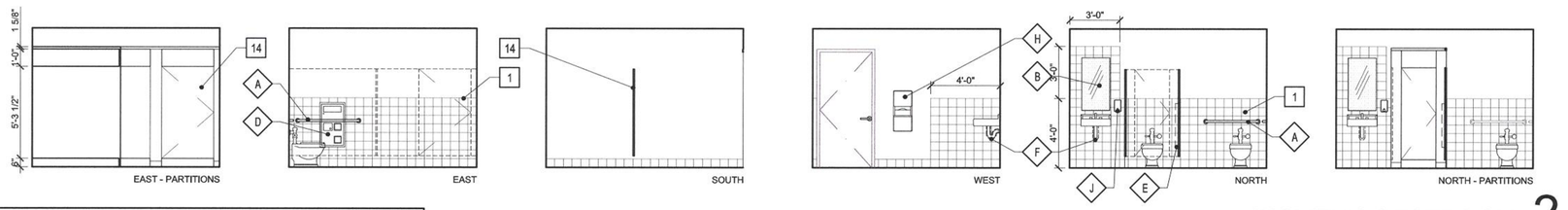
CCS27 COORDINATE
CCS83 COORDINATE
35608-10-D

'A' CHANGE: REVISED DOOR NUMBERS, ADD GENERAL NOTES, ADD PATH OF TRAVEL LINE TO PLAN

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)



MEN'S RESTROOM 1
SCALE: 1/4" = 1'-0"



WOMEN'S RESTROOM 2
SCALE: 1/4" = 1'-0"

RESTROOM ACCESSORY SCHEDULE

ITEM #	DESCRIPTION	MDL #	COM.	QTY
A	TWO-WALL GRAB BAR	B-68137	1	2
B	FRAMELESS STAINLESS STEEL MIRROR	B-1556 1824	1	3
C	RECESSED TOILET PAPER AND SEAT COVER COMBINATION	B-3474	1	1
D	RECESSED TOILET PAPER, SEAT COVER AND SANITARY NAPKIN DISPOSAL	B-3574	1	1
E	PARTITION MOUNTED TOILET PAPER, SEAT COVER AND SANITARY NAPKIN DISPOSAL	B-3571	1	1
F	P-TRAP COVER	1 396 WHITE	2	4
G	24" L WALL MOUNTED GRAB BARS	B-6806x24	1	2
H	SURFACE MOUNTED PAPER TOWEL DISPENSER / WASTE RECEPTACLE	B-43699	1	3
J	SURFACE MOUNTED SOAP DISPENSER	B-2111	1	3
K	UTILITY SHELF WITH MOP HOLDER/RAG HOOKS	B-224x36	1	1

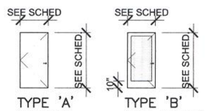
ACCESSORY SCHEDULE COMMENTS

1. AS MANUFACTURED BY 'BOBRICK WASHROOM EQUIPMENT, INC', OR EQUAL
2 AS MANUFACTURED BY 'TRAP GEAR', OR EQUAL

DOOR SCHEDULE

	NO	SIZE (W x H x TH)	DOOR TYPE	DOOR MAT'L	FRAME MAT'L	FRAME FIN	HDWR SET	DETAILS (_/A3.1) HEAD	JAMB	SILL	COMMENTS
EXISTING	100	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	3	4	4	5	1,2
	101	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	102	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	103	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	3	4	4	5	1, 2
	104	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	105	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	106	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	3	4	4	5	1, 2
NEW	201	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	4	2	2	3	1
	202	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	4	2	2	3	1
	203	3'-0" x 6'-8" x 1 3/4"	B	ALUM	ALUM	ANOD	1	4	4	5	1, 2
	204	3'-0" x 6'-8" x 1 3/4"	B	ALUM	ALUM	ANOD	1	4	4	5	1, 2
	205	2'-6" x 6'-8" x 1 3/4"	A	WD	WD	PTD	5	2	2	3	1
	206	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	6	2	2	3	1,3
	207	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	1
	208	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	1
	209	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	6	2	2	3	1,3

DOOR LEGEND



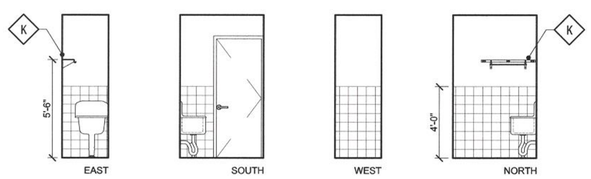
TYPE 'A' (FLUSH) TYPE 'B' (SOLARIUM/ STOREFRONT)

SCHEDULE LEGEND

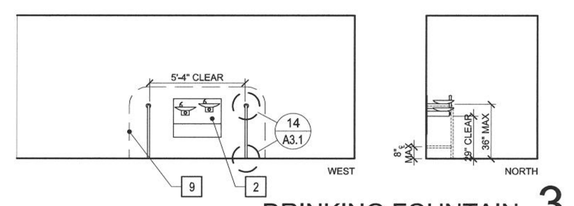
ALUM = ALUMINUM
ANOD = ANODIZED
PTD = PAINTED
WD = WOOD

SCHEDULE COMMENTS

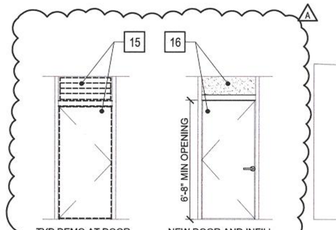
1. FIELD MEASURE ROUGH OPENING BEFORE ORDERING
2. APPLY WEATHERSTRIPPING TO PERIMETER OF DOOR
3. DOOR TO HAVE NO LATCH.
4. DOOR IS EXISTING, TO REMAIN.



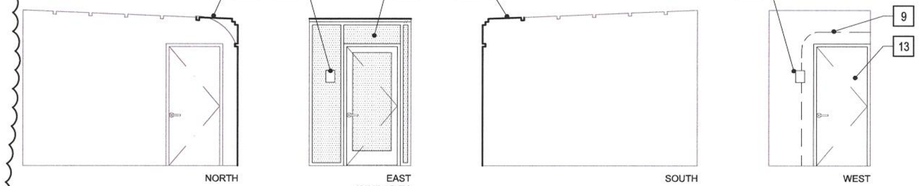
JANITOR CLOSET 6
SCALE: 1/4" = 1'-0"



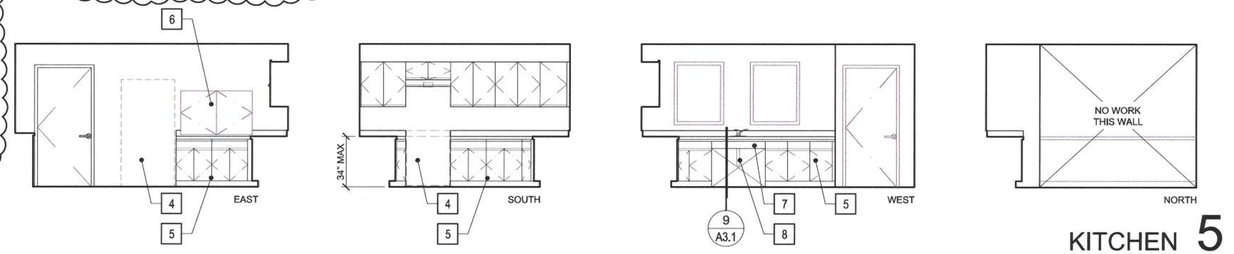
DRINKING FOUNTAIN 3
SCALE: 1/4" = 1'-0"



TYP NEW DOOR 7
SCALE: 1/4" = 1'-0"



VESTIBULE 4
SCALE: 1/4" = 1'-0"



KITCHEN 5
SCALE: 1/4" = 1'-0"

NOTES

1. CERAMIC TILE TO 48" AFF, PER DETAIL 12/A3.1
2. NEW ACCESSIBLE DRINKING FOUNTAIN, PER DETAIL 5/G-6
3. NEW RESTROOM FIXTURES, PER PLUMBING DRAWINGS
4. RELOCATE EXISTING RANGE AND REFRIGERATOR
5. NEW CABINETRY, PLASTIC LAMINATE FINISH
6. EXISTING OPENING WITH DOORS, TO REMAIN
7. INSTALL SKIRT AT SINK, TO MATCH ADJACENT CABINETRY
8. P-TRAP WITH INSULATING COVER
9. PATCH AND REPAIR WALL TO EXISTING CONDITION
10. SHATTERPROOF GLASS SOLARIUM ROOF PANELS
11. NEW SOLARIUM FRAMING AND PANELS, ANODIZED ALUMINUM TO MATCH EXISTING SOLARIUM STRUCTURE, TEMPERED GLAZING AND NEW DOOR WITH DIMENSIONS AND HARDWARE COMPLIANT WITH 2007 CBC REQUIREMENTS
12. INSTALL CODE-COMPLIANT ROOM SIGNAGE, PER SCHEDULE ON SHEET A1.1
13. NEW DOOR, PER PLAN AND SCHEDULE ON SHEET A2.0
14. NEW TOILET PARTITIONS, FLOOR-MOUNTED, HEADRAIL-BRACED, FINISHED WITH PLASTIC LAMINATE, TYP
15. REMOVE DOOR, HEADER AND TRANSOM WINDOW WHERE OCCURS
16. INSTALL NEW HEADER TO MATCH WIDTH OF EXISTING MATERIAL, NEW DOOR WITH HARDWARE, AND INFILL REMAINING TRANSOM AREA WITH 2x WOOD STUD AND 5/8" GYP BD BOTH SIDES, PAINT FINISH

GENERAL NOTES

1. PATCH AND REPAIR EXISTING MATERIALS SURROUNDING NEW WORK TO MATCH EXISTING CONDITION, TYPICAL OF ALL INSTANCES.

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.
'A' CHANGE	12/11/12	35608-4-D, 35608-5-D, 35608-9-D, 35608-10-D, 35608-14-D	
		35608-15-D	

CONSULTANT

MOA
MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.oncinaarc.com

SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

REGISTERED ARCHITECT MANUEL ONCINA 13996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

WARNING 0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263 | A2.0

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

INTERIOR ELEVATIONS

CITY OF SAN DIEGO, CALIFORNIA
SHEET 14 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER DATE 12/20/12
SIAVASH HAGHKHAH PROJECT MANAGER

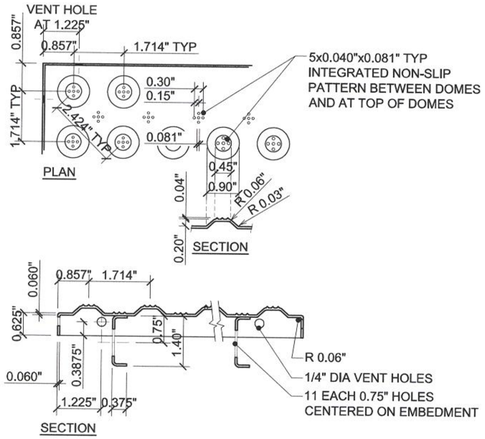
DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
'A' CHANGE	MOA		12/11/2012	
AS-BUILTS				

CCS27 COORDINATE
CCS83 COORDINATE
CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

35608-14-D

'A' CHANGE: REVISED SCHEDULE, ADD NOTES, ADD ELEVATIONS

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)



9 CAST IN PLACE DETECTABLE WARNING SURFACE

SCALE: 6"=1'-0"

PAVING AT WALKWAYS

1. ALL PAVEMENT CROSS SLOPES IN THE PATH OF TRAVEL, MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL, SHALL BE A MAXIMUM OF 1.5%. RUNNING SLOPES OF PAVEMENT IN PATH OF TRAVEL, MEASURED PARALLEL WITH DIRECTION OF TRAVEL, SHALL BE A MAXIMUM OF 4.5% UNLESS SPECIFIED ON THESE DRAWINGS AS A RAMP. MAXIMUM SLOPES FOR PAVEMENT IN THE PATH OF TRAVEL ARE ABSOLUTE AND SUPERCEDE CONSTRUCTION TOLERANCES STATED IN THE PROJECT SPECIFICATION OR ELSEWHERE. THE CONTRACTOR HAS THE OPTION OF ADJUSTING GRADES TO ALLOW FOR CONSTRUCTION TOLERANCE BUT SHALL NOT ADJUST GRADES TO LESS THAN 1% CROSS SLOPE OR GREATER THAN 2%. THE CONTRACTOR SHALL CONTACT THE RESIDENT ENGINEER REGARDING ANY GRADE REVISIONS PRIOR TO CONSTRUCTION OF PAVEMENT AREAS. THE PAVEMENT SLOPES WILL BE REVIEWED AFTER CONSTRUCTION AND PAVEMENT EXCEEDING THE MAXIMUM SLOPES SPECIFIED ABOVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

2. ALL CONCRETE PAVEMENT SHALL BE INSTALLED PER GREENBOOK SPECIFICATIONS WITH CITY SUPPLEMENT PROVISIONS, AND PER CITY STANDARD DRAWINGS WITH NOT LESS THAN #3 STEEL REINFORCMENT BARS AT 18" ON CENTER EACH WAY, AT MID-HEIGHT OF SLAB AND SUPPORTED BY CHAIRS OR EQUIVALENT.

FINISH SCHEDULE

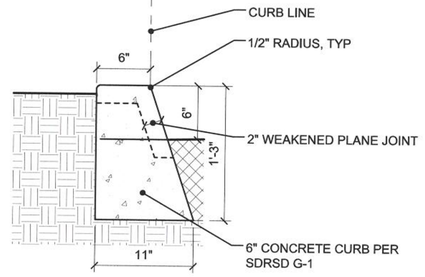
ROOM NAME	WALLS				BASE	FLOOR	CEILING	COMM.
	NORTH	EAST	SOUTH	WEST				
MEN'S RESTROOM	P-2/CT	P-2/CT	P-2/CT	P-2/CT	CTB	PT	P-1	1,2
WOMEN'S RESTROOM	P-2/CT	P-2/CT	P-2	P-2/CT	CTB	PT	P-1	1,2
KITCHEN	P-1	P-1	P-1	P-1	EXIST	EXIST	EXIST	1

SCHEDULES LEGEND

CTB	=	6"X6" DALTILE SEMI-GLOSS COVE BASE A-3601, COLOR: GOLDEN GRANITE 0138
CT	=	6"X6" DALTILE SEMI-GLOSS WALL TILE, COLOR: GOLDEN GRANITE 0138
EXIST	=	EXISTING
P-1	=	PAINT, DUNN-EDWARDS, COLOR: WHITE HEAT DEW338
P-2	=	PAINT, DUNN-EDWARDS, COLOR: RICE BOWL DE6170
PT	=	12"X12" DALTILE PORCELAIN FLOOR TILE, PORCEALTO GRANITI, COLOR: DUNA DI SABBIA CD98

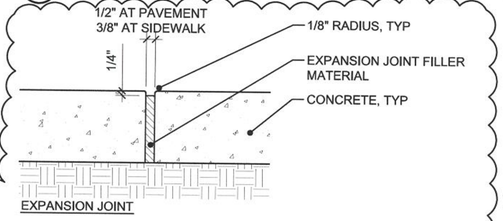
SCHEDULE COMMENTS

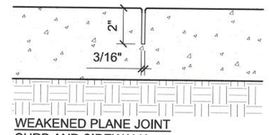
1. PAINT FINISH AT WALLS IN RESTROOMS AND KITCHEN TO BE SEMI-GLOSS
2. PAINT FINISH AT CEILINGS IN RESTROOMS TO BE EGGSHELL.

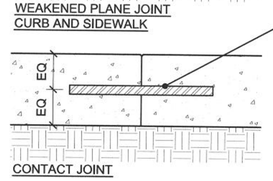


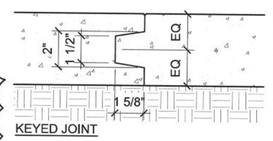
6 TYP 6" CONCRETE CURB

SCALE: 1-1/2"=1'-0"









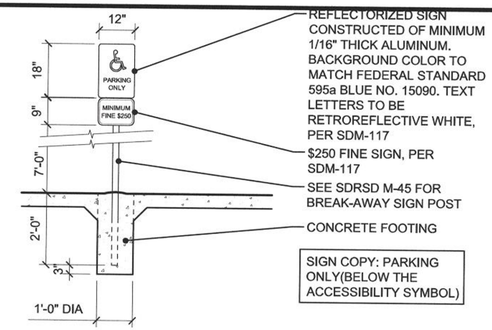
NOTE:
MIN REINFORCING AT ALL NEW CONCRETE WALKWAYS: #3 AT 18" O.C. EACH WAY, MIDDEPTH

7 CONCRETE JOINT DETAILS

SCALE: 3"=1'-0"

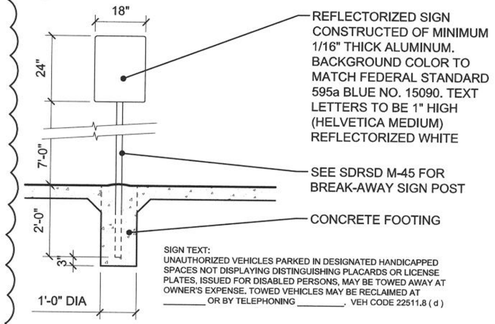
8 NOT USED

SCALE: NONE



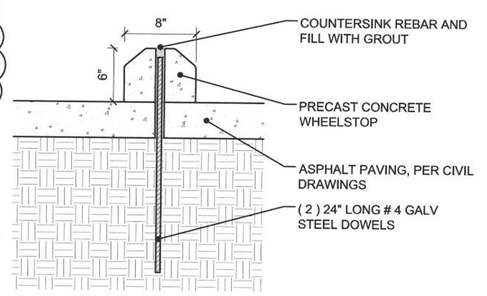
3 ACCESSIBLE PARKING SIGN

SCALE: 1/2"=1'-0"



4 UNAUTHORIZED VEHICLE SIGN

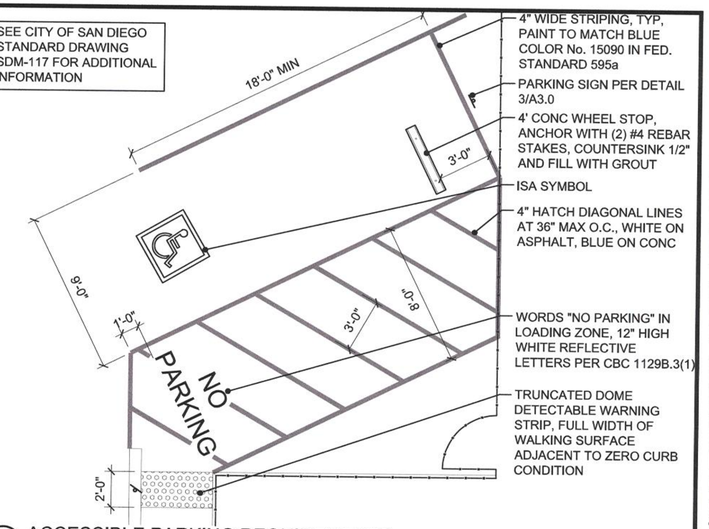
SCALE: 1/2"=1'-0"



5 CONCRETE WHEELSTOP

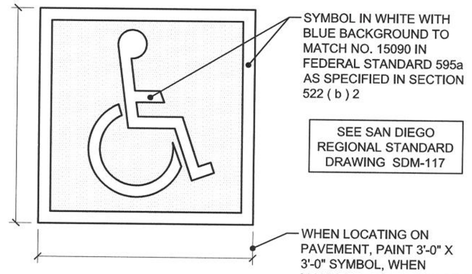
SCALE: 1-1/2"=1'-0"

SEE CITY OF SAN DIEGO STANDARD DRAWING SDM-117 FOR ADDITIONAL INFORMATION



1 ACCESSIBLE PARKING REQUIREMENTS

SCALE: 1/4"=1'-0"



2 INTERNATIONAL SYMBOL OF ACCESSIBILITY

SCALE: 1"=1'-0"

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

A3.0

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

SITE DETAILS AND FINISH SCHEDULE

CITY OF SAN DIEGO, CALIFORNIA
SHEET 15 OF 25 SHEETS

W.B.S. B-00944

APPROVED: _____ FOR CITY ENGINEER — DATE 12/20/12

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
A 'A' CHANGE	MOA		12/11/2012	

CCS27 COORDINATE

CCS83 COORDINATE

AS-BUILTS

CONTRACTOR — DATE STARTED

INSPECTOR — DATE COMPLETED

35608-15-D

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.
'A' CHANGE	12/11/12	35608-4-D,35608-5-D,35608-9-D, 35608-10-D,35608-14-D 35608-15-D	

CONSULTANT

MOA
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ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.oncinaarc.com

SCALE — HORIZONTAL NO SCALE — VERTICAL NO SCALE

LICENCED ARCHITECT — No. 13996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • SEMPER VIGILANS

City of San Diego

CITY CONTACT: CLEMENTINA GIORDANO - Contract Specialist, Email: cgiordano@sandiego.gov
Phone: (619) 533-3481, Fax: (619) 533-3633

ADDENDUM "B"

FOR

ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)

BID NO.:	**L-13-5263-DBB-1**
SAP NO. (WBS/IO/CC):	**B-00944**
CLIENT DEPARTMENT:	**2113**
COUNCIL DISTRICT:	**3**
PROJECT TYPE:	**BT**

BID DUE DATE:

1:30 PM
JANUARY 15, 2013
CITY OF SAN DIEGO
PUBLIC WORKS DEPARTMENT
1010 SECOND AVENUE, SUITE 1400, MS 614C
SAN DIEGO, CA 92101

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

B. QUESTIONS

Q1. The new ADA side walk to the street (page 0.0 site plan 2) out front ends into to an entrance apron for cars to drive into the parking lot will this be allowed to happen?

A1. New walk transition to city sidewalk shall be flat/level (1.5% max). If there is a conflict with the driveway apron, the transition shall be shifted south as necessary to accommodate a flat/level transition.

Q2. The elevations shown on (page 0.0 site plan 2) at the new entry slab and stairs. There is not enough elevation shown at the present time to pour 2 new 6" steps as shown on the plans. Would we be allowed to have one 7" step here so that we can create drainage away from the front door of the building, so water doesn't set up next to the building footing like it does now. With the elevations shown on the plan now the new entry slab would be basically flat.

A2. 2 new steps can be poured, equal riser height, down to minimum of 4" riser height to accomplish positive drainage.

Q3. Replacement of bathroom floors after underground plumbing has been completed. Should the concrete that was removed be replaced with a mortar base bed for ceramic or concrete.

A3. Depress new concrete slab 2" below finish floor, dowel into existing, and provide porcelain tile per specification over mortar be per TCA METHOD F111.

Q4. Is the grout for the new ceramic walls and floors in the bathrooms standard or epoxy.

A4. Standard Grout.

Q5. Will there be parking area for the workers and their trucks during construction at this location?

A5. No.

Q6. There is nowhere on the plans for work on fire sprinklers, fire alarm systems. Will there be any required work any of these?

A6. No.

Q7. Will we need to build a temporary walk way to the front of the building during the demo and repour of the new sidewalks and entry slab?

A7. Yes. Maintain access to the building at all times during construction.

Q8. Will we have a lay down area for us to use to store any equipment or storage boxes?

A8. No. See "The White Book", the City Standard Specifications for Public Works Construction, 2010 edition, page 107, section 7-10.9.2

Q9. Will we be allowed to remove a small portion of fencing in the open back yard area so we can get bobcats in for demo?

A9. Yes. The contractor shall reinstall the fence at the end of each work day and secure the facility.

Q10. Will we be allowed to demo everything at one time inside and out, or will you require us to phase this work and how many phases will you require?

A10. The demolition work shall be done in phases. It is anticipated that at least four demolition phases will be required.

Q11. Will we be allowed to drive the concrete trucks and pumper trucks in to the parking lot for the re-pour of concrete and patching of asphalt work, or will we need traffic control and permits to park out in the street and pump the concrete in from there.

A11. The contractor shall prepare traffic control plans and obtain all required permits for the work.

Q12. It shows in the survey in the back of the spec book that there is lead and asbestos in existing building materials in this building. Will cost of the abatement of these materials be included in our pricing, or will this work be done and the cost be paid by the city of San Diego?

A12. The lead and asbestos abatement will be performed by the City's asbestos and lead abatement contractor.

Q13. I know that there is a bid bond for this job. Will we need to supply a Performance, material, labor, Bond for this job as well?

A13. A bid bond is not required. Performance and labor and materialmen's bonds are required.

Q14. Will we need to submit certified payroll weekly for this, job is non-prevailing wage?

A14. No.

Q15. Doors, I need a clarification on the hardware. On the floor plan, doors 201 & 202 have note 9 assigned to them, "no latch". On the hardware schedule, hardware set 04 calls for a mortise lock. Which is correct?

A15. Restroom doors shall have no latch.

Q16. Solarium work, are we upgrading to insulating glass throughout the entire system as per the sunroom details page A3.2 Detail 4, 5.?

A16. Replace glazing at the improved/replaced section(s) only.

Q17. Solarium work, Does the “canopy” filler entail removal of all existing bent glazing across entire sunroom elevation or are the filler panel returns only at the door and sidelight jambs where they extend beyond the radius transition panel?

A17. Replace glazing only at areas of improvement, at sections removed to accommodate new doors and sidelites.

Q18. The plans call for leaded joints on the waste lines. Can ABS be substituted?

A18. No reference to use leaded joints on the plans.

Q19. Parking Access-The parking lot appears to belong to the adjacent building will the city be the liaison for their inconvenience?

A19. Parking in the private parking lots is not allowed.

Q20. Will the city allow for delays in scheduling due to the surrounding businesses?

A20. No.

Q21. On the re-surfacing and striping of parking lot are you going to do the common area and adjacent building also? It’s not defined in plan.

A21. No. Only the area adjacent to the adult center

Q22. It is possible to put a port-a-pottie in place of the bathrooms in case of waste line problems? Could it be placed inside the back fenced in court yard for the patrons and work crews and security?

A22. Yes.

Q23. Are all the lines in the slab designated or do they have to be located? Can they be relocated in the wall?

A23. The exact location of the pipes below slab are not known. The location of the plumbing fixtures have been re-arranged to comply with ADA requirements, which is the main intent of the project. The slab shall be exposed to remove the existing pipes and install the new pipes.

Q24. What, if any plans (as-built) exist for the sub-floor, electric and plumbing-including later modifications within the existing bldg., overhead, main or underground conversions of electrical and telephone, etc. Are there any plans for common lines in the alley or north of existing buildings.

A24. No as-built plans or record drawings are known to exist.

Q25. The recessed can lights in the bathrooms do not meet Title 24. Are these to be considered?

A25. The recessed lights would not be considered for Title 24.

Q26. Does the height of the cabinets include the toe kick?

A26. Height of cabinets includes the toe kick.

Q27. Are the toe kicks suppose to be ADA height?

A27. Toe kick is not regulated by ADA.

Q28. Is the stove suppose to be ADA compatible for a wheelchair, like the sink area too?

A28. Provide stove as shown on the drawings.

Q29. In the Invitation to Bid, page 8, item 10., it states that prevailing wage is not applicable to this project. Is there Funding Agency Provisions included in this bid package or an explanation on why prevailing wage is not applicable? In the Instructions to Bidders, page 17, item 23., it states that the Labor Compliance Program applies to this project. Under this program, would prevailing wage apply to the project? How does this project not be subject to labor codes 1770-1781?

A29. This project is not subject to prevailing wages; it is not state or federally funded.

Q30. In Spec section 055000 Metal Fabrications, item 2.04 Fabricated Items, A, B, C, and D. Is there any drawings for these items?

A30. These items are indicated on the construction Plans.

Q31. In Spec section 130541 Seismic Restraint Requirements for Non-Structural Components, item 1.6, B. Exceptions, 1., 2., 3., 4. Is there any situations that occur in this project that does not fall under these Exceptions? If so, can it be described where and how it occurs, so it can be quantified?

A31. No conditions are known that apply but the determination will be made during items submittals review.

Tony Heinrichs, Director
Public Works Department

Dated: *December 31, 2012*
San Diego, California

TH/NB/egz

City of San Diego

CITY CONTACT: CLEMENTINA GIORDANO - Contract Specialist, Email: cgiordano@sandiego.gov
Phone: (619) 533-3481, Fax: (619) 533-3633

ADDENDUM "C"

FOR

ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)

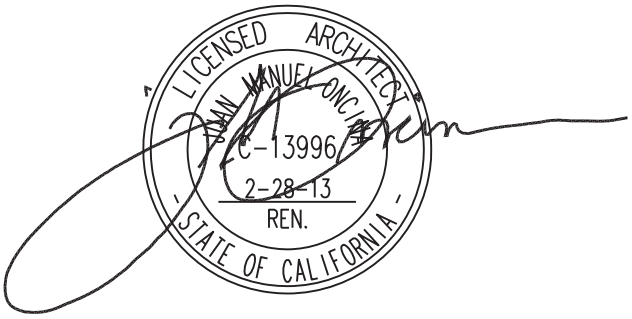
BID NO.:	**L-13-5263-DBB-1**
SAP NO. (WBS/IO/CC):	**B-00944**
CLIENT DEPARTMENT:	**2113**
COUNCIL DISTRICT:	**3**
PROJECT TYPE:	**BT**

BID DUE DATE:

1:30 PM
JANUARY 15, 2013
CITY OF SAN DIEGO
PUBLIC WORKS DEPARTMENT
1010 SECOND AVENUE, SUITE 1400, MS 614C
SAN DIEGO, CA 92101

ENGINEER OF WORK

Pursuant to California Business and Professions Code Section 6735, the Plans, Specifications, and Special Provisions contained herein have been prepared by or under the direction of the following Registered Architect:



J. Manuel Oncina, Architect	1/7/2013	
Registered Architect	Date	Seal

APPROVED FOR CONSTRUCTION

Pursuant to Government Code Section 830.6, the Plans, Specifications, and Special Provisions contained herein are approved for construction:

For City Engineer	Date	Seal

A. CHANGES TO CONTRACT DOCUMENTS

The following changes to the Contract Documents are hereby made effective as though originally issued with the bid package. Bidders are reminded that all previous requirements to this solicitation remain in full force and effect.

B. CLARIFICATIONS

1. To the Plans and Specifications, all references to the Resident Engineer shall be interpreted as the Engineer.

C. ADDENDUM A

1. To Drawing number 35608-4-D (G-4), DELETE the following notes under **GENERAL REQUIREMENTS**:

   4, 6, 7, 10, 11, 13, 14

2. To Drawing number 35608-4-D (G-4), DELETE the following notes under **CONTRACTOR RESPONSIBILITIES**:

   1 through 5 and 7 through 12

D. VOLUME 1

1. To the Whitebook, Section 2-5.1 General, ADD the following:

   Drawings shall not be scaled for construction purposes.

Tony Heinrichs, Director
Public Works Department

Dated: *January 7, 2013*
San Diego, California

TH/NB/egz

1/18/13 CW

City of San Diego

CONTRACTOR'S NAME: HANDY INDUSTRIAL
ADDRESS: 3414 WACO STREET, UNIT 1, SAN DIEGO, CA 92117
TELEPHONE NO.: 858 703-7088 FAX NO.: 619 228-9602
CITY CONTACT: CLEMENTINA GIORDANO, Contract Specialist; Email: cgiordano@sandiego.gov
Phone: 619-533-3481; Fax: (619) 533-3633
S.Haghkhah/NB/egz

CONTRACT DOCUMENTS FOR

ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)

VOLUME 2 OF 2

BID NO.:	**L-13-5263-DBB-1**
SAP NO. (WBS/IO/CC):	**B-00944**
CLIENT DEPARTMENT:	**2113**
COUNCIL DISTRICT:	**3**
PROJECT TYPE:	**BT**

THIS CONTRACT IS SUBJECT TO THE FOLLOWING:

- THE CITY'S SUBCONTRACTING PARTICIPATION REQUIREMENTS FOR SLBE PROGRAM.
- COMPETITION RESTRICTED TO: **ELBE FIRMS ONLY.**

THIS BIDDING DOCUMENT TO BE SUBMITTED IN ITS ENTIRETY
REFER TO VOLUME1 COVER PAGE FOR TIME, DATE, AND LOCATION

TABLE OF CONTENTS

Volume 2 - Bidding Documents

The following forms must be completed in their entirety and submitted with the Bid. Failure to include any of the forms may cause the Bid to be deemed non-responsive.

PROPOSAL

Bidder's General Information

To the City of San Diego:

Pursuant to "Invitation to Bids", specifications, and requirements on file with the City Clerk, and subject to all provisions of the Charter and Ordinances of the City of San Diego and applicable laws and regulations of the United States and the State of California, the undersigned hereby proposes to furnish to the City of San Diego, complete at the prices stated herein, the items or services hereinafter mentioned. The undersigned further warrants that this bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

The undersigned bidder(s) further warrants that bidder(s) has thoroughly examined and understands the entire Contract Documents (plans and specifications) and the Bidding Documents therefore, and that by submitting said Bidding Documents as its bid proposal, bidder(s) acknowledges and is bound by the entire Contract Documents, including any addenda issued thereto, as such Contract Documents incorporated by reference in the Bidding Documents.

IF A SOLE OWNER OR SOLE CONTRACTOR SIGN HERE:

(1) Name under which business is conducted HANDY INDUSTRIAL

(2) Signature (Given and surname) of proprietor _____

(3) Place of Business (Street & Number) 3414 WACO STREET UNIT 1

(4) City and State SAN DIEGO, CA Zip Code 92117

(5) Telephone No. 858 703-7088 Facsimile No. 619 228-9602

IF A PARTNERSHIP, SIGN HERE:

(1) Name under which business is conducted N/A

(2) Name of each member of partnership [indicate character of each partner, general or special (limited):

N/A

(3) Signature (Note: Signature must be made by a general partner)

N/A

Full Name and Character of partner
N/A

(4) Place of Business (Street & Number) N/A
(5) City and State N/A Zip Code N/A
(6) Telephone No. N/A Facsimile No. N/A

IF A CORPORATION, SIGN HERE:

(1) Name under which business is conducted N/A

(2) Signature, with official title of officer authorized to sign for the corporation:

N/A
(Signature)

N/A
(Printed Name)

N/A
(Title of Officer)

(Impress Corporate Seal Here)

(3) Incorporated under the laws of the State of N/A
(4) Place of Business (Street & Number) N/A
(5) City and State N/A Zip Code N/A
(6) Telephone No. N/A Facsimile No. N/A

THE FOLLOWING SECTIONS MUST BE FILLED IN BY ALL PROPOSERS:

In accordance with the "**INVITATION TO BIDS**", the bidder holds a California State Contractor's license for the following classification(s) to perform the work described in these specifications:

LICENSE CLASSIFICATION 940082

LICENSE NO. B EXPIRES 11/30, 2013

This license classification must also be shown on the front of the bid envelope. Failure to show license classification on the bid envelope may cause return of the bid unopened.

TAX IDENTIFICATION NUMBER (TIN): [redacted]

E-Mail Address: HANDYINDUSTRIAL@YAHOO.COM

THIS PROPOSAL MUST BE NOTARIZED BELOW:

I certify, under penalty of perjury, that the representations made herein regarding my State Contractor's license number, classification and expiration date are true and correct.

Signature _____ Title OWNER

SUBSCRIBED AND SWORN TO BEFORE ME, THIS 15th DAY OF JAN, 2013.

Notary Public in and for the County of SAN DIEGO, State of CALIFORNIA

_____

(NOTARIAL SEAL)

NRO1 A. K. MARVIN
COMM. #1857421
Notary Public - California
San Diego County
My Comm. Expires Jul. 11, 2013 NRO1

NON-COLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID UNDER 23 USC 112 AND PCC 7106

State of California)
) ss.
County of SAN DIEGO)

WAHEAD WILLIAM RAZ, being first duly sworn, deposes and says that he or she is THE OWNER of the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Signed: _____

Title: OWNER

Subscribed and sworn to before me this 15th day of JAN, 2013

_____
Notary Public

A. K. MARVIN
COMM. #1857421
Notary Public - California
San Diego County
My Comm. Expires Jul. 11, 2013

(SEAL)

CONTRACTORS CERTIFICATION OF PENDING ACTIONS

As part of its bid or proposal (Non-Price Proposal in the case of Design-Build contracts), the Bidder shall provide to the City a list of all instances within the past ten years where a complaint was filed or pending against the Bidder in a legal or administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.

CHECK ONE BOX ONLY.

☒ The undersigned certifies that within the past 10 years the Bidder has NOT been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers.

☐ The undersigned certifies that within the past ten years the Bidder has been the subject of a complaint or pending action in a legal administrative proceeding alleging that Bidder discriminated against its employees, subcontractors, vendors or suppliers. A description of the status or resolution of that complaint, including any remedial action taken and the applicable dates is as follows:

N/A

Contractor Name: HANDY INDUSTRIAL

Certified By WAHEAD WILLIAM RAZ Title OWNER

Name

Signature Date 1/3/2013

USE ADDITIONAL FORMS AS NECESSARY

EQUAL BENEFITS ORDINANCE CERTIFICATION OF COMPLIANCE

For additional information, contact:
CITY OF SAN DIEGO
EQUAL BENEFITS PROGRAM
202 C Street, MS 9A, San Diego, CA 92101
Phone (619) 533-3948 Fax (619) 533-3220

COMPANY INFORMATION

Company Name: HANDY INDUSTRIAL	Contact Name: WAHEAD WILLIAM RAZ
Company Address: 3414 WACO STREET, UNIT 1 SAN DIEGO, CA 92117	Contact Phone: 858 703-7088 Contact Email: HANDYINDUSTRIAL@YAHOO.COM

CONTRACT INFORMATION

Contract Title: ADULT CENTER EAST SAN DIEGO ACCESS UPGRADE (BARRIER REMOVAL)	Start Date: 03/03/2013 - ESTIMATE
Contract Number (if no number, state location): L-13-5263-DBB-1	End Date: 07/15/2013 - ESTIMATE

SUMMARY OF EQUAL BENEFITS ORDINANCE REQUIREMENTS

The Equal Benefits Ordinance [EBO] requires the City to enter into contracts only with contractors who certify they will provide and maintain equal benefits as defined in SDMC §22.4302 for the duration of the contract. To comply:

- Contractor shall offer equal benefits to employees with spouses and employees with domestic partners.
  - Benefits include health, dental, vision insurance; pension/401(k) plans; bereavement, family, parental leave; discounts, child care; travel/relocation expenses; employee assistance programs; credit union membership; or any other benefit.
  - Any benefit not offer an employee with a spouse, is not required to be offered to an employee with a domestic partner.
- Contractor shall post notice of firm's equal benefits policy in the workplace and notify employees at time of hire and during open enrollment periods.
- Contractor shall allow City access to records, when requested, to confirm compliance with EBO requirements.
- Contractor shall submit *EBO Certification of Compliance*, signed under penalty of perjury, prior to award of contract.

NOTE: This summary is provided for convenience. Full text of the EBO and Rules Implementing the EBO are available at *www.sandiego.gov/administration*.

CONTRACTOR EQUAL BENEFITS ORDINANCE CERTIFICATION

Please indicate your firm's compliance status with the EBO. The City may request supporting documentation.

☒ I affirm **compliance** with the EBO because my firm *(contractor must select one reason):*

- ☒ Provides equal benefits to spouses and domestic partners.
- ☐ Provides no benefits to spouses or domestic partners.
- ☐ Has no employees.
- ☐ Has collective bargaining agreement(s) in place prior to January 1, 2011, that has not been renewed or expired.

☐ I request the City's approval to pay affected employees a cash equivalent in lieu of equal benefits and verify my firm made a reasonable effort but is not able to provide equal benefits upon contract award. I agree to notify employees of the availability of a cash equivalent for benefits available to spouses but not domestic partners and to continue to make every reasonable effort to extend all available benefits to domestic partners.

It is unlawful for any contractor to knowingly submit any false information to the City regarding equal benefits or cash equivalent associated with the execution, award, amendment, or administration of any contract. [San Diego Municipal Code §22.4307(a)] Under penalty of perjury under laws of the State of California, I certify the above information is true and correct. I further certify that my firm understands the requirements of the Equal Benefits Ordinance and will provide and maintain equal benefits for the duration of the contract or pay a cash equivalent if authorized by the City.

WAHEAD WILLIAM RAZ / OWNER
Name/Title of Signatory

Signature

FOR OFFICIAL CITY USE ONLY

Receipt Date: EBO Analyst: ☐ Approved ☐ Not Approved – Reason:

rev 02/15/2011

PROPOSAL (BID)

The Bidder agrees to the construction of **ADULT CENTER EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)**, for the city of San Diego, in accordance with these contract documents for the prices listed below. The Bidder guarantees the Contract Price for a period of 120 days (90 days for federally funded contracts and contracts valued at $500,000 or less) from the date of Bid opening to Award of the Contract. The duration of the Contract Price guarantee shall be extended by the number of days required for the City to obtain all items necessary to fulfill all conditions precedent e.g., bond and insurance.

Item	Quantity	Unit	Payment Reference	NAICS	Description	Unit Price	Extension
1.	1	LS	2-4.1	238160	Bonds (Payment and Performance)		$5,000.00
2.	1	AL	7-5	238160	Permit Fees-Type I Allowance		$3,000.00
3.	1	LS	9-3.1	238160	Field Construction		$144,500.00
4	1	AL	9-3.5	238160	Field Orders – Type II Allowance		$11,000
5.	1	LS	801-9.4	541330	Water Pollution Control Program Development		$2500.00
6.	1	LS	801-9.4	237990	Water Pollution Control Program Implementation		$5000.00
						ESTIMATED TOTAL BID:	$171,000.00

TOTAL BID PRICE FOR BID (Items 1 through 6 inclusive) amount written in words:

One hundred and seventy one thousand dollars

The Bid shall contain an acknowledgment of receipt of all addenda, the numbers of which shall be filled in on the Bid form. If an addendum or addenda has been issued by the City and not noted as being received by the Bidder, this proposal shall be rejected as being **non-responsive**. The following addenda have been received and are acknowledged in this bid: A, B, C.

The names of all persons interested in the foregoing proposal as principals are as follows:

WAHEAD WILLIAM RAZ

BIDDING DOCUMENTS

IMPORTANT NOTICE: If Bidder or other interested person is a corporation, state secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if Bidder or other interested person is an individual, state first and last names in full.

Bidder: WAHEAD WILLIAM RAZ

Title: OWNER

Business Address: 3414 WACO STREET, UNIT 1, SAN DIEGO, CA 92117

Place of Business: 3414 WACO STREET, UNIT 1, SAN DIEGO, CA 92117

Place of Residence: SAME AS ABOVE

Signature:

NOTES:

A. The City shall determine the low Bid based on the Base Bid alone.

B. Prices and notations shall be in ink or typewritten. All corrections (which have been initiated by the Bidder using erasures, strike out, line out, or "white-out") shall be typed or written in with ink adjacent thereto, and shall be initialed in ink by the person signing the bid proposal.

C. Failure to initial all corrections made in the bidding documents shall cause the Bid to be rejected as **non-responsive** and ineligible for further consideration.

D. Blank spaces must be filled in, using figures. Bidder's failure to submit a price for any Bid item that requires the Bidder to submit a price shall render the Bid **non-responsive** and shall be cause for its rejection.

E. Unit prices shall be entered for all unit price items. Unit prices shall not exceed two (2) decimal places. If the Unit prices entered exceed two (2) decimal places, the City will only use the first two digits after the decimal points without rounding up or down.

F. All extensions of the unit prices bid will be subject to verification by the City. In the case of inconsistency or conflict between the product of the Quantity x Unit Price and the Extension, the product shall govern.

G. In the case of inconsistency or conflict, between the sums of the Extensions with the estimated total Bid, the sum of the Extensions shall govern.

H. Bids shall not contain any recapitulation of the Work. Conditional Bids will be rejected as being **non-responsive**. Alternative proposals will not be considered unless called for.

LIST OF SUBCONTRACTORS

In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act", Division 2, Part 1, Chapter 4 of the Public Contract Code, the Bidder shall list below the name and address of each Subcontractor who will perform work, labor, render services or specially fabricates and installs a portion [type] of the work or improvement, in an amount in excess of 0.5% of the Contractor's total Bid. The Bidder shall also list below the portion of the work which will be done by each subcontractor under this Contract. The Contractor shall list only one Subcontractor for each portion of the Work. The **DOLLAR VALUE** of the total Bid to be performed shall be stated for all subcontractors listed. Failure to comply with this requirement shall result in the Bid being rejected as non-responsive and ineligible for award. The Bidder's attention is directed to the Special Provisions - General; Paragraph 2-3 Subcontracts, which stipulates the percent of the Work to be performed with the Bidders' own forces. The Bidder shall list all SLBE, ELBE, DBE, DVBE, MBE, WBE, OBE, SDB, WoSB, HUBZone, and SDVOSB Subcontractors that Bidders are seeking recognition towards achieving any mandatory, voluntary, or both subcontracting participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF SUBCONTRACTOR	CONSTRUCTOR OR DESIGNER	TYPE OF WORK	DOLLAR VALUE OF SUBCONTRACT	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED ②	CHECK IF JOINT VENTURE PARTNERSHIP
Name: SIGGES Address: 12512 HIGHWAY 67 City: LAKESIDE State: CA Zip: 92040 Phone: 619 390-7323	SUB-CONTRACTOR	CONCRETE/ ASPHALT	50,000.00			N/A
Name: Address: City: State: Zip: Phone:						
Name: Address: City: State: Zip: Phone:						

① As appropriate, Bidder shall identify Subcontractor as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Bidder shall indicate if Subcontractor is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification (except for OBE, SLBE and ELBE).

NAMED EQUIPMENT/MATERIAL SUPPLIER LIST

The Bidder seeking the recognition of equipment, materials, or supplies obtained from Suppliers towards achieving any mandatory, voluntary, or both subcontracting participation percentages shall submit with the Bid the Named Equipment/Material Supplier List. The Named Equipment/Material Supplier List, at a minimum, shall have the name, locations (City) and the **DOLLAR VALUE** of the Suppliers. The Bidder will be credited up to 60% of the amount to be paid to the Suppliers for such materials and supplies unless vendor manufactures or substantially alters materials and supplies in which case 100% will be credited. The Bidder is to indicate (Yes/No) whether listed firm is a supplier or manufacturer. In calculating the subcontractor participation percentages, vendors/suppliers will receive 60% credit of the listed **DOLLAR VALUE**, whereas manufacturers will receive 100% credit. If no indication provided, listed firm will be credited at 60% of the listed dollar value for purposes of calculating the Subcontractor Participation Percentage, Suppliers will receive 60% credit of the listed **DOLLAR VALUE**, whereas manufacturers will receive 100% credit. If no indication provided, listed firm will be credited at 60% of the listed **DOLLAR VALUE** for purposes of calculating the subcontractor participation percentages.

NAME, ADDRESS AND TELEPHONE NUMBER OF VENDOR/SUPPLIER	MATERIALS OR SUPPLIES	DOLLAR VALUE OF MATERIAL OR SUPPLIES	SUPPLIER (Yes/No)	MANUFACTURER (Yes/No)	MBE, WBE, DBE, DVBE, OBE, ELBE, SLBE, SDB, WoSB, HUBZone, OR SDVOSB①	WHERE CERTIFIED ②
Name: FERGUSON PLUMBING Address: 4699 MERCURY STREET City: SAN DIEGO State: CA Zip: 92111 Phone: 858 974-5100	ROUGH IN PLUMBING	30,000.00	YES	NO	N/A	N/A
Name: HOME DEPOT Address: 3555 SPORTS ARENA BLVD City: SAN DIEGO State: CA Zip: 92110 Phone: 619 224-9200	MATERIALS/ PLYWOOD LUMBER	25,000.00	YES	NO	N/A	N/A
Name: DIXIELINE Address: 4888 CONVOR STREET City: SAN DIEGO State: CA Zip: 92111 Phone: 858 279-5010	DRYWALL/ MATERIALS	25,000.00	YES	NO	N/A	N/A

① As appropriate, Bidder shall identify Vendor/Supplier as one of the following and shall include a valid proof of certification (except for OBE, SLBE and ELBE):

Certified Minority Business Enterprise	MBE	Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE	Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE	Certified Emerging Local Business Enterprise	ELBE
Certified Small Local Business Enterprise	SLBE	Small Disadvantaged Business	SDB
Woman-Owned Small Business	WoSB	HUBZone Business	HUBZone
Service-Disabled Veteran Owned Small Business	SDVOSB		

② As appropriate, Bidder shall indicate if Vendor/Supplier is certified by:

City of San Diego	CITY	State of California Department of Transportation	CALTRANS
California Public Utilities Commission	CPUC	San Diego Regional Minority Supplier Diversity Council	SRMSDC
State of California's Department of General Services	CADoGS	City of Los Angeles	LA
State of California	CA	U.S. Small Business Administration	SBA

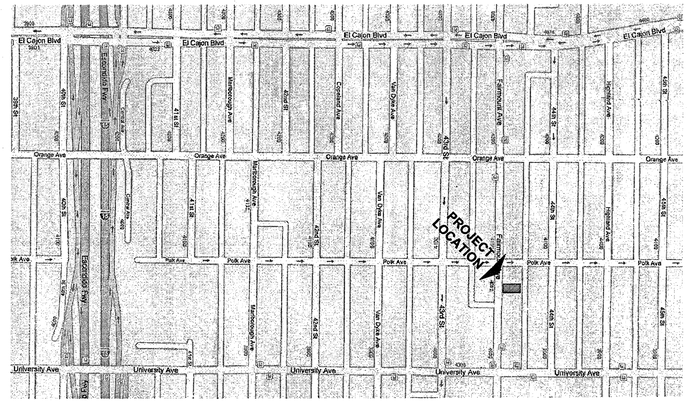
The Bidder will not receive any subcontracting participation percentages if the Bidder fails to submit the required proof of certification (except for OBE, SLBE and ELBE).

ADULT CENTER - EAST SAN DIEGO ACCESS UPGRADES (BARRIER REMOVAL)

MAY 2011

VICINITY MAP
NOT TO SCALE

NORTH



KEY MAP
NOT TO SCALE

NORTH

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

G-1

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

COVER SHEET

CITY OF SAN DIEGO, CALIFORNIA
SHEET 1 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR ____ DATE STARTED ____

INSPECTOR ____ DATE COMPLETED ____

35608- 1 -D

APPROVED BY: FOR CITY ENGINEER
CHECKED BY: CONSTRUCTION ENGINEER
CHECKED BY: INSPECTOR

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4956 FX
www.oncinaarc.com

SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

LICENSED ARCHITECT — MANUEL ONCINA — C-13996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • INCORPORATED JULY 27, 1850

EAST SAN DIEGO ADULT RECREATION CENTER - ACCESS UPGRADES (ADA BARRIER REMOVAL)

CITY OF SAN DIEGO, CALIFORNIA

FIRE RESISTANCE DATA

BASED ON CBC TABLE 601:	BUILDING TYPE V-B
STRUCTURAL FRAME:	0 HOUR
BEARING WALLS (INT & EXT):	0 HOUR
NONBEARING WALLS - EXT:	0 HOUR
NONBEARING WALLS - INT:	0 HOUR
FLOOR CONSTRUCTION:	0 HOUR
ROOF CONSTRUCTION:	0 HOUR

BASED ON CBC TABLE 602:	FIRE RESISTANCE RATING REQ'S FOR EXT WALLS BASED ON FIRE SEPARATION DISTANCE
X < 5 FT:	1 HOUR
5 FT - 10 FT:	1 HOUR
10 FT - 30 FT:	0 HOUR
X > 30FT:	0 HOUR

ARCHITECTURAL SYMBOLS

- GRID LINE
- DETAIL CALL OUT
- SECTION CALL OUT
- ELEVATION
  - T.O: TOP OF
  - B.O: BOTTOM OF
  - F.F: FINISH FLOOR
- ROOM NUMBER
- KEYNOTE
- SLOPE TO DRAIN
- HOSE BIB
- DOOR NUMBER
- WINDOW NUMBER
- WALL TYPE

ABBREVIATIONS

ADA: Americans with Disabilities Act of 1992
AFF: Above Finished Floor
ALUM: Aluminum
ARCH: Architectural
ASTM: American Society for Testing and Materials

B.O.: Bottom OF
BD: Board

CONC: Concrete
CONT: Continuous
CY: Cubic Yard

D: Deep
DF: Douglas Fir
DIA: Diameter
DIM: Dimension
DN: Down
DS: Downspout

(E): Existing
EQ: Equal

FAR: Floor Area Ratio
FD: Floor drain
FF: Finished Floor
FT: Foot, Feet

GA: Gauge
GALV: Galvanized
GFCI: Ground Fault Circuit Interrupted
GFI: Ground Fault Interrupted
GYP BD: Gypsum Board

HB: Hose Bib
HR: Hour

ID: Inside Diameter
IN: Inch

LB: Pound (weight)

MAX: Maximum
MIN: Minimum

NIC: Not In Contract
NTS: Not To Scale

OC: On Center
OD: Outside Diameter

PTD: Painted

R: Radius
RCP: Reflected Ceiling Plan

SCHED: Schedule
SF: Square Foot
SQ: Square
SS: Stainless Steel
STL: Steel

T&G: Tongue & Groove
T.O.: Top of
TYP: Typical

UL: Underwriters' Laboratories
UON: Unless Otherwise Noted

VIF: Verify In the Field

WD: Wood
WH: Water Heater

SCOPE OF WORK

PROPOSED WORK INCLUDES FOCUSED DEMOLITION AND REMODEL FOR VOLUNTARY ACCESS UPGRADES (ADA BARRIER REMOVAL).

- REMOVE EXISTING EXTERIOR STAIR, CONC ENTRY SLAB AND RAMP ON WEST SIDE OF BUILDING, CONSTRUCT NEW.
- RESURFACE AND RESTRIPE PARKING AREA TO ACCOMMODATE ACCESSIBLE SPACE AND ACCESSIBLE PATH OF TRAVEL TO STREET SIDE ENTRY.
- REMOVE PORTION OF FENCE AND CONCRETE PATIO ON NORTH SIDE OF BUILDING, CONSTRUCT NEW WALK AND FENCE.
- REMOVE PORTION OF CONCRETE WALK AND STAIR, CONSTRUCT NEW SLOPED WALK TO ENTRY. ADD NEW COMPLIANT HANDRAILS TO STAIR FACING STREET.
- REMOVE PORTION OF SOLARIUM WITH NON-COMPLIANT DOORS AND REPLACE WITH NEW SOLARIUM COMPONENTS AND COMPLIANT DOOR AND HARDWARE.
- REMOVE ALL BATHROOM FIXTURE; RELOCATE TO COMPLIANT LOCATIONS WITH NEW PARTITIONS AND PLUMBING, NEW BATHROOM FINISHES.
- REMOVE ALL KITCHEN CABINETRY, REPLACE WITH NEW CABINETS AT COMPLIANT HEIGHT AND COMPLIANT SINK FIXTURE.
- REMOVE DRINKING FOUNTAIN, REPLACE WITH HI-LOW FIXTURE AND RAILING WING WALLS.

BUILDING DATA

OCCUPANCY:	B
CONSTRUCTION TYPE:	V-B
NO. OF STORIES:	1
BUILDING HEIGHT:	EXISTING, APPROX 14'-0"
ALLOWABLE AREA:	9,000 SF
SPRINKLERED:	NO
GOVERNING CODES:	2007 CALIFORNIA BUILDING CODE 2007 CALIFORNIA ELECTRICAL CODE 2007 CALIFORNIA MECHANICAL CODE 2007 CALIFORNIA PLUMBING CODE 2007 CALIFORNIA ENERGY CODE 2007 CALIFORNIA FIRE CODE AMERICANS WITH DISABILITIES ACT (ADA) ADA ACCESSIBILITY GUIDELINES (ADAAG)

PROJECT DATA

APN:	471-461-23-00
SITE ADDRESS:	4077 FAIRMOUNT AVENUE SAN DIEGO, CA 92105
LEGAL DESCRIPTION:	LOT 8, ALL OF LOTS 5 THROUGH 7, AND NORTH HALF OF BLOCK 1.
ZONING:	CUPD-CU-2-3
SITE AREA:	10,948 SF (0.25 ACRE)
PROPOSED F.A.R:	0.29, NO CHANGE PROPOSED
BUILDING COVERAGE: PROPOSED:	3,180 +/- GSF, NO CHANGE PROPOSED
LANDSCAPE AREA:	933 SF
SETBACKS:	
FRONT (STREET):	0' MIN / 10' MAX
SIDE YARD:	10' MIN / OPTIONAL 0'
REAR YARD:	10' MIN / OPTIONAL 0'
REQ'D BUILDING SEPARATION:	N/A
PARKING PROVIDED:	EXISTING 5 TOTAL SPACES / 0 ACCESSIBLE PROPOSED 4 TOTAL SPACES / 1 ACCESSIBLE

SHEET INDEX

OWNER/APPLICANT

OWNER:
CITY OF SAN DIEGO
ENGINEERING AND CAPITAL PROJECTS DEPARTMENT
ATTN: SIAVASH HAGHKHAH
600 B. STREET, SUITE 800
SAN DIEGO, CA 92101

PROJECT TEAM

ARCHITECT:
MANUEL ONCINA ARCHITECTS, INC.
514 PENNSYLVANIA AVENUE
SAN DIEGO, CA 92103
T. (619) 295-4900
F. (619) 295-4955
CONTACT: PATRICK BANNING
PBANNING@ONCINAARC.COM

MECHANICAL ENGINEER:
TEZA DESIGN
233 A STREET, SUITE 1103
SAN DIEGO, CA 92101
T. (619) 955-6834
T. (619) 209-7798
CONTACT: SIMON GIRMAI
SIMON@TEZA-DESIGN.COM

ELECTRICAL ENGINEER:
TURPIN & RATTAN ENGINEERING, INC.
4719 PALM AVENUE
LA MESA, CA 91941
T. (619) 466-6224
F. (619) 466-6233
CONTACT: KARL PORTS
KARL@TREISD.COM

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

G-2

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

PROJECT DATA

CITY OF SAN DIEGO, CALIFORNIA
SHEET 2 OF 25 SHEETS

W.B.S. B-00944

APPROVED: _____ FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

CCS27 COORDINATE

CCS83 COORDINATE

AS-BUILTS

CONTRACTOR _____ DATE STARTED _____

INSPECTOR _____ DATE COMPLETED _____

35608- 2 -D

APPROVED BY: _____ FOR CITY ENGINEER

CHECKED BY: _____ CONSTRUCTION ENGINEER

CHECKED BY: _____ INSPECTOR

WARNING 0 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MOA
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REGISTERED ARCHITECT MANUEL ONCINA No. C-13996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

DISABLED ACCESS REGULATIONS

GENERAL ACCESSIBILITY REQUIREMENTS:

THE FOLLOWING ARE ONLY SELECT REQUIREMENTS FROM THE 2010 CALIFORNIA BUILDING CODE (2010 CBC). REFER TO ARCHITECTURAL DRAWINGS, SPECIFICATIONS AND 2010 CBC FOR ADDITIONAL ACCESSIBLITY REQUIRMENTS.

ACCESSIBLE: IS DEFINED AS APPROACHABLE AND USABLE BY PERSONS WITH DISABILITIES IN COMPLIANCE WITH THE 2010 CBC.

ACCESSIBILITY: IS DEFINED AS THE COMBINATION OF VARIOUS ELEMENTS IN A BUILDING, FACILITY, SITE OR AREA, OR PORTION THEREOF WHICH ALLOWS ACCESS, CIRCULATION AND THE FULL USE OF THE BUILDING AND FACILITIES BY PERSONS WITH DISABILITIES IN CONFORMANCE WITH CHAPTERS 11, 11A, 11B AND 11C OF THE 2010 CBC.

AMERICANS WITH DISABILITIES ACT (ADA): IS A COMPREHENSIVE CIVIL RIGHTS LAW FOR PEOPLE WITH DISABILITIES. THE DEPARTMENT OF JUSTICE ENFORCES THE ADA'S REQUIREMENTS. THOUGH THE ADA IS NOT THE BUILDING CODE, IT HAS SIMILAR DIMENSIONAL AND CLEARANCE REQUIREMENTS TO THE 2010 CBC. THESE REQUIREMENTS ARE SUBJECT TO CHANGE BY FEDERAL REGULATORY BODIES AND/OR COURT DECISIONS. ALL WORK SHALL ALSO COMPLY WITH THE ADA.

CONTRACTOR SHALL NOT INSTALL WORK THAT VIOLATES 2010 CBC OR ADA REQUIREMENTS AND REGULATIONS. CONTRACTOR SHALL NOT ASSUME THAT NON-COMPLIANT WORK COMPLIES BASED ON ACCEPTANCE OF THE OVERALL WORK BY ANY BUILDING OFFICIAL HAVING JURISDICTION OVER THE WORK.

ACCESSIBLE ROUTE OF TRAVEL:

ACCESSIBLE ROUTE OF TRAVEL: IS A CONTINUOUS UNOBSTRUCTED PATH CONNECTING ALL ACCESSIBLE ELEMENTS AND SPACES IN AN ACCESSIBLE BUILDING OR FACILITY THAT CAN BE NEGOTIATED BY A PERSON WITH A SEVERE DISABILITY USING A WHEELCHAIR, AND THAT IS ALSO SAFE FOR AND USABLE BY PERSONS WITH OTHER DISABILITIES, AND THAT ALSO IS CONSISTENT WITH THE DEFINITION OF "PATH OF TRAVEL". INTERIOR ACCESSIBLE ROUTES MAY INCLUDE CORRIDORS, FLOORS, RAMPS, ELEVATORS, LIFTS AND CLEAR FLOOR SPACE AT FIXTURES. EXTERIOR ACCESSIBLE ROUTES MAY INCLUDE PARKING ACCESS AISLES, CURB RAMPS, CROSSWALKS AT VEHICULAR WAYS, WALKS, SIDEWALKS, RAMPS AND LIFTS. AN ACCESSIBLE ROUTE DOES NOT INCLUDE STAIRS, STEPS, OR ESCALATORS.

1. WHEN A BUILDING, OR PORTION OF A BUILDING, IS REQUIRED TO BE ACCESSIBLE OR ADAPTABLE, AN ACCESSIBLE ROUTE OF TRAVEL SHALL BE PROVIDED TO ALL PORTIONS OF THE BUILDING, TO ACCESSIBLE BUILDING ENTRANCES AND BETWEEN THE BUILDING AND THE PUBLIC WAY. AT LEAST ONE ACCESSIBLE ROUTE WITHIN THE BOUNDARY OF THE SITE SHALL BE PROVIDED FROM PUBLIC TRANSPORTATION STOPS, ACCESSIBLE PARKING, AND ACCESSIBLE PASSENGER LOADING ZONES, AND PUBLIC STREETS OR SIDEWALKS TO THE ACCESSIBLE BUILDING ENTRANCE THEY SERVE. AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS, FACILITIES, ELEMENTS AND SPACES THAT ARE ON THE SAME SITE.

2. SITE DEVELOPMENT AND GRADING SHALL BE DESIGNED TO PROVIDE ACCESS TO ALL ENTRANCES AND EXTERIOR GROUND FLOOR EXITS, AND ACCESS TO NORMAL PATHS OF TRAVEL, AND WHERE NECESSARY TO PROVIDE ACCESS.

3. EXTERIOR WALKWAYS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGE IN LEVEL EXCEEDING 1/2 INCH, AND SHALL BE A MINIMUM OF 48 INCHES IN WIDTH.

4. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2 INCH. WHEN CHANGES IN LEVEL DO OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2 EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4 INCH MAY BE VERTICAL. WHEN CHANGES IN LEVELS GREATER THAN 1/2 INCH ARE NECESSARY, THEY SHALL COMPLY WITH THE REQUIREMENTS OF CURB RAMPS.

5. WALK AND SIDEWALK SURFACE CROSS SLOPES SHALL NOT EXCEED 1.5% SLOPE.

6. WHEN THE SLOPES IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 VERTICAL TO 20 HORIZONTAL IT SHALL COMPLY WITH THE PROVISIONS FOR PEDESTRIAN RAMPS.

7. SURFACES WITH A SLOPE OF LESS THAN 6 PERCENT GRADIENT SHALL BE AT LEAST AS SLIP-RESISTANT AS THAT DESCRIBED AS A MEDIUM SALTED FINISH WITH A STATIC COEFFICIENT OF FRICTION OF 0.6 OR GREATER.

8. SURFACES WITH A SLOPE OF 6 PERCENT GRADIENT OR GREATER SHALL BE SLIP-RESISTANT WITH A STATIC COEFFICIENT OF FRICTION OF 0.8 OR GREATER.

9. WALKWAYS SHALL BE FREE OF GRATINGS WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN GRATING SHALL BE LIMITED TO 1/2 INCH IN THE DIRECTION OF TRAFFIC FLOW.

DOORS:

1. EVERY REQUIRED EXIT DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3 FEET IN WIDTH AND NOT LESS THAN 6 FEET 8 INCHES IN HEIGHT. WHEN INSTALLED IN EXIT DOORWAYS, EXIT DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE EXIT WAY IS NOT LESS THAN 32 INCHES.

2. FOR HINGED DOORS, THE OPENING WIDTH SHALL BE MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

3. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

4. IF AN AUTOMATIC DOOR IS USED, THEN IT SHALL COMPLY WITH BHMA A156.10. SLOWLY OPENING, LOW-POWERED, AUTOMATIC DOORS SHALL COMPLY WITH BHMA A156.19. SUCH DOORS SHALL NOT OPEN TO BACK CHECK FASTER THAN 3 SECONDS AND SHALL REQUIRE NO MORE THAN 15lbf TO STOP DOOR MOVEMENT.

5. REGARDLESS OF OCCUPANCY LOAD, THERE SHALL BE A FLOOR OR LANDING ON EACH SIDE OF A DOOR.

6. THE FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2 INCH LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGE IN LEVEL BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL. CHANGE IN LEVEL GREATER THAN 1/2 INCH SHALL BE ACCOMPLISHED BY MEANS OF A RAMP.

7. MINIMUM MANEUVERING CLEARANCES AT DOORS SHALL BE AS SHOWN IN FIGURE 11B-26A AND 11B-26B (2007 CBC). THE FLOOR OR GROUND AREA WITHIN THE REQUIRED CLEARANCES SHALL BE LEVEL AND CLEAR. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF THE DOOR SWING OF AT LEAST 60 INCHES AND A LENGTH OPPOSITE THE DIRECTION OF THE DOOR SWING OF 48 INCHES AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION.

8. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24 INCHES PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18 INCHES PAST THE STRIKE EDGE FOR INTERIOR DOORS. AN ADDITIONAL 12 INCHES IS REQUIRED AT THE PUSH SIDE IF A FRONTAL APPROACH, IF DOOR IS EQUIPPED WITH BOTH LATCH AND CLOSER.

9. THE SPACE BETWEEN TWO CONSECUTIVE DOOR OPENINGS IN A VESTIBULE, SERVING OTHER THAN A REQUIRED EXIT STAIRWAY, SHALL PROVIDE A MINIMUM OF 48 INCHES OF CLEAR SPACE FROM ANY DOOR OPENING INTO SUCH VESTIBULE WHEN THE DOOR IS POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION. DOORS IN A SERIES SHALL SWING EITHER IN THE SAME DIRECTION OR AWAY FROM THE SPACE BETWEEN THE DOORS.

10. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 lbf FOR EXTERIOR AND INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15 lbf.

11. HAND-ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30 INCHES AND 44 INCHES ABOVE THE FLOOR. LATCHING AND LOCKING DOORS THAT ARE HAND-ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL, SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER-TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. LOCKED EXIT DOORS SHALL OPERATE AS ABOVE IN EGRESS DIRECTION.

12. THE BOTTOM 10 INCHES OF ALL DOORS, EXCEPT AUTOMATIC AND SLIDING, SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10-INCH-HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR, WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.

13. REGARDLESS OF THE OCCUPANT LOAD SERVED, EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.

SIGNS AND IDENTIFICATION:

1. WHEN SIGNS IDENTIFY PERMANENT ROOM AND SPACES OF A BUILDING OR SITE, THEY SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS AS WELL AS ANY OTHER REQUIREMENT SPECIFIED IN 2007 CBC.

2. FINISH AND CONTRAST: CHARACTERS, SYMBOLS AND THEIR BACKGROUND SHALL HAVE A NONGLARE FINISH. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND.

3. PROPORTIONS: CHARACTERS ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO OF BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO OF BETWEEN 1:5 AND 1:10.

4. CHARACTER HEIGHT: CHARACTERS AND NUMBERS ON SIGNS SHALL BE SIZED ACCORDING TO THE VIEWING DISTANCE FROM WHICH THEY ARE TO BE READ. THE MINIMUM HEIGHT IS MEASURED USING AN UPPERCASE X. LOWERCASE LETTERS ARE PERMITTED. FOR SIGNS SUSPENDED OR PROJECTED ABOVE THE FINISH FLOORIN COMPLIANCE WITH 1133B.8.6, THE MINIMUM CHARACTER HEIGHT SHALL BE 3 INCHES.

5. CHARACTER TYPE: CHARACTERS ON SIGNS SHALL BE RAISED 1/32 INCH MINIMUM AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE.

6. CHARACTER SIZE: RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8 INCH AND MAXIMUM OF 2 INCHES HIGH.

7. PICTORIAL SYMBOL SIGNS: PICTORIAL SYMBOLS SIGNS SHALL BE ACCOMPANIED BY THE VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE OUTSIDE DIMENSION OF THE PICTOGRAM FIELD SHALL BE A MINIMUM OF 6 INCHES IN HEIGHT.

8. CHARACTER PLACEMENT: CHARACTERS AND BRAILLE SHALL BE IN A HORIZONTAL FORMAT. BRAILLE SHALL BE PLACED A MINIMUM OF 3/8 INCH AND MAXIMUM OF 1/2 INCH DIRECTLY BELOW THE TACTILE CHARACTERS; FLUSH LEFT OR CENTERED. WHEN TACTILE TEXT IS MULTI-LINED, ALL BRAILLE SHALL BE PLACED TOGETHER BELOW ALL LINES OF TACTILE TEXT.

9. BRAILLE: CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHENEVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS. DOTS SHALL BE 1/10 INCH ON CENTER IN EACH CELL WITH 2/10 INCH SPACE BETWEEN CELLS, MEASURED FROM THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED A MINIMUM OF 1/40 INCH ABOVE THE BACKGROUND. BRAILLE DOTS SHALL BE DOMED OR ROUNDED.

10. MOUNTING LOCATION AND HEIGHT:
a. WHERE PERMANENT INDENTIFICATION SIGNS ARE PROVIDED FOR ROOMS AND SPACES, SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING AT THE LEAF OF DOUBLE DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT.

b. WHERE PERMANENT IDENTIFICATION SIGNAGE IS PROVIDED FOR ROOMS AND SPACES THEY SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE ENTERS THE ROOM OR SPACE. SIGNS THAT IDENTIFY EXITS SHALL BE LOCATED ON THE APPROACH SIDE OF THE DOOR AS ONE EXITS THE ROOM OR SPACE.

c. MOUNTING HEIGHT SHALL BE 60 INCHES ABOVE THE FINISH FLOOR TO THE CENTER LINE OF THE SIGN. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3 INCHES OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR.

WALKS AND SIDEWALKS:

1. WALKWAYS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGE IN LEVEL EXCEEDING 1/2 INCH, AND SHALL BE A MINIMUM OF 48 INCHES IN WIDTH.

2. SURFACES WITH A SLOPE OF LESS THAN 6 PERCENT GRADIENT SHALL BE AT LEAST AS SLIP-RESISTANT AS THAT DESCRIBED AS A MEDIUM SALTED FINISH WITH A STATIC COEFFICIENT OF FRICTION OF 0.6 OR GREATER.

3. SURFACES WITH A SLOPE OF 6 PERCENT GRADIENT OR GREATER SHALL BE SLIP-RESISTANT WITH A STATIC COEFFICIENT OF FRICTION OF 0.8 OR GREATER.

4. WALKWAYS SHALL BE FREE OF GRATINGS WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN GRATING SHALL BE LIMITED TO 1/2 INCH IN THE DIRECTION OF TRAFFIC FLOW.

5. WHEN THE SLOPES IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1 VERTICAL TO 20 HORIZONTAL IT SHALL COMPLY WITH THE PROVISIONS FOR PEDESTRIAN RAMPS PER 2007 CBC SECTION 1023 AND SECTION 1007.1.

6. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2 INCH. WHEN CHANGES IN LEVEL DO OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2 EXCEPT THAT LEVEL CHANGES NOT EXCEEDING 1/4 INCH MAY BE VERTICAL. WHEN CHANGES IN LEVELS GREATER THAN 1/2 INCH ARE NECESSARY, THEY SHALL COMPLY WITH THE REQUIREMENTS OF CURB RAMPS.

7. WALKS SHALL BE PROVIDED WITH LEVEL AREA NOT LESS THAN 60 INCHES X 60 INCHES AT A DOOR OR GATE THAT SWINGS TOWARD THE WALK, AND NOT LESS THAN 60 INCHES X 78 INCHES WHEN THE DOOR SWINGS ONTO THE LANDING, AND NOT LESS THAN 48 INCHES WIDE BY 44 INCHES DEEP AT A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK. SUCH WALKS SHALL EXTEND 24 INCHES TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALK

8. ALL WALKS WITH CONTINUOUS GRADIENTS SHALL HAVE LEVEL AREAS AT LEAST 5' IN LENGTH AT INTERVALS OF AT LEAST EVERY 400 FEET.

9. WALK AND SIDEWALK SURFACE CROSS SLOPES SHALL NOT EXCEED 1.5%.

10. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMPS, OR ACCESSIBLE ROUTE, SHALL NOT EXCEED 1:20 WITHIN 4' OF THE TOP AND BOTTOM OF THE CURB RAMP. THE SLOPE OF THE FANNED OR FLARED SIDES OF CURB RAMPS SHALL NOT EXCEED 1 VERTICAL TO 10 HORIZONTAL.

11. THE SLOPE OF CURB RAMPS SHALL NOT EXCEED 1 VERTICAL TO 12 HORIZONTAL.

12. SURFACE SLOPES OF ACCESSIBLE SPACES AND ACCESS AISLES SHALL BE THE MINIMUM POSSIBLE AND SHALL NOT EXCEED 1/4" PER FOOT IN ANY DIRECTION.

13. ALL BUILDING ENTRANCES THAT ARE ACCESSIBLE SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, TO BE VISIBLE TO PERSONS ALONG APPROACHING PEDESTRIAN WAYS.

14. OBJECTS PROJECTING FROM WALLS WITH THEIR LEADING EDGES BETWEEN 27 INCHES AND 80 INCHES ABOVE THE FINISHED FLOOR SHALL PROTRUDE NO MORE THAN 4 INCHES INTO WALKS, HALLS CORRIDORS, PASSAGEWAYS OR AISLES. OBJECTS MOUNTED WITH THEIR LEADING EDGES AT OR BELOW 27 INCHES ABOVE THE FINISHED FLOOR MAY PROTRUDE ANY AMOUNT. FREESTANDING OBJECTS MOUNTED ON POSTS OR PYLONS MAY OVERHANG 12 INCHES MAX FROM 27 INCHES TO 80 INCHES ABOVE THE GROUND OR FINISHED FLOOR. PROTRUDING OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE ROUTE OR MANEUVERING SPACE.

BUILDING ACCESSIBILITY:

1. ALL ENTRANCES AND EXTERIOR GROUND-FLOOR EXIT DOORS TO BUILDINGS AND FACILITIES SHALL BE MADE ACCESSIBLE TO PERSONS WITH DISABILITIES. DOORWAYS SHALL HAVE A MINIMUM CLEAR OPENING OF 32 INCHES WITH THE DOOR OPEN 90 DEGREES, MEASURED BETWEEN THE FACE OF THE DOOR AND THE OPPOSITE STOP. AT EVERY PRIMARY PUBLIC ENTRANCE, THERE SHALL BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.

GENERAL NOTES

1. THE CONTRACTOR SHALL REVIEW EXISTING CONDITIONS ON THE SITE DURING THE BIDDING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING WORK. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES PRIOR TO PROCEEDING.

2. UNLESS OTHERWISE SHOWN OR NOTED, ALL PHASES OF WORK ARE TO CONFORM TO THE MINIMUM STANDARDS OF THE 2010 C.B.C. (CALIFORNIA BUILDING CODE), AND ANY A.S.T.M. SPECIFICATIONS ON WHICH THESE STANDARDS ARE BASED. WHERE CONFLICT BETWEEN BUILDING CODES AND SPECIFICATIONS OCCURS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.

3. ALL A.S.T.M. DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATION, AS OF THE DATE OF THESE DRAWINGS.

4. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS. DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.

5. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

6. NEITHER THE OWNER NOR THE ARCHITECT WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE; DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE ARCHITECT FREE AND HARMLESS FROM ALL CLAIMS, DEMANDS AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT SHALL NOT INCLUDE INSPECTION OF THE ABOVE SAFETY ITEMS.

7. SATISFACTORY EXECUTION OF CONSTRUCTION IS DEPENDENT UPON CONFORMANCE WITH THE INTENT OF THESE DRAWINGS.

8. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL. WHEN WEIGHT OF MATERIALS OR EQUIPMENT MAY EXCEED DESIGN LOAD, STRUCTURAL SYSTEMS SHALL BE SHORED.

9. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK. THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.

10. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. WORK SHOULD NOT PROCEED UNTIL A SOLUTION IS GIVEN BY THE ARCHITECT.

11. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE ERECTION SHORING AND BRACING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND, UNLESS OTHERWISE INDICATED, DO NOT INDICATE THE METHOD OF CONSTRUCTION.

12. PIPES, DUCTS, SLEEVES, OPENINGS, POCKETS, CHASES, BLOCK-OUTS, ETC. SHALL NOT BE PLACED IN SLABS, BEAMS, GIRDERS, COLUMNS, WALLS, FOUNDATION, ETC. NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR SUCH ITEMS, UNLESS SPECIFICALLY DETAILED ON THESE DRAWINGS. (IF ANY PIPES, DUCTS, ETC; DO OCCUR; THAT ARE NOT SHOWN ON THESE DRAWINGS, THE ARCHITECT SHALL BE NOTIFIED.)

13. HOUSEKEEPING: GOOD HOUSEKEEPING SHALL BE MAINTAINED AT ALL TIMES. ACCUMULATION OF COMBUSTABLE WASTE MATERIALS IN THE BUILDING SHALL NOT BE ALLOWED. C.F.C. 902.4/DEPARTMENT POLICY.

G-3

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

GENERAL NOTES

CITY OF SAN DIEGO, CALIFORNIA
SHEET 3 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11 — SIAVASH HAGHIGHAH, PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

CCS27 COORDINATE

CCS83 COORDINATE

AS-BUILTS

CONTRACTOR ..... DATE STARTED .....

INSPECTOR ..... DATE COMPLETED .....

35608- 3 -D

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.oncinaarc.com

SCALE — HORIZONTAL NO SCALE — VERTICAL NO SCALE

LICENSED ARCHITECT — C-13996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

CITY OF SAN DIEGO • STATE OF CALIFORNIA • COUNTY OF SAN DIEGO

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APPROVED BY: FOR CITY ENGINEER
CHECKED BY: CONSTRUCTION ENGINEER
CHECKED BY: INSPECTOR

DISABLED ACCESS REGULATIONS (CONT.)

PARKING:

1. EACH LOT OR PARKING STRUCTURE WHERE PARKING IS PROVIDED FOR THE PUBLIC AS CLIENTS, GUESTS OR EMPLOYEES, SHALL PROVIDE ACCESSIBLE PARKING. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO A PRIMARY ENTRANCE. TABLE 11B-6 ESTABLISHES THE NUMBER OF ACCESSIBLE PARKING SPACES REQUIRED.

2. WHERE SINGLE ACCESSIBLE PARKING SPACES ARE PROVIDED, THEY SHALL BE 14 FEET WIDE AND OUTLINED TO PROVIDE A 9-FOOT PARKING AREA AND A 5-FOOT LOADING AND UNLOADING ACCESS AISLE ON THE PASSENGER SIDE OF THE VEHICLE. THE MINIMUM LENGTH OF EACH PARKING SPACE SHALL BE 18 FEET.

3. WHERE MORE THAN ONE SPACE IS PROVIDED IN LIEU OF PROVIDING A 14-FOOT-WIDE SPACE FOR EACH PARKING SPACE, TWO SPACES CAN BE PROVIDED WITHIN A 23-FOOT-WIDE AREA LINED TO PROVIDE A 9-FOOT PARKING AREA ON EACH SIDE OF A 5-FOOT LOADING AND UNLOADING ACCESS AISLE IN THE CENTER.

4. ONE IN EVERY EIGHT SPACES, BUT NOT LESS THAN ONE, SHALL BE SERVED BY AN ACCESS AISLE 96 INCHES WIDE MINIMUM PLACED ON THE SIDE OPPOSITE THE DRIVER'S SIDE WHEN THE VEHICLE IS GOING FORWARD INTO THE PARKING SPACE AND SHALL BE DESIGNATED VAN ACCESSIBLE AS REQUIRED BY SECTION 1129B.3.

5. THE WORDS "NO PARKING" SHALL BE PAINTED ON THE GROUND WITHIN EACH 8 FOOT LOADING AND UNLOADING ACCESS AISLE. THIS NOTICE SHALL BE PAINTED IN WHITE LETTERS NO LESS THAN 12 INCHES HIGH AND LOCATED SO THAT IT IS VISIBLE TO TRAFFIC ENFORCEMENT OFFICIALS.

6. IN EACH PARKING AREA, A BUMPER OR CURB SHALL BE PROVIDED AND LOCATED TO PREVENT ENCROACHMENT OF CARS OVER THE REQUIRED WIDTH OF WALKWAYS. ALSO, THE SPACE SHALL BE LOCATED SO THAT PERSONS WITH DISABILITIES ARE NOT COMPELLED TO WHEEL OR WALK BEHIND CARS OTHER THAN THEIR OWN. PEDESTRIAN WAYS WHICH ARE ACCESSIBLE TO PEOPLE WITH DISABILITIES SHALL BE PROVIDED FROM EACH SUCH PARKING SPACE TO RELATED FACILITIES, INCLUDING CURB CUTS OR RAMPS AS NEEDED. RAMPS SHALL NOT ENCROACH INTO ANY ACCESSIBLE PARKING SPACE OR THE ADJACENT ACCESS AISLE. THE MAXIMUM CROSS SLOPE IN ANY DIRECTION OF AN ACCESSIBLE PARKING SPACE AND THE ADJACENT ACCESS AISLE SHALL NOT EXCEED 2%.

7. SURFACE SLOPES OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE THE MINIMUM POSSIBLE AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.

8. SIGN TO IDENTIFY ACCESSIBLE PARKING SPACES MAY BE CENTERED ON A WALL AT THE INTERIOR AND OF THE PARKING SPACE AT A MINIMUM HEIGHT OF 36 INCHES FROM THE PARKING SPACE FINISHED GRADE, GROUND OR SIDEWALK. AN ADDITIONAL SIGN OR ADDITIONAL LANGUAGE BELOW THE SYMBOL OF ACCESSIBILITY SHALL STATE "MINIMUM FINE $250".

9. AN ADDITIONAL SIGN SHALL BE POSTED, MINIMUM 17x22, IN A CONSPICUOUS PLACE, AT EACH ENTRANCE TO OFF-STREET PARKING FACILITIES, OR IMMEDIATELY ADJACENT TO AND VISIBLE FROM EACH STALL OR SPACE. THE SIGN SHALL BE NOT LESS THAN 17 INCHES x 22 INCHES IN SIZE WITH LETTERING NOT LESS THAN 1 INCH IN HEIGHT, WHICH CLEARLY AND CONSPICUOUSLY STATES THE FOLLOWING: "UNAUTHORIZED VEHICLES PARKED IN DESIGNATED ACCESSIBLE SPACES NOT DISPLAYING DISTINGUISHING PLACARDS OR LICENSE PLATES ISSUED FOR PERSONS WITH DISABILITIES MAY BE TOWED AT OWNER'S EXPENSE. TOWED VEHICLES MAY BE RECLAIMED AT _____, OR BY TELEPHONING _____." NOTE: BLANK SPACES ARE TO BE FILLED IN WITH APPROPRIATE INFORMATION AS A PERMANENT PART OF THE SIGN.

RAMPS:

1. GENERAL: ANY ACCESSIBLE ROUTE OF TRAVEL SHALL BE CONSIDERED A RAMP IF ITS SLOPE IS GREATER THAN 1 FOOT RISE IN 20 FEET OF HORIZONTAL RUN (5% GRADIENT).

2. WIDTH: PEDESTRIAN RAMPS SHALL HAVE A MINIMUM CLEAR WIDTH OF 48 INCHES.

3. SLOPE: THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP. THE MAXIMUM SLOPE SHALL BE 1 FOOT RISE IN 15 FEET HORIZONTAL RUN (6.67% GRADIENT) THE MAXIMUM RISE OF ANY RUN SHALL BE 30 INCHES. THE CROSS SLOPE OF RAMP SURFACES SHALL BE NO GREATER THAN 1 UNIT IN 75 UNITS HORIZONTAL (1.5% SLOPE).

4. LANDINGS: LEVEL RAMP LANDINGS SHALL BE PROVIDED AT THE TOP AND BOTTOM OF EACH RAMP. INTERMEDIATE LANDINGS SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 30 INCHES OF VERTICAL RISE AND AT EACH CHANGE OF DIRECTION. LANDINGS SHALL BE LEVEL. TOP LANDINGS SHALL NOT BE LESS THAN 60 INCHES WIDE AND SHALL HAVE LENGTH NOT LESS THAN 60 INCHES IN THE DIRECTION OF RAMP RUN. LANDINGS AT BOTTOM OF RAMP SHALL HAVE A DIMENSION IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 72 INCHES.

5. DOORS AT LANDINGS: DOORS IN ANY POSITION SHALL NOT REDUCE THE MINIMUM DIMENSION OF THE LANDING TO LESS THAN 42 INCHES AND SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 3 INCHES WHEN FULLY OPEN.

6. HAZARDS: RAMPS SHALL HAVE A CURB AT LEAST 2 INCHES HIGH, OR A WHEEL GUIDE RAIL 2 TO 4 INCHES HIGH ON EACH SIDE OF THE RAMP LANDING THAT HAS A VERTICAL DROP EXCEEDING 4 INCHES AND THAT IS NOT BOUND BY A WALL OR FENCE.

7. HANDRAILS: HANDRAILS ARE REQUIRED AT RAMPS, EXCEPT THAT AT EXTERIOR DOOR LANDINGS, HANDRAILS ARE NOT REQUIRED ON RAMPS LESS THAN 6 INCHES RISE OR 72 INCHES IN LENGTH. HANDRAILS SHALL BE PLACED ON EITHER SIDE OF THE RAMP, SHALL BE CONTINUOUS THE FULL LENGTH OF THE RAMP, SHALL BE 34 TO 38 INCHES ABOVE THE RAMP SURFACE TO TOP OF HANDRAILS, SHALL EXTEND 1 FOOT MINIMUM BEYOND THE TOP AND BOTTOM OF THE RAMP AND SHALL BE PARALLEL TO THE FLOOR OR GROUND SURFACE. THE INSIDE HANDRAIL ON SWITCHBACK OR DOGLEG RAMPS SHALL ALWAYS BE CONTINUOUS. THE ENDS OF HANDRAILS SHALL EITHER BE ROUNDED OR RETURNED SMOOTHLY TO THE FLOOR, WALL OR POST. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF 1-1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL. HANDRAILS MAY BE LOCATED IN A RECESS IF THE RECESS IS A MAXIMUM OF 3 INCHES DEEP AND EXTENDS AT LEAST 18 INCHES ABOVE THE TOP OF RAIL. THE GRIP PORTION SHALL NOT BE LESS THAN 1-1/4 INCH NOR MORE THAN 1-1/2 INCHES IN THE CROSS-SECTIONAL NOMINAL DIMENSION OF THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE, AND ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS. HANDRAILS SHALL NOT ROTATE IN THEIR FITTINGS.

8. WHEEL GUIDES: WHERE THE RAMP SURFACE IS NOT BOUNDED BY A WALL, THE RAMP SHALL HAVE A GUIDE CURB, A MINIMUM OF 2 INCHES IN HEIGHT PROVIDED AT EACH SIDE OF THE RAMP - OR - A WHEEL GUIDE RAIL CENTERED 3 INCHES +/- 1 INCH ABOVE THE SURFACE OF THE RAMP.

9. GUARDS: RAMPS MORE THAN 30 INCHES ABOVE ADJACENT GROUND SHALL BE PROVIDE WITH GUARDS. SUCH GUARDS SHALL BE CONTINUOUS FROM TOP TO BOTTOM OF RAMP.

10. OUTDOOR RAMPS: OUTDOOR RAMPS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

STAIRWAYS:

1. STAIRWAYS SHALL HAVE HANDRAILS ON EACH SIDE.

2. HANDRAILS SHALL BE 34 INCHES TO 38 INCHES ABOVE THE NOSING OF THE TREADS.

3. HANDRAILS SHALL EXTEND A MINIMUM OF 12 INCHES BEYOND THE TOP NOSING AND 12 INCHES, PLUS THE TREAD WIDTH, BEYOND THE BOTTOM NOSING.

4. ENDS SHALL BE RETURNED TO TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS.

5. WHERE THE EXTENSION OF THE HANDRAIL IN THE DIRECTION OF THE STAIR RUN WOULD CREATE A HAZARD, THE TERMINATION OF THE EXTENSION SHALL BE MADE EITHER ROUNDED OR RETURNED SMOOTHLY TO FLOOR, WALL OR POST. WHERE THE STAIRS ARE CONTINUOUS FROM LANDING TO LANDING, THE INNER RAIL SHALL BE CONTINUOUS AND NEED NOT EXTEND OUT INTO THE LANDING.

6. HANDRAILS PROJECTING FROM A WALL SHALL HAVE SPACE OF 1-1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL. HANDRAILS MAY BE LOCATED IN A RECESS IF THE RECESS IS A MAXIMUM OF 3 INCHES DEEP AND EXTENDS AT LEAST 18 INCHES ABOVE THE TOP OF THE RAIL. HANDRAILS SHALL NOT ROTATE IN THEIR FITTINGS. HANDRAILS IN EXISTING FACILITIES MAY HAVE A SPACE OF 1-1/4" BETWEEN THE WALL AND HANDRAIL.

7. THE HANDGRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN 1-1/4 INCHES NOR MORE THAN 1-1/2 INCHES IN CROSS-SECTIONAL NOMINAL DIMENSION OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. THE HANDGRIP PORTION OF HANDRAILS SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS.

8. THE UPPER APPROACH AND THE LOWER TREAD OF EACH STAIR SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2 INCHES AND NO MORE THAN 4 INCHES WIDE AND PLACED PARALLEL TO AND NOT MORE THAN 1 INCH FROM THE NOSE OF THE STEP OR LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR. A PAINTED STRIP SHALL BE ACCEPTABLE.

9. WHERE STAIRWAYS OCCUR OUTSIDE A BUILDING, THE UPPER APPROACH AND ALL THE TREADS SHALL BE MARKED BY A STRIP OF CLEARLY CONTRASTING COLOR AT LEAST 2 INCHES AND NO MORE THAN 4 INCHES WIDE AND PLACED PARALLEL AND NOT MORE THAN 1 INCH FROM THE NOSE OF THE STEP OR LANDING TO ALERT THE VISUALLY IMPAIRED. THE STRIP SHALL BE OF A MATERIAL THAT IS AT LEAST AS SLIP RESISTANT AS THE OTHER TREADS OF THE STAIR. A PAINTED STRIP SHALL BE ACCEPTABLE.

10. ALL TREAD SURFACES SHALL BE SLIP-RESISTANT. WEATHER-EXPOSED STAIRS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES. TREADS SHALL HAVE SMOOTH, ROUNDED OR CHAMFERED EXPOSED EDGES, AND NO ABRUPT EDGES AT THE NOSING (FRONT EDGE).

11. THE NOSING SHALL NOT PROJECT MORE THAN 1-1/4 INCHES PAST THE FACE OF THE RISER BELOW.

12. STAIR TREADS SHALL BE NO LESS THAN 11 INCHES DEEP, MEASURED FROM RISER TO RISER.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MOA

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.oncinaarc.com

SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

LICENSED ARCHITECT — MANUEL ONCINA — C-23996 — 2-28-13 — REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • INCORPORATED SEPTEMBER 17, 1850

WARNING
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APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263 | G-4

PLANS FOR THE CONSTRUCTION OF
ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

GENERAL NOTES

CITY OF SAN DIEGO, CALIFORNIA
SHEET 4 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER 6/6/11 DATE

SAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

CCS27 COORDINATE
CCS83 COORDINATE

35608-4-D

DISABLED TOILET FACILITIES ACCESS REGULATIONS

GENERAL:

1. BATHING AND TOILET FACILITIES THAT SERVE BUILDINGS, FACILITIES OR PORTIONS OF BUILDINGS OR FACILITIES THAT ARE REQUIRED BY THESE STANDARDS TO BE ACCESSIBLE TO PERSONS WITH DISABILITIES, SHALL BE ON AN ACCESSIBLE ROUTE AND SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

2. THE ACCESSIBLE FIXTURES AND CONTROLS REQUIRED IN THIS SECTION SHALL BE ON AN ACCESSIBLE ROUTE. AN UNOBSTRUCTED TURNING SPACE COMPLYING WITH SECTION 1115B.3.1, ITEM 1, OR 1115B.32, ITEM 1, AS APPLICABLE, SHALL BE PROVIDED WITHIN AN ACCESSIBLE TOILET FACILITY. THE CLEAR FLOOR SPACES AT FIXTURES AND CONTROLS, THE ACCESSIBLE ROUTE AND THE TURNING SPACE MAY OVERLAP.

3. WHERE SEPARATE FACILITIES ARE PROVIDED FOR PERSONS OF EACH SEX, THESE FACILITIES SHALL BE ACCESSIBLE TO PERSONS WITH DISABILITIES. WHERE UNISEX FACILITIES ARE PROVIDED, THESE FACILITIES SHALL BE ACCESSIBLE TO PERSONS WITH DISABILIITIES.

MULTIPLE ACCOMMODATION TOILET FACILITIES:

1. WHEELCHAIR CLEARANCE: A CLEAR SPACE MEASURED FROM THE FLOOR TO A HEIGHT OF 27" ABOVE THE FLOOR, WITHIN THE SANITARY FACILITY ROOM, OF SUFFICIENT SIZE TO INSCRIBE A CIRCLE WITH A DIAMETER OF NOT LESS THAN 69 INCHES IN SIZE. OTHER THAN THE DOOR TO THE ACCESSIBLE WATER CLOSET COMPARTMENT, A DOOR IN ANY POSITION, MAY ENCROACH INTO THIS SPACE BY NOT MORE THAN 12 INCHES.

2. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE REQUIRED FOR ANY FIXTURE.

3. PROVIDE A MINIMUM OF ONE ACCESSIBLE WATER CLOSET IN COMPLIANCE WITH SECTION 1115B.4.1.

4. ACCESSIBLE WATER CLOSET COMPARTMENTS SHALL COMPLY WITH THE FOLLOWING:

4.1. THE COMPARTMENT SHALL BE A MINIMUM OF 60 INCHES WIDE.

4.2. IF THE COMPARTMENT HAS A SIDE OPENING DOOR, AN MINIMUM 60" WIDE AND 60" DEEP CLEAR FLOOR SPACE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET.

4.3. IF THE COMPARTMENT HAS AN END OPENING DOOR (FACING THE WATER CLOSET), A MINIMUM 60 INCHES WIDE AND 48 INCHES DEEP CLEAR FLOOR SPACE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET. THE DOOR SHALL BE LOCATED IN FRONT OF THE CLEAR FLOOR SPACE AND DIAGONAL TO THE WATER CLOSET, WITH A MAXIMUM STILE WIDTH OF 4 INCHES.

4.4. THE WATER CLOSET COMPARTMENT SHALL BE EQUIPPED WITH A DOOR THAT HAS AN AUTOMATIC CLOSING DEVICE, AND SHALL HAVE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WHEN LOCATED AT THE END AND 34 INCHES WHEN LOCATED AT THE SIDE WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

4.5. THE INSIDE AND OUTSIDE OF THE COMPARTMENT DOOR SHALL BE EQUIPPED WITH A LOOP OR U-SHAPED HANDLE IMMEDIATELY BELOW THE LATCH. THE LATCH SHALL BE FLOP-OVER STYLE, SLIDING OR OTHER HARDWARE NOT REQUIRING THE USER TO GRASP OR TWIST. EXCEPT FOR DOOR OPENING WIDTHS AND DOOR SWINGS, A CLEAR, UNOBSTRUCTED ACCESS OF NOT LESS THAN 44 INCHES SHALL BE PROVIDED TO WATERCLOSET COMPARTMENTS DESIGNED FOR USE BY PERSONS WITH DISABILITIES. MANEUVERING SPACE AT THE COMPARTMENT DOOR SHALL COMPLY WITH SECTION 1133B.2.4.2 AND 1133B.2.4.3, EXCEPT THAT THE SPACE IMMEDIATELY IN FRONT OF A WATER CLOSET COMPARTMENT SHALL NOT BE LESS THAN 48 INCHES AS MEASURED AT RIGHT ANGLE TO THE COMPARTMENT DOOR IN ITS CLOSED POSITION.

5. WHERE SIX OR MORE COMPARTMENTS ARE PROVIDED WITHIN A MULTIPLE ACCOMMODATION TOILET ROOM, AT LEAST ONE COMPARTMENT SHALL COMPLY WITH ITEMS 3 AND 4 ABOVE, AND AT LEAST ONE ADDITIONAL AMBULATORY ACCESSIBLE COMPARTMENT SHALL BE 36 INCHES WIDE WITH AN OUTWARD SWINGING SELF CLOSING DOOR AND PARALLEL GRAB BARS COMPLYING WITH SECTION 1115B.4.1, ITEM 3.

6. IN OTHER THAN DWELLING UNITS, TOILET ROOM FLOORS SHALL HAVE A SMOOTH, HARD, NONABSORBENT SURFACE SUCH AS PORTLAND CEMENT, CONCRETE, CERAMIC TILE OR OTHER APPROVED MATERIAL WHICH EXTENDS UPWARD ONTO THE WALLS AT LEAST 5 INCHES. WALLS WITHIN WATER CLOSET COMPARTMENTS AND WALLS WITHIN 24 INCHES OF THE FRONT AND SIDE OF URINALS SHALL BE SIMILARLY FINISHED TO A HEIGHT OF 48 INCHES AND, EXCEPT FOR STRUCTURAL ELEMENTS, THE MATERIALS, USED IN SUCH WALLS SHALL BE A TYPE WHICH IS NOT ADVERSELY AFFECTED BY MOISTURE.

ACCESSIBLE WATER CLOSETS:

1. THE CENTERLINE OF THE WATER CLOSET FIXTURE SHALL BE 18 INCHES FROM THE SIDE WALL OR PARTITION. ON THE OTHER SIDE OF THE WATER CLOSET, PROVIDE A MINIMUM OF 32 INCHES WIDE CLEAR FLOOR SPACE IF THE WATER CLOSET IS ADJACENT TO THE WALL OR PARTITION. THIS CLEAR FLOOR SPACE SHALL EXTEND FROM THE REAR WALL WALL TO THE FRONT OF THE WATER CLOSET.

2. A MINIMUM 60 INCHES WIDE AND 48 INCHES DEEP CLEAR FLOOR SPACE SHALL BE PROVIDED IN FRONT OF THE WATER CLOSET.

3. GRAB BARS FOR WATER CLOSETS NOT LOCATED WITHIN A COMPARTMENT SHALL COMPLY WITH SECTION 1115B.7 AND SHALL BE PROVIDED ON THE SIDE WALL CLOSET TO THE WATER CLOSET AND ON THE REAR WALL. GRAB BARS FOR WATER CLOSETS LOCATED WITHIN AMBULATORY ACCESSIBLE COMPARTMENTS SHALL COMPLY WITH SECTION 1115B.7 AND SHALL BE PROVIDED ON BOTH SIDES OF THE COMPARTMENT.

GRAB BARS SHALL NOT PROJECT MORE THAN 3 INCHES INTO THE REQUIRED CLEAR FLOOR SPACE.

3.1. THE SIDE GRAB BAR SHALL BE 42 INCHES LONG MINIMUM, LOCATED 12 INCHES MAXIMUM FROM THE REAR WALL AND EXTEND 54 INCHES MINIMUM FROM THE REAR WALL WITH THE FRONT END POSITIONED 24 INCHES MINIMUM IN FRONT OF THE WATER CLOSET. THE SIDE GRAB BAR SHALL BE SECURELY ATTACHED AND CENTERED 33 INCHES ABOVE AND PARALLEL TO THE FLOOR.

3.2. THE REAR GRAB BAR SHALL BE 36 INCHES LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12 INCHES MINIMUM ON ONE SIDE AND 24 INCHES MINIMUM ON THE OTHER SIDE. THE REAR GRAB BAR SHALL BE SECURELY ATTACHED AND CENTERED 33 INCHES ABOVE AND PARALLEL TO THE FLOOR, EXCEPT THAT WHERE A TANK TYPE TOILET IS USED WHICH OBSTRUCTS PLACEMENT AT 33 INCHES, THE GRAB BAR MAY BE AS HIGH AS 36 INCHES AND THE SPACE BETWEEN THE GRAB BAR AND THE TOP OF THE TANK SHALL BE 1-1/2 INCHES MINIMUM.

4. THE HEIGHT OF ACCESSIBLE WATER CLOSETS SHALL BE A MINIMUM OF 17 INCHES AND A MAXIMUM OF 19 INCHES MEASURED TO THE TOP OF A MAXIMUM 2 INCH HIGH TOILET SEAT.

5. CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING. CONTROLS FOR THE FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE FOR TOILET AREAS, NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS FORCE (LBF).

6. SEE SECTION 1134A.7 FOR ADDITIONAL REQUIREMENTS FOR WATER CLOSETS IN PUBLICLY FUNDED HOUSING AND ALL NON RESIDENTIAL OCCUPANCIES.

7. AUTOMATIC SPRING TO LIFTED POSITION SEATS ARE NOT ALLOWED.

ACCESSORIES:

1. MIRRORS SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE NO HIGHER THAN 40 INCHES FROM THE FLOOR.

2. IF MEDICINE CABINETS ARE PROVIDED, AT LEAST ONE SHALL BE LOCATED WITH A USABLE SHELF NO HIGHER THAN 44 INCHES ABOVE THE FLOOR. A CLEAR FLOOR SPACE OF 30 INCHES BY 48 INCHES COMPLYING WITH SECTION 1118B.4 SHALL BE PROVIDED IN FRONT OF A MEDICINE CABINET TO ALLOW A FORWARD OR PARALLEL APPROACH.

3. WHERE TOWEL, SANITARY NAPKINS, WASTE RECEPTACLES, DISPENSERS, OTHER EQUIPMENT AND CONTROLS ARE PROVIDED, AT LEAST ONE OF EACH TYPE SHALL BE LOCATED ON AN ACCESSIBLE ROUTE, WITH ALL OPERABLE PARTS, INCLUDING COIN SLOTS, WITHIN 40 INCHES FROM THE FINISHED FLOOR AND SHALL COMPLY WITH SECTION 1117B.6, CONTROLS AND OPERATING MECHANISMS.

4. SHALL BE LOCATED ON THE WALL WITHIN 12 INCHES OF THE FRONT EDGE OF THE TOILET SEAT, MOUNTED BELOW THE GRAB BAR, AT A MINIMUM HEIGHT OF 19 INCHES, AND 36 INCHES MAXIMUM TO THE FAR EDGE FROM THE REAR WALL. DISPENSERS THAT CONTROL DELIVERY OR THAT DO NOT PERMIT CONTINUOUS PAPER FLOW SHALL NOT BE USED.

5. WHERE LOCKERS ARE PROVIDED FOR THE PUBLIC, CLIENTS, EMPLOYEES, MEMBERS OR PARTICIPANTS, AT LEAST ONE LOCKER AND NOT LESS THAN 1 PERCENT OF ALL LOCKERS SHALL BE MADE ACCESSIBLE TO PERSONS WITH DISABILITIES. A PATH OF TRAVEL NOT LESS THAN 36 IN CLEAR WIDTH SHALL BE PROVIDED TO THESE LOCKERS.

ACCESSIBLE LAVATORIES:

1. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5lbf. LEVER-OPERATED, PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

2. LAVATORIES, WHEN LOCATED ADJACENT TO A SIDE WALL OR PARTITION, SHALL BE A MINIMUM OF 18 INCHES TO THE CENTERLINE OF THE FIXTURE. ALL LAVATORIES THAT ARE DESIGNATED TO BE ACCESSIBLE SHALL BE A MIN 17 INCHES IN HORIZONTAL DEPTH AND MOUNTED WITH THE RIM OR COUNTER EDGE NO HIGHER THAN 34 INCHES ABOVE FINISHED FLOOR AND WITH VERTICAL CLEARANCE MEASURED FROM THE BOTTOM OF THE APRON OR THE OUTSIDE BOTTOM EDGE OF THE LAVATORY OF 29 INCHES REDUCING TO 27 INCHES AT A POINT LOCATED 8 INCHES BACK FROM THE FRONT EDGE. IN ADDITION, A MIN 9 INCH TOE CLEARANCE MUST BE PROVIDED EXTENDING BACK TOWARD THE WALL TO A DISTANCE NO MORE THAN 6 INCHES FROM THE BACK WALL. THE TOE CLEARANCE SPACE MUST BE FREE OF EQUIPMENT OR OBSTRUCTIONS.

3. A CLEAR FLOOR SPACE 30 INCHES BY 48 INCHES SHALL BE PROVIDED IN FRONT OF A LAVATORY TO ALLOW FORWARD APPROACH. SUCH CLEAR FLOOR SPACE SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE AND SHALL EXTEND A MIN OF 19 INCHES INTO KNEE AND TOE SPACE UNDERNEATH THE LAVATORY.

4. HOT WATER AND DRAINPIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.

GRAB BARS, TUB AND SHOWER SEATS:

1. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACE OF A GRAB BAR SHALL BE 1-1/4 INCHES TO 1-1/2 INCHES OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE. IF GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2 INCHES.

2. THE STRUCTURAL STRENGTH OF GRAB BARS, TUB AND SHOWER SEATS, FASTENERS AND MOUNTING DEVICES SHALL MEET THE FOLLOWING SPECIFICATIONS:

A. BENDING STRESS IN A GRAB BAR OR SEAT INDUCED BY THE MAXIMUM BENDING MOMENT FROM THE APPLICATION OF A 250 POUND POINT LOAD SHALL BE LESS THAN THE ALLOWABLE STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT.

B. SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF A 250 POUND POINT LOAD SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT, AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESSES SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS.

C. SHEAR FORCE INDUCED IN A FASTENER OR MOUNTING DEVICE FROM THE APPLICATION OF A 250 POUND POINT LOAD SHALL BE LESS THAN THE ALLOWABLE LATERAL LOAD OF EITHER THE FASTENER OF MOUNTING DEVICE OR THE SUPPORTING STRUCTURE , WHICHEVER IS THE ALLOWABLE LOAD.

D. TENSILE FORCE INDUCED IN A FASTENER BY A DIRECT TENSION FORCE OF A 250 POUND POINT LOAD, PLUS THE MAXIMUM MOMENT FROM THE APPLICATION OF A 250 POUND POINT LOAD, SHALL BE LESS THAN THE ALLOWABLE WITHDRAWAL LOAD BETWEEN THE FASTENER AND SUPPORTING STRUCTURE.

E. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.

3. A GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH.

ACCESSIBLE DRINKING FOUNTAINS:

1. WHERE ONLY ONE DRINKING FOUNTAIN AREA IS PROVIDED ON A FLOOR, THERE SHALL BE A DRINKING FOUNTAIN THAT IS ACCESSIBLE TO INDIVIDUALS WHO USE WHEELCHAIRS IN ACCORDANCE WITH THIS SECTION AND ONE ACCESSIBLE TO THOSE WHO HAVE DIFFICULTY BENDING OR STOOPING. THIS CAN BE ACCOMMODATED BY THE USE OF 'HI-LOW' FOUNTAINS, OR BY SUCH OTHER MEANS AS WOULD ACHIEVE THE REQUIRED ACCESSIBILITY FOR EACH GROUP ON EACH FLOOR.
WHERE MORE THAN ONE DRINKING FOUNTAIN IS PROVIDED ON A FLOOR, 50 PERCENT OF THOSE PROVIDED SHALL COMPLY WITH ITEMS 1,2 4 AND 5 OF THIS SECTION AND SHALL BE ON AN ACCESSIBLE ROUTE COMPLYING WITH SECTION 1114B.1.2. ALL DRINKING FOUNTAINS SHALL COMPLY WITH ITEM 3 OF THIS SECTION.

2. WALL AND POST MOUNTED CANTILEVERED DRINKING FOUNTAINS SHALL BE MINIMUM OF 18 INCHES AND A MAXIMUM OF 19 INCHES IN DEPTH AND SHALL HAVE A CLEAR KNEE SPACE BETWEEN THE BOTTOM OF THE APRON AND THE FLOOR OR GROUND NOT LESS THAN 27 INCHES IN HEIGHT, 30 INCHES IN WIDTH AND 8 INCHES IN DEPTH, THE DEPTH MEASUREMENTS BEING TAKEN FROM THE FRONT EDGE OF THE FOUNTAIN BACK TOWARD THE WALL OR MOUNTING POST. THE KNEE CLEARANCE SPACE MUST BE FREE OF EQUIPMENT OR OBSTRUCTIONS. ADDITIONALLY, THERE SHALL BE TOE CLEARANCE OF 9 INCHES IN HEIGHT ABOVE THE FLOOR AND 17 INCHES IN DEPTH FROM THE FRONT EDGE OF THE FOUNTAIN. THE TOE CLEARANCE SPACE MUST BE FREE OF EQUIPMENT OR OBSTRUCTIONS. A CLEAR FLOOR SPACE AT LEAST 30 INCHES BY 48 INCHES COMPLYING WITH SECTION 1118B.4 SHALL BE PROVIDED IN FRONT OF THE DRINKING FOUNTAIN TO ALLOW FORWARD APPROACH. A SIDE APPROACH DRINKING FOUNTAIN IS NOT ACCEPTABLE.

3. ALL DRINKING FOUNTAINS SHALL BE LOCATED COMPLETELY WITHIN ALCOVES OR OTHERWISE POSITIONED SO AS NOT TO ENCROACH INTO PEDESTRIAN WAYS. THE ALCOVE IN WHICH THE DRINKING FOUNTAIN IS LOCATED SHALL NOT BE LESS THAN 32 INCHES IN WIDTH AND 18 INCHES IN DEPTH. ADDITIONALLY, ALCOVES SHALL COMPLY WITH SECTION 1118B.4, ITEM 2. PROTRUDING OBJECTS LOCATED IN ALCOVES OR OTHERWISE POSITIONED SO AS LIMIT ENCROACHMENT INTO PEDESTRIAN WAYS ARE PERMITTED TO PROJECT 4 INCHES INTO WALKS, HALLS, CORRIDORS, PASSAGEWAYS OR AISLES.

4. THE BUBBLER SHALL BE ACTIVATED BY A MANUALLY OPERATED SYSTEM COMPLYING WITH SECTION 1117B.6, ITEM 4 THAT IS FRONT MOUNTED OR SIDE MOUNTED AND LOCATED WITHIN 6 INCHES OF THE FRONT EDGE OF THE FOUNTAIN OR AN ELECTRONICALLY CONTROLLED DEVICE. THE BUBBLER OUTLET ORIFICE SHALL BE LOCATED WITHIN 6 INCHES OF THE FRONT EDGE OF THE DRINKING FOUNTAIN AND WITHIN 36 INCHES OF THE FLOOR. THE WATER STREAM FROM THE BUBBLER SHALL BE SUBSTANTIALLY PARALLEL TO THE FRONT EDGE OF THE DRINKING FOUNTAIN.

5. THE SPOUT SHALL PROVIDE A FLOW OF WATER AT LEAST 4 INCHES HIGH SO AS TO ALLOW THE INSERTION OF A CUP OR GLASS UNDER THE FLOW OF WATER.

IDENTIFICATION SYMBOLS:

1. DOORWAYS LEADING TO MEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY AN EQUILATERAL TRIANGLE, 1/4 INCH THICK WITH EDGES 12 INCHES LONG AND A VERTEX POINTING UPWARD. WOMEN'S SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE, 1/4 INCH THICK AND 12 INCHES IN DIAMETER. UNISEX SANITARY FACILITIES SHALL BE IDENTIFIED BY A CIRCLE 1/4 INCH THICK, 12 INCHES IN DIAMETER WITH A 1/4 INCH THICK TRIANGLE SUPERIMPOSED ON THE CIRCLE WITHIN THE 12 INCH DIAMETER. THESE GEOMETRIC SYMBOLS SHALL BE CENTERED ON THE DOOR AT A HEIGHT OF 60 INCHES AND THEIR COLOR AND CONTRAST OF THE DOOR. SEE ALSO SECTION 1117B.51, ITEM 1 FOR ADDITIONAL SIGNAGE REQUIREMENTS APPLICABLE TO SANITARY FACILITIES.

ACCESSIBLE URINALS:

1. URINALS SHALL BE FLOOR MOUNTED, STALL-TYPE OR WALL HUNG. WHERE ONE OR MORE WALL-HUNG URINALS ARE PROVIDED, AT LEAST ONE WITH AN ELONGATED RIM PROJECTING A MINIMUM OF 14 INCHES FROM THE WALL AND A MAXIMUM OF 17 INCHES FROM THE WALL AND A MAXIMUM OF 17 INCHES ABOVE THE FLOOR SHALL BE PROVIDED.

2. FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44 INCHES ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF. ELECTRONIC AUTOMATIC FLUSHING CONTROLS ARE ACCEPTABLE AND PREFERABLE.

3. WHERE URINALS ARE PROVIDED, AT LEAST ONE SHALL HAVE A CLEAR FLOOR SPACE 30 INCHES BY 48 INCHES IN FRONT OF THE URINAL TO ALLOW FORWARD APPROACH. THIS CLEAR SPACE SHALL COMPLY WITH SECTION 1118B.4

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MOA

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.oncinaarc.com

SCALE: HORIZONTAL NO SCALE; VERTICAL NO SCALE

LICENSED ARCHITECT — C-33996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263 | G-5

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

GENERAL NOTES

CITY OF SAN DIEGO, CALIFORNIA
SHEET 5 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/16/11

SIAVASH HAGHKHAH
PROJECT MANAGER

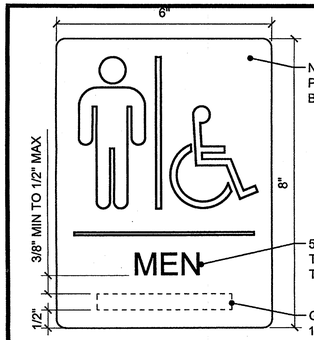
DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

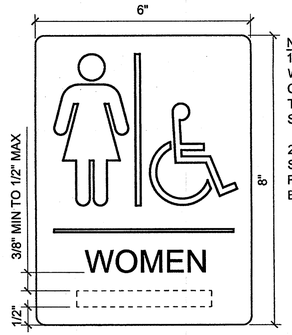
CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

35608- 5 -D

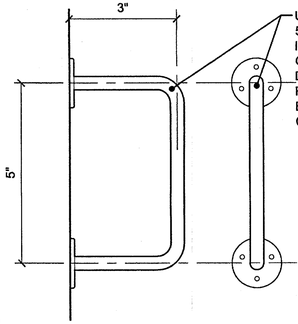




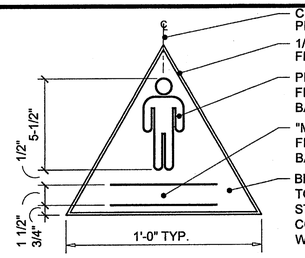
NOTE:
1. TEXT COLOR TO BE WHITE AND BACKGROUND COLOR TO BE BLUE EQUAL TO COLOR NO. 15090 IN FED STD 595B.

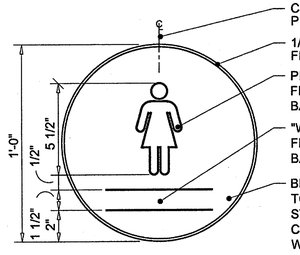
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BEFORE FABRICATION.

12 RESTROOM WALL IDENTIFICATION SIGN
SCALE: 6"=1'-0"



13 DOOR PULL - ACCESSIBLE STALL DOOR
SCALE: 6"=1'-0"





NOTES:
1. PLAQUES ARE TO BE MOUNTED 60" ABOVE FINISH FLOOR TO CENTERLINE OF THE SIGN, CENTER OF DOOR.

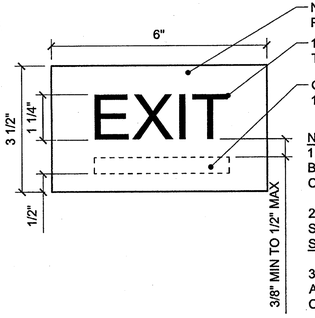
2. SECURE PLAQUES TO DOOR WITH ADHESIVE.

3. PLAQUES TO BE MADE FROM INJECTION MOLDED HIGH-IMPACT PLASTIC.

4. ADDITIONAL IDENTIFICATION SIGNAGE WITH CLASS 2 BRAILLE SHALL BE LOCATED ON THE WALL ADJACENT TO THE DOOR LEADING TO THE SANITARY FACILITIES, PER REQUIREMENTS OF CBC 1117B.5

5. CONTRACTOR TO SUBMIT SHOP DRAWINGS, WITH COPY, FOR REVIEW AND APPROVAL PRIOR TO FABRICATION

10 RESTROOM DOOR IDENTIFICATION
SCALE: NOT TO SCALE

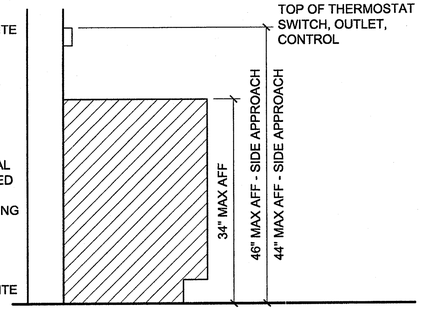


NOTE:
1. BACKGROUND COLOR TO BE 'NAVY BLUE' AND TEXT COLOR TO BE 'WHITE'

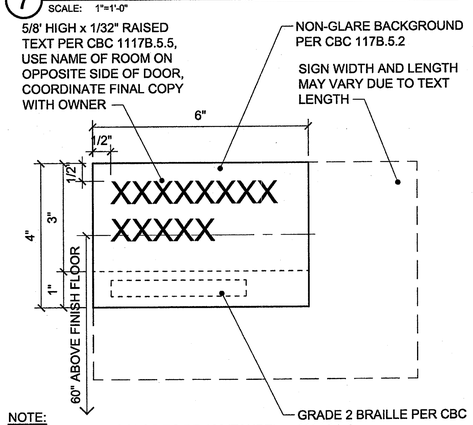
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL SIGNS, WITH COPY

3. MOUNT ALL SIGNS 60" ABOVE FINISH FLOOR TO CENTERLINE OF SIGN

11 TACTILE EXIT SIGNS - 'EXIT'
SCALE: 6"=1'-0"



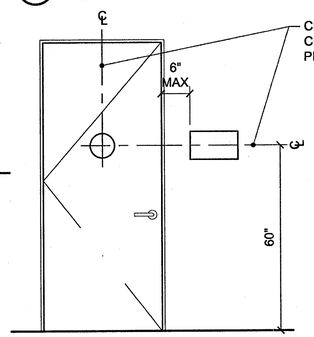
7 MOUNTING HEIGHT OVER OBSTRUCTION
SCALE: 1"=1'-0"



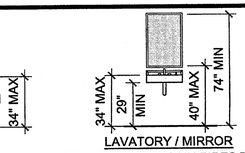
NOTE:
1. BACKGROUND COLOR TO BE 180 'TAUPE' AND TEXT COLOR TO BE 225 'WHITE' CHOSEN FROM MOHAWK SIGN SYSTEMS, OR EQUAL.

2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL SIGNS WITH COPY SO THAT PROPER SIGN SIZE CAN BE DETERMINED

8 ROOM IDENTIFICATION SIGN
SCALE: 6"=1'-0"



9 RESTROOM DOOR ID MOUNTING LOCATION
SCALE: NOT TO SCALE



1. CONTROLS FOR FLUSH VALVES MOUNTED ON WIDE SIDE OF TOILET.

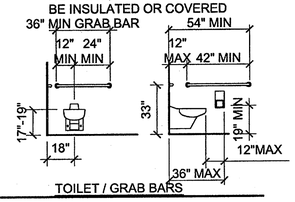
2. W.C., URINAL, AND FAUCET CONTROLS, AND OPERATING MECHANISM CONTROLS TO BE OPERATED WITH ONE HAND, NOT REQUIRING TIGHT GRASPING, PINCHING, OR TWISTING OF WRIST. MOUNT NO MORE THAN 3'-4" A.F.F.

3. NO SHARP OR ABRASIVE OBJECTS UNDER LAVATORY.

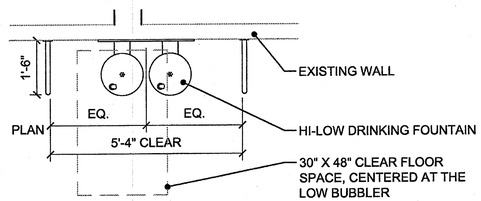
4. ACTIVATION FORCE TO BE NO GREATER THAN 5 LBF. FOR VALVE CONTROLS, FAUCET, OR MECHANISM CONTROLS.

5. SEE ADDITIONAL NOTES ON SHEET G-5.

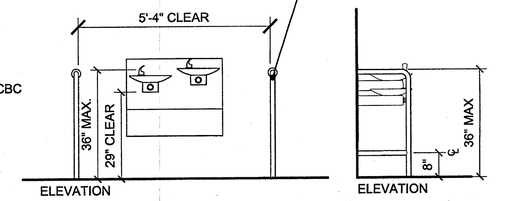
HOT WATER AND DRAIN PIPES TO BE INSULATED OR COVERED

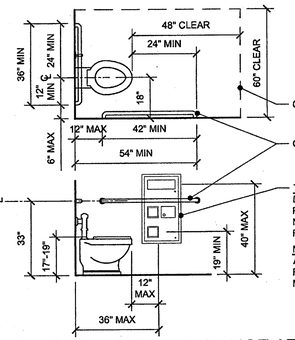


3 ACCESSIBILITY STANDARDS
SCALE: 1/4"=1'-0"

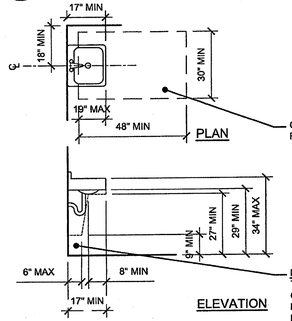


SEE ADDITIONAL NOTES ON SHEET G-5



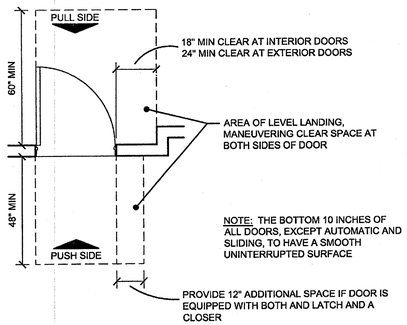


1 REQUIRED CLEARANCE AT TOILET
SCALE: 3/8"=1'-0"



4 REQUIRED CLEARANCE AT LAVATORY
SCALE: 3/8"=1'-0"

5 DRINKING FOUNTAIN
SCALE: 1/2"=1'-0"



6 REQUIRED CLEARANCES AT ALL DOORS
SCALE: NOT TO SCALE

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

G-6

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

GENERAL ACCESSIBLITY DETAILS

CITY OF SAN DIEGO, CALIFORNIA
SHEET 6 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR ..... DATE STARTED .....
INSPECTOR ..... DATE COMPLETED .....

35608- 6 -D

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4956 FX
www.oncinaarc.com

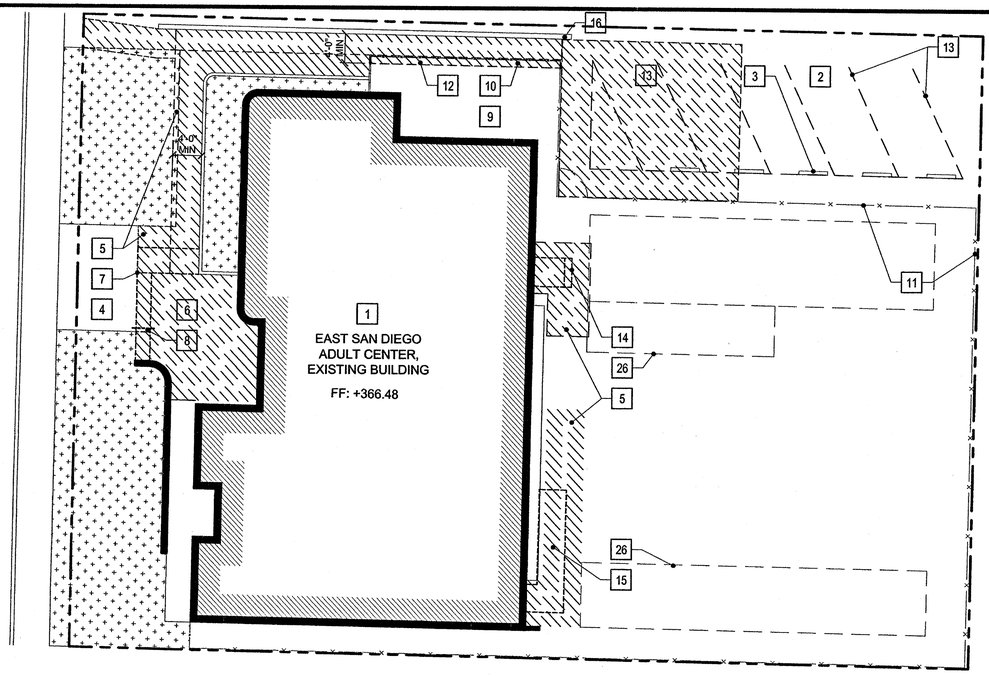
SCALE — HORIZONTAL NO SCALE — VERTICAL NO SCALE

LICENSED ARCHITECT — MANUEL ONCINA — C-13996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

WARNING 0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

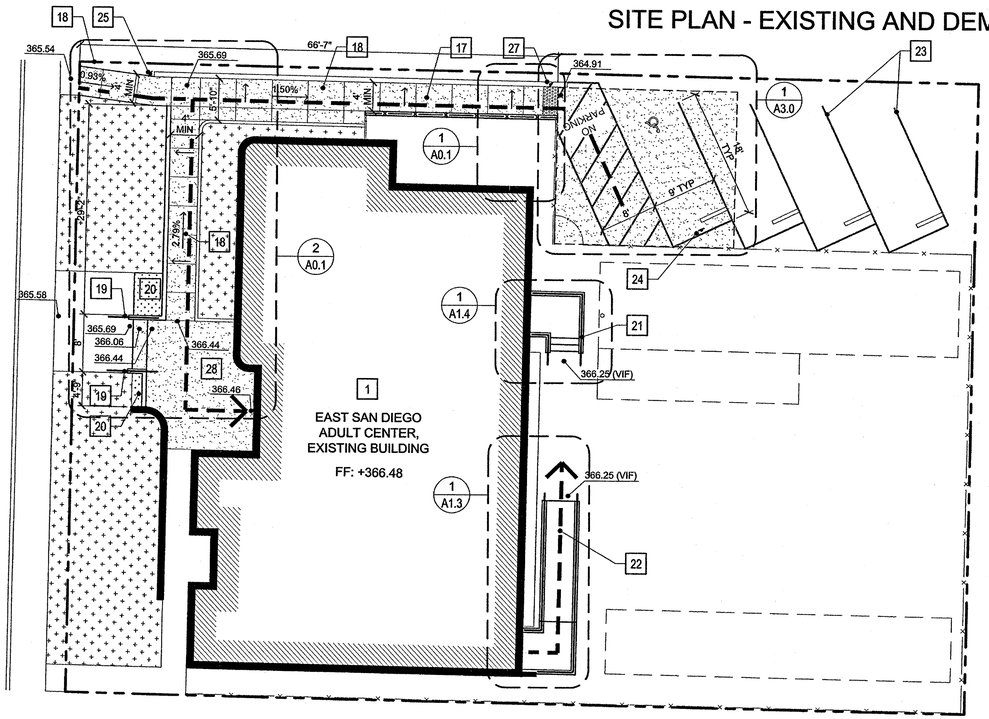
APPROVED BY: FOR CITY ENGINEER
CHECKED BY: CONSTRUCTION ENGINEER
CHECKED BY: INSPECTOR
AS-BUILTS



SITE PLAN - EXISTING AND DEMOLITION

SCALE: 1" = 10'-0"

1 north



SITE PLAN - PROPOSED WORK

SCALE: 1" = 10'-0"

2 north

DEMO LEGEND

- EXISTING BUILDING FOOTPRINT
- LANDSCAPE / PERVIOUS AREA
- REMOVE LANDSCAPE
- PROPERTY LINE
- BUILDING SETBACK LINE
- CONC AND A/C PAVEMENT, TO BE REMOVED
- EXISTING FENCE
- FENCE, TO BE REMOVED
- STAIR, TO BE REMOVED
- STRIPING, TO BE REMOVED

SYMBOL LEGEND

- EXISTING BUILDING FOOTPRINT
- NEW CONCRETE WALK
- LANDSCAPE / PERVIOUS AREA
- PROPERTY LINE
- BUILDING SETBACK LINE
- NEW FENCE LINE
- ACCESSIBLE PATH OF TRAVEL

GENERAL SITE PLAN NOTES

1. SEE SHEET A3.0 FOR TYPICAL SITE DETAILS
2. ALL SPOT ELEVATIONS SHOWN ARE RESULT OF TOPO SURVEY PROVIDED BY CITY OF SAN DIEGO. SPOT ELEVATIONS TO BE VERIFIED (VIF) ARE EXTRAPOLATED FROM FF ELEVATION PROVIDED IN TOPO AND MEASUREMENTS TAKEN AT SITE BY ARCHITECT.
3. REPLACE EXISTING IRRIGATION COMPONENTS IN KIND, IF IMPACTED DURING DEMOLITION OR CONSTRUCTION.
4. CONTRACTOR IS RESPONSIBLE FOR SECURING ON OR OFF-SITE STAGING AREA.
5. COORDINATE SITE DEMOLITION PLAN WITH SHEET A1.0, DEMOLITION PLAN

NOTES

1. ADULT CENTER EAST SAN DIEGO, EXISTING BUILDING
2. EXISTING ASPHALTIC CONCRETE PAVED PARKING AREA
3. EXISTING CONC WHEEL STOP, TYP AT EACH PARKING SPACE, SALVAGE, STORE AND REPLACE
4. EXISTING CONCRETE WALK
5. REMOVE PORTIONS OF CONCRETE WALK AND LANDSCAPE, WHERE INDICATED, PREP FOR NEW WORK
6. REMOVE CONC SLAB AT ENTRY
7. REMOVE CONC STAIR, WHERE INDICATED
8. REMOVE EXISTING RAIL AT STAIR
9. EXISTING RAISED CONC PATIO
10. REMOVE PORTION OF RAISED CONC PATIO AS INDICATED TO MAINTAIN CLEAR WALKWAY FOR PATH OF TRAVEL
11. EXISTING WOOD FENCE, WOOD GATE WHERE OCCURS
12. REMOVE WOOD FENCE, WHERE INDICATED
13. REMOVE ALL EXISTING PARKING STRIPING, REMOVE A/C PAVEMENT WHERE INDICATED
14. REMOVE EXISTING WOOD AND CONC STAIR
15. REMOVE EXISTING WOOD RAMP
16. EXISTING A/C PAVEMENT CURB, TO REMAIN
17. ACCESSIBLE PATH OF TRAVEL, MIN 48" WIDE
18. NEW CONC WALK, LESS THAN 4.5% SLOPE IN DIRECTION OF TRAVEL, 1.5% MAX CROSS SLOPE
19. NEW STEEL RAIL, HOT DIPPED GALV AND PAINTED, EMBED IN CONC FLATWORK, PER 15/A3.1
20. NEW LANDSCAPE / PERVIOUS AREA
21. NEW STAIR, PER PLAN AND DETAILS, SHEET A1.4
22. NEW RAMP, PER PLAN AND DETAILS, SHEET A1.3
23. NEW PAVEMENT STRIPING
24. ACCESSIBLE PARKING SIGN, PER DETAIL 3/A3.0
25. PARKING LOT ENTRY SIGN, WITH TOWING INFORMATION, PER DETAIL 4/A3.0
26. EXISTING SHADE CANOPY, TO REMAIN
27. INSTALL DIRECTIONAL SIGNAGE FOR ACCESSIBLE ROUTE
28. NEW CONC ENTRY SLAB, 1.5% MAX IN ALL DIRECTIONS
29. NEW A/C PAVEMENT, 1.5% MAX IN ALL DIRECTIONS

GENERAL DEMOLITION NOTES

1. PATCH, REPAIR AND RESTORE TO MATCH EXISTING CONDITIONS AT ANY DAMAGED AREA BEHIND OR SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED
2. EVERYTHING SHOWN ON DEMO PLAN IS EXISTING AND TO REMAIN EXCEPT WHERE INDICATED TO BE REMOVED. CONTRACTOR SHALL PROTECT ANYTHING THAT IS TO REMAIN FROM DAMAGE.
3. CONTRACTOR TO TEST ALL DOOR CLOSERS TO ENSURE EFFORT TO OPERATE DOORS IS WITHIN ALLOWED 5LBS MAX OF PRESSURE. IF EXISTING CLOSER DOES NOT MEET THIS REQUIREMENT, REMOVE AND INSTALL NEW.
4. ALL THRESHOLDS THAT DO NOT COMPLY WITH CBC SECTION 1133B.2.4.1 SHALL BE REMOVED AND REPLACED WITH COMPLIANT THRESHOLDS
5. COORDINATE DEMOLITION SHEET WITH REST OF SHEETS IN PLAN SET AND SPECIFICATIONS. ITEMS THAT WILL CONFLICT WITH THE SUCCESSFUL COMPLETION OF THE WORK DESCRIBED IN THESE CONSTRUCTION DOCUMENTS MUST BE REMOVED. WHERE EXISTING STRUCTURE OR MATERIALS CONFLICT WITH CONSTRUCTION OF FINISHED PROJECT, AND ARE NOT SPECIFICALLY SHOWN ON THIS SHEET, NOTIFY OWNER AND ARCHITECT PRIOR TO REMOVAL.
6. COORDINATE SLAB TRENCHING WITH LOCATION ON PLAN SHEETS. NOTIFY ARCHITECT BEFORE WORK FOR CLARIFICATION OF ANY DISCREPANCIES.
7. REMOVE EXTERIOR AND INTERIOR FINISHES WHERE NECESSARY TO COMPLETE NEW WORK AS SHOWN IN THIS PLAN SET, UNLESS SPECIFICALLY NOTED OTHERWISE.
8. COORDINATE RESTROOM DEMOLITION AND CONSTRUCTION WITH CITY REPRESENTATIVE AND BUILDING OFFICIAL. TEMPORARY ACCESSIBLE, EQUIVALENT FACILITIES (TOILETS AND HAND SINKS) MAY NEED TO BE PROVIDED.
9. REMOVE EXISTING RESTROOM DOOR IDENTIFICATION PLAQUES.
10. CAP CONNECTIONS WHERE UTILITIES REMOVED, AND TO BE ABANDONED
11. REMOVE NON-COMPLIANT HARDWARE FROM ALL DOORS TO REMAIN, TO BE REPLACED WITH CODE-COMPLIANT HARDWARE, SEE PLANS AND DOOR SCHEDULE.
12. CONTRACTOR TO FINISH ANY UNFINISHED SURFACES THAT ARE THE RESULT OF DEMOLITION, WITH MATERIAL OF LIKE KIND UNLESS OTHERWISE NOTED.
13. WHERE FIXTURE REMOVED, REMOVE ALL ASSOCIATED MOUNTING HARDWARE
14. WERE EXISTING ITEMS TO BE REMOVED EXTEND BELOW FINISH FLOOR, REMOVE AT LEAST 2" BELOW SURFACE OF EXISTING SLAB. FILL AND TROWEL TO SMOOTH. FINISH TO MATCH ADJACENT TEXTURE.

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4003 PH
619/295-4955 FX
www.oncinaarc.com

SCALE	HORIZONTAL	NO SCALE
	VERTICAL	NO SCALE

REGISTERED ARCHITECT MANUEL ONCINA C-13096 2-28-13 REN STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

WARNING 0 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:	
FOR CITY ENGINEER	
CHECKED BY:	
CONSTRUCTION ENGINEER	
CHECKED BY:	
INSPECTOR	
AS-BUILTS	
CONTRACTOR	DATE STARTED
INSPECTOR	DATE COMPLETED

A0.0

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

SITE PLANS

CITY OF SAN DIEGO, CALIFORNIA
SHEET 7 OF 25 SHEETS

W.B.S. B-00944

APPROVED FOR CITY ENGINEER 6/6/11 DATE

SIAVASH HAGHIGHAH PROJECT MANAGER

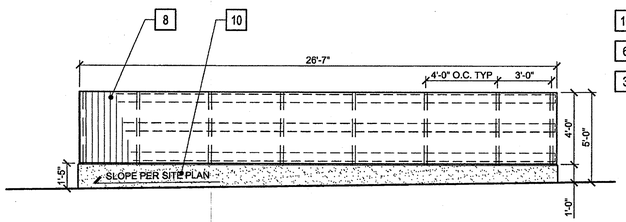
DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

CCS27 COORDINATE

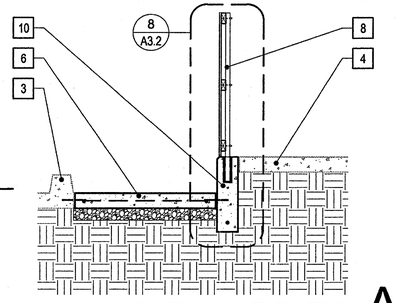
CCS83 COORDINATE

35608- 7 -D

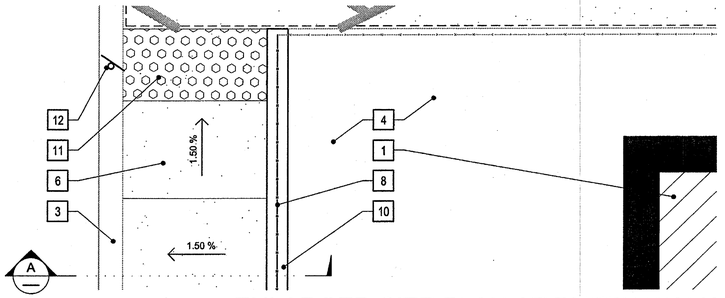
ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)



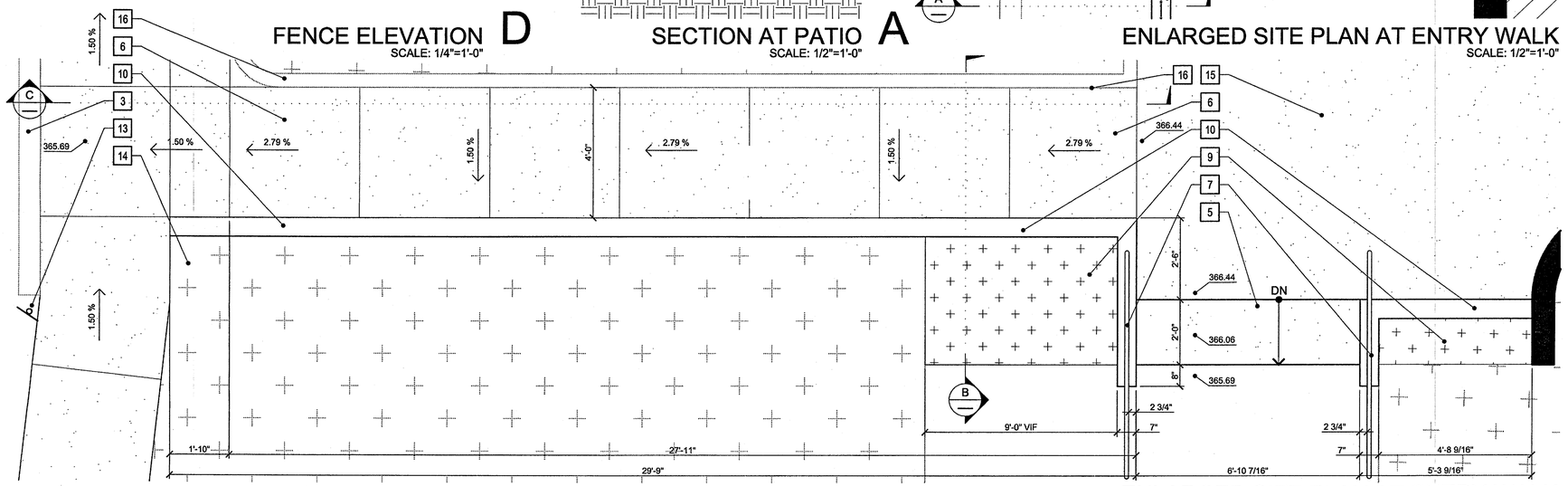
FENCE ELEVATION D
SCALE: 1/4"=1'-0"



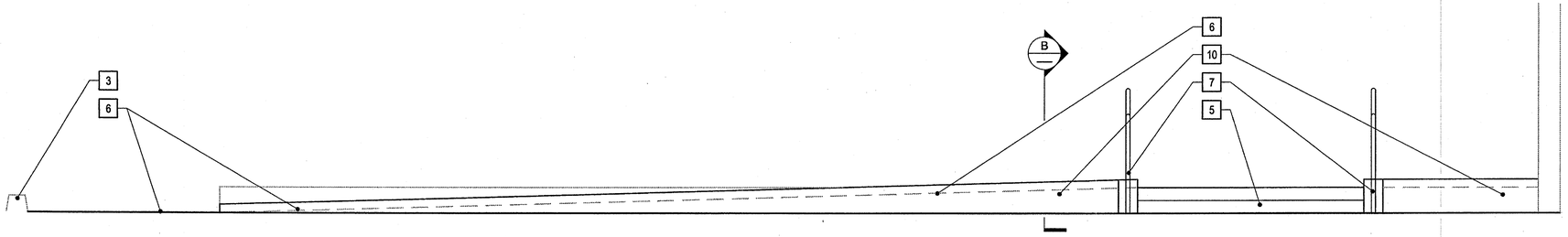
SECTION AT PATIO A
SCALE: 1/2"=1'-0"



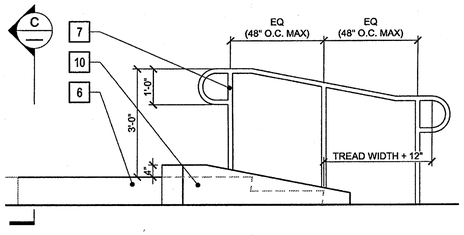
ENLARGED SITE PLAN AT ENTRY WALK 1
SCALE: 1/2"=1'-0"
north



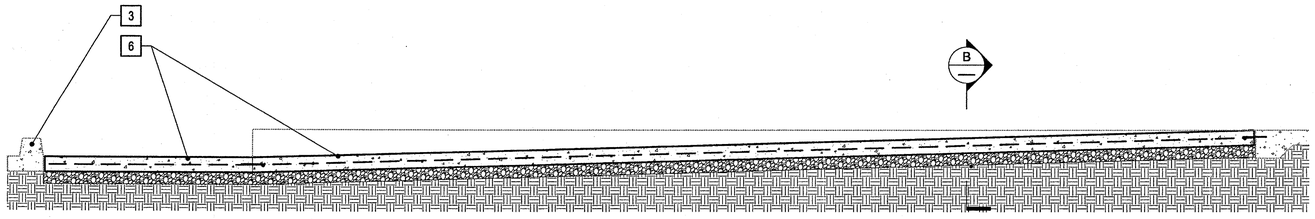
ENLARGED SITE PLAN AT ENTRY WALK 2
SCALE: 1/2"=1'-0"
north



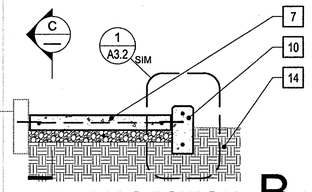
WALK ELEVATION 4
SCALE: 1/2"=1'-0"



WALK ELEVATION 3
SCALE: 1/2"=1'-0"



WALK SECTION C
SCALE: 1/2"=1'-0"



WALK SECTION B
SCALE: 1/2"=1'-0"

NOTES

1. ADULT CENTER EAST SAN DIEGO, EXISTING BUILDING
2. ACCESSIBLE PATH OF TRAVEL, MIN 48" WIDE
3. EXISTING A/C PAVEMENT CURB
4. EXISTING RAISED CONC PATIO
5. NEW CONC STAIR
6. NEW CONC WALK, LESS THAN 4.5% SLOPE IN DIRECTION OF TRAVEL, 1.5% MAX CROSS SLOPE
7. NEW STEEL RAIL, HOT DIPPED GALV AND PAINTED, EMBED IN CONC FLATWORK
8. NEW WOOD FENCE, SEE DETAIL 8/A3.2
9. NEW LANDSCAPE / PERVIOUS AREA, TO MATCH EXISTING LANDSCAPING
10. NEW CONC WALL
11. TRUNCATED DOME WARNING STRIP
12. ACCESSIBLE DIRECTIONAL SIGNAGE
13. UNAUTHORIZED VEHICLE SIGNAGE, PER DETAIL 4/A3.0
14. EXISTING LANDSCAPE / PERVIOUS AREA
15. NEW CONC SLAB AT ENTRY AREA, 1.5% MAX IN ANY DIRECTION
16. EXISTING CONC PLANTER CURB, TO REMAIN

GENERAL NOTES

1. SEE SHEET A3.0 FOR TYPICAL SITE DETAILS
2. ALL SPOT ELEVATIONS SHOWN ARE RESULT OF TOPO SURVEY PROVIDED BY CITY OF SAN DIEGO. SPOT ELEVATIONS TO BE VERIFIED (VIF) ARE EXTRAPOLATED FROM FF ELEVATION PROVIDED IN TOPO AND MEASUREMENTS TAKEN AT SITE BY ARCHITECT.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4930 PH
619/295-4955 FX
www.onciaaia.com

SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

LICENSED ARCHITECT MANUEL ONCINA C-13996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

WARNING 0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263 | A0.1

PLANS FOR THE CONSTRUCTION OF
ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

ENLARGED SITE PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 8 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER DATE

SIAVASH HAGHIGHAT
PROJECT MANAGER

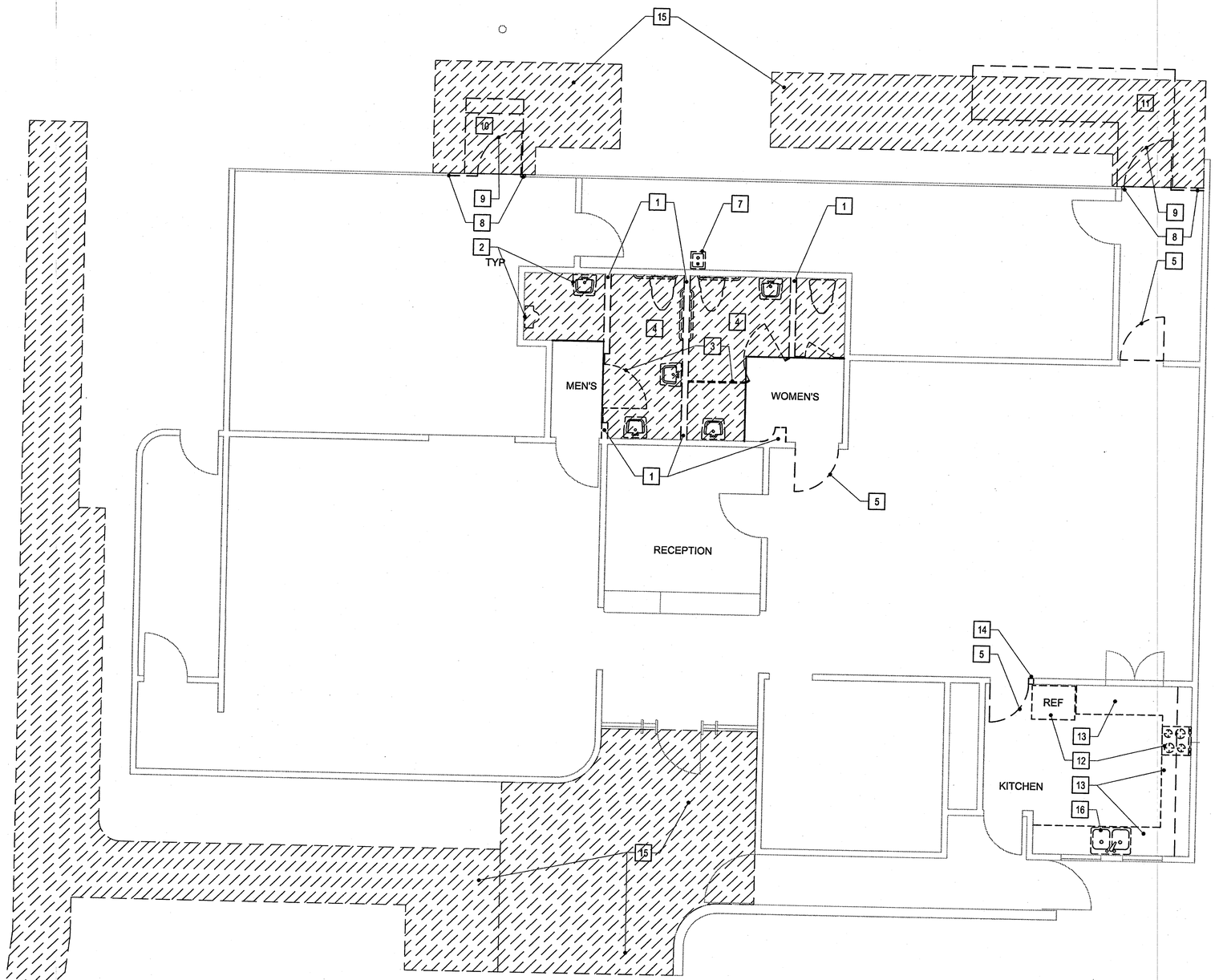
DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

35608- 8 -D



EXISTING / DEMOLITION FLOOR PLAN 1

SCALE: 1/8" = 1'-0"

north

NOTES

1. REMOVE INTERIOR WALLS, WHERE INDICATED PER PLAN
2. REMOVE ALL RESTROOM FIXTURES AND ACCESSORIES
3. REMOVE ALL RESTROOM PARTITIONS AND ANCHOR COMPONENTS
4. REMOVE CONC FLOOR SLAB AS NECESSARY TO REMOVE EXISTING BELOW SLAB UTILITIES AND INSTALL NEW BELOW SLAB PLUMBING AND SEWER UTILITIES
5. REMOVE DOORS, WHERE INDICATED PER PLAN
6. REMOVE THRESHOLDS WHERE EXISTING, AT DOORS TO BE REMOVED
7. REMOVE EXISTING DRINKING FOUNTAIN
8. CAREFULLY REMOVE SECTIONS OF GLASS SOLARIUM IN FULL INCREMENTS TO THE NEXT NEAREST MULLION, TAKING CARE NOT TO DAMAGE ADJACENT SECTIONS
9. REMOVE SOLARIUM DOORS AS INDICATED ON PLANS
10. REMOVE EXISTING STAIR AND CONC LANDING
11. REMOVE EXISTING RAMP AND LANDING
12. REMOVE APPLIANCES IN KITCHEN, PROTECT AND SAVE FOR REINSTALLATION
13. REMOVE ALL CABINETRY ON EAST, SOUTH AND WEST WALLS IN KITCHEN, UPPER AND LOWER
14. REMOVE JAMB AND PORTION OF WALL TO ALLOW ROUGH OPENING FOR NEW 36" WIDE DOOR
15. REMOVE EXISTING CONC FLATWORK, AND STAIR WHERE OCCURS, AND PREP FOR NEW WORK, SEE SITE DEMOLITION PLAN FOR FULL EXTENT
16. REMOVE EXISTING SINK

COORDINATE THIS SHEET WITH SITE DEMOLITION PLAN, SHEET A0.0

GENERAL DEMOLITION NOTES

1. PATCH, REPAIR AND RESTORE TO MATCH EXISTING CONDITIONS AT ANY DAMAGED AREA BEHIND OR SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED
2. EVERYTHING SHOWN ON DEMO PLAN IS EXISTING AND TO REMAIN EXCEPT WHERE INDICATED TO BE REMOVED. CONTRACTOR SHALL PROTECT ANYTHING THAT IS TO REMAIN FROM DAMAGE.
3. CONTRACTOR TO TEST ALL DOOR CLOSERS TO ENSURE EFFORT TO OPERATE DOORS IS WITHIN ALLOWED 5LBS MAX OF PRESSURE. IF EXISTING CLOSER DOES NOT MEET THIS REQUIREMENT, REMOVE AND INSTALL NEW.
4. ALL THRESHOLDS THAT DO NOT COMPLY WITH CBC SECTION 1133B.2.4.1 SHALL BE REMOVED AND REPLACED WITH COMPLIANT THRESHOLDS
5. COORDINATE DEMOLITION SHEET WITH REST OF SHEETS IN PLAN SET AND SPECIFICATIONS. ITEMS THAT WILL CONFLICT WITH THE SUCCESSFUL COMPLETION OF THE WORK DESCRIBED IN THESE CONSTRUCTION DOCUMENTS MUST BE REMOVED. WHERE EXISTING STRUCTURE OR MATERIALS CONFLICT WITH CONSTRUCTION OF FINISHED PROJECT, AND ARE NOT SPECIFICALLY SHOWN ON THIS SHEET, NOTIFY RESIDENT ENGINEER PRIOR TO REMOVAL.
6. COORDINATE SLAB TRENCHING WITH LOCATION ON PLAN SHEETS. NOTIFY RESIDENT ENGINEER BEFORE WORK FOR CLARIFICATION OF ANY DISCREPANCIES.
7. REMOVE EXTERIOR AND INTERIOR FINISHES WHERE NECESSARY TO COMPLETE NEW WORK AS SHOWN IN THIS PLAN SET, UNLESS SPECIFICALLY NOTED OTHERWISE.
8. COORDINATE RESTROOM DEMOLITION AND CONSTRUCTION WITH RESIDENT ENGINEER. TEMPORARY ACCESSIBLE, EQUIVALENT FACILITIES (TOILETS AND HAND SINKS) TO BE PROVIDED BY CONTRACTOR DURING CONSTRUCTION OF RESTROOMS.
9. REMOVE EXISTING RESTROOM DOOR IDENTIFICATION PLAQUES.
10. CAP CONNECTIONS WHERE UTILITIES REMOVED, AND TO BE ABANDONED
11. REMOVE NON-COMPLIANT HARDWARE FROM ALL DOORS TO REMAIN, TO BE REPLACED WITH CODE-COMPLIANT HARDWARE, SEE PLANS AND DOOR SCHEDULE.
12. CONTRACTOR TO FINISH ANY UNFINISHED SURFACES THAT ARE THE RESULT OF DEMOLITION, WITH MATERIAL OF LIKE KIND UNLESS OTHERWISE NOTED.
13. WHERE FIXTURE REMOVED, REMOVE ALL ASSOCIATED MOUNTING HARDWARE
14. WERE EXISTING ITEMS TO BE REMOVED EXTEND BELOW FINISH FLOOR, REMOVE AT LEAST 2" BELOW SURFACE OF EXISTING SLAB. FILL AND TROWEL TO SMOOTH. FINISH TO MATCH ADJACENT TEXTURE.

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4000 PH
619/295-4055 FX
www.oncina.com

SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

LICENSED ARCHITECT C-13996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

WARNING 0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

A1.0

FUNDING CIP/SAP: 400002 SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

DEMOLITION PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 9 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER 6/15/11 DATE

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

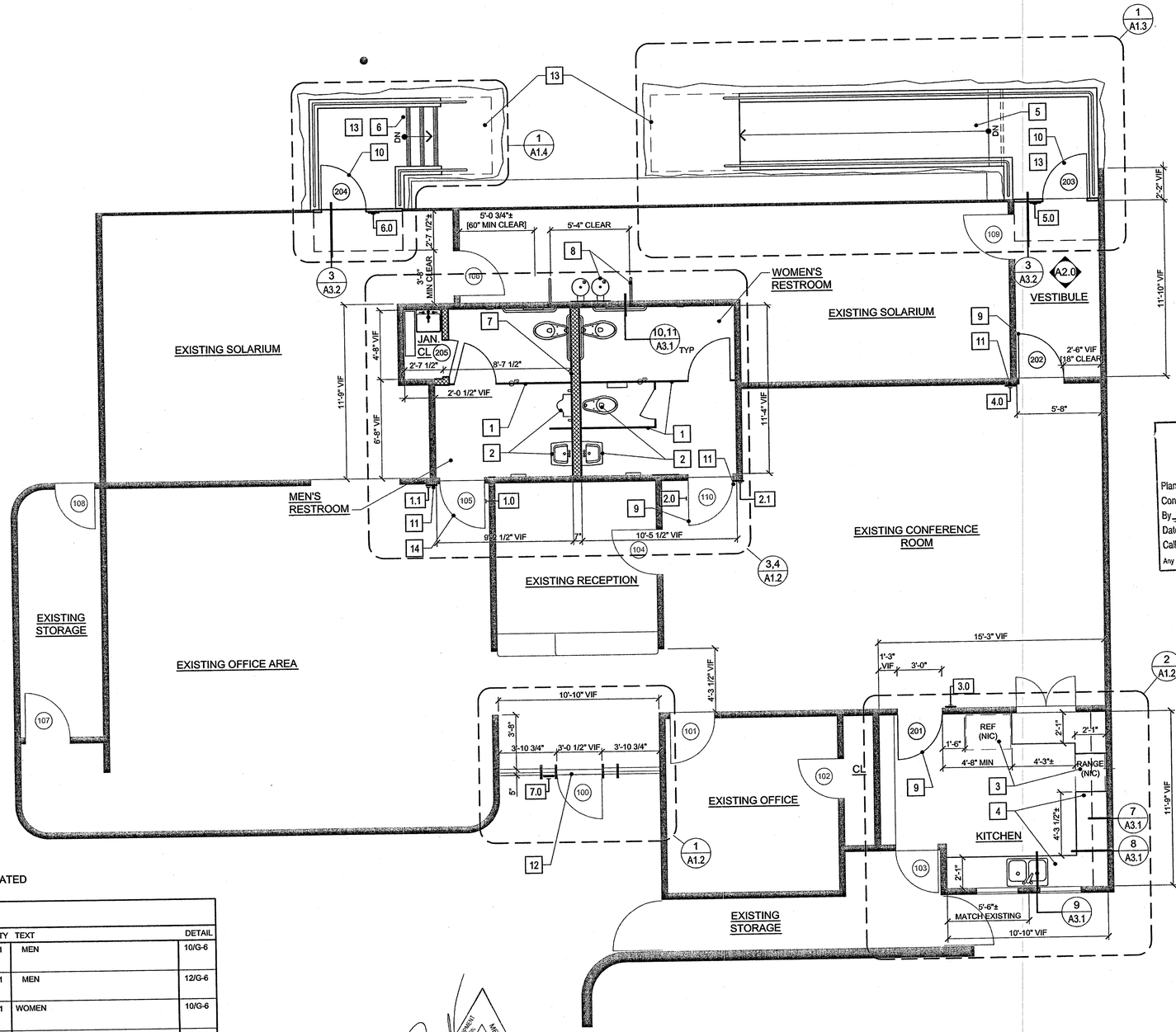
CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

35608- 9 -D

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)



NOTES

1. NEW FLOOR MOUNTED TOILET PARTITIONS
2. NEW PLUMBING FIXTURE LOCATIONS, SEE PLUMBING DRAWINGS FOR MORE INFORMATION
3. RELOCATED EXISTING KITCHEN APPLIANCES, TYP OF ALL
4. NEW BASE AND UPPER CABINETRY, PLASTIC LAMINATE FINISH
5. NEW ACCESSIBLE RAMP, CONC, PER PLAN AND DETAIL 1/A3.2
6. NEW CONC STAIR, WITH CONTRASTING COLOR STRIPE AT EACH NOSING, PER PLAN AND DETAILS 2/A3.2
7. NEW GYP BOARD AND WOOD STUD PARTITION, PER DETAIL 1/A3.1, FINISH PER SCHEDULE ON SHEET A3.0
8. NEW HI-LOW DRINKING FOUNTAIN AND RAILING WING WALL, PER DETAIL 5/G-6, INSTALL CONCEALED BLOCKING AT LOCATION OF RAILING CONNECTION TO WALL, PATCH WALL TO MATCH EXISTING FINISH
9. NEW DOOR AND CODE COMPLIANT HARDWARE, PER SCHEDULE ON SHEET A2.0, NO LATCH
10. NEW SOLARIUM PARTITION AND DOOR WITH CODE-COMPLIANT HARDWARE, INSTALL WITH WATERTIGHT AND WEATHERPROOF SEAL WITH EXISTING CONSTRUCTION, SEE DETAIL 3/A3.2
11. INSTALL CODE-COMPLIANT ROOM SIGNAGE, PER SCHEDULE THIS SHEET, TYP
12. INSTALL NEW CODE-COMPLIANT THRESHOLD, VERIFY OPENING WIDTH MEETS ACCESSIBLE REQUIREMENTS WHEN DOOR OPEN AT 90 DEGREE ANGLE
13. LANDING, SLOPE 1.5% FOR POSITIVE DRAINAGE AT EXTERIOR CONDITION
14. DOORS 105 TO HAVE CLOSER AND NO LATCH

GENERAL NOTES

1. PATCH, REPAIR AND RESTORE TO MATCHING CONDITIONS AT ANY DAMAGED AREA BEHIND OR SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED.
2. FOR A DIMENSIONAL LAYOUT OF RESTROOMS SEE ENLARGED PLAN ON SHEET A1.2
3. ALL SIGNS THAT ARE MOUNTED TO GLASS SHALL BE BACKED ON OPPOSITE SIDE OF GLASS WITH VYNAL TO MATCH SIGN BACKGROUND AND BE OF EQUAL SIZE TO THE SIGN TO WHICH IT BACKS

CONFORMS
PLANNING AND DEVELOPMENT REVIEW DEPARTMENT
Land Development Review
Plan File/Work Order No. 228447
Conforms to CUPDP
By _____ Initials GDS
Date 6-2-11 Phone 446-5324
Call _____ for landscape inspection
Any Revision To These Plans Will Require Another Stamp of Conformity

City of San Diego
Development Services
Information & Application Services
APPROVALS
By: Oscar Paralso, Jr. Date: 6/2/2011
Structural: _____
Mechanical: _____
Zoning: RM Plumbing
WP ISSUE & CELEBRATE
NSGD 14238

BUILDING DEVELOPMENT REVIEW
DIVISION/STRUCTURAL
Jose A. Del Prado Date 6/2

DEVELOPMENT SERVICES
MEHDI NASHOLLAHNIA DATE 6/2/11
228447
ELECTRICAL PLAN REVIEW DIVISION

SYMBOLS LEGEND

1.00 WALL / DOOR MOUNTED SIGNS, AS INDICATED

SIGNAGE SCHEDULE

SIGN #	LOCATION	SIGN TYPE	QTY	TEXT	DETAIL
1.0	ON ENTRY SIDE OF DOOR 105	RESTROOM DOOR I.D.	1	MEN	10/G-6
1.1	ON ENTRY SIDE OF DOOR 105	RESTROOM WALL I.D. WITH BRAILE	1	MEN	12/G-6
2.0	ON ENTRY SIDE OF DOOR 110	RESTROOM DOOR I.D.	1	WOMEN	10/G-6
2.1	ON ENTRY SIDE OF DOOR 110	RESTROOM WALL I.D. WITH BRAILE	1	WOMEN	12/G-6
3.0	CONF ROOM SIDE OF DOOR 201	DOOR I.D.	1	KITCHEN	8/G-6
4.0	INTERIOR SIDE OF DOOR 202	EXIT	1	EXIT	11/G-6
5.0	INTERIOR SIDE OF DOOR 203	EXIT	1	EXIT	11/G-6
6.0	INTERIOR SIDE OF DOOR 204	EXIT	1	EXIT	11/G-6
7.0	EXTERIOR SIDE OF DOOR 100	ISA	1	NONE (INT'L SYMBOL OF ACCESSIBILITY)	2/A3.0

TAMMY BUI
Residential and Tenant Improvement
PTS 228447
MECHANICAL
APPROVED
5/31/11

PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"
1
north

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT
MOA.
MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE PLANNING INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.oncinaac.com

SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

LICENSED ARCHITECT
C-13996
2-28-13
REN.
STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • SEMPER VIGILANS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

A1.1

FUNDING CIP/SAP: 400002 SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

FLOOR PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 10 OF 25 SHEETS

APPROVED: FOR CITY ENGINEER DATE 6/6/11

W.B.S. B-00944

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

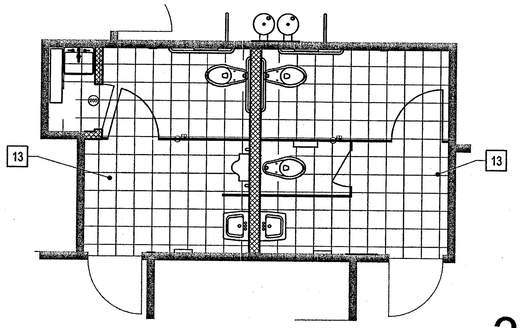
CCS27 COORDINATE

CCS83 COORDINATE

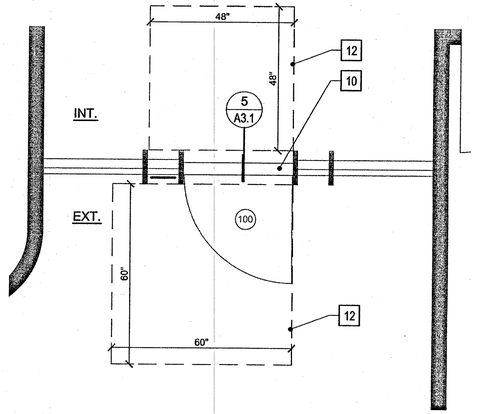
AS-BUILTS
CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

35608-10-D

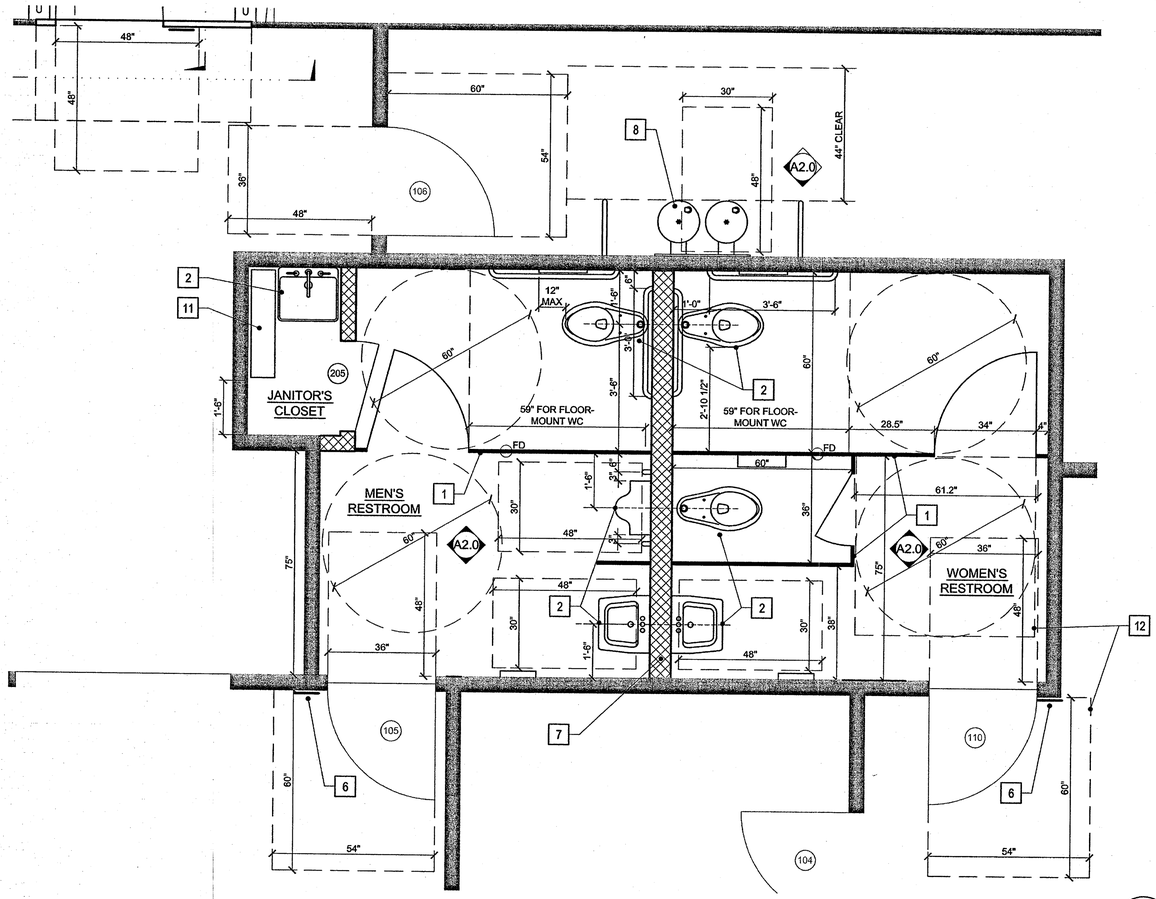
ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)



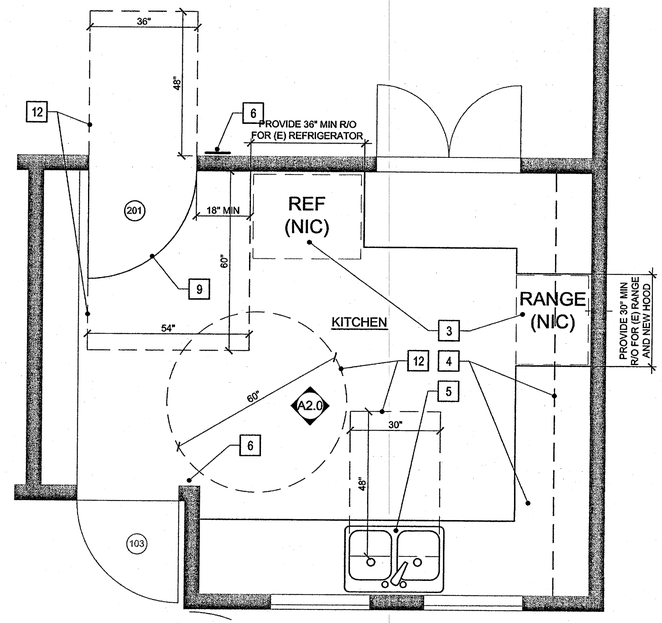
FINISH PLAN - RESTROOMS 3
SCALE: 1/4" = 1'-0"



ENLARGED FLOOR PLAN - ACCESS CLEARANCES 1
SCALE: 1/2" = 1'-0"
north



ENLARGED FLOOR PLAN - ACCESS CLEARANCES 4
SCALE: 1/2" = 1'-0"
north



ENLARGED FLOOR PLAN - ACCESS CLEARANCES 2
SCALE: 1/2" = 1'-0"
north

NOTES

1. NEW FLOOR MOUNTED TOILET PARTITIONS
2. NEW PLUMBING FIXTURE LOCATIONS, SEE PLUMBING DRAWINGS FOR MORE INFORMATION
3. RELOCATED EXISTING KITCHEN APPLIANCES, TYP OF ALL
4. NEW BASE AND UPPER CABINETRY, PLASTIC LAMINATE FINISH
5. NEW ACCESSIBLE SINK, OPEN SPACE BELOW COUNTER, PER DETAIL 9/A3.1 AND PLUMBING DRAWINGS
6. INSTALL CODE-COMPLIANT ROOM SIGNAGE, PER DETAIL 8/G-5 AND SCHEDULE ON SHEET A1.1, TYP
7. NEW GYP BOARD AND WOOD STUD PARTITION, PER DETAIL 1/A3.1, FINISH PER SCHEDULE
8. NEW HI-LOW DRINKING FOUNTAIN AND RAILING WING WALL, PER DETAIL 5/G-5, INSTALL CONCEALED BLOCKING AT LOCATION OF RAILING CONNECTION TO WALL
9. NEW DOOR AND CODE COMPLIANT HARDWARE, PER SCHEDULE
10. INSTALL NEW CODE-COMPLIANT THRESHOLD, VERIFY OPENING WIDTH MEETS ACCESSIBLE REQUIREMENTS WHEN DOOR OPEN AT 90 DEGREE ANGLE
11. SS SHELF WITH MOP HOOKS, MOUNT ON WALL ABOVE SINK, SEE INTERIOR ELEVATIONS
12. LANDING OR REQ'D ACCESSIBLE CLEAR SPACE, CLEAR AND LEVEL, TYP. EXTERIOR CONDITIONS MAY BE SLOPED AT 1.5% MAX FOR POSITIVE DRAINAGE
13. 12"x12" GLAZED CERAMIC TILE, PER FINISH PLAN ON SHEET A3.0

GENERAL NOTES

1. PATCH, REPAIR AND RESTORE TO MATCHING CONDITIONS AT ANY DAMAGED AREA BEHIND OR • SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED.
2. SEE PLUMBING PLANS FOR INFORMATION ON NEW FIXTURES.
3. INSTALL ACCESSIBLE DOOR PULL AT EACH SIDE OF ACCESSIBLE DOOR, PER DETAIL 13/G-6

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

A1.2

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

ENLARGED PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 11 OF 25 SHEETS

W.B.S. B-00944

APPROVED: _____ FOR CITY ENGINEER _____ DATE 6/6/11
SIAVASH HAGHIGHAH PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILED
DSD 2	MOA		05/19/2011	

CCS27 COORDINATE

CCS83 COORDINATE

AS-BUILTS
CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

35608-11-D

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT
MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.onciaac.com

SCALE | HORIZONTAL NO SCALE | VERTICAL NO SCALE

LICENSED ARCHITECT C-13996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO · STATE OF CALIFORNIA · THE EMPIRE VIRGILANTIA

WARNING
0 1
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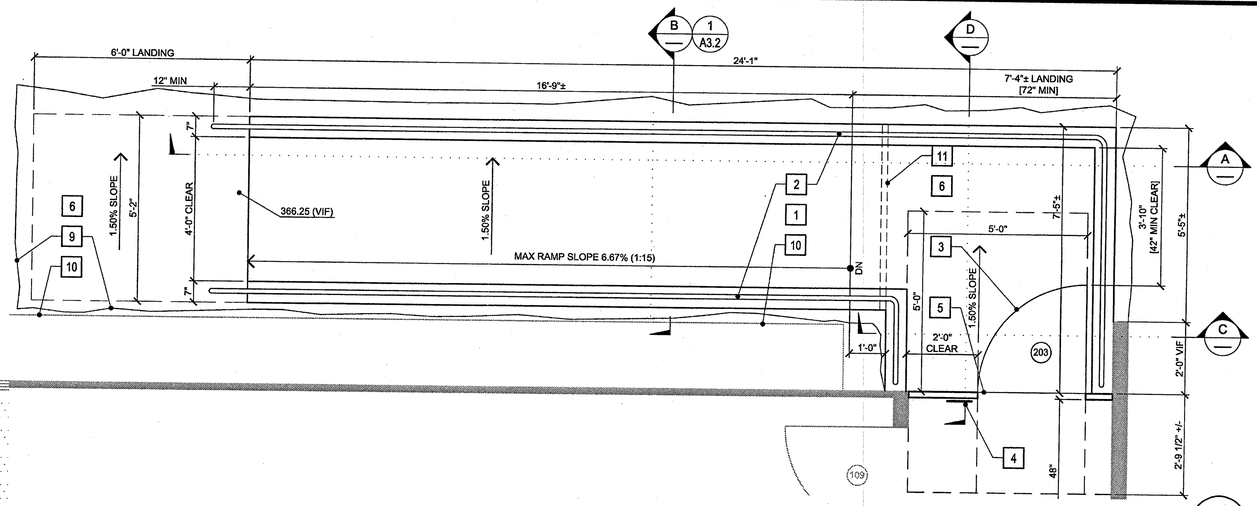
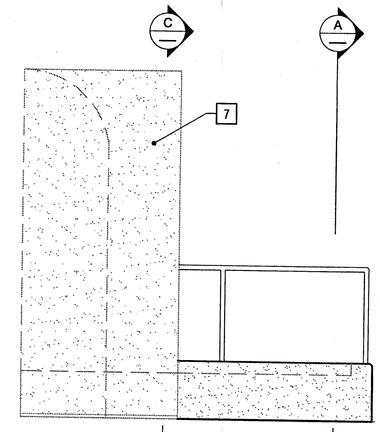
CHECKED BY: _____ CONSTRUCTION ENGINEER
CHECKED BY: _____ INSPECTOR

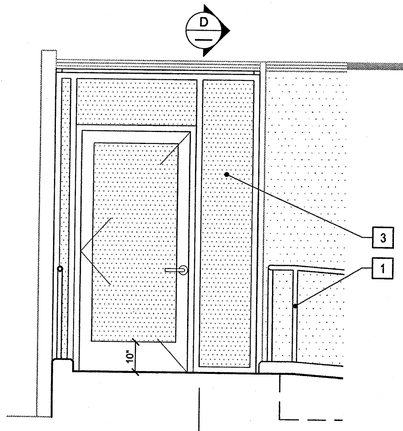


ENLARGED RAMP PLAN 1
SCALE: 1/2" = 1'-0"

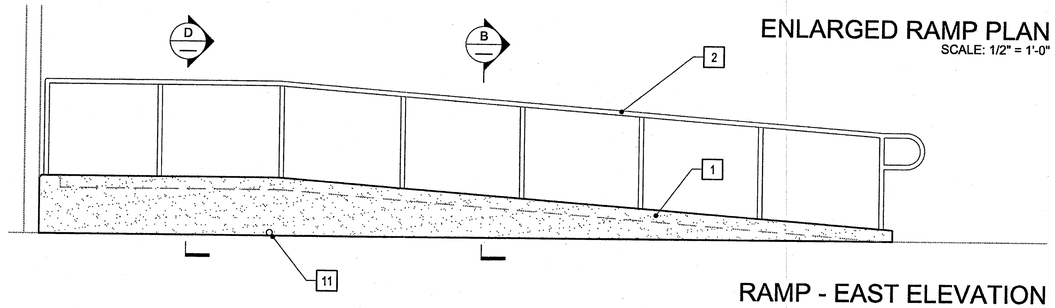
north



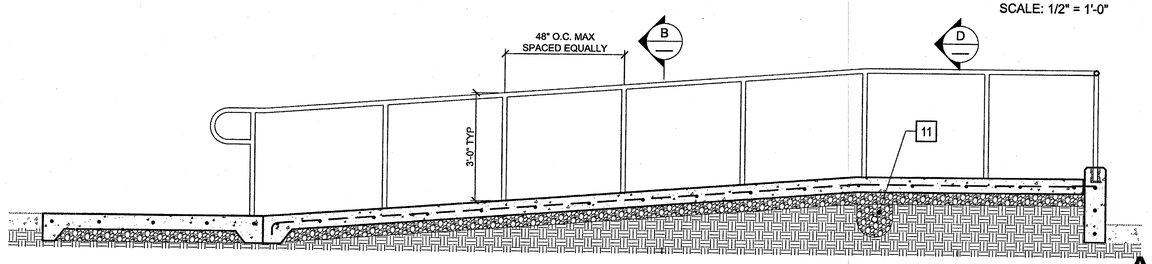
RAMP - SOUTH ELEVATION 4
SCALE: 1/2" = 1'-0"



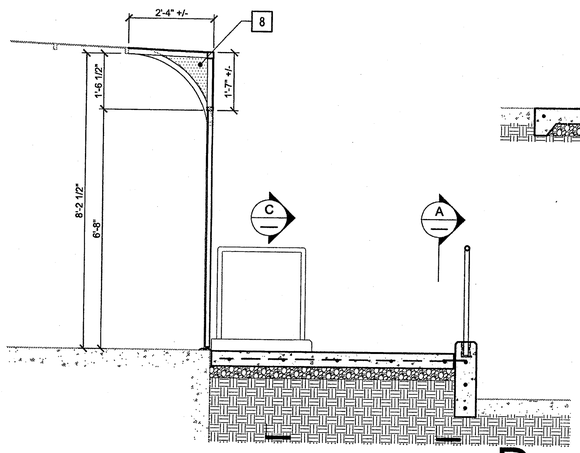
RAMP - EAST ELEVATION 3
SCALE: 1/2" = 1'-0"



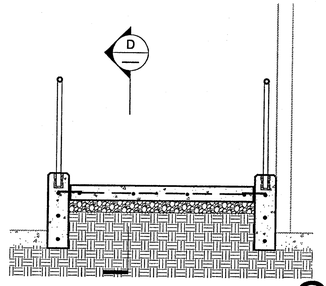
RAMP - EAST ELEVATION 2
SCALE: 1/2" = 1'-0"



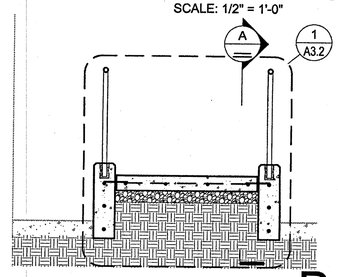
RAMP SECTION A
SCALE: 1/2" = 1'-0"



RAMP SECTION D
SCALE: 1/2" = 1'-0"



RAMP SECTION C
SCALE: 1/2" = 1'-0"



RAMP SECTION B
SCALE: 1/2" = 1'-0"

NOTES

1. NEW ACCESSIBLE RAMP, CONC, PER PLAN AND DETAIL 1/A3.2
2. NEW 1-1/2" DIA GALV STEEL HANDRAIL, FULLY WELDED SEAMS, GRIND SMOOTH ALL WELDS, PAINTED
3. NEW SOLARIUM PARTITION WITH TEMPERED GLAZING PER CBC AND DOOR WITH CODE-COMPLIANT HARDWARE, INSTALL WITH WATERTIGHT AND WEATHERPROOF SEAL WITH EXISTING CONSTRUCTION, SEE DETAIL 3/A3.2
4. INSTALL CODE-COMPLIANT ROOM SIGNAGE, PER DETAIL 8/G-5, TYP
5. INSTALL NEW CODE-COMPLIANT THRESHOLD, VERIFY OPENING WIDTH MEETS ACCESSIBLE REQUIREMENTS WHEN DOOR OPEN AT 90 DEGREE ANGLE
6. NEW CONC LANDING, SLOPE 1.5% MAX FOR POSITIVE DRAINAGE AT EXTERIOR CONDITION, MEET EXISTING GRADE AT NORTH, EAST AND RAMP SIDES MIN
7. EXISTING FRAMED AND STUCCO'ED WALL
8. ANOD ALUM FILLER PANEL, TO MATCH FINISH OF EXISTING SOLARIUM EXTRUSIONS
9. PATCH AND REPAIR CONC EDGES ADJACENT TO NEW WORK, IF DAMAGED DURING DEMOLITION, SURFACE TEXTURE TO MATCH EXISTING
10. EXISTING CONC LEDGE, NOTIFY RESIDENT ENGINEER AND ARCHITECT IMMEDIATELY, PRIOR TO START OF WORK ON RAMP, IF ANY PORTION OF WORK IS IN CONFLICT.
11. CAST IN 2" PVC SLEEVE, TO ALLOW PASSAGE OF EXISTING CONDUIT

GENERAL NOTES

1. PATCH, REPAIR AND RESTORE TO MATCHING CONDITIONS AT ANY DAMAGED AREA BEHIND OR SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MOA

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
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SCALE — HORIZONTAL: NO SCALE — VERTICAL: NO SCALE

LICENSED ARCHITECT — MANUEL ONCINA — C-13996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

CITY OF SAN DIEGO • STATE OF CALIFORNIA • FORWARD WE LOOK

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FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

A1.3

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

ENLARGED PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 12 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

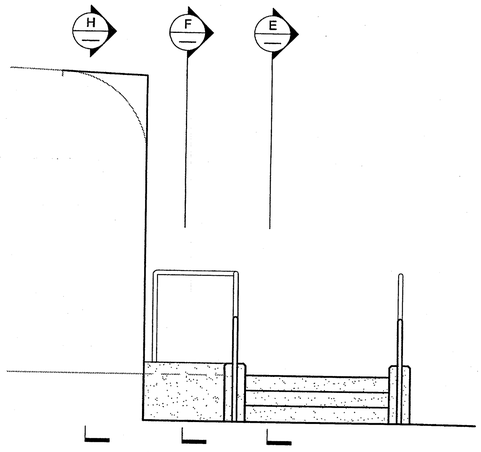
DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CCS27 COORDINATE

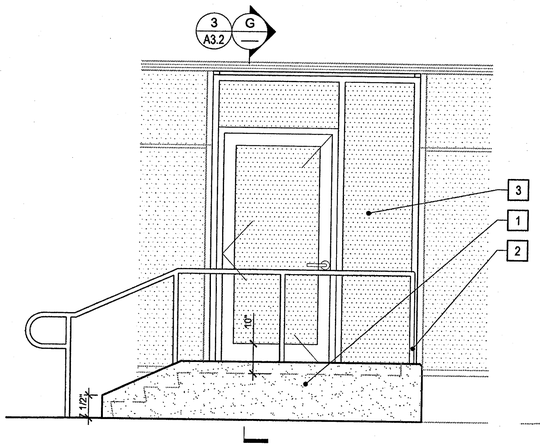
CCS83 COORDINATE

CONTRACTOR ..... DATE STARTED .....
INSPECTOR ..... DATE COMPLETED .....

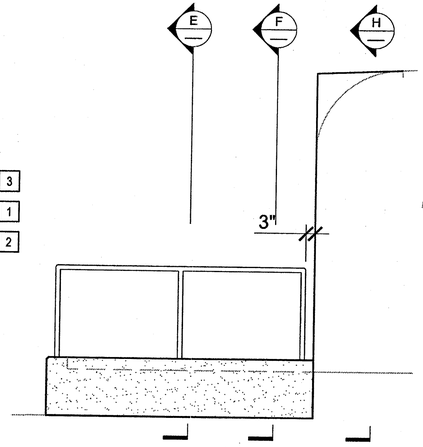
35608-12-D



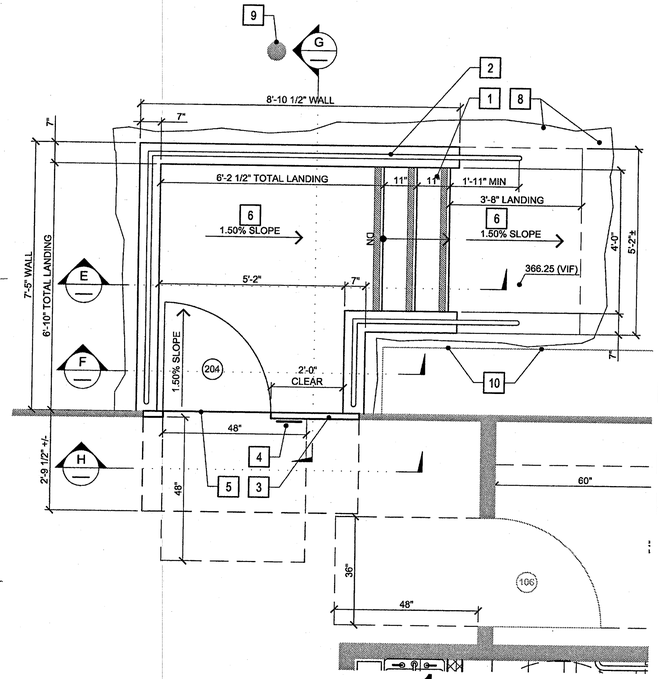
STAIR - SOUTH ELEVATION 4
SCALE: 1/2" = 1'-0"



STAIR - EAST ELEVATION 3
SCALE: 1/2" = 1'-0"



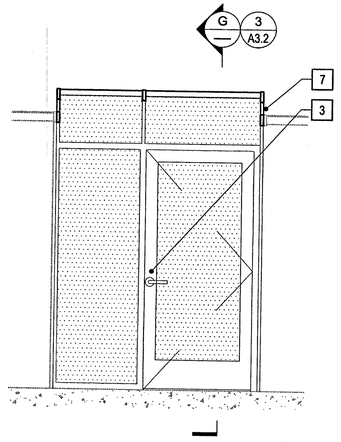
STAIR - NORTH ELEVATION 2
SCALE: 1/2" = 1'-0"



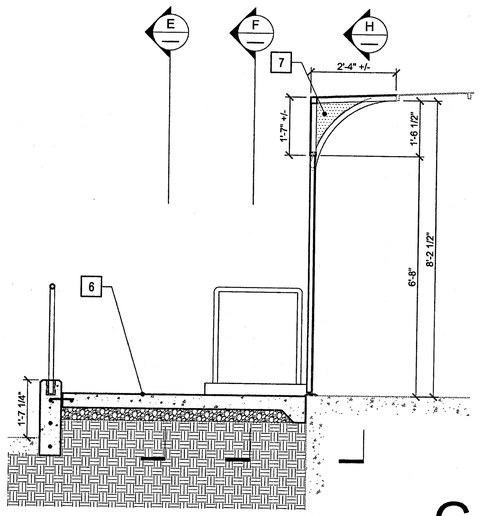
ENLARGED STAIR PLAN 1
SCALE: 1/2" = 1'-0"

NOTES

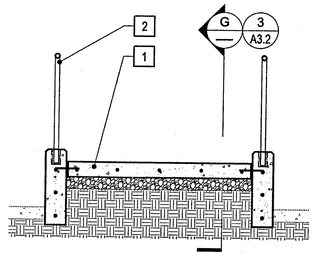
1. NEW CONC STAIR, PER PLAN AND DETAIL 2/A3.2
2. NEW 1-1/2" DIA GALV STEEL HANDRAIL, FULLY WELDED SEAMS, GRIND SMOOTH ALL WELDS, PAINTED
3. NEW SOLARIUM PARTITION AND DOOR WITH CODE-COMPLIANT HARDWARE, INSTALL WITH WATERTIGHT AND WEATHERPROOF SEAL WITH EXISTING CONSTRUCTION, SEE DETAILS _/A3.2
4. INSTALL CODE-COMPLIANT ROOM SIGNAGE, PER DETAIL 8/G-5, TYP
5. INSTALL NEW CODE-COMPLIANT THRESHOLD, VERIFY OPENING WIDTH MEETS ACCESSIBLE REQUIREMENTS WHEN DOOR OPEN AT 90 DEGREE ANGLE
6. NEW CONC LANDING, SLOPE 1.5% MAX FOR POSITIVE DRAINAGE AT EXTERIOR CONDITION, MEET EXISTING GRADE AT NORTH, EAST AND RAMP SIDES MIN
7. ANOD ALUM FILLER PANEL
8. PATCH AND REPAIR CONC EDGES ADJACENT TO NEW WORK, IF DAMAGED DURING DEMOLITION, SURFACE TEXTURE TO MATCH EXISTING
9. EXISTING STEEL POST, PROTECT IN PLACE
10. EXISTING CONC LEDGE, NOTIFY RESIDENT ENGINEER AND ARCHITECT IMMEDIATELY, PRIOR TO START OF WORK ON STAIR, IF ANY PORTION OF WORK IS IN CONFLICT.



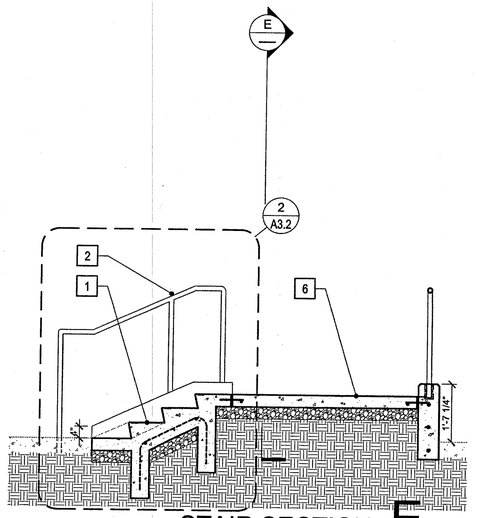
SECTION H
SCALE: 1/2" = 1'-0"



SECTION G
SCALE: 1/2" = 1'-0"



STAIR SECTION F
SCALE: 1/2" = 1'-0"



STAIR SECTION E
SCALE: 1/2" = 1'-0"

GENERAL NOTES

1. PATCH, REPAIR AND RESTORE TO MATCHING CONDITIONS AT ANY DAMAGED AREA BEHIND OR SURROUNDING ITEMS THAT ARE REMOVED UNLESS OTHERWISE NOTED.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

A1.4

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

ENLARGED STAIR PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 13 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER 6/6/11 DATE

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

CCS27 COORDINATE

• CCS83 COORDINATE

AS-BUILTS

CONTRACTOR ..... DATE STARTED .....

INSPECTOR ..... DATE COMPLETED .....

35608-13-D

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MOA
MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-6900 PH
619/295-6956 FX
www.oncinaarc.com

SCALE | HORIZONTAL NO SCALE | VERTICAL NO SCALE

REGISTERED ARCHITECT MANUEL ONCINA C-13996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • INCORPORATED SEMPER VIRTUS • 1850

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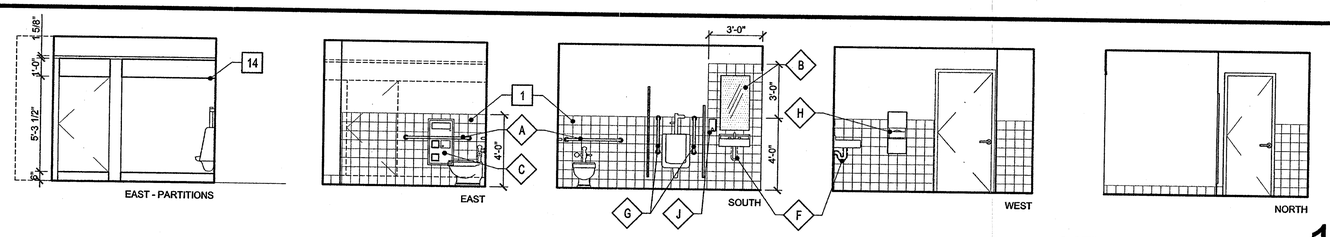
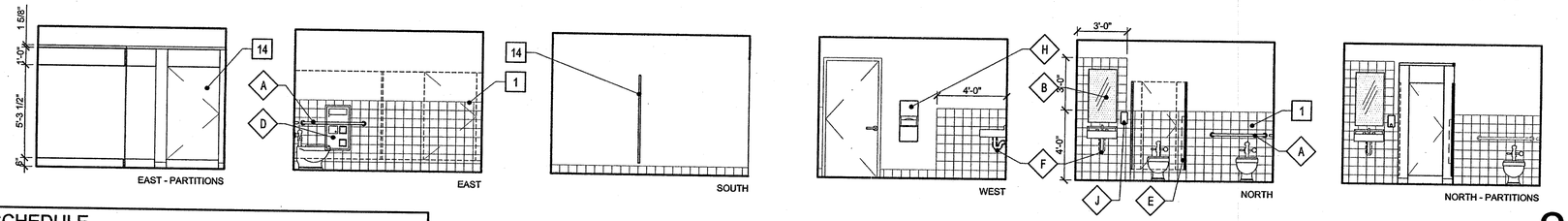
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR



MEN'S RESTROOM 1
SCALE: 1/4" = 1'-0"



WOMEN'S RESTROOM 2
SCALE: 1/4" = 1'-0"

RESTROOM ACCESSORY SCHEDULE

ITEM #	DESCRIPTION	MDL #	COM.	QTY
A	TWO-WALL GRAB BAR	B-68137	1	2
B	FRAMELESS STAINLESS STEEL MIRROR	B-1556 1824	1	3
C	RECESSED TOILET PAPER AND SEAT COVER COMBINATION	B-3474	1	1
D	RECESSED TOILET PAPER, SEAT COVER AND SANITARY NAPKIN DISPOSAL	B-3574	1	1
E	PARTITION MOUNTED TOILET PAPER, SEAT COVER AND SANITARY NAPKIN DISPOSAL	B-3571	1	1
F	P-TRAP COVER	307 WHITE	2	4
G	24" L WALL MOUNTED GRAB BARS	B-6806x24	1	2
H	SURFACE MOUNTED PAPER TOWEL DISPENSER / WASTE RECEPTACLE	B-43699	1	3
J	SURFACE MOUNTED SOAP DISPENSER	B-2111	1	3
K	UTILITY SHELF WITH MOP HOLDER/RAG HOOKS	B-224x36	1	1

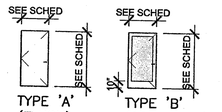
ACCESSORY SCHEDULE COMMENTS

1. AS MANUFACTURED BY 'BOBRICK WASHROOM EQUIPMENT, INC', OR EQUAL
2 AS MANUFACTURED BY 'TRAP GEAR', OR EQUAL

DOOR SCHEDULE

	NO	SIZE (W x H x TH)	DOOR TYPE	DOOR MAT'L	FRAME MAT'L	FRAME FIN	HDWR SET	DETAILS (_/A3.1) HEAD	JAMB	SILL	COMMENTS
EXISTING	100	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	3	4	4	5	1,2
	101	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	102	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	103	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	3	4	4	5	1, 2
	104	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	105	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	3
	106	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	107	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	108	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	3	4	4	5	1, 2
	109	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	4
	110	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	2	2	2	3	1,3
NEW	201	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	4	2	2	3	1
	202	3'-0" x 6'-8" x 1 3/4"	A	WD	WD	PTD	4	2	2	3	1
	203	3'-0" x 6'-8" x 1 3/4"	B	ALUM	ALUM	ANOD	1	4	4	5	1, 2
	204	3'-0" x 6'-8" x 1 3/4"	B	ALUM	ALUM	ANOD	1	4	4	5	1, 2
	205	2'-6" x 6'-8" x 1 3/4"	A	WD	WD	PTD	5	2	2	3	1

DOOR LEGEND

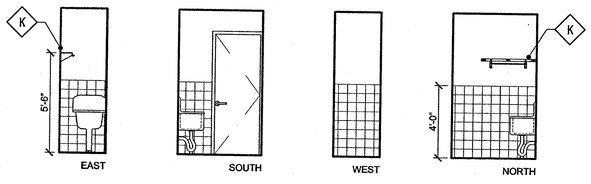


SCHEDULE LEGEND

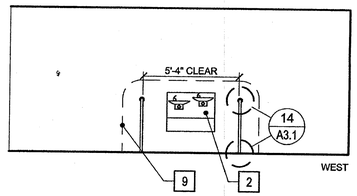
ALUM = ALUMINUM
ANOD = ANODIZED
PTD = PAINTED
WD = WOOD

SCHEDULE COMMENTS

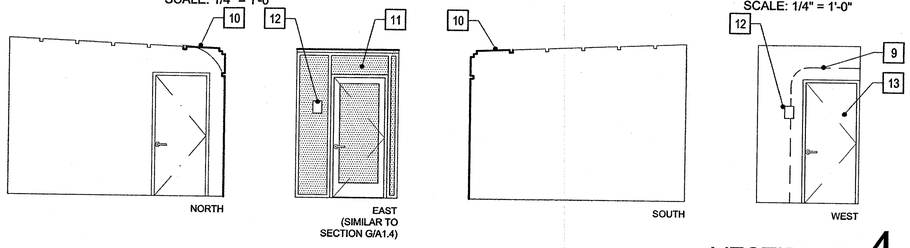
1. FIELD MEASURE ROUGH OPENING BEFORE ORDERING
2. APPLY WEATHERSTRIPPING TO PERIMETER OF DOOR
3. DOOR TO HAVE NO LATCH.
4. DOOR IS EXISTING, TO REMAIN.



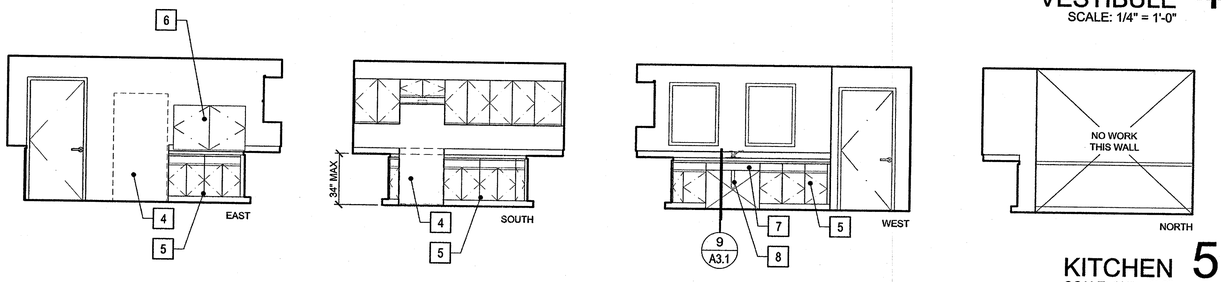
JANITOR CLOSET 6
SCALE: 1/4" = 1'-0"



DRINKING FOUNTAIN 3
SCALE: 1/4" = 1'-0"



VESTIBULE 4
SCALE: 1/4" = 1'-0"



KITCHEN 5
SCALE: 1/4" = 1'-0"

NOTES

1. CERAMIC TILE TO 48" AFF, PER DETAIL 12/A3.1
2. NEW ACCESSIBLE DRINKING FOUNTAIN, PER DETAIL 5/G-6
3. NEW RESTROOM FIXTURES, PER PLUMBING DRAWINGS
4. RELOCATE EXISTING RANGE AND REFRIGERATOR
5. NEW CABINETRY, PLASTIC LAMINATE FINISH
6. EXISTING OPENING WITH DOORS, TO REMAIN
7. INSTALL SKIRT AT SINK, TO MATCH ADJACENT CABINETRY
8. P-TRAP WITH INSULATING COVER
9. PATCH AND REPAIR WALL TO EXISTING CONDITION
10. SHATTERPROOF GLASS SOLARIUM ROOF PANELS
11. NEW SOLARIUM FRAMING AND PANELS, ANODIZED ALUMINUM TO MATCH EXISTING SOLARIUM STRUCTURE, TEMPERED GLAZING AND NEW DOOR WITH DIMENSIONS AND HARDWARE COMPLIANT WITH 2007 CBC REQUIREMENTS
12. INSTALL CODE-COMPLIANT ROOM SIGNAGE, PER SCHEDULE ON SHEET A1.1
13. NEW DOOR, PER PLAN AND SCHEDULE ON SHEET A2.0
14. NEW TOILET PARTITIONS, FLOOR-MOUNTED, HEADRAIL-BRACED, FINISHED WITH PLASTIC LAMINATE, TYP

GENERAL NOTES

1. PATCH AND REPAIR EXISTING MATERIALS SURROUNDING NEW WORK TO MATCH EXISTING CONDITION, TYPICAL OF ALL INSTANCES.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

A2.0

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

INTERIOR ELEVATIONS

CITY OF SAN DIEGO, CALIFORNIA
SHEET 14 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
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35608-14-D

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CONSULTANT

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San Diego, CA 92103
619/295-4900 PH
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www.oncinaarc.com

SCALE — HORIZONTAL NO SCALE — VERTICAL NO SCALE

LICENSED ARCHITECT — MANUEL ONCINA — C-13996 — 2-28-13 — REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • SEMPER VIGILANS

WARNING
0 1
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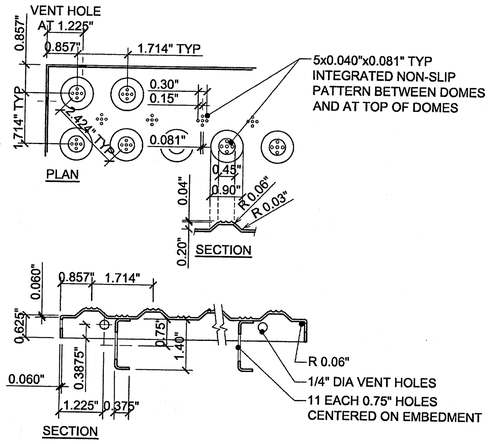
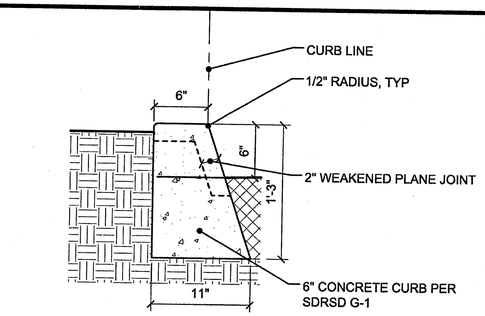
APPROVED BY: FOR CITY ENGINEER
CHECKED BY: CONSTRUCTION ENGINEER
CHECKED BY: INSPECTOR



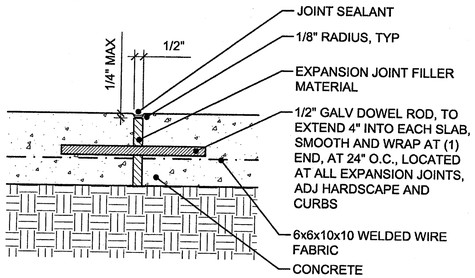
9 CAST IN PLACE DETECTABLE WARNING SURFACE

SCALE: 6"=1'-0"



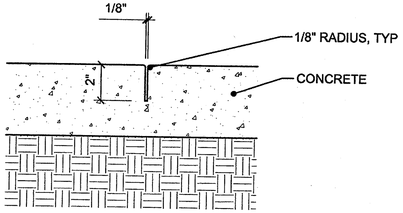
6 TYP 6" CONCRETE CURB

SCALE: 1-1/2"=1'-0"



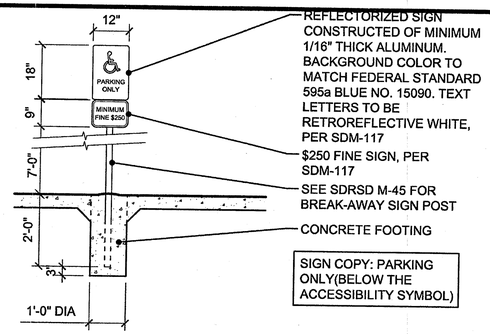
7 EXPANSION JOINT

SCALE: 3"=1'-0"



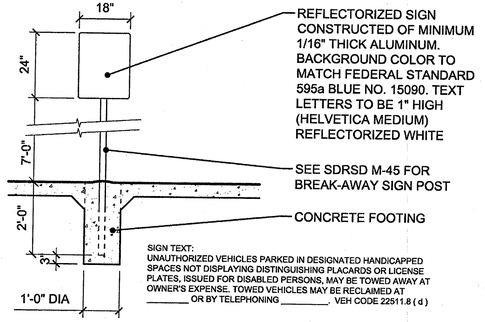
8 WEAKENED PLANE JOINT

SCALE: 3"=1'-0"



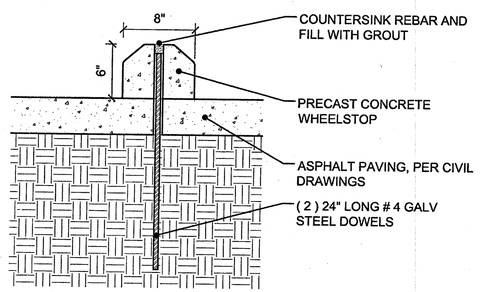
3 ACCESSIBLE PARKING SIGN

SCALE: 1/2"=1'-0"



4 UNAUTHORIZED VEHICLE SIGN

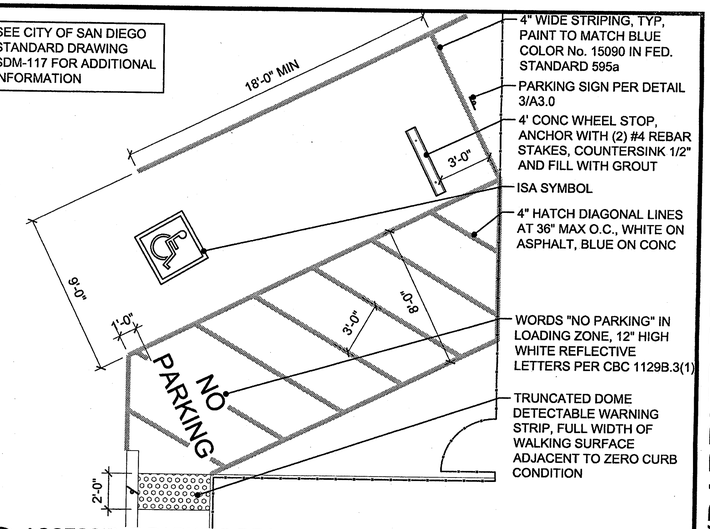
SCALE: 1/2"=1'-0"



5 CONCRETE WHEELSTOP

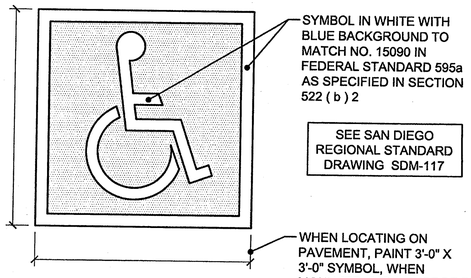
SCALE: 1-1/2"=1'-0"

SEE CITY OF SAN DIEGO STANDARD DRAWING SDM-117 FOR ADDITIONAL INFORMATION



1 ACCESSIBLE PARKING REQUIREMENTS

SCALE: 1/4"=1'-0"



2 INTERNATIONAL SYMBOL OF ACCESSIBILITY

SCALE: 1"=1'-0"

FINISH SCHEDULE

ROOM NAME	WALLS				BASE	FLOOR	CEILING	COMM.
	NORTH	EAST	SOUTH	WEST				
MEN'S RESTROOM	P-2/CT	P-2/CT	P-2/CT	P-2/CT	CTB	PT	P-1	1,2
WOMEN'S RESTROOM	P-2/CT	P-2/CT	P-2	P-2/CT	CTB	PT	P-1	1,2
KITCHEN	P-1	P-1	P-1	P-1	EXIST	EXIST	EXIST	1

SCHEDULES LEGEND

CTB = 6"X6" DALTILE SEMI-GLOSS COVE BASE A-3601, COLOR: GOLDEN GRANITE 0138
CT = 6"X6" DALTILE SEMI-GLOSS WALL TILE, COLOR: GOLDEN GRANITE 0138
EXIST = EXISTING
P-1 = PAINT, DUNN-EDWARDS, COLOR: WHITE HEAT DEW338
P-2 = PAINT, DUNN-EDWARDS, COLOR: RICE BOWL DE6170
PT = 12"X12" DALTILE PORCELAIN FLOOR TILE, PORCEALTO GRANITI, COLOR: DUNA DI SABBIA CD98

SCHEDULE COMMENTS

1. PAINT FINISH AT WALLS IN RESTROOMS AND KITCHEN TO BE SEMI-GLOSS
2. PAINT FINISH AT CEILINGS IN RESTROOMS TO BE EGGSHELL.

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
814 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
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LICENSED ARCHITECT MANUEL ONCINA C-13996 2-28-13 REN. STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

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CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

FUNDING CIP/SAP: 400002 SPEC. NO.: 5263

A3.0

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

SITE DETAILS AND FINISH SCHEDULE

CITY OF SAN DIEGO, CALIFORNIA
SHEET 15 OF 25 SHEETS

W.B.S. B-00944

APPROVED
FOR CITY ENGINEER 6/6/11 DATE

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

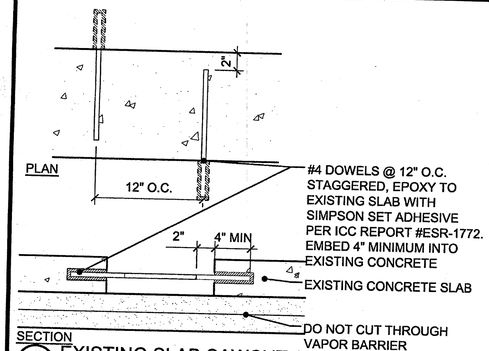
CCS27 COORDINATE

CCS83 COORDINATE

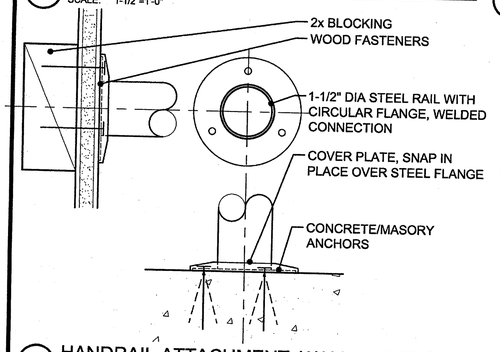
CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

35608-15-D

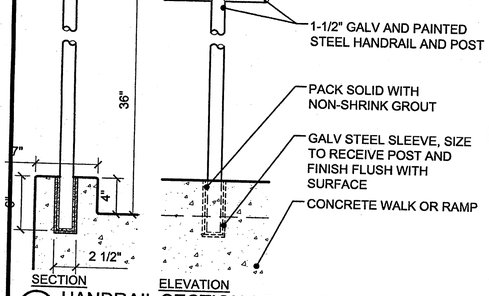
ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)



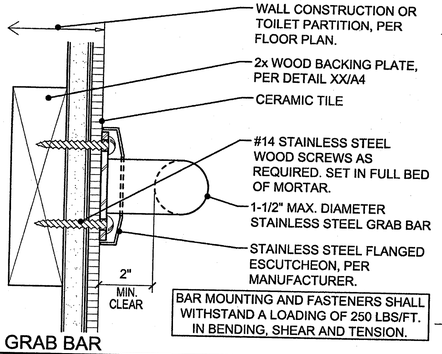
13 EXISTING SLAB SAWCUT AND REPAIR
SCALE: 1-1/2"=1'-0"



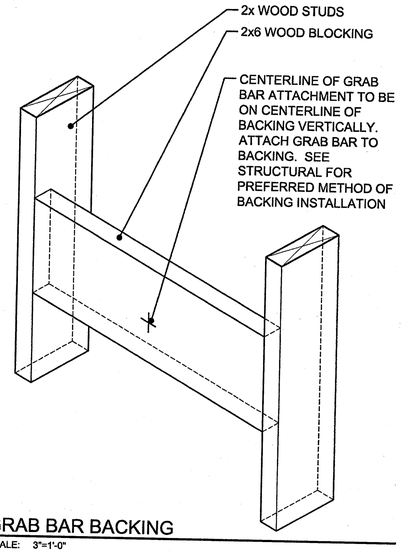
14 HANDRAIL ATTACHMENT, WALL AND FLOOR
SCALE: 6"=1'-0"



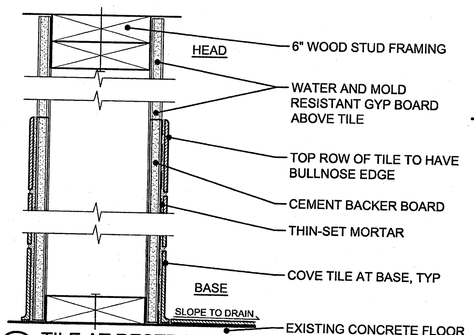
15 HANDRAIL SECTION / ELEVATION
SCALE: 1-1/2"=1'-0"



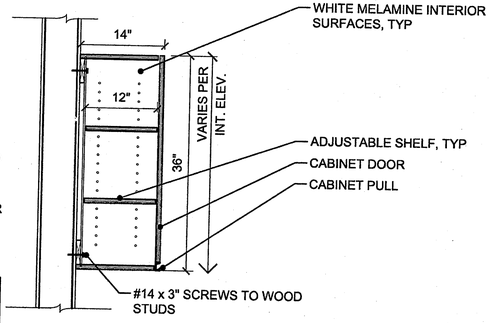
10 GRAB BAR
SCALE: 6"=1'-0"



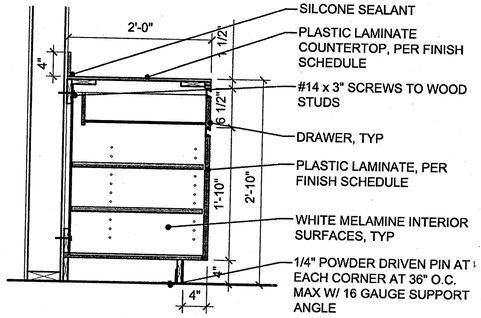
11 GRAB BAR BACKING
SCALE: 3"=1'-0"



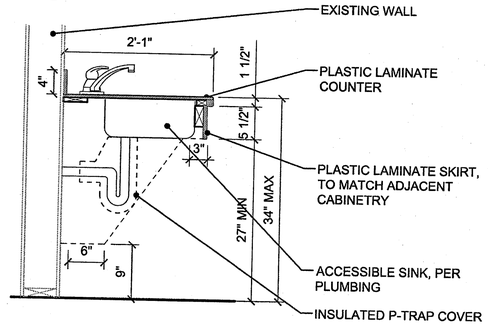
12 TILE AT RESTROOM WALL/FLOOR
SCALE: 3"=1'-0"



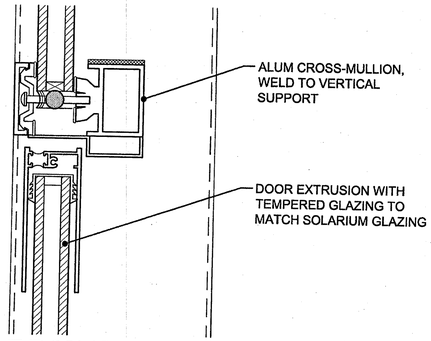
7 UPPER CABINET SECT
SCALE: 1"=1'-0"



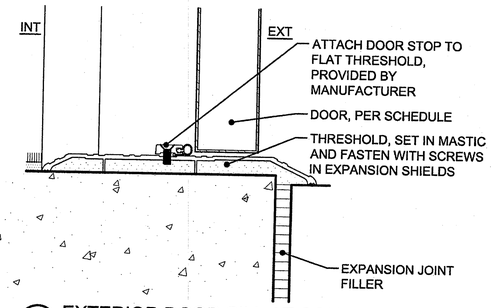
8 LOWER CABINET SECTION
SCALE: 1"=1'-0"



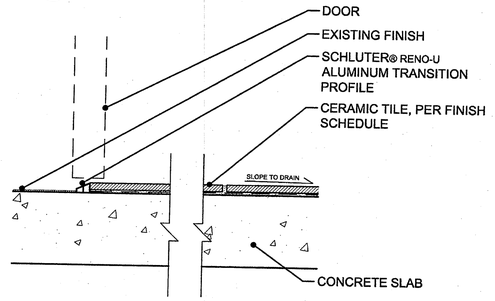
9 ACCESSIBLE SINK
SCALE: 1"=1'-0"



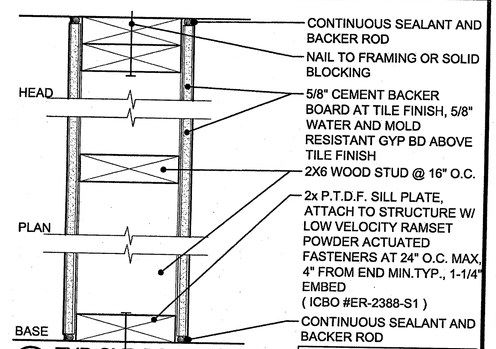
4 TYP SOLARIUM DOOR HEAD
SCALE: 6"=1'-0"



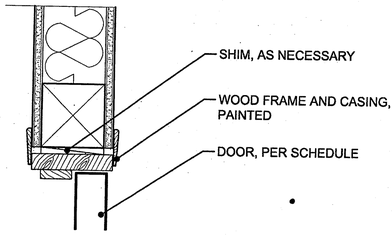
5 EXTERIOR DOOR SILL AT CONCRETE
SCALE: 6"=1'-0"



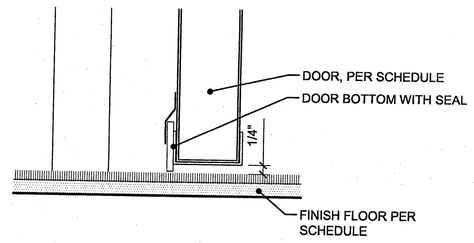
- VCT TO CERAMIC TILE TRANSITION
SCALE: 3"=1'-0"



1 TYP GYP BOARD WALL
SCALE: 3"=1'-0"



2 INTERIOR DOOR HEAD (JAMB SIM)
SCALE: 3"=1'-0"



3 INTERIOR DOOR SILL W/ SEAL
SCALE: 6"=1'-0"

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT
MOA
MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE
PLANNING
INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
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www.arch-moa.com

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CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

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CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

A3.1

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

INTERIOR DETAILS

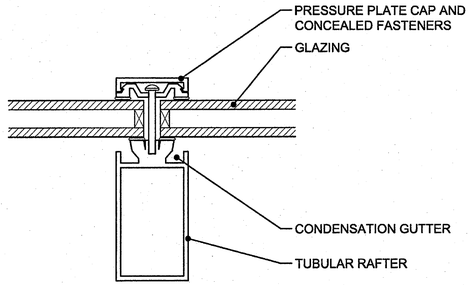
CITY OF SAN DIEGO, CALIFORNIA
SHEET 18 OF 25 SHEETS

APPROVED: FOR CITY ENGINEER DATE 6/6/11

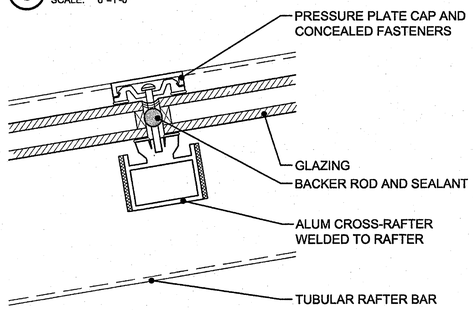
DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

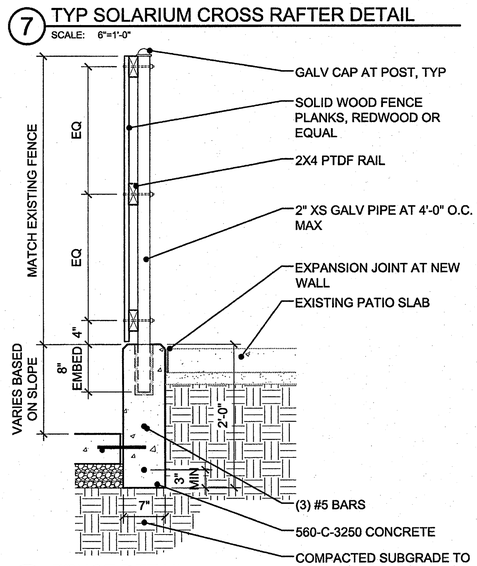
W.B.S. B-00944
SIAVASH HAGHKHAH PROJECT MANAGER
CCS27 COORDINATE
CCS83 COORDINATE
35608-16-D



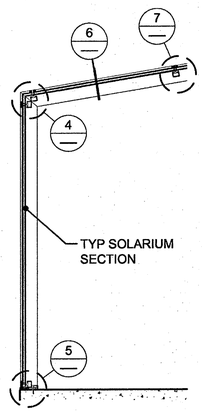
6 TYP SOLARIUM RAFTER DETAIL
SCALE: 6"=1'-0"



7 TYP SOLARIUM CROSS RAFTER DETAIL
SCALE: 6"=1'-0"



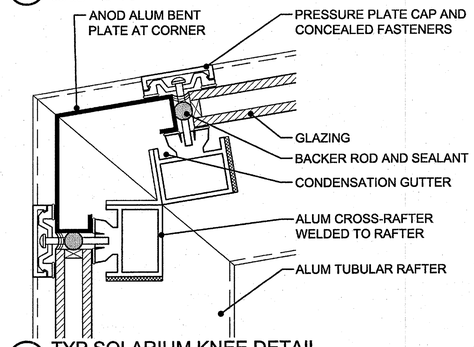
8 FENCE DETAIL
SCALE: 1"=1'-0"



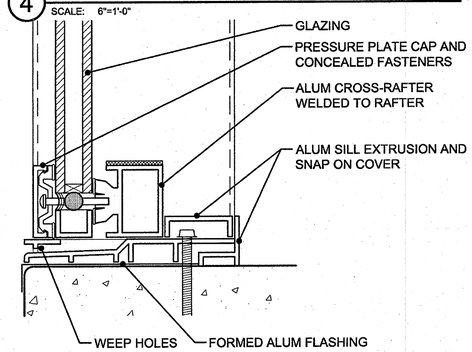
SOLARIUM ADDITION TO MATCH EXISTING SYSTEM TO GREATEST EXTENT POSSIBLE. NEW SOLARIUM MATERIALS MUST PROVIDE WATERTIGHT SEAL WITH EXISTING SOLARIUM STRUCTURE. SYSTEMS THAT MAY BE COMPATIBLE WITH EXISTING SYSTEM INCLUDE, BUT ARE NOT LIMITED TO:

- AMERICAN SUNROOM
- DEHAVEN CONSTRUCTION CO.
- ADVANCED SOLARIUMS & SUNROOMS TECHNOLOGY
- TEMO SUNROOMS
- PATIO ENCLOSURES, INC.
- FOUR SEASONS SUNROOMS BY SUN BOSS CORP.
- SKYLINE SUNROOMS

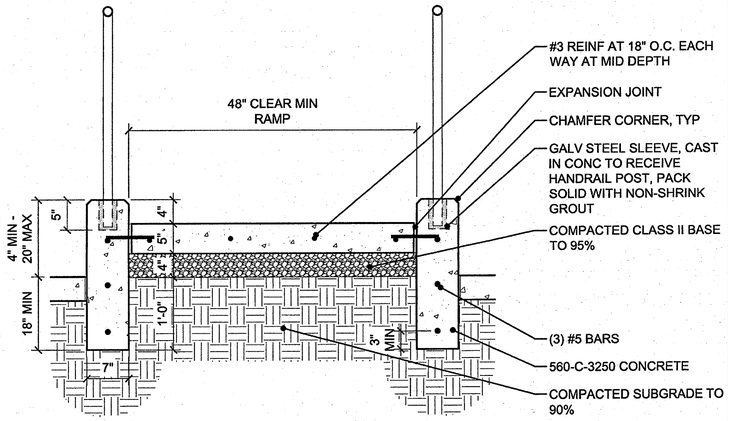
3 TYP SOLARIUM SECTION
SCALE: 1/2"=1'-0"



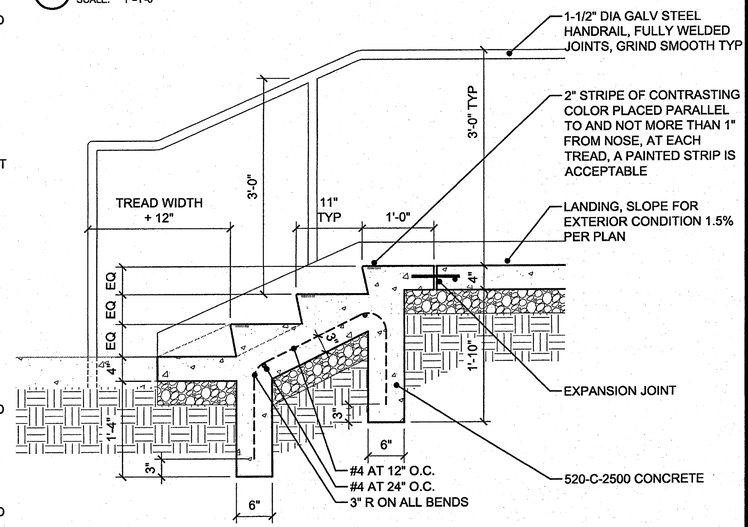
4 TYP SOLARIUM KNEE DETAIL
SCALE: 6"=1'-0"



5 TYP SOLARIUM CROSS RAFTER DETAIL
SCALE: 6"=1'-0"



1 PEDESTRIAN RAMP AND PROTECTIVE RAILING (PER SDRSD SDM-115)
SCALE: 1"=1'-0"



2 CONCRETE STAIR (PER SDRSD-118)
SCALE: 1"=1'-0"

A3.2

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

DETAILS

CITY OF SAN DIEGO, CALIFORNIA
SHEET 17 OF 25 SHEETS

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

W.B.S. B-00944
SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

CCS27 COORDINATE

CCS83 COORDINATE

35608-17-D

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

AS-BUILTS

APPROVED BY: FOR CITY ENGINEER
CHECKED BY: CONSTRUCTION ENGINEER
CHECKED BY: INSPECTOR

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CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT
MANUEL ONCINA ARCHITECTS INC.
ARCHITECTURE PLANNING INTERIORS
514 Pennsylvania Ave.
San Diego, CA 92103
619/295-4900 PH
619/295-4955 FX
www.emonaarc.com

SCALE | HORIZONTAL NO SCALE | VERTICAL NO SCALE

REGISTERED ARCHITECT — MANUEL ONCINA — 13996 — 2-28-13 REN. — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

FIXTURE SCHEDULE

ITEM NO.	DESCRIPTION	MINIMUM ROUGH-IN SIZE					REMARKS
		WASTE	TRAP	VENT	CW	HW	
WC 1	WATER CLOSET	4"	INTEGRAL	2"	1"	--	AMERICAN STANDARD "OR APPROVED EQUAL", CADET 3 FLOWISE 2833.128, VITREOUS CHINA, HIGH EFFICIENCY 1.28 GPF, ELONGATED SIPHON ACTION JETTED BOWL, CLOSE-COUPLED TANK WITH FLAT TANK COVER FOR SUPERIOR STORAGE AND ADA COMPLIANT.
L 1	LAVATORY	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	REINSTALL AMERICAN STANDARD, 0356.41 LUCERNE WALL HUNG LAVATORY. PROVIDE NEW SYMMONS FAUCET, "OR APPROVED EQUAL," S-60-G-H, 4" CAST BRASS CENTERSET, SPRAY OUTLET WITH 0.5 GPM FLOW RATE, SELF CLOSING, VANDAL RESISTANT AND ADA COMPLIANT.
U 1	URINAL	2"	2"	1-1/2"	1/2"	--	AMERICAN STANDARD. "OR APPROVED EQUAL," 620.010 ADA COMPLIANT. TOP SPUD WALL MOUNT URNIAL, VITREOUS CHINA 6015.051.002 FLUSH VALVE.
S 1	SINK	2"	2"	1-1/2"	1/2"	1/2"	ELKAY "OR APPROVED EQUAL," LRADQ3321 ADA, 18 GAUGE STAINLESS STEEL, TOP MOUNT, 33"X21.25" WITH TWO 5-1/2" DEEP BOWLS AND 3 FAUCET HOLES ON 4" CENTERS. CHICAGO FAUCET, POLISHED CHROME PLATED BRASS, 8" CENTER-SET, 9.5" SWIVEL SPOUT, 2.5 BLADE HANDLES, 2 GPM AERATOR. IN-SINK-ERATOR GARBAGE DISPOSER, EVOLUTION-COMPACT, 3/4 HP/120V/60HZ, ON/OFF WALL SWITCH
SS 1	SERVICE SINK	2"	2"	1-1/2"	1/2"	1/2"	AMERICAN STANDARD "OR APPROVED EQUAL," "LAKEWELL" 7692.008, ENAMELED CAST IRON, 22'x18", WITH STAINLESS STEEL RIM GUARD AND TRAP STANDARD. CHICAGO FAUCETS, 305-VBRRCF, ROUGH CHROME PLATED BRASS, WITH .75" THREAD OUTLET, VACUUM BREAKER, 2.375" METAL HANDLES, 2.5 " ADJUSTABLE SUPPLY ARM WITH INTEGRAL STOP AND ADJUSTABLE 8' CENTER SET
TP 1	TRAP PRIMER	--	--	--	1/2"	--	ZURN "OR APPROVED EQUAL," 1022-DU2, AUTOMATIC TRAP PRIMER, INSTALL 6" ABOVE FLOOR DRAIN GRID, CONNECT TO COLD WATER SUPPLY PIPE. 2 OUTLET DISTRIBUTION
WHA 1	WATER HAMMER ARRESTOR	--	--	--	1/2"	--	ZURN "OR APPROVED EQUAL," Z-1700 SHOKTROLS # 100, NESTNG TYPE BELLOWS CONTAINED WITHIN CASING ENOUGH TO DISSIPATE THE KINETIC ENERGY IN THE PIPE SYSTEM, CASING AND BELLOWS CONSTRUCTED OF TYPE 304 STAINLESS STEEL,
DF 1	DRINKING FOUNTAIN	1-1/2"	1-1/2"	1-1/2"	1/2"	--	HAWS "OR APPROVED EQUAL," HWBFA8L.VRC, "Hi-Lo" WALL MOUNTED ELECTRIC WATER COOLER, INSTALL AT ADA HEIGHT.
FD 1	FLOOR DRAIN	2"	2"	1-1/2"	3/8"	--	JAY. R SMITH "OR APPROVED EQUAL," 2005Y-P050 FLOOR DRAIN WITH 1/2" TRAP PRIMER CONNECTION, 6" NICKEL BRONZE ROUND TOP, 3" OUTLET.

ABBREVIATION/SYMBOLS

SYMBOL	ABBREV.	DESCRIPTION
	CW	DOMESTIC COLD WATER
	HW	DOMESTIC HOT WATER
	RHW	RHW – RECIRCULATING HOT WATER
-S-	S	SANITARY SEWER
-V-	V	SANITARY VENT
	FCO	FLOOR CLEAN-OUT OR COG
	WCO	WALL CLEAN-OUT
	COG	CLEAN-OUT TO GRADE
	FD	FLOOR DRAIN
		CAP
		DROP
		RISE
		VALVE IN RISE
		CHECK VALVE
	WC	WATER CLOSET
	L	LAVATORY
	U	URINAL
	SS	SERVICE SINK
	DF	DRINKING FOUNTAIN
	WHA	WATER HAMMER ARRESTOR
	(E)	EXISTING
	VTR	VENT THRU ROOF
	TP	TRAP PRIMER
	SOV	SHUT OFF VALVE
	OAE	OR APPROVED EQUAL
	COG	CLEAN OUT TO GRADE OR FCO
	EDF	EXISTING DRINKING FOUNTAIN
	CPC	CALIFORNIA PLUMBING CODE
	A/C	ABOVE CEILING
	B/F	BELOW FLOOR
	WH	WALL HYDRANT

GENERAL NOTES

1. NO PLUMBING SHALL BE INSTALLED UNTIL ALL REQUIRED PLUMBING PLAN CHECK PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REQUIRED AGENCIES.
2. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES AND ACCESSIBILITY REQUIREMENTS.
3. CONTRACTOR SHALL FURNISH AND INSTALL MANUFACTURED WATER HAMMER ARRESTORS AT QUICK CLOSING VALVES, OUTLETS AND DEVICES.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS AND FLOORS. INCLUDING ALL SAW CUTTING AND CORE DRILLING.
5. COORDINATE INSTALLATION OF ALL EQUIPMENT AND PIPING WITH OTHER TRADES PRIOR TO INSTALLATION. ENSURE THAT ALL CONTROL DEVICES, SHUTOFF VALVES, ETC. ARE ACCESSIBLE FOR MAINTENANCE. WHERE ACCESS PANELS IN FINISHED SPACES, OTHER THAN THAT SHOWN. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF PANELS WITH ARCHITECT PRIOR TO INSTALLATION.
6. CONTRACTOR SHALL COORDINATE AND VERIFY SIZES, LOCATIONS, DEPTHS AND PRESSURIZED PIPING PRESSURES OF ALL BUILDING UTILITIES PRIOR TO EXCAVATION.
7. ALL LINES BELOW SLAB ON GRADE TO BE LOCATED AWAY FROM ALL LOAD BEARING FOOTINGS.
8. ALL PIPES AND CONDUITS SHALL BE SUPPORTED AND BRACED PER SMACNA GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS. ALL PLUMBING EQUIPMENT SHALL COMPLY WITH TITLE 24 REQUIREMENTS.
9. DRAIN AND WASTE PIPES SHALL SLOPE PER CALIFORNIA PLUMBING CODE.
10. WATER CLOSETS TO BE ULTRA LOW FLUSH TYPE.
11. INSULATION MATERIAL SHALL MEET THE CALIFORNIA QUALITY STANDARDS PER SECTION 118 ENERGY EFFICIENCY STANDARDS (E.E.S.)
12. FAUCETS TO BE 2.2 GPM MAX.
13. CONTRACTOR SHALL SNAKE AND CLEAR ALL OF THE EXISTING SEWER LINES TO THE FIRST MAN HOLE OUTSIDE OF THE BUILDING AND CLEAR AGAIN AFTER IMPROVEMENT IS COMPLETE AND PRIOR TO JOB CLOSEOUT.
14. EXHAUST DUCTS SHALL BE EQUIPPED WITH BACK DRAFT DAMPERS.
15. BUILDING DRAIN AND VENT PIPING MATERIALS SHALL COMPLY WITH SECTIONS 701.0 AND 903.0 OF THE CALIFORNIA PLUMBING CODE.
16. ALL SANITARY SYSTEM MATERIALS SHALL BE LISTED BY AN APPROVED LISTING AGENCY.
17. POTABLE WATER PIPING MATERIAL SHALL COMPLY WITH SECTION 604.0 CPC.
18. LAVATORY FAUCETS IN RESTROOMS SHALL BE THE SELF CLOSING TYPE.
19. URINALS TO BE 1.0 G.P.F. MAX.

EQUIPMENT SCHEDULE

ITEM NO.	DESCRIPTION	MANUFACTURER INFORMATION
RH 1	RANGE HOOD	BROAN QDE 2-SPEED CENTRIFUGAL BLOWER 130CFM LO, 290 CFM HI (2) 13 W FLUORESCENT LIGHTS, UL LISTED, ENERGY STAR QUALIFIED, WALL CAP, 120V/60HZ/1.6A.
CE 1	CEILING EXHAUST	COOK MODEL GC-122, 58 CFM @ .125 SP CENTRIFUGAL BLOWER, 800 RPM, 48.1 W, 33 dBA AND UL LISTED.
CE 2	CEILING EXHAUST	COOK MODEL GC-320, 202 CFM @ .125 SP CENTRIFUGAL BLOWER, 1365 RPM, 71.5 W, 46 dBA AND UL LISTED.
CE 3	CEILING EXHAUST	COOK MODEL GC-320, 202 CFM @ .125 SP CENTRIFUGAL BLOWER, 1365 RPM, 71.5 W, 46 dBA AND UL LISTED.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

MP-1

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER – EAST SAN DIEGO – ACCESS UPGRADES (BARRIER REMOVAL)

ABB, LEGEND, SYMBOLS, GEN. NOTES

CITY OF SAN DIEGO, CALIFORNIA
SHEET 18 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/16/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

35608-18-D

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

Teza Design
Consulting In Mechanical Engineering
201 A Street, Suite 103, San Diego, CA 92101
Phone: (619) 702-6574 - Fax: (619) 255-7726

SCALE — HORIZONTAL NO SCALE — VERTICAL NO SCALE

REGISTERED PROFESSIONAL ENGINEER — SIAVASH G. GHAFFARI — No. 31459 — EXP. 12-31-12 — MECHANICAL — STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

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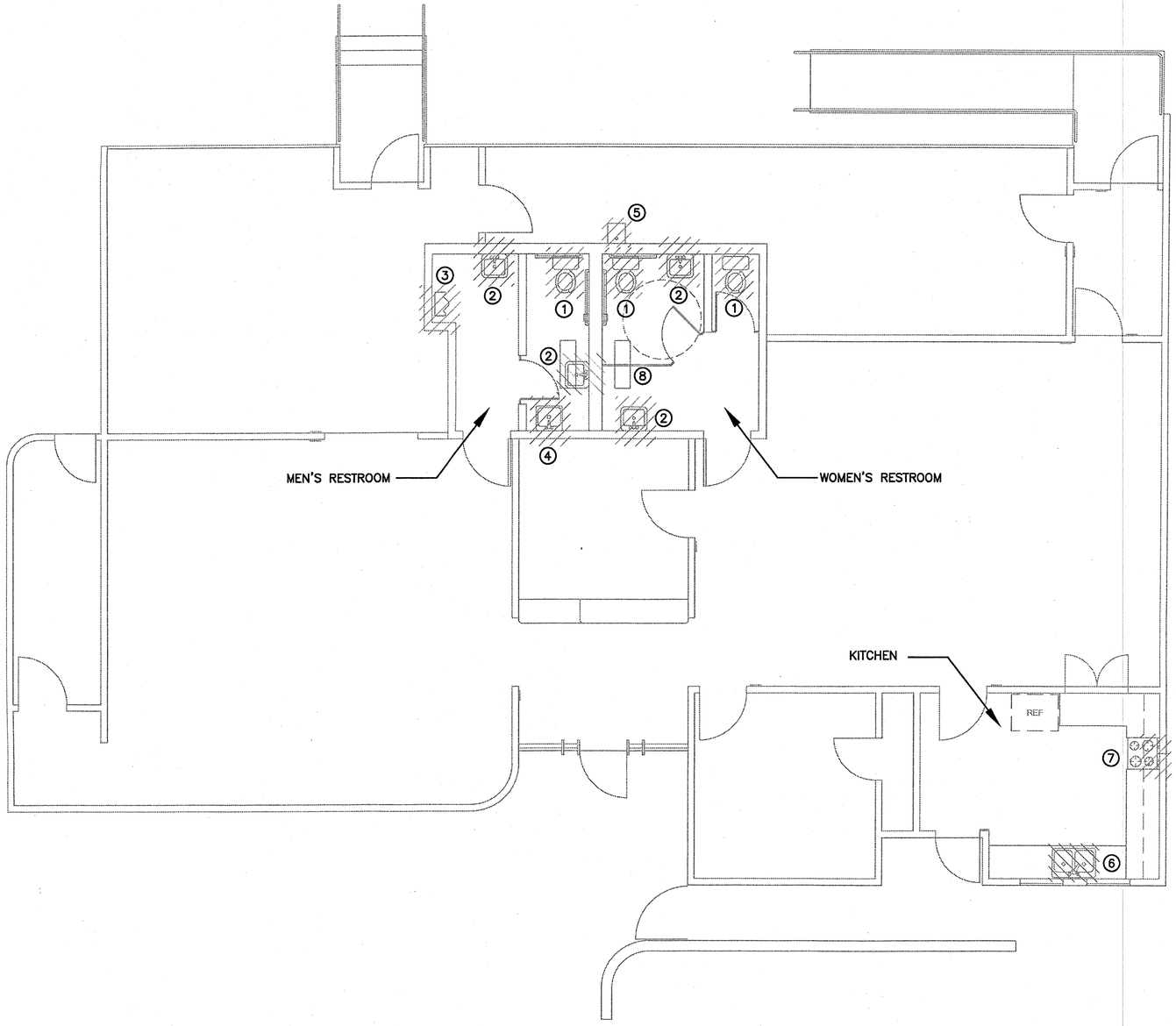

PLUMBING DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'-0"

○ GENERAL NOTES

1 THE DEMOLITION WORK IS TO REMOVE THE PLUMBING FIXTURES IN MEN'S AND WOMEN'S RESTROOMS, KITCHEN SINK, RANGE HOOD AND DRINKING FOUNTAIN. ALL PIPING AND DUCTWORK ASSOCIATED WITH THESE ITEMS SHALL BE REMOVED.

2 REFER TO SHEETS MP-3 AND MP-4 FOR EXISTING AND REVISED HOT WATER, COLD WATER, SANITARY SEWER AND VENT PIPING.

3 THE LAYOUT OF THE PLUMBING FIXTURES IS BASED ON VISUAL FIELD OBSERVATION. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY THE PLUMBING FIXTURES AND ASSOCIATED PIPING DURING CONSTRUCTION.

○ KEY NOTES

(1) REMOVE AND DISPOSE EXISTING WATER CLOSET.
(2) REMOVE EXISTING LAVATORY. REUSE TWO LAVATORIES THAT ARE IN BETTER CONDITION.
(3) REMOVE AND DISPOSE EXISTING URINAL.
(4) REMOVE AND DISPOSE EXISTING SERVICE SINK.
(5) REMOVE AND DISPOSE EXISTING DRINKING FOUNTAIN.
(6) REMOVE AND DISPOSE EXISTING KITCHEN SINK.
(7) REMOVE AND DISPOSE EXISTING RANGE HOOD.
(8) EXISTING SKYLIGHT, TYPICAL OF 2.

NORTH

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

MP-2

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER – EAST SAN DIEGO – ACCESS UPGRADES (BARRIER REMOVAL)

PLUMBING DEMOLITION FLOOR PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 19 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

CCS27 COORDINATE

CCS83 COORDINATE

35608-19-D

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CONSULTANT

Teza Design
Consulting In Mechanical Engineering
339 A Street, Suite 103, San Diego, CA 92101
Phone: (619) 390-6624 • Fax: (619) 209-7736

SCALE HORIZONTAL NO SCALE
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REGISTERED PROFESSIONAL ENGINEER — SHIRIN G. OMAR — No. 21459 — Exp. 9-30-12 — MECHANICAL — STATE OF CALIFORNIA

CITY OF SAN DIEGO
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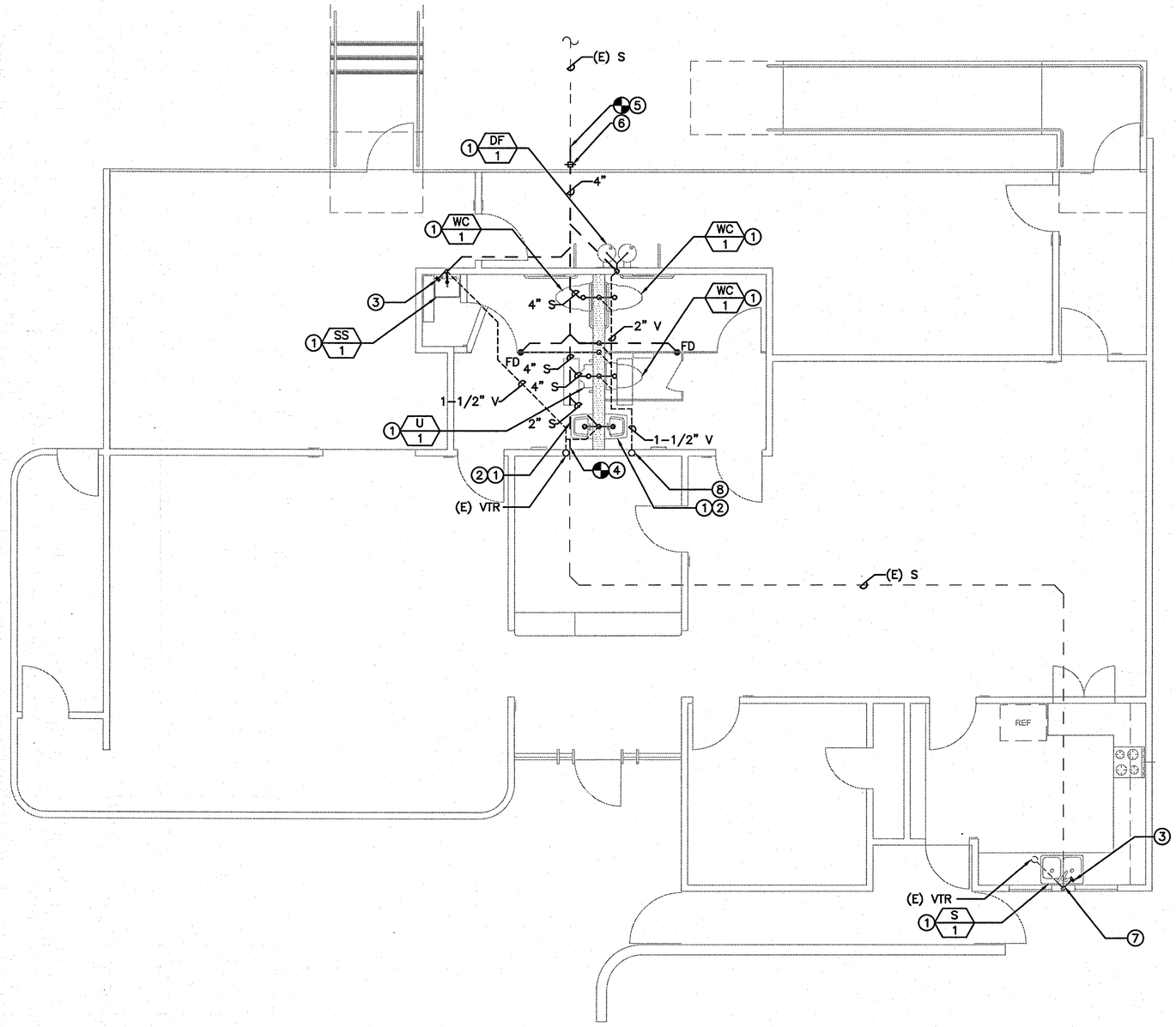


PLUMBING REVISED WASTE AND VENT FLOOR PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1 THE DIRECTION AND LAYOUT OF EXISTING SEWER DRAINAGE AND VENT PIPING SHOWN ON DRAWING IS BASED ON VISUAL FIELD OBSERVATION. THE CONTRACTOR SHALL VERIFY DURING CONSTRUCTION.

○ KEY NOTES

(1) FURNISH & INSTALL PLUMBING FIXTURES PER MANUFACTURERS INSTRUCTIONS. CONNECT NEW PIPING TO (E) UTILITIES, VERIFY IN FIELD EXACT SIZE AND LOCATIONS. PROVIDE FITTINGS & TRANSITIONS AS REQUIRED.

(2) REINSTALL EXISTING LAVATORY AND NEW FAUCET. ENSURE THE POP-UP WASTE PLUG IS FUNCTIONAL.

(3) PROVIDE 2" WALL CLEAN OUT.

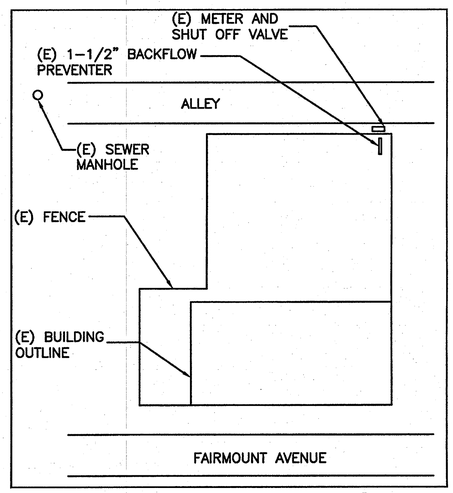
(4) POINT OF CONNECTION OF 4" SANITARY SEWER PIPE TO EXISTING SANITARY SEWER PIPE. UTILIZE REDUCER AS NECESSARY.

(5) POINT OF CONNECTION OF 4" SANITARY SEWER PIPE TO EXISTING SANITARY SEWER PIPE.

(6) CONTRACTOR SHALL SNAKE AND CLEAR ALL OF THE EXISTING SEWER LINES TO THE MAIN SEWER LINE OUTSIDE OF THE BUILDING AND CLEAR AGAIN AFTER IMPROVEMENT IS COMPLETE AND PRIOR TO JOB CLOSEOUT.

(7) POINT OF CONNECTION OF 2" SANITARY SEWER PIPE TO EXISTING SANITARY SEWER PIPE.

(8) CONTRACTOR SHALL FIELD VERIFY THE EXISTING VENT THROUGH ROOF TO BE 2". IF NOT, ENLARGE THE EXISTING VENT TO 2" VENT THROUGH ROOF.



SITE KEY PLAN

SCALE: NONE

NORTH

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

FUNDING CIP/SAP: 400002	SPEC. NO.: 5263	MP-3

PLANS FOR THE CONSTRUCTION OF ADULT CENTER – EAST SAN DIEGO – ACCESS UPGRADES (BARRIER REMOVAL)

PLUMBING REVISED WASTE & VENT FLOOR PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 20 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

CCS27 COORDINATE

CCS83 COORDINATE

35608-20-D

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CONSULTANT

Teza Design
Consulting In Mechanical Engineering
233 A Street, Suite 903, San Diego, CA 92101
Phone: (619) 955-6674 - Fax: (619) 269-7726

SCALE HORIZONTAL NO SCALE
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REGISTERED PROFESSIONAL ENGINEER STEVEN C. GIBSON No. 31459 CIVIL STATE OF CALIFORNIA

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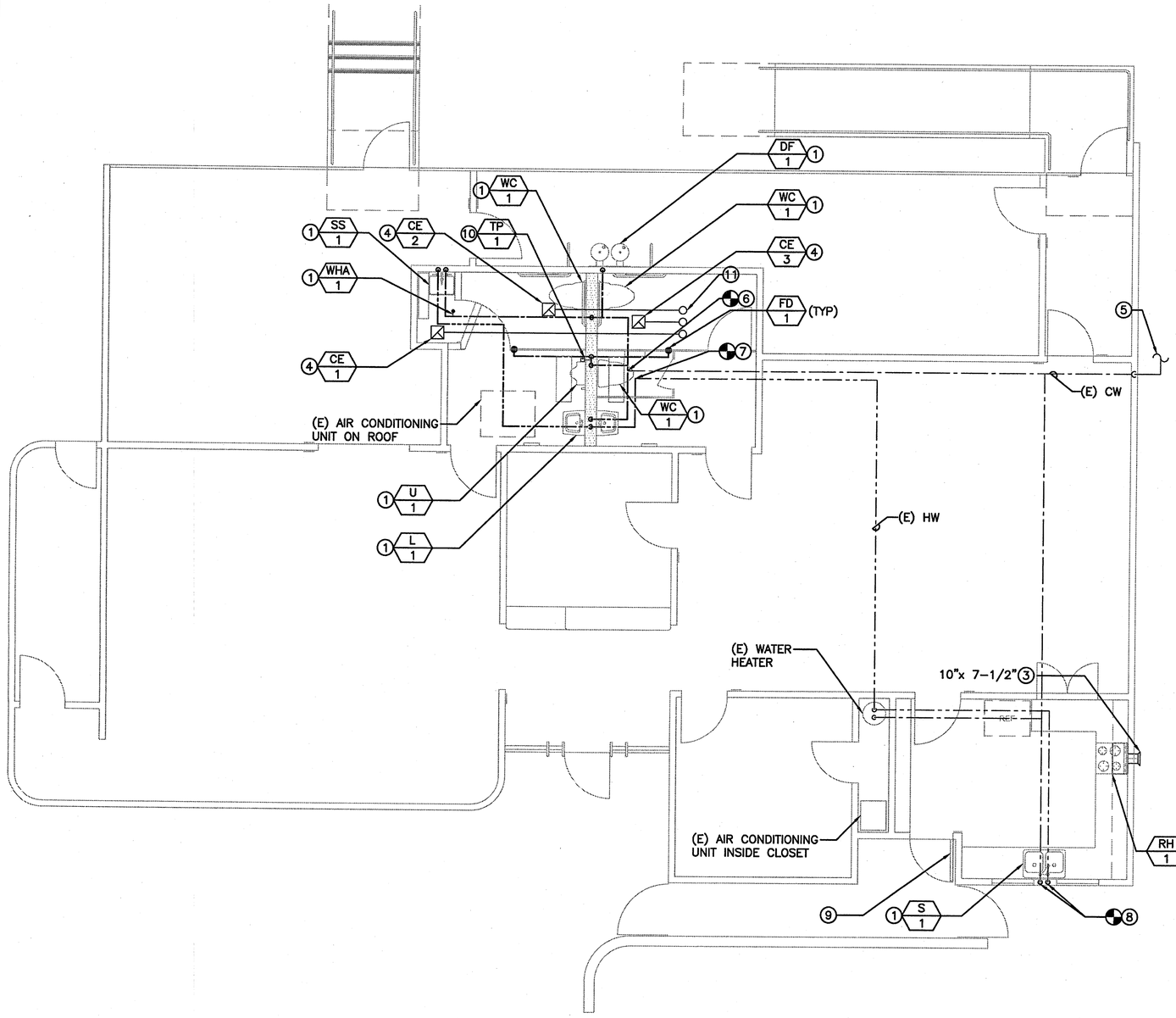


REVISED PLUMBING COLD WATER AND HOT WATER / MECHANICAL EXHAUST FLOOR PLAN

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1 THE EXISTING LAYOUT OF THE HOT AND COLD WATER PIPING SHOWN ON DRAWING IS BASED ON VISUAL FIELD OBSERVATION. THE CONTRACTOR SHALL VERIFY DURING CONSTRUCTION.

2 CONTRACTOR SHALL FIELD VERIFY THE EXISTING CONDENSATE PIPING AND REROUTE TO THE NEAREST FIXTURE.

KEY NOTES

(1) FURNISH & INSTALL PLUMBING FIXTURES PER MANUFACTURERS INSTRUCTIONS. CONNECT NEW PIPING TO (E) UTILITIES, VERIFY IN FIELD EXACT LOCATIONS. PROVIDE FITTINGS & TRANSITIONS AS REQUIRED.

(2) FURNISH & INSTALL RANGE HOOD PER MFR INSTRUCTIONS.

(3) ROUTE EXHAUST DUCT THROUGH WALL PROVIDE VENT CAP & BACKDRAFT DAMPER, CAULK & SEAL PENETRATION.

(4) FURNISH & INSTALL CEILING EXHAUST ROUTE 6"ø DUCT THROUGH ROOF, TERMINATE WITH ROOF CAP.

(5) WATER TO EXISTING SHUT-OFF VALVE AND METER. FIELD VERIFY EXACT SIZE AND LOCATION.

(6) POINT OF CONNECTION OF 1-1/2" COLD WATER PIPE TO EXISTING COLD WATER PIPE.

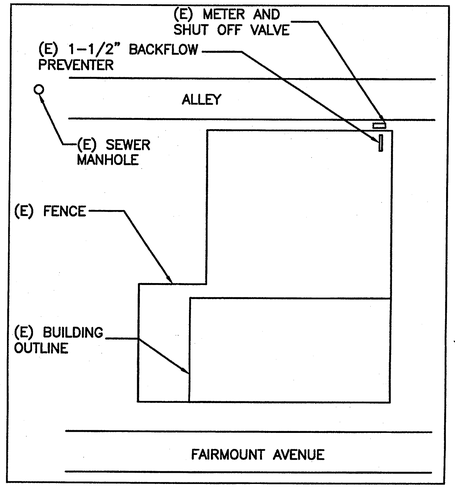
(7) POINT OF CONNECTION OF 3/4" HOT WATER PIPE TO EXISTING HOT WATER PIPE.

(8) POINT OF CONNECTION OF 1/2" COLD WATER AND HOT WATER PIPES TO EXISTING COLD WATER AND HOT WATER PIPES.

(9) (E) DOOR WITH (18) 22" LONG AND 3" WIDE GLASS PANELS WITH 1" GAP IN BETWEEN EACH PANEL. THE TOTAL OPEN AREA IS 396 SQUARE INCHES, WHICH COMPENSATES THE MAKE UP AIR REQUIREMENT FOR THE KITCHEN HOOD.

(10) PROVIDE ACCESS PANEL FOR THE TRAP PRIMER.

(11) EXHAUST DUCT THROUGH THE ROOF. CAULK AND SEAL AROUND ROOF PENETRATION TO MAKE WEATHER PROOF AND PROVIDE ROOF CAP. ENSURE A MINIMUM DISTANCE OF 10' IS MAINTAINED TO THE EXISTING AIR CONDITIONING UNIT.



SITE KEY PLAN

SCALE: NONE

NORTH E S W

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

MP-4

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER – EAST SAN DIEGO – ACCESS UPGRADES (BARRIER REMOVAL)

REVISED PLUMBING AND MECHANICAL FLOOR PLAN

CITY OF SAN DIEGO, CALIFORNIA
SHEET 21 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

CCS27 COORDINATE

CCS83 COORDINATE

35608-21-D

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CONSULTANT

Teza Design
Consulting In Mechanical Engineering
239 A Street, Suite 105, San Diego, CA 92101
Phone: (619) 756-6674 • Fax: (619) 209-7736

SCALE HORIZONTAL NO SCALE VERTICAL NO SCALE

REGISTERED PROFESSIONAL ENGINEER SIAVASH G. HAGHKHAH No. 31459 EXP. 6-30-13 MECHANICAL STATE OF CALIFORNIA

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

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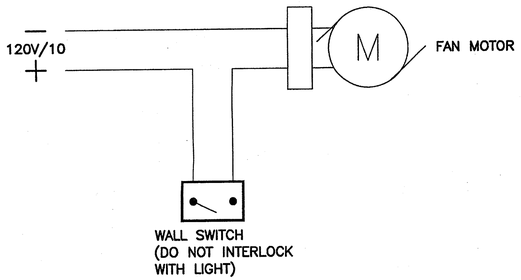

A CEILING EXHAUST CONTROL
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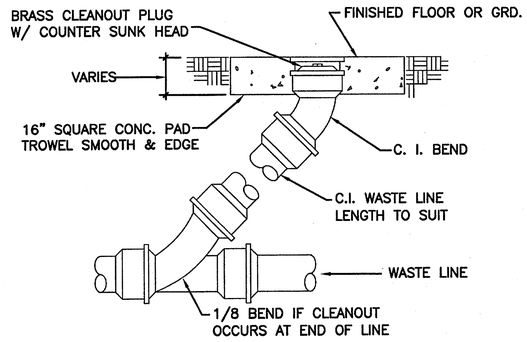

B FLOOR CLEANOUT/ CLEANOUT DETAIL
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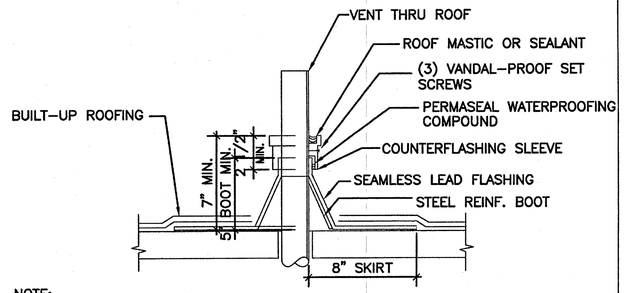
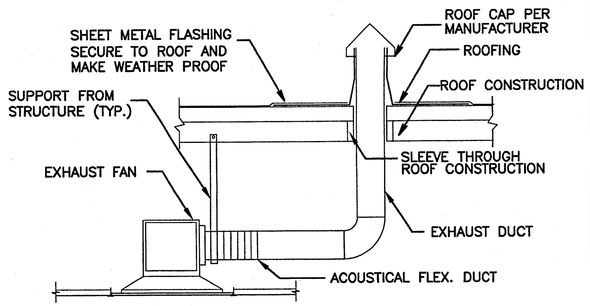


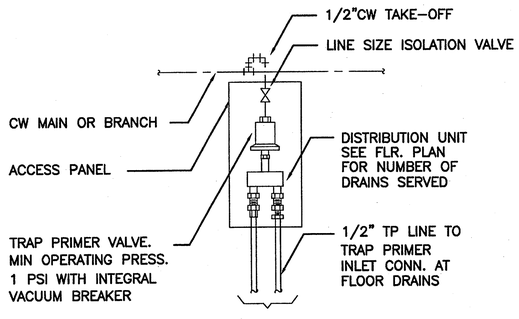
NOTE:
1. UTILIZE EXISTING VENT THRU ROOF PIPE WHERE POSSIBLE TO REDUCE THE NUMBER OF ROOF PENETRATIONS.

C VENT THROUGH ROOF
NOT TO SCALE



NOTE:
1. PREFERRED METHOD OF FLEX DUCT ATTACHMENT FOR CEILING DIFFUSERS.

D CEILING EXHAUST
NOT TO SCALE



MULTIPLE CONNECTION

E CW TO TRAP PRIMER CONNECTION DETAIL
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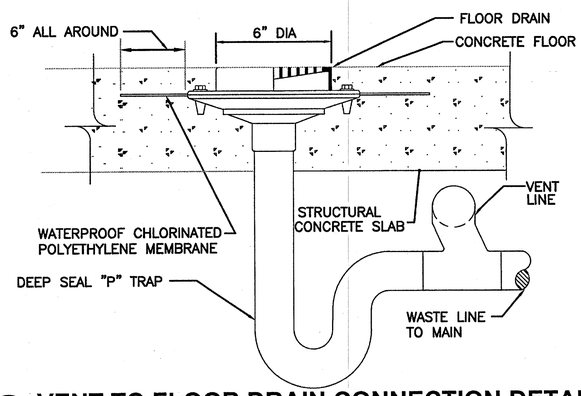

F VENT TO FLOOR DRAIN CONNECTION DETAIL
NOT TO SCALE

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (BARRIER REMOVAL)

MP-5

FUNDING CIP/SAP: 400002 | SPEC. NO.: 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER – EAST SAN DIEGO – ACCESS UPGRADES (BARRIER REMOVAL)

DETAILS

CITY OF SAN DIEGO, CALIFORNIA
SHEET 22 OF 25 SHEETS

W.B.S. B-00944

SIAVASH HAGHKHAH
PROJECT MANAGER

APPROVED: _____ FOR CITY ENGINEER _____ DATE 6/6/11

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	

AS–BUILTS

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

CCS27 COORDINATE

CCS83 COORDINATE

35608–22–D

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CONSULTANT

Teza Design
Consulting In Mechanical Engineering
233 A Street, Suite 103, San Diego, CA. 92101
Phone: (619) 330-0604 – Fax: (619) 209-7706

SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

REGISTERED PROFESSIONAL ENGINEER
SIAVASH G. HAGHKHAH
No. 31459
CIVIL
STATE OF CALIFORNIA

CITY OF SAN DIEGO
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SYMBOL LIST

- DASHED SYMBOL INDICATES EXISTING FIXTURE, OUTLET, DEVICE OR EQUIPMENT TO BE REMOVED.
- FINE-LINED SYMBOL INDICATES EXISTING FIXTURE, OUTLET, DEVICE OR EQUIPMENT TO REMAIN.
- EX — EXISTING CONDUIT TO BE REUSED.
- R — EXISTING CONDUIT TO BE REMOVED IF IN AN ACCESSIBLE AREA OR TO BE ABANDONED IF IN AN INACCESSIBLE AREA.
- (A) FIXTURE TYPE AND WATTAGE PER FIXTURE LIST. TYPICAL FOR ROOM INDICATED UNLESS OTHERWISE NOTED.
- INDICATES CONTROLLING SWITCH LEG.
- 11a DENOTES BRANCH CIRCUIT NUMBER SUPPLYING FIXTURE.
- RECESSED MOUNTED FLUORESCENT LIGHTING FIXTURE WITH PROVISIONS FOR PLUG-IN WIRING SYSTEM.
- RECESSED MOUNTED FLUORESCENT LIGHTING FIXTURE.
- SURFACE OR PENDANT MOUNTED FLUORESCENT LIGHTING FIXTURE, AS DETERMINED BY FIXTURE TYPE.
- ROUND LIGHTING FIXTURE. LAMP AND MOUNTING PER FIXTURE TYPE. SEE FIXTURE SCHEDULE.
- S_a SINGLE POLE, SINGLE THROW TOGGLE SWITCH, MOUNTED AT +48", U.O.N. SUBSCRIPT INDICATES CONTROLLING SWITCH LEG.
- S^3 THREE WAY TOGGLE SWITCH, MOUNTED AT +48" U.O.N.
- S^4 FOUR WAY TOGGLE SWITCH, MOUNTED AT +48" U.O.N.
- S^K KEYED SWITCH, MOUNTED AT +48", U.O.N.
- DUPLEX RECEPTACLE, MOUNTED HORIZONTALLY AT HEIGHT NOTED.
- DUPLEX RECEPTACLE, MOUNTED AT +15" U.O.N.
- DUPLEX RECEPTACLE WITH GFI PROTECTION, MOUNTED HORIZONTALLY AT HEIGHT NOTED.
- DUPLEX RECEPTACLE, GFI PROTECTION, MOUNTED AT +15" U.O.N.
- DOUBLE DUPLEX RECEPTACLE, MOUNTED AT +15" U.O.N.
- SURFACE MOUNTED PANELBOARD.
- FLUSH MOUNTED PANELBOARD.
- SURFACE MOUNTED CABINET, AS NOTED.
- FLUSH MOUNTED CABINET, AS NOTED.
- FUSED DISCONNECT SWITCH. SIZE AS NOTED. (FDS)

SYMBOL LIST (CONTINUED)

- [B] ENCLOSED CIRCUIT BREAKER. SIZE AS NOTED. (C/B)
- (J) CODE SIZE JUNCTION BOX.
- MOTOR
- MOTOR CONNECTION.
- AC / 2 MECHANICAL EQUIPMENT REFERENCE.
- CODE SIZE PULLBOX, SIZED AS REQUIRED.
- CONDUIT CONCEALED IN WALL OR CEILING SPACE.
- CONDUIT CONCEALED UNDER FLOOR SLAB OR UNDERGROUND.
- CONDUIT INSTALLED EXPOSED.
- CONDUIT INSTALLED UNDER A RAISED FLOOR OR UNDER A PORTABLE BUILDING.
- OH — OVERHEAD DISTRIBUTION LINES.
- W — DOUBLE CHANNEL PLASTIC SURFACE RACEWAY EQUIVALENT TO WIREMOLD SERIES 2300.
- CONDUIT OR SURFACE RACEWAY TURNED UP.
- CONDUIT OR SURFACE RACEWAY TURNED DOWN.
- E — CONDUIT STUB-OUT TERMINATION.
- FLEXIBLE METAL CONDUIT. INSTALL REQUIRED BRANCH CIRCUIT CONDUCTORS AND EQUIPMENT GROUND CONDUCTOR.
- A-1,3- HOMERUN TO INDICATED PANELBOARD ("A"). NUMBERS (1,3) INDICATE BRANCH CIRCUIT NUMBERS. 1" CONDUIT MINIMUM AT NEW BUILDINGS.
- 3/4"-3#8+1#10 EG INDICATES 3/4" CONDUIT WITH 3 NUMBER 8 CONDUCTORS + 1 NUMBER 10 EQUIPMENT GROUND.
- 3/4" CONDUIT WITH 2#12 CONDUCTORS PLUS 1#12 EQUIPMENT GROUNDING CONDUCTOR.
- 3/4" CONDUIT WITH 3#12 CONDUCTORS PLUS 1#12 EQUIPMENT GROUNDING CONDUCTOR.
- 3/4" CONDUIT WITH 4#12 CONDUCTORS PLUS 1#12 EQUIPMENT GROUNDING CONDUCTOR.
- 3/4" CONDUIT WITH 5#12 CONDUCTORS PLUS 1#12 EQUIPMENT GROUNDING CONDUCTOR.
- 3/4" CONDUIT WITH 6#12 CONDUCTORS PLUS 1#12 EQUIPMENT GROUNDING CONDUCTOR.
- 3/4" CONDUIT WITH 7#12 CONDUCTORS PLUS 1#12 EQUIPMENT GROUNDING CONDUCTOR.
- 1" CONDUIT WITH 8#12 CONDUCTORS PLUS 1#12 EQUIPMENT GROUNDING CONDUCTOR.
- #10 A NUMBER ADJACENT TO THE HASH MARK IN ANY CONDUIT RUN INDICATES THE CONDUCTOR SIZE TO BE USED IN LIEU OF #12 AWG. CONDUIT AND EQUIPMENT GROUNDING CONDUCTOR SHALL BE SIZED PER NEC, U.O.N.
- (4) ELECTRICAL NOTE REFERENCE
- A / E-6 INDICATES DETAIL "A" ON SHEET E-6
- LOW VOLTAGE CIRCUIT BREAKER.
- FUSE, SIZE AND TYPE AS NOTED.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
CB	CIRCUIT BREAKER
CEC	CALIFORNIA ELECTRICAL CODE
CIR	CIRCUIT
C.O.	CONDUIT ONLY
CU	COPPER
EG	EQUIPMENT GROUND
EIA/TIA	ELECTRICAL INDUSTRY ASSOCIATION / TELECOMMUNICATION INDUSTRY ASSOCIATION
EPB	ELECTRICAL PULLBOX
EX	EXISTING
KAIC	1000 AMPS INTERRUPTING CAPACITY
KVA	KILOVOLT-AMPS
MFR	MANUFACTURER
NTS	NOT TO SCALE
OC	ON CENTER
PNL	PANEL
S.I.	SQUARE INCHES
SCCR	SHORT CIRCUIT CURRENT RATING
TYP	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
+48"	MOUNTING HEIGHT ABOVE FINISHED FLOOR (TO CENTER OF DEVICE)

- GROUND CONNECTION.
- CIRCUIT BREAKER WITH GROUND FAULT PROTECTION.
- SWITCH SIZE
- NO. OF POLES
- 60A / 3P
- 30A
- FUSE SIZE
- TRIP SETTING
- AT / AF / 3P
- FRAME SIZE
- NUMBER OF POLES

GENERAL NOTES

1. THE SEISMIC ANCHORAGE FOR ALL ELECTRICAL EQUIPMENT SHALL BE DESIGNED TO WITHSTAND A LATERAL FORCE:
   a. CALCULATED AS SPECIFIED IN SECTIONS 1613A AND 1614A OF CCR TITLE 24, PART 2, VOLUME 2 OF 2, (2007 CBC).

   ANCHORAGE DETAILS FOR EQUIPMENT WHICH ARE NOT APPROVED DURING PLAN REVIEW ARE SUBJECT TO APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND DSA'S DISTRICT STRUCTURAL ENGINEER PRIOR TO INSTALLATION AND INSPECTION BY THE PROJECT INSPECTOR.
2. ALL WIRING ON THIS PROJECT SHALL BE COPPER/FIBER AND SHALL BE INSTALLED IN CONDUIT, SURFACE RACEWAY OR CABLE TRAY PER SPECIFICATIONS.
3. INSTALL A PULL ROPE IN ALL CONDUITS LABELED "CONDUIT ONLY". ROPE SHALL BE PER SPECIFICATION.
4. ELECTRICAL DEVICE DIMENSIONS ARE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED.
5. VERIFY ALL EXISTING CONDITIONS AND ASSUME THE RESPONSIBILITY OF FITTINGS, EQUIPMENT, RACEWAYS, ETC. IN THE EXISTING SPACE ALLOWED. ALL NEW INSTALLATIONS SHALL BE AT NEAT RIGHT ANGLES.
6. THE FOLLOWING BENDING RADII SHALL BE MAINTAINED FOR ALL COMMUNICATION UNDERGROUND CONDUIT SWEEPS.

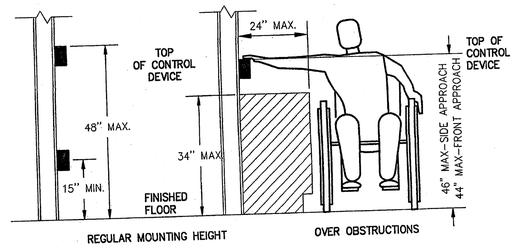
CONDUIT SIZE	SWEEP SIZE
2"	24"
3"	36"
4"	48"

7. ALL WORK SHALL BE IN COMPLIANCE WITH NFPA 70-2005 WITH CALIFORNIA AMENDMENTS (2007 CEC) AND WHERE APPLICABLE AS AMENDED BY LOCAL ORDINANCES AND CODES OF GOVERNING MUNICIPALITIES.
8. ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND ALL OTHER RELATED CONTRACT DRAWINGS.
9. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS/SPECIFICATIONS AND BE RESPONSIBLE FOR THE PROPER FITTING OF MATERIALS AND EQUIPMENT AT EACH LOCATION AS INDICATED WITHOUT SUBSTANTIAL ALTERATION. IN AS MUCH AS THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. FURNISHING FITTINGS REQUIRED TO MEET SUCH CONDITIONS SHALL BE AT NO COST TO THE OWNER.
10. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS AND WALLS.
11. ALL CIRCUIT PROTECTIVE DEVICES SHALL HAVE THE REQUIRED RATINGS AND INTERRUPTING CAPACITY EQUAL TO OR GREATER THAN THE AVAILABLE SHORT CIRCUIT CURRENT AT ITS SUPPLY TERMINAL.
12. ALL BUILDING WIRING SHALL BE COPPER, PER SPECIFICATIONS, REGARDLESS OF APPLICATION. NO ALUMINUM WIRING SHALL BE USED.
13. FIELD VERIFY EXISTING CONDITIONS AND ADVISE ENGINEER OF ANY DISCREPANCIES OR DEVIATIONS BETWEEN PLANS AND ACTUAL CONDITIONS PRIOR TO SUBMITTING BID.
14. ALL EQUIPMENT AND MATERIALS REMOVED BY THE CONTRACTOR SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR.
15. ALL BRANCH CIRCUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR INSTALLED, SIZED PER CEC TABLE 250.122 UNLESS OTHERWISE NOTED.

MINIMUM CONDUIT SIZES ALLOWED FOR THIS PROJECT	
3/4" CONDUIT	POWER/LIGHTING

EMT SIZING SCHEDULE

CONDUIT SIZE	AREA	40% FILL x 75%	ALLOWABLE FILL
3/4" DIAMETER CONDUIT	0.53 S.I.	30%	0.159 S.I.
1" DIAMETER CONDUIT	0.86 S.I.	30%	0.258 S.I.
1 1/4" DIAMETER CONDUIT	1.50 S.I.	30%	0.450 S.I.
1 1/2" DIAMETER CONDUIT	2.04 S.I.	30%	0.612 S.I.
2" DIAMETER CONDUIT	3.36 S.I.	30%	1.01 S.I.
2 1/2" DIAMETER CONDUIT	5.86 S.I.	30%	1.76 S.I.
3" DIAMETER CONDUIT	8.85 S.I.	30%	2.66 S.I.
3 1/2" DIAMETER CONDUIT	11.5 S.I.	30%	3.45 S.I.
4" DIAMETER CONDUIT	14.75 S.I.	30%	4.43 S.I.



NOTE

WHERE LIGHT SWITCHES, RECEPTACLES, TELEPHONE/DATA OUTLETS, DIMMING CONTROL STATIONS, FIRE ALARM PULL STATIONS OR OTHER OPERABLE OUTLET DEVICES OCCUR OVER FIXED OBSTRUCTIONS (SUCH AS CASEWORK, ETC) RESPECTIVE DEVICE MOUNTING HEIGHTS AFF SHALL BE AS TYPICALLY DEPICTED ABOVE.

SWITCH, OUTLET OR OTHER CONTROL DEVICE MOUNTING HEIGHT OVER OBSTRUCTIONS (A / E0.1)

NO SCALE

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (ADA BARRIER REMOVAL)

E-1

FUNDING CIP/SAP: 400002 | SPEC. NO : 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (ADA BARRIER REMOVAL)

SYMBOL LIST/GENERAL NOTES

CITY OF SAN DIEGO, CALIFORNIA

SHEET 23 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER — DATE 6/6/11

SIAVASH HAGHKHAH PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2 .	MOA		05/19/2011	
AS-BUILTS				

CONTROL CERTIFICATION

CCS27 COORDINATE

CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____

INSPECTOR _____ DATE COMPLETED _____

35608-23-D

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

TURPIN & RATTAN ENGINEERING, INC.
CONSULTING ENGINEERS
4719 PALM AVENUE
LA MESA, CA 91941-5221
619 / 466 / 6224 FAX 466 / 6233
E-MAIL: ENGINEER@TREIBO.COM
TREI # 09098.00
K-Posts 05/18/11 - 2:43PM
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SCALE HORIZONTAL NO SCALE VERTICAL NO SCALE

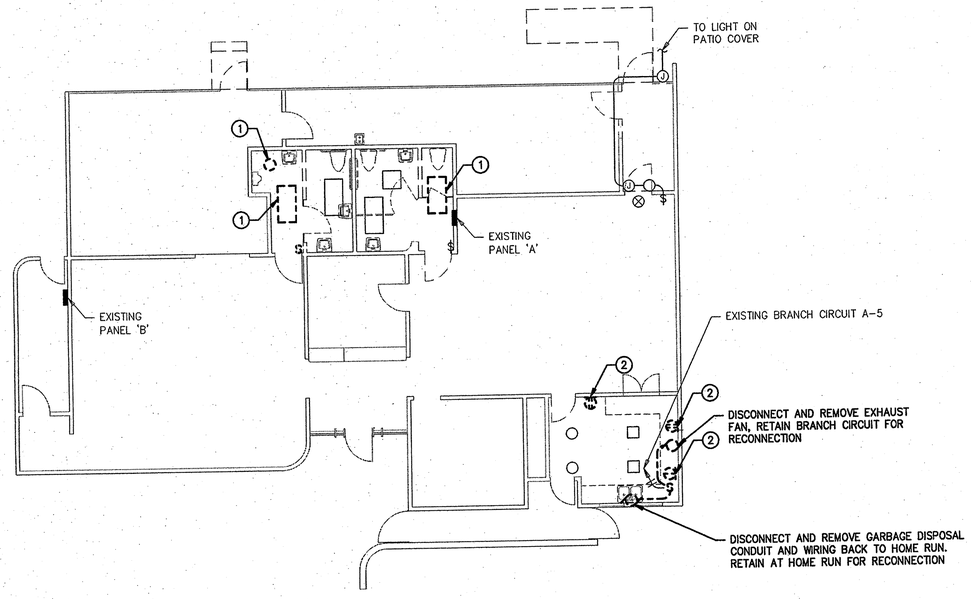
REGISTERED PROFESSIONAL ENGINEER — STEPHEN J. KURTZMAN — 13554 — Exp.9-30-12 — ELECTRICAL — 05/18/11

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • SEMPER VIGILANTES

WARNING 0 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY: FOR CITY ENGINEER
CHECKED BY: CONSTRUCTION ENGINEER
CHECKED BY: INSPECTOR



FLOOR PLAN - DEMOLITION

NORTH

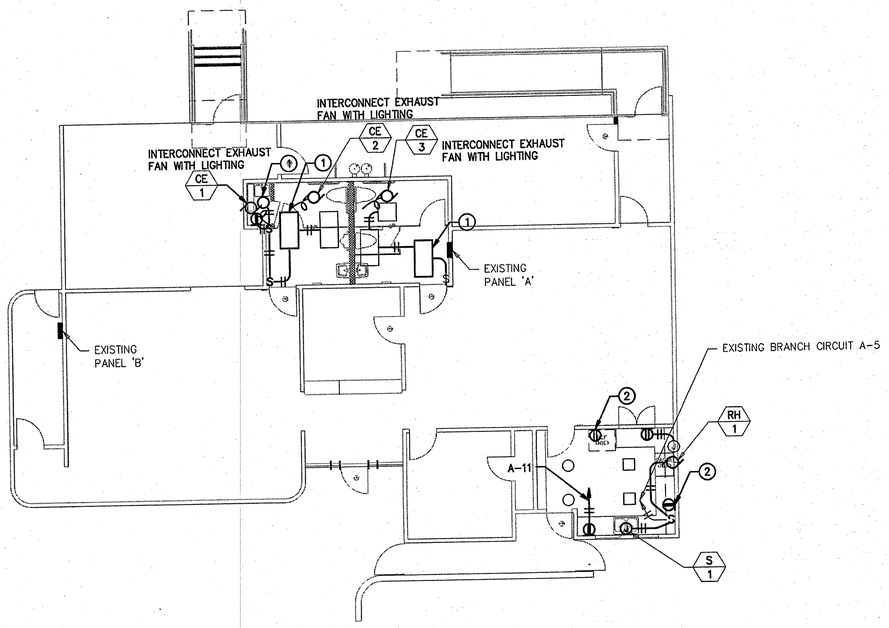
SCALE: 1/8"=1'-0"

0 4' 8' 16' 24'

1/8" = 1'-0"

KEYNOTES

1. DISCONNECT AND REMOVE FIXTURES, RETAIN FOR REINSTALLATION.
2. DISCONNECT AND REMOVE OUTLET, RETAIN BRANCH CIRCUIT FOR RE-CONNECTION.



FLOOR PLAN - NEW

NORTH

SCALE: 1/8"=1'-0"

0 4' 8' 16' 24'

1/8" = 1'-0"

KEYNOTES

1. REINSTALL RETAINED FIXTURES, INTERCEPT AND EXTEND BRANCH CIRCUITING AS NEEDED.
2. INSTALL NEW DEVICE AND RECONNECT TO RETAINED BRANCH CIRCUIT.

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (ADA BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

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CONSULTING ENGINEERS
4719 PALM AVENUE
LA MESA, CA 91941-5221
619 / 466 / 6224 FAX 466 / 6233
E-MAIL: ENGINEER@TREISD.COM
TREI # 09098.00

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SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

REGISTERED PROFESSIONAL ENGINEER STEPHEN J. KURTMAN 13554 Exp.9-30-12 CIVIL

05/18/11

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

THE CITY OF SAN DIEGO • STATE OF CALIFORNIA • RESPECT VISION ENDEAVOR

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY: FOR CITY ENGINEER
CHECKED BY: CONSTRUCTION ENGINEER
CHECKED BY: INSPECTOR

E-2

FUNDING CIP/SAP: 400002 | SPEC. NO : 5263

PLANS FOR THE CONSTRUCTION OF
ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (ADA BARRIER REMOVAL)

FLOOR PLANS DEMOLITION/NEW

CITY OF SAN DIEGO, CALIFORNIA
SHEET 24 OF 25 SHEETS

APPROVED: FOR CITY ENGINEER 6/6/11 DATE

W.B.S. B-00944

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CONTROL CERTIFICATION
CCS27 COORDINATE
CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

35608-24-D

MOUNTING: FLUSH
ENTER CABINET AT: BOTTOM
VOLTAGE: 240Y/120V,1ø,3W

EXISTING PANEL 'A'

MAIN: L.O
TYPE: BOLT-ON
BUSSING: 100AMP AIC: 10K

LOCATION	VOLT-AMPERES øA	VOLT-AMPERES øB	LTG	REC	MIS	BKR. AMP	BKR. POLE	A	B	BKR. POLE	BKR. AMP	MIS	REC	LTG	VOLT-AMPERES øA	VOLT-AMPERES øB	LOCATION
WOMENS CLUB LITES	843		·	·	·	20	1	1	2	1	20	·	·	·	698		WOMENS CLUB LITES
HEATER		540				20	1	3	4	1	20					1080	STORAGE LITES
DISPOSAL & HOOD	1623					30	1	5	6	1	20				720		PLUGS WOMEN CLUB
ROOM PLUGS/FOYER		360				20	1	7	8	1	20					540	LITES OUTSIDE
LTG RESTROOM	360					20	1	9	10	1	20				360		FLOOR PLUGS S.
KITCHEN		360				20	1	11	12	1	20						SPARE
SPACE	·							13	14								SPACE
SPACE		·						15	16								SPACE
SUBTOTAL	2826	1260													1598	1620	SUBTOTAL
TOTAL VOLT-AMPERES/PHASE			øA= 4424 VA												øB= 2880 VA		
TOTAL PANEL VOLT-AMPERES: 7304 VA + LCL 500															VA= 7804 VA		AMPS= 33

* REPLACE EXISTING 1 POLE 20 AMP BREAKER WITH 1 POLE 30 AMP BREAKER.

MOUNTING: FLUSH
ENTER CABINET AT: BOTTOM
VOLTAGE: 240Y/120V,1ø,3W

EXISTING PANEL 'B'

MAIN: L.O
TYPE: BOLT-ON
BUSSING: 100AMP AIC: 10K

LOCATION	VOLT-AMPERES øA	VOLT-AMPERES øB	LTG	REC	MIS	BKR. AMP	BKR. POLE	A	B	BKR. POLE	BKR. AMP	MIS	REC	LTG	VOLT-AMPERES øA	VOLT-AMPERES øB	LOCATION
MENS LITES	900		·	·	·	20	1	1	2	1	20	·	·	·	698		MENS LITES
CLUB PLUGS		650				20	1	3	4	1	20					1080	FOYER
CLUB LITES	450					20	1	5	6	2	50				1800		EXISTING
FOYER		360				20	1	7	8	–	–					1800	–
EXISTING	360					20	1	9	10	2	30				1200		A/C
TERRACE		360				20	1	11	12	–	–					1200	–
PANEL 'A'	4424					50	2	13	14	1	20						SPARE
–		2880				–	–	15	16	1	15						SPARE
SUBTOTAL	6134	4250													3698	4080	SUBTOTAL
TOTAL VOLT-AMPERES/PHASE			øA= 9832 VA												øB= 8330 VA		
TOTAL PANEL VOLT-AMPERES: 18162 VA + LCL 500															VA= 18662 VA		AMPS= 78

ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (ADA BARRIER REMOVAL)

CONSTRUCTION CHANGE / ADDENDUM

CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

CONSULTANT

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SCALE HORIZONTAL NO SCALE
VERTICAL NO SCALE

REGISTERED PROFESSIONAL ENGINEER
STEPHEN J. KURTZMAN
13554
Exp.9-30-12
ELECTRICAL
05/18/11

CITY OF SAN DIEGO
PUBLIC WORKS PROJECT

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

APPROVED BY:
FOR CITY ENGINEER
CHECKED BY:
CONSTRUCTION ENGINEER
CHECKED BY:
INSPECTOR

E-3

FUNDING CIP/SAP: 400002 | SPEC. NO : 5263

PLANS FOR THE CONSTRUCTION OF ADULT CENTER - EAST SAN DIEGO - ACCESS UPGRADES (ADA BARRIER REMOVAL)

DETAILS

CITY OF SAN DIEGO, CALIFORNIA
SHEET 25 OF 25 SHEETS

W.B.S. B-00944

APPROVED: FOR CITY ENGINEER DATE 6/6/11

SIAVASH HAGHKHAH
PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
DSD 2	MOA		05/19/2011	
AS-BUILTS				

CONTROL CERTIFICATION
CCS27 COORDINATE
CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

35608-25-D