



June 4, 2015

Revised September 7, 2016

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**RE: *Uptown, North Park & Golden Hill Community Plan Update Mobility Study for Future Year Conditions***

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This technical memorandum summarizes the future conditions mobility study completed for the Uptown, North Park & Golden Hill Community Plan Updates. This technical report is being prepared to facilitate City staff review of the recommended mobility improvements for the Community Plan Updates. Although each community is preparing separate community plans, this memo addresses the future conditions for all three communities, with the recommendations at the end separated by community.

## **Transit First**

A key focus of the Regional Transportation Plan prepared by the San Diego Association of Governments (SANDAG) is to develop an ambitious and far-reaching transit network that significantly expands the role that transit plays. Vital to achieving this goal is the improvement of the current system to provide more convenient and timely bus and rail services, the implementation of new transit services to improve connections and access, the implementation of new service types to attract new riders to transit, and the enhancement of the transit customer's experience to make transit easier, safer, and more enjoyable to use. While this is a regional goal, the same focuses are applied to the local transit networks in the communities of Uptown, North Park, and Golden Hill.

As identified in ~~the SANDAG's 2050 Regional Transportation Plan~~ [San Diego Forward: The Regional Plan \(2050 RTP\)](#), future public transportation improvements are planned for each of the three communities. These improvements include different transit options such as ~~Bus~~ [Rapid Transit \(BRT\)](#), High Frequency Local Bus, Light Rail Transit (LRT), and streetcar. The following summarizes the specific planned improvements for each community. Each transit project would be required to prepare a project-level analysis prior to implementation.

### **Uptown**

Uptown currently is served by several local and ~~rapid~~ [Rapidbus](#) routes, providing several options along Washington Street, University Avenue, Reynard Way, Fort Stockton Drive, First Avenue, Fourth Avenue, Fifth Avenue, Sixth Avenue, and connections to each of the adjacent communities. ~~BRT~~ [Rapid service](#) was recently implemented along Park Boulevard north of University Avenue. Each of these roadways are popular routes for vehicles and bicyclists as well, providing a shared-use atmosphere for the different modes of travel. Transit is highly used in the area. One missing transit

connection that the community has expressed interest in providing is ~~connection~~ to the San Diego International Airport.

Planned transit routes within the Uptown community include [BRT-Rapid](#), LRT and streetcar improvements as shown on **Figure 1** and the changes from existing services are described below:

- **Route 15** was converted to being a Rapid [bus](#)-route, known as the Mid-City Rapid, and opened for operation in Fall 2014. The Mid-City Rapid is a high-frequency, limited-stop service between San Diego State and Downtown San Diego. The Mid-City Rapid travels along El Cajon Boulevard and Park Boulevard in the Uptown community corridor.
- **Route 10** will convert to ~~be be a~~ Rapid [bus-routeservice](#), with improvements supported by the Mid-City Rapid. Route 10 is currently a limited stop bus service that provides service from University Avenue at College Avenue to Old Town San Diego. Improvements include expansion of the service to La Mesa and Ocean Beach. Route 10 currently travels along University Avenue and Washington Street in the Uptown community corridor. The expected year for completion of this improvement is 2020.
- A **new streetcar service**, currently designated as route 554, will provide service from Downtown San Diego to Hillcrest neighborhood. Currently, it is planned that the streetcar service will travel along Fourth and Fifth Avenues, University Avenue, and Park Boulevard in the Uptown community corridor. The expected year for completion of this improvement is 2020 as identified in the RTP. However, additional evaluation completed for this potential service suggested that it will not be in place until beyond 2020.
- **Route 120** will convert to be ~~a~~ Rapid [bus-routeservice](#) along its current route. Route 120 currently provides local bus service from Downtown San Diego to the Kearny Mesa Transit Center. Improvements include transit priority measures and new transfer opportunities to the Trolley Green Line and [BRT-Rapid](#) services. Route 120 currently travels along Fourth and Fifth Avenues and University Avenue in the Uptown community corridor. The expected year for completion of this improvement is 2030.
- **Route 11** will convert to be ~~a~~ Rapid [bus-routeservice](#) along its current route. Route 11 currently provides local bus service from the SDSU Transit Center to Skyline Hills and travels along Park Boulevard, University Avenue, and First Avenue in the Uptown community. The expected year for completion of this improvement is 2035.
- **Mid-City LRT** is currently planned as a service extension from the City College Trolley Station. Construction of Mid-City LRT will be done in two phases. Phase 1 will include a LRT extension from downtown to Mid-City via El Cajon Boulevard and Park Boulevard. Phase 2 will extend the Phase 1 construction efforts to the current SDSU transit center. LRT service will be provided via Park Boulevard in the Uptown community corridor. The expected year for completion of [phase 1 of this improvement is 2035](#)~~this improvement is 2035~~.

A streetcar feasibility study was funded and completed in 2013 to evaluate the potential implementation of a streetcar in the Uptown community. An example cross-section of how the streetcar would integrate into the existing roadway network along Fourth and Fifth Avenues and



University Avenue are provided in **Figures 2 and 3**, respectively. While overall a streetcar is feasible and would be a great fit with the community, the study found that there are ~~some~~ significant challenges ~~facing with~~ implementation of a streetcar. The lack of funding and potential funding options was found to be the biggest hurdle as it would require either community development funds or federal funds to gain the large amount of money needed to get the system installed. Further, the supporting storage and maintenance facilities for a regional streetcar fleet are still undefined. The study revealed that it would be advantageous to find a champion to take on the funding and implementation challenges for a region-wide streetcar system, and that Uptown would then be a good candidate for the initial rollout phase.

In addition to the planned facilities identified, a new aerial gondola transit idea is being considered. The aerial gondola would initially connect between downtown and Balboa Park, using a guideway near Sixth Avenue. This would provide a valuable connection between the downtown and Uptown communities, and may displace the need for the streetcar connection identified in the RTP. Preliminary efforts are being carried forward to determine if an aerial gondola will be feasible.

The San Diego Airport has begun expansion of facilities to the north side of their property, near Pacific Highway. To compliment that expansion, an intermodal transit center is also being considered near Pacific Highway. This new facility would provide the ability to create the missing connection to the airport that the community has expressed interest in.

### North Park

North Park has local and ~~R~~apid bus routes along their major commercial corridors of University Avenue, El Cajon Boulevard, Adams Avenue, and 30th Street, and recently implemented ~~BRT~~ Rapid service along Park Boulevard. The bus system is highly used in this area and additional, more frequent, or faster transit is being considered to support the demand. These streets are all popular roadways for other modes of travel as well, so buffered, separate transit facilities are being considered to provide efficiency and safety for all modes of travel. Planned transit routes within the North Park community include ~~BRT~~ Rapid, LRT and streetcar improvements as shown on **Figure 4**. The changes from existing services are described below:

- **Route 2** will ~~convert to be a Rapid bus route~~ be transitioned to a Rapid service along its current route. Route 2 currently provides high-frequency local bus service from Downtown San Diego to North Park. Route 2 travels along 30th Street in the North Park community corridor. The expected year for completion of this improvement is 2030.
- **Mid-City LRT** is currently planned as a service extension from the City College Trolley station. Construction of Mid-City LRT will be done in two phases. Phase 1 will include a LRT extension from downtown to Mid-City via El Cajon Boulevard and Park Boulevard. Phase 2 will extend the Phase 1 construction efforts to the current SDSU transit center. LRT service will be provided via El Cajon Boulevard in the North Park community corridor. The expected year for completion of ~~this improvement is 2035~~ phase 1 of this improvement is 2035.

- A **new bus route**, currently designated as route 637, will provide [Rapid](#) service from North Park to the Pacific Fleet Trolley Station in Barrio Logan. The expected year for completion of this improvement is 2035.
- A **new streetcar service**, currently designated as route 555, will provide streetcar service from 30th Street to Downtown San Diego. The planned route defined in the RTP is along 30th Street, with connection to downtown via Golden Hill. The expected year for completion of this improvement is 2035.

With the exception of the Mid-City LRT, these planned transit changes would not reduce the number of lanes available to personal vehicles. The changes would be schedule and stop modifications for existing buses, and new bus and streetcar service that would share the roadway with personal vehicles. The Mid-City LRT could potentially reduce the number of travel lanes on El Cajon Boulevard to provide dedicated right-of-way for the LRT, but the specifics of the design have not been determined at this time.

### Golden Hill

Transit routes are minimal in Golden Hill but seem to be adequate to serve the needs of the community. The routes currently travel through the commercial areas of Golden Hill and are able to serve many of the residential areas. Canyons and topography do limit the walking distance from some of the transit stops. The roadways with bus routes are primarily two lane streets. The buses share space with vehicles and bicyclists, but speeds and volumes are fairly low. Planned transit routes within the Golden Hill community include [BRT-Rapid](#) and streetcar improvements as shown on **Figure 5** and the changes from existing services are described below:

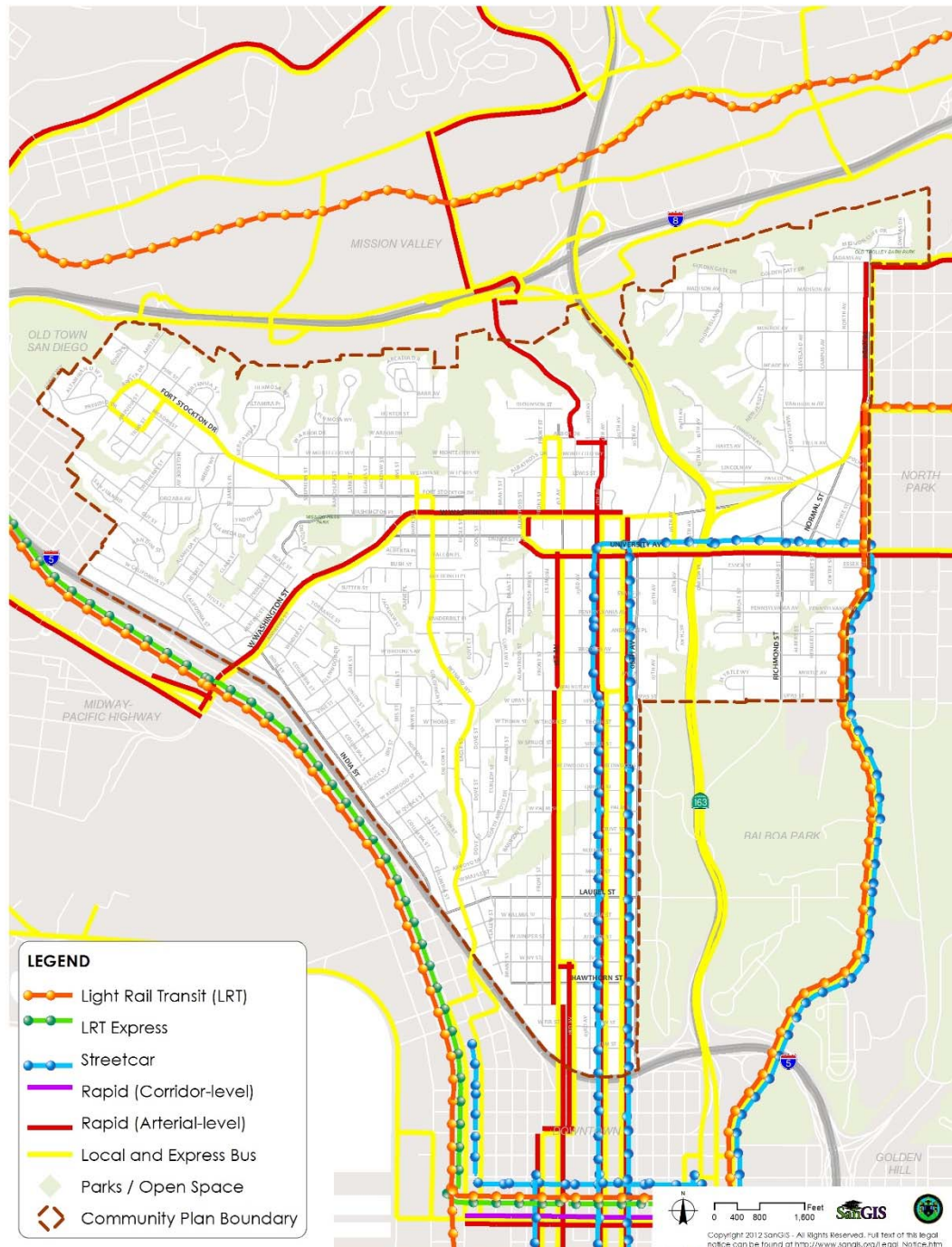
- **Route 2** will ~~convert to be a Rapid bus route~~ [be transitioned to a Rapid service](#) along its current route. Route 2 currently provides [high-frequency](#) local bus service from Downtown San Diego to North Park. Route 2 travels along Broadway, C Street, and 30th Street in the Golden Hill community. The expected year for completion of this improvement is 2030.
- A **new bus route**, currently designated as route 637, will provide [Rapid](#) service from North Park to 32nd Street Trolley station in Barrio Logan. The expected year for completion of this improvement is 2035.
- A **new streetcar route**, currently designated as route 555, will provide streetcar service from 30th Street to Downtown San Diego. The planned route through Golden Hill defined in the RTP is along 30th Street north of C Street, along C Street between 25th Street and 30th Street, and along 25th Street between Market Street and C Street. The expected year for completion of this improvement is 2035.

These planned transit changes would not reduce the number of lanes available to personal vehicles. The changes would be schedule and stop modifications for existing buses, and new bus and streetcar service that would share the roadway with personal vehicles.

## **BEST PRACTICES: TRANSIT**

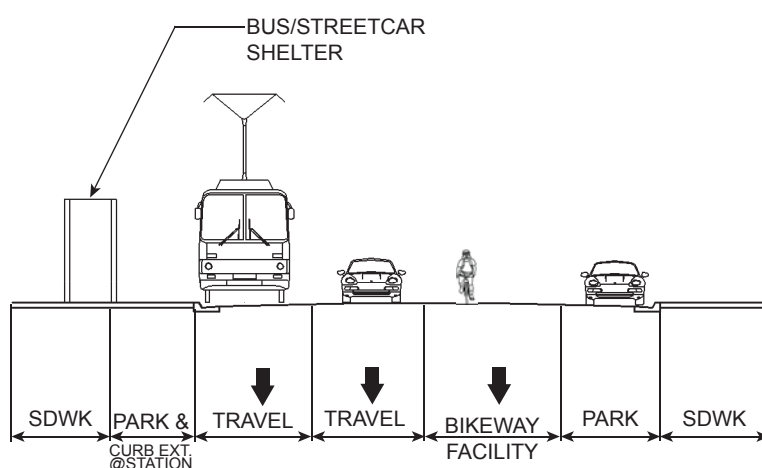
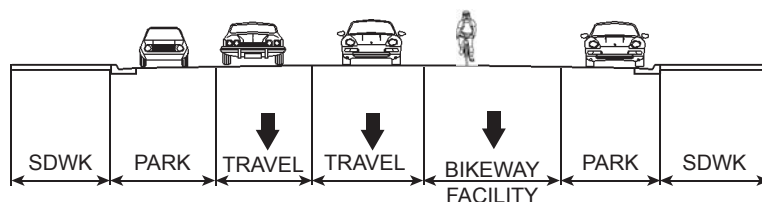
The communities have several potential changes to the transit network that need to be evaluated and implemented in a way that interacts with the surrounding land uses and other modes of travel. To complement the information provided in the Regional Transportation Plan, an information paper on best practices for implementing transit was prepared as part of this community plan update and is included in **Appendix B**.

Any roadway capacity reductions, traffic calming measures, or bicycle and pedestrian infrastructure improvements should be planned in consideration of transit vehicle performance and routing, bus stop locations, and bus turning movements. In addition the community plans include policy language to implement transit priority measures that include transit signal priority, queue jump and transit lanes where feasible.



*Planned Transit Facilities: Uptown*  
Revised September 7, 2016

## CROSS SECTION EXAMPLES Fourth & Fifth Avenues with Planned Streetcar Improvements



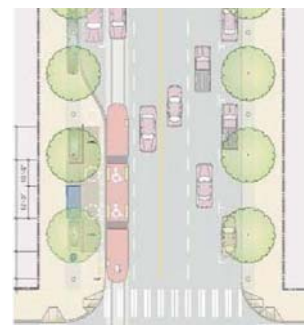
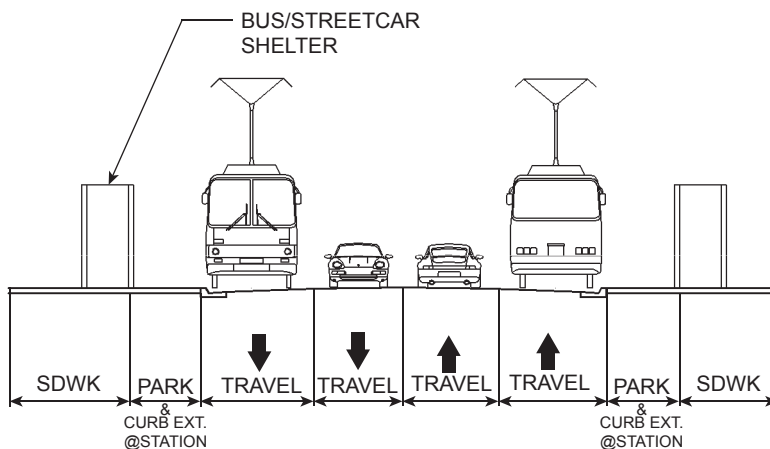
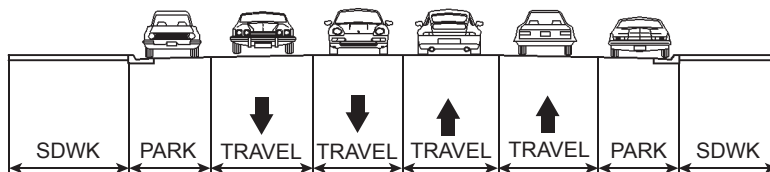
*Conceptual street layouts, cross sections, lane dimensions, and bicycle facility configurations are provided to demonstrate general feasibility of proposals only. Actual improvements will require additional engineering studies and design work and shall be to the satisfaction of the City Engineer.*

Streetcar Cross-Section on Fourth and Fifth Avenues



## CROSS SECTION EXAMPLES

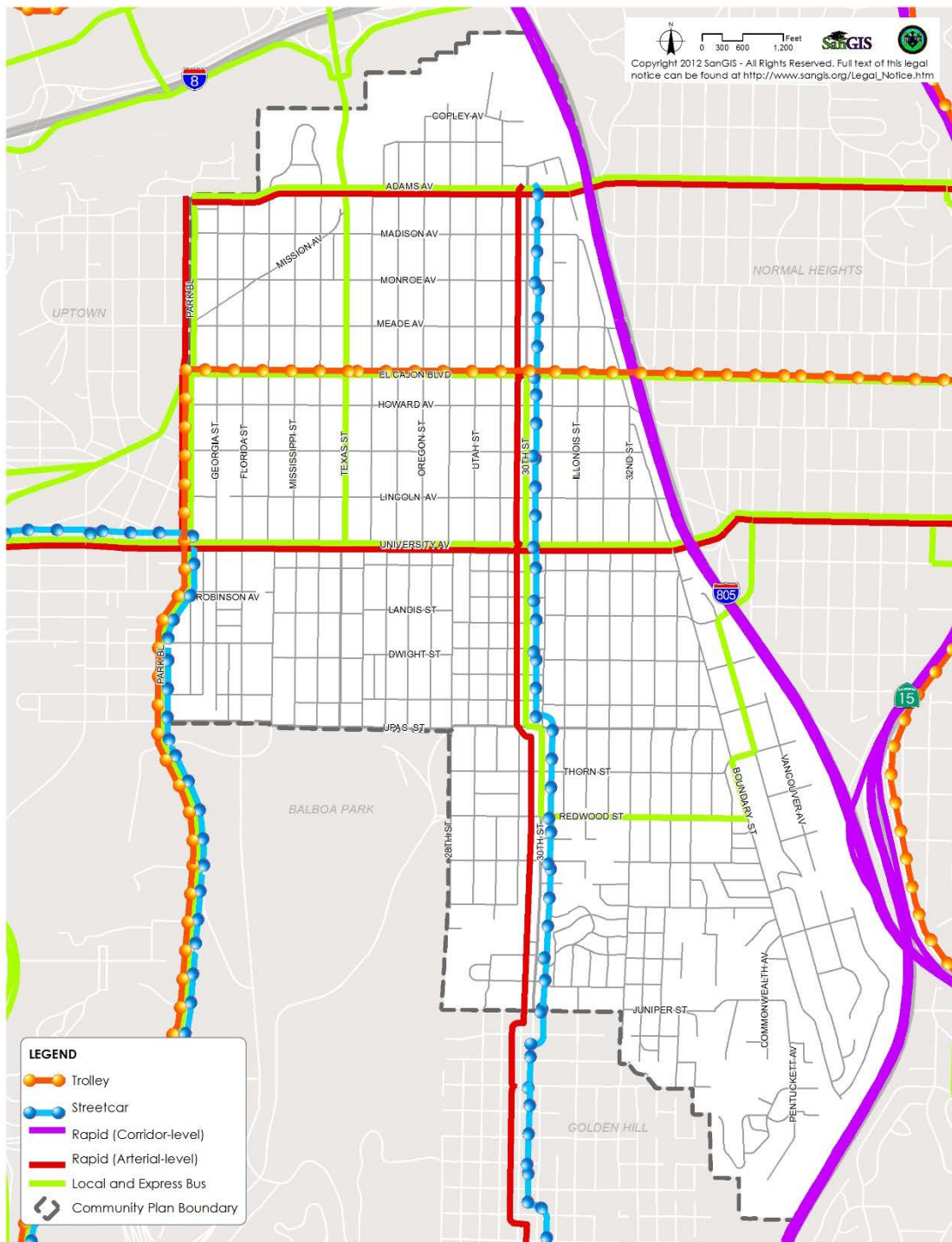
### University Avenue with Planned Streetcar Improvements



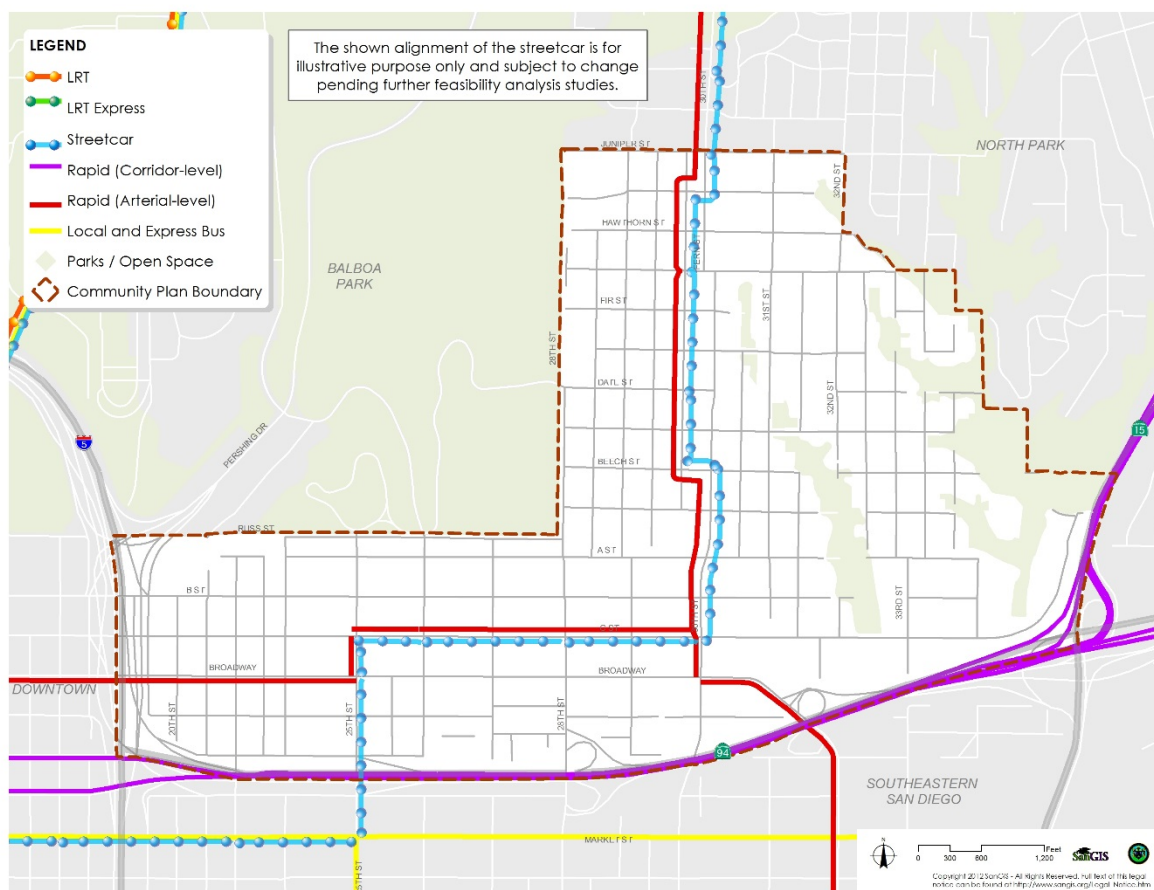
*Conceptual street layouts, cross sections, lane dimensions, and bicycle facility configurations are provided to demonstrate general feasibility of proposals only. Actual improvements will require additional engineering studies and design work and shall be to the satisfaction of the City Engineer.*

Streetcar Cross-Section on University Avenue





Planned Transit Facilities: North Park  
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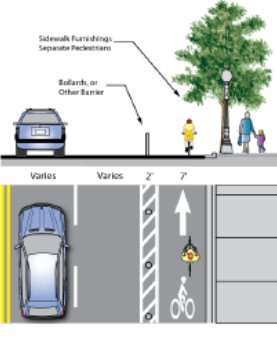
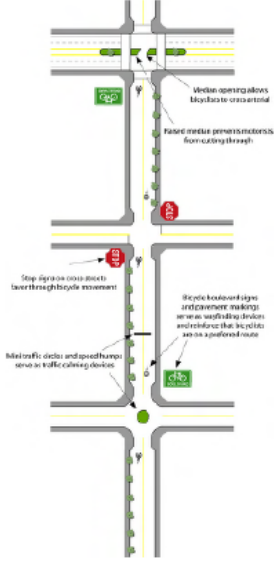


Planned Transit Facilities: Golden Hill  
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## Bicycling

The City of San Diego Bicycle Master Plan established guidance on achieving an ideal bicycle environment throughout the City. Similarly, a key focus of The San Diego Regional Bicycle Plan (RBP) prepared by SANDAG is to develop an interconnected network of bicycle corridors to improve the connectivity and quality of bicycle facilities and their supporting facilities. While these documents look at citywide and regional goals, the same focuses to develop quality facilities are applied to the local street networks in the communities of Uptown, North Park, and Golden Hill. The types of bicycle facilities delegated and applied to local networks include bicycle boulevards, bicycle paths (Class I), bicycle lanes (Class II), bicycle routes (Class III), and cycle tracks (Class IV). The RBP introduced bicycle boulevards and cycle tracks as additional facilities that are not defined by the California Department of Transportation (Caltrans) and are not part of the existing bicycle network in the three communities. **Table 1**, taken directly from the RBP, describes the two new bicycle facilities.

**Table 1 – Regional Corridor Classification System**

<p><b>Cycle Tracks</b></p> <p>A cycle track is a hybrid type bicycle facility that combines the experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are bikeways located in roadway right-of-way but separated from vehicle lanes by physical barriers or buffers. Cycle tracks provide for one-way bicycle travel in each direction adjacent to vehicular travel lanes and are exclusively for bicycle use. Cycle tracks are not recognized by Caltrans Highway Design Manual as a bikeway facility. Development of cycle track on segments of the regional corridor system is proposed through experimental, pilot projects.</p>	 <p>Diagram illustrating a Cycle Track facility. It shows a cross-section of a roadway with a car lane, a cycle track separated by bollards or other barriers, and a sidewalk with trees and pedestrians. The cycle track is labeled 'Cycle Track' and the sidewalk is labeled 'Sidewalk/Paved Shoulder - Separate from Cycle Track'.</p>
<p><b>Bicycle Boulevards</b></p> <p>Bicycle boulevards are local roads or residential streets that have been enhanced with traffic calming and other treatments to facilitate safe and convenient bicycle travel. Bicycle boulevards accommodate bicyclists and motorists in the same travel lanes, typically without specific vehicle or bicycle lane delineation. These roadway designations prioritize bicycle travel above vehicular travel. The treatments applied to create a bike boulevard heighten motorists' awareness of bicyclists and slow vehicle traffic, making the boulevard more conducive to safe bicycle and pedestrian activity. Bicycle boulevard treatments include signage, pavement markings, intersection treatments, traffic calming measures and can include traffic diversions. Bicycle boulevards are not defined as bikeways by Caltrans Highway Design Manual; however, the basic design features of bicycle boulevards comply with Caltrans standards.</p>	 <p>Diagram illustrating a Bicycle Boulevard facility. It shows a cross-section of a street with various traffic calming and signage treatments. The diagram includes labels for 'Stop signs cross streets to slow through-traffic movement', 'Bicycle boulevard signs and pavement markings to warn motorists and indicate that bicyclists are on a preferred route', 'Minimize ditches and speed humps serve as traffic calming devices', and 'Paint median green to encourage bicyclists to cross street'.</p>

Each of the three communities have planned bicycle facilities such as multi-use paths, cycle tracks, bicycle lanes, buffered bike lanes, bicycle routes, bicycle boulevards, and hybrid bike facilities. Information on the planned facilities was first obtained from the City of San Diego Bicycle Master Plan and then was compared to SANDAG's RBP and current bicycle facility project being undertaken by SANDAG. The following summarizes the specific planned improvements for each community. The planned facilities identified in this section are determined to be feasible for further evaluation, but the impacts of the actual design and incorporation of the facilities into the street network is not accounted for in this study and will need to be further evaluated by the individual project proponent.

### Uptown

Uptown's location in the central portion of San Diego makes bicycling an attractive mode of transportation for this community, although geography challenges in the community result in out of direction travel and steep hills. Uptown is located adjacent to downtown San Diego, where many Uptown residents work. Class II (bicycle lanes) and III (bicycle route) facilities are provided on Fourth, Fifth, and Sixth Avenues as well as on portions of downtown streets. Recent facility upgrades, such as buffered bicycle lanes, have resulted in a noticeable increase in cyclists along these routes. Uptown sits on a mesa above Mission Valley to the north and Old Town and Midway to the west. There are no connections down to Mission Valley. There are limited connections to the west; Class III bicycle routes provide the only existing connections, one on Presidio Drive (to Old Town) and one on Laurel Street (to Midway). Canyons also limit the ability to provide a continuous grid pattern of streets, limiting bicycle options for short trips within the community.

SANDAG's regional bicycle facilities planned for the Uptown Community Planning area are shown on **Figure 6**. SANDAG is conducting further project-level analysis of the regional bicycle network in the Uptown area and will propose solutions to implement the intent of the RBP. Project-level refinement is anticipated in the RBP. As stated in the RBP (p. 78) "It is not the intent of this Plan to make recommendations for regional network improvements that would result in significant impacts to traffic, biological resources, or other environmental factors. During design and environmental review of individual planned segments, project proponents may elect to modify alignment of corridor segments to avoid and minimize impacts. Any changes to the regional network will be documented during the Plan update, which is proposed at intervals of every four years."

The recommended bicycle facility network for the Uptown Community Planning area that interfaces with the regional bicycle network is shown on **Figure 7** and summarized in **Table 2**.

The following summarizes where inter-community connections will be developed with the proposed facilities:

- The planned cycle track on Washington Street from University Avenue to Pacific Highway connects to existing bicycle lanes on Pacific Highway. This improvement will separate bicyclists further from high-speed vehicle traffic creating a more comfortable cycling experience.
- The planned bicycle routes on Laurel Street and Juniper Street provide a connection between existing bicycle routes in the Midway-Pacific Highway community and Balboa Park.

- The planned buffered bicycle lanes on San Diego Avenue connect with planned bicycle facilities in the Old Town community.
- The planned bicycle facilities on Third, Fourth, Fifth, and Sixth Avenues each provide connections to existing and planned Centre City bicycle facilities. The rise in bicyclists using the new buffered bicycle lanes recently installed on Fourth and Fifth Avenues have shown the benefit in making these connections.
- The planned hybrid facility on Bachman Place connects with existing bicycle lanes on Hotel Circle South in the Mission Valley community, a connection that currently does not exist. Bicycle lanes will be provided for the uphill direction, while the downhill portion will be a bicycle route.
- Several of the planned facilities connect with planned facilities in North Park, providing connections between the communities along these roadways:
  - Washington Street
  - Lincoln Avenue
  - University Avenue
  - Robinson Avenue
  - Park Boulevard

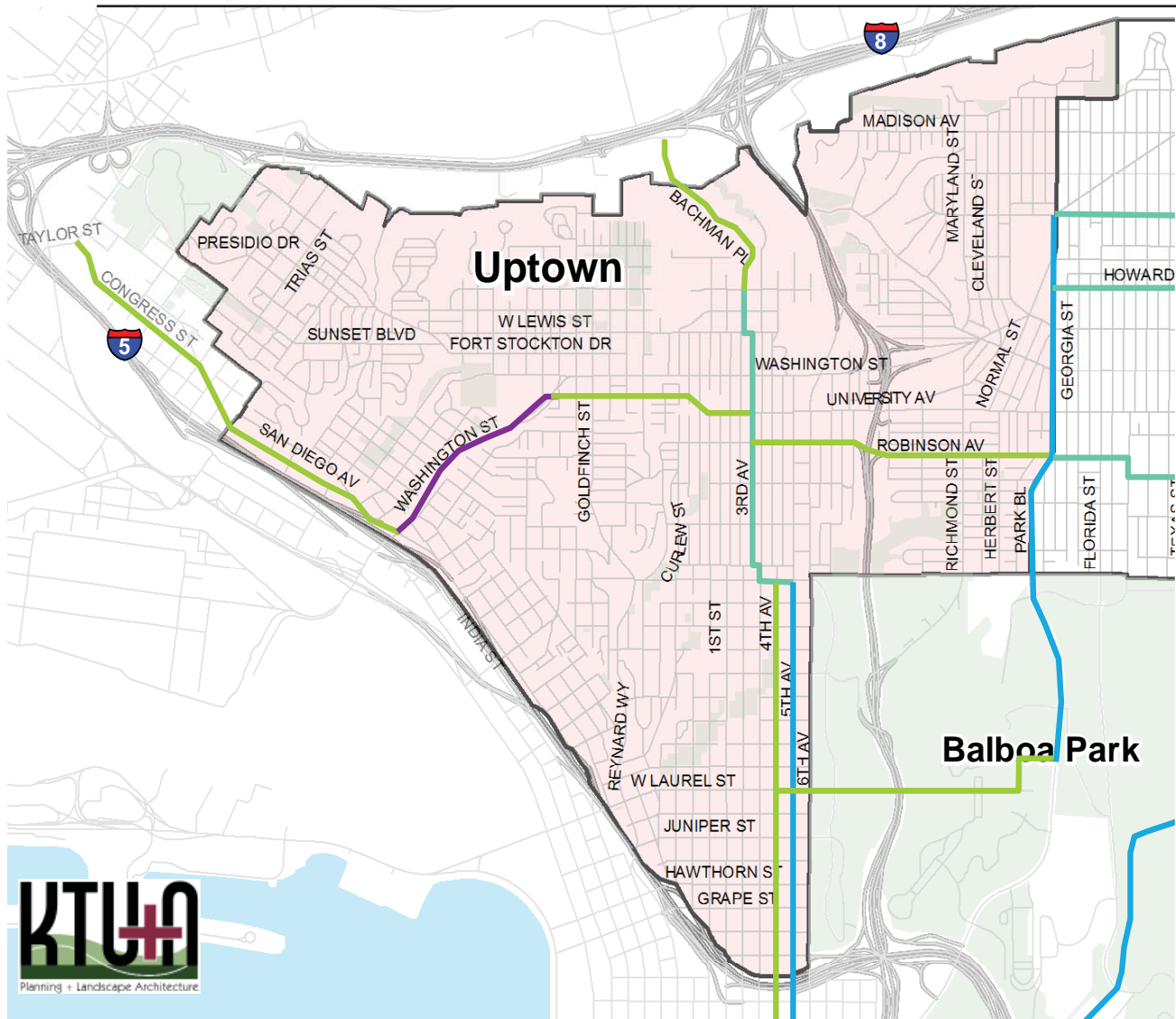
Intra-community connections will be strengthened with new bicycle facilities along the key roadways that traverse through the community:

- Washington Street
- University Avenue
- Fourth, Fifth, and Sixth Avenues
- India Street
- Park Boulevard

Implementing a higher accommodation than what is planned may be possible in some locations. This often provides a greater benefit to the bicycle network. One example of this is First Avenue. While the data shows that a Class III (bicycle route) facility is planned for First Avenue, an evaluation of its cross-section determined that there is sufficient room for Class II (bicycle lanes), as presented in **Figure 8**.

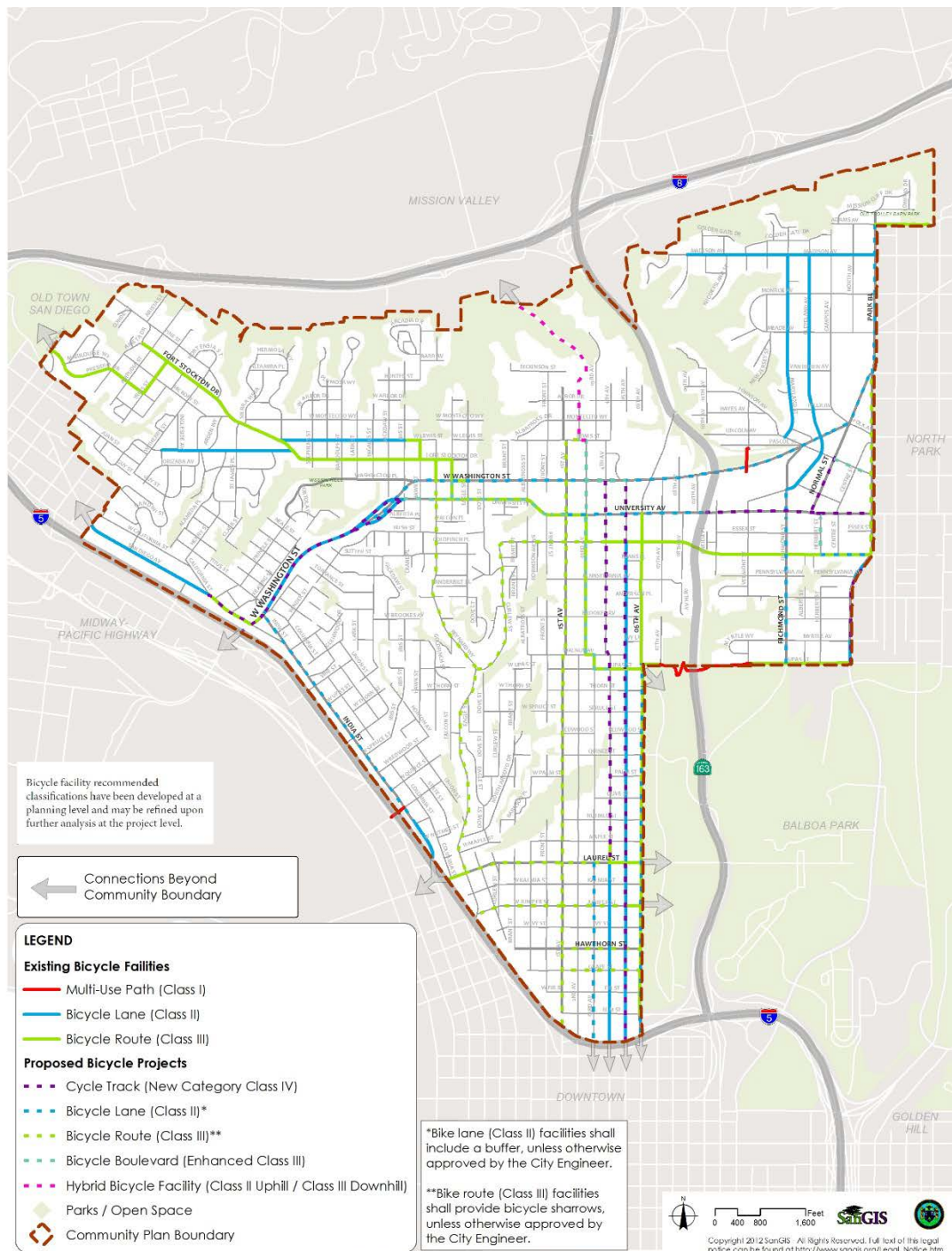
The City of San Diego is aggressively upgrading bicycle facilities Citywide. Funding for active transportation regionally and statewide is increasing and is likely at historic levels. As a result, there have and will be quantum leaps in the provision of new and upgraded bicycle facilities in San Diego. This combined with the existing and planned bicycle facilities in Uptown will result in increasing levels of bicycling within the next decade. Longer bicycle travel, such as trips to work, will increase due to the Bachman Place connection to the north and facility upgrades to the west and south of Uptown. Shorter trips within Uptown or adjacent communities will become more prevalent with upgrades to facilities and due to auto drivers becoming more accustomed to sharing the road with cyclists.





The identified regional bicycle facility recommended classifications are subject to change pending further project level evaluation demonstrating implementation feasibility of these facilities.





Existing and Planned Bicycle Facilities: Uptown  
Revised September 7, 2016

Table 2 – Planned Bicycle Facilities: Uptown

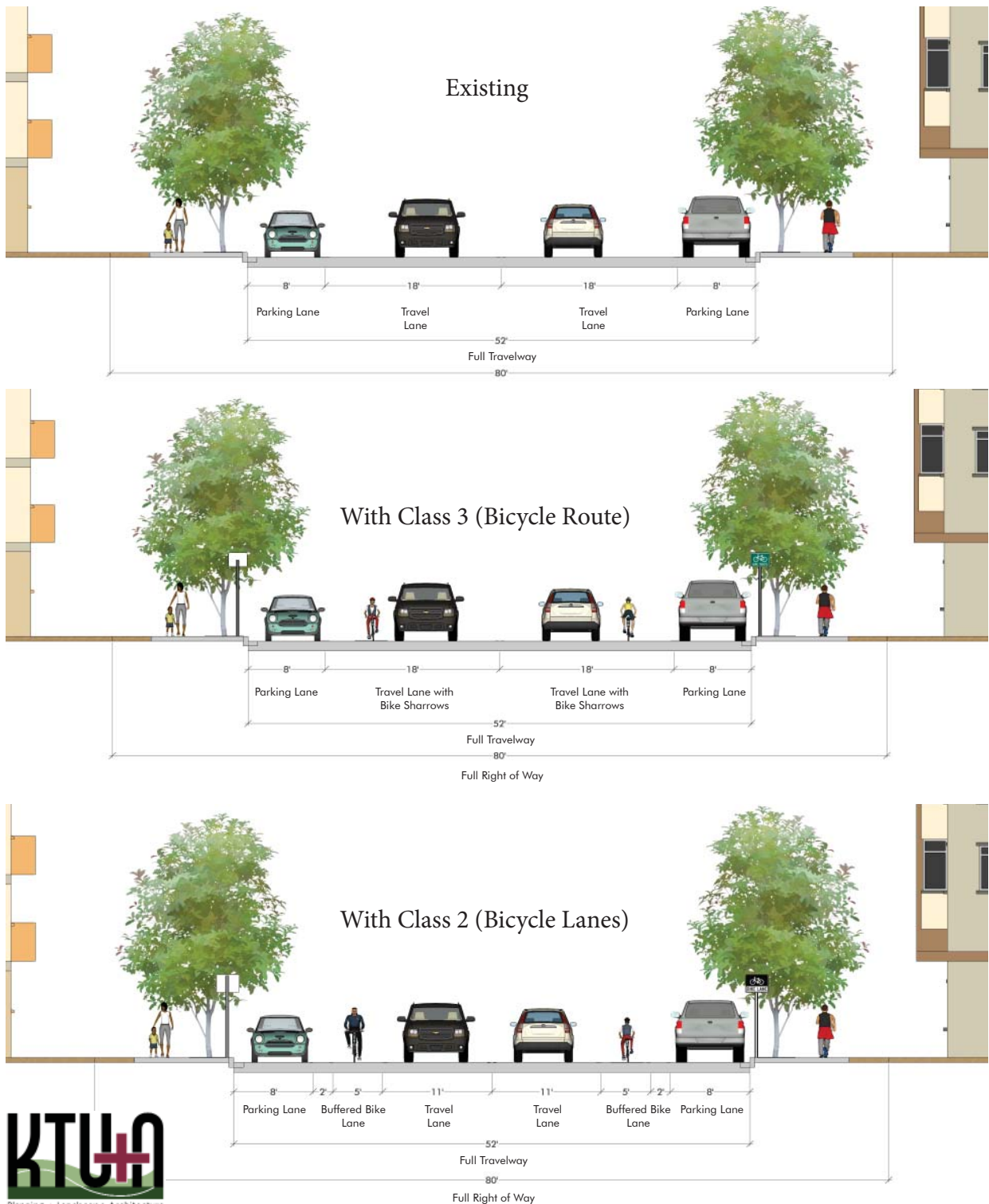
Street Name	Facility Type	Limit 1	Limit 2
San Diego Avenue	Bike lanes (Class II) <sup>1*</sup>	Hortensia Street	California Street
	Cycle track (Class IV) <sup>1</sup>	California Street	Washington Street
India Street	Bike lanes (Class II) <sup>*</sup>	Washington Street	Olive Street
Washington Street	Cycle track (Class IV) <sup>1</sup>	San Diego Avenue	University Avenue
	Bike lanes (Class II) <sup>*</sup>	University Avenue	Normal Street
	Bike blvd (Class III) <sup>1**</sup>	Third Avenue	Fifth Avenue
University Avenue	Bike blvd (Class III) <sup>1**</sup>	Washington Street	First Avenue
	Bike lanes (Class II) <sup>*</sup>	First Avenue	CA-163
	Cycle track (Class IV) <sup>1</sup>	CA-163	Park Boulevard
Robinson Avenue	Bike route (Class III) <sup>**</sup>	Curlew Street	Fourth Avenue
	Bike lanes (Class II) <sup>*</sup>	Herbert Street	Park Boulevard
Upas Street	Bike blvd (Class III) <sup>**</sup>	Third Avenue	Fourth Avenue
Laurel Street	Bike route (Class III) <sup>**</sup>	State Street	Fourth Avenue
Juniper Street	Bike route (Class III) <sup>**</sup>	State Street	Fifth Avenue
Hawthorn Street	Bike route (Class III) <sup>**</sup>	First Avenue	Sixth Avenue
Grape Street	Bike route (Class III) <sup>**</sup>	First Avenue	Sixth Avenue
Reynard Way	Bike route (Class III) <sup>**</sup>	Laurel Street	Washington Street
Goldfinch Street	Bike route (Class III) <sup>**</sup>	Washington Street	Pennsylvania Avenue
State Street	Bike route (Class III) <sup>**</sup>	Maple Street	Laurel Street
Curlew Street	Bike route (Class III) <sup>**</sup>	Reynard Way	Robinson Avenue
First Avenue	Bike route (Class III) <sup>**</sup>	Cedar Street	Lewis Street
Third Avenue	Bike lanes (Class II) <sup>*</sup>	Downtown	Laurel Street
	Bike blvd (Class III) <sup>**</sup>	Upas Street	Lewis Street
Fourth Avenue	Cycle track (Class IV) <sup>1</sup>	<del>Downtown</del> Laurel Street	Washington Street
Fifth Avenue	Cycle track (Class IV) <sup>1</sup>	Downtown	Washington Street
Sixth Avenue	Bike lanes (Class II) <sup>*</sup>	Downtown	Upas Street
Normal Street	Cycle track (Class IV) <sup>1</sup>	University Avenue	Lincoln Avenue
	Bike lanes (Class II) <sup>*</sup>	Washington Street	Park Boulevard
Richmond Street	Bike lanes (Class II) <sup>*</sup>	Upas Street	Cleveland Avenue
Lincoln Street	Bike blvd (Class III) <sup>1**</sup>	Normal Street	Park Boulevard
Herbert Street	Bike blvd (Class III) <sup>1**</sup>	Robinson Avenue	University Avenue
Park Boulevard	Cycle track (Class IV) <sup>1</sup>	Village Place	Robinson Avenue
	Bike lanes (Class II) <sup>*</sup>	El Cajon Boulevard	Adams Avenue
Bachman Place	Hybrid Facility <sup>1</sup> : Bike lanes (Class II) <sup>*</sup> uphill, Bike route (Class III) <sup>**</sup> downhill	Lewis Street	Hotel Circle South

<sup>1</sup> Facility is anticipated to be funded through SANDAG and is not included in the DIF basis.

\* Bike lane (Class II) facilities shall include a buffer, unless otherwise approved by the City Engineer.

\*\* Bike route (Class III) facilities shall provide bicycle sharrows, unless otherwise approved by the City Engineer.

*Conceptual street layouts, cross sections, lane dimensions, and bicycle facility configurations are provided to demonstrate general feasibility of proposals only. Actual improvements will require additional engineering studies and design work and shall be to the satisfaction of the City Engineer.*



*Cross-Section of First Avenue Bicycle Facility Options*

### North Park

North Park has traditionally been one of San Diego's most active bicycling communities. Grid street patterns north of Upas Street allow for numerous connections on streets with moderate traffic volumes. These street patterns extend to the east, allowing for connections to Mid-City, San Diego State University, and La Mesa. Several street connections occur between North Park and Uptown, but automobile traffic is heavy which discourages less-than-serious cyclists from venturing on roads such as University Avenue and Washington Street.

Many North Park residents commute to work in downtown San Diego using bicycles. Pershing Drive and Florida Street have bicycle lanes through Balboa Park connecting to the business district in downtown. Texas Street has bicycle lanes that provide for the only bicycle facility connection that currently exists between Mission Valley and the mesa to the south. This route is steep and a long climb, presenting challenges to most cyclists. South of Upas Street, bicycle travel is constrained somewhat due to canyons and Interstate 805. To this point, south of Landis Street there are no connections to the east (for bicycles, cars, or pedestrians). Fortunately, auto speeds are low in this area and bicyclists can navigate around the canyons.

SANDAG's regional bicycle facilities planned for the North Park community planning area are shown on **Figure 9**.

The SANDAG RBP includes guidance to implement bicycle boulevards on Meade and Howard Avenues. Per the RBP (p. 29): "Bicycle boulevards are local roads or residential streets that have been enhanced with traffic calming and other treatments to facilitate safe and convenient bicycle travel. Bicycle boulevards accommodate bicyclists and motorists in the same travel lanes, typically without specific vehicle or bicycle lane delineation." Since Meade and Howard Avenues are classified as two lane collectors and under current conditions are projected to carry upwards of 10,000 ADT per day, there are challenges to implementing "typical" bicycle boulevard designs in these corridors. As such, SANDAG is completing further project-level analysis of the project and will propose solutions to implement the intent of the RBP, which may also include design features such as buffered bike lanes. Project-level refinement was anticipated in the RBP. As stated in the RBP (p. 78) "It is not the intent of this Plan to make recommendations for regional network improvements that would result in significant impacts to traffic, biological resources, or other environmental factors. During design and environmental review of individual planned segments, project proponents may elect to modify alignment of corridor segments to avoid and minimize impacts. Any changes to the regional network will be documented during the Plan update, which is proposed at intervals of every four years."

The recommended bicycle facility network for the North Park Community Planning area that interfaces with the regional bicycle network is shown on **Figure 10** and summarized in **Table 3**.

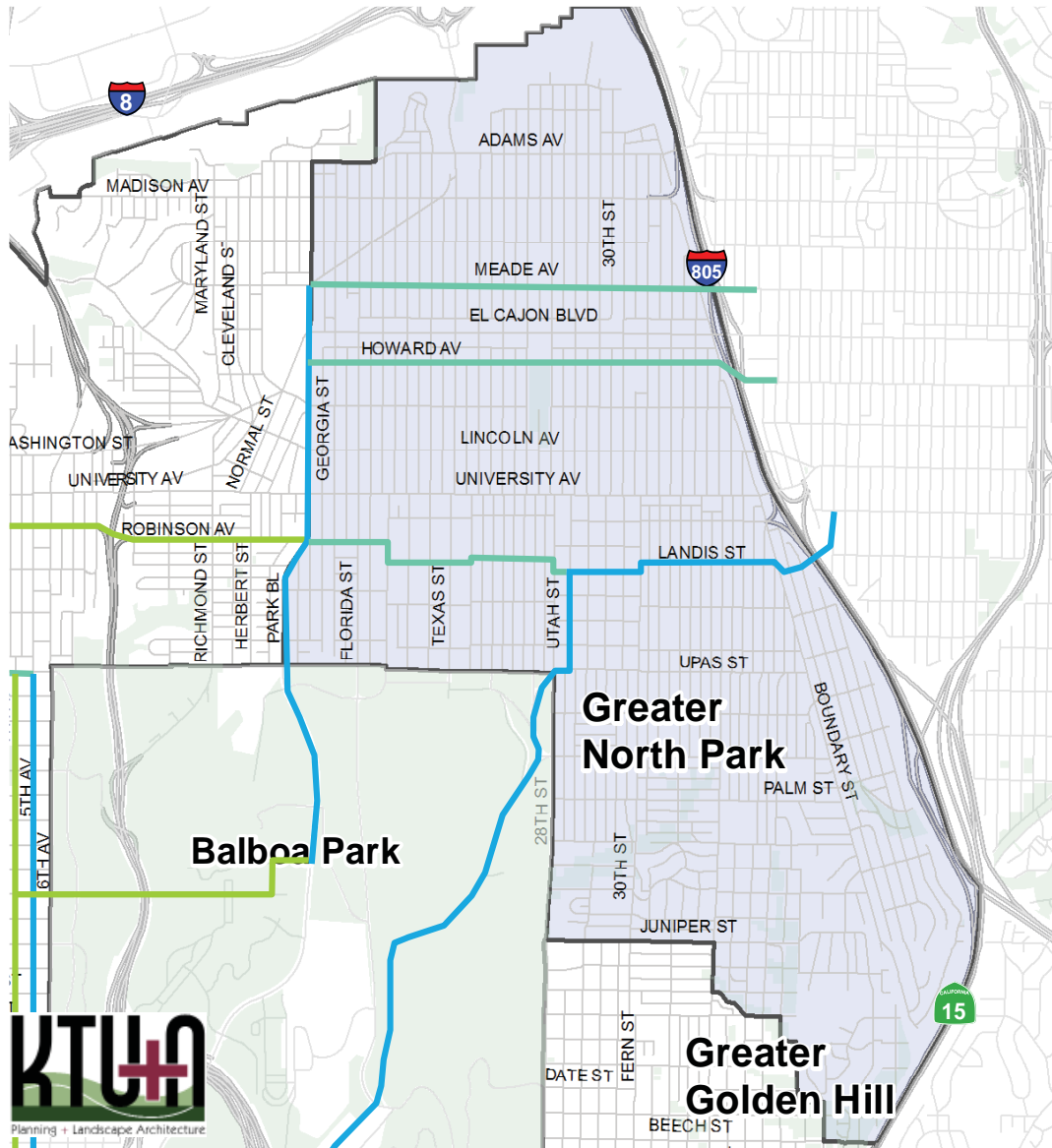
In addition to the planned bicycle facilities identified, the existing bicycle route along 30th Street would benefit from having bicycle lanes or buffered bicycle lanes between Palm Street and Laurel Street, where the roadway crosses Switzer Canyon and vehicles tend to travel at higher speeds.

Many improvements to the bicycle network within and surrounding North Park will be made with implementation of the Community Plan and Bicycle Master Plan. Three routes being studied by



SANDAG would provide east-west connections in North Park and points east of the community. Landis Street, Howard Avenue, and Meade Avenue are all lower volume, two lane streets that parallel El Cajon Boulevard and University Avenue and have bridge connections over State Route 15. These routes are well suited for commuter and recreation trips. With build out of the recommended network, bicycle facilities will also be provided on El Cajon Boulevard, Adams Avenue, and University Avenue as these streets provide access to retail businesses and other places where bicyclists may need to visit. Connection to Uptown and destinations west will be strengthened with bicycle facilities on University Avenue and Lincoln Avenue.

Funding and political support for the provision of improved bicycle facilities is at unprecedented levels in San Diego and across the region. North Park is already regarded as one of the most bicycle-friendly places in the region and will continue to attract residents who desire to use bicycles as one of their primary modes of transportation. Longer bicycle travel, such as trips to work, will increase with the new east-west facilities and the extension of bicycle lanes on Texas Street. Shorter trips within the community or to adjacent communities will become more regular as the network is expanded and drivers become more accustomed to sharing the road with cyclists.



The identified regional bicycle facility recommended classifications are subject to change pending further project level evaluation demonstrating implementation feasibility of these facilities.

- Bicycle Boulevard
- Class I - Bike Path
- Class II - Bike Lane
- Class II or III
- Class III - Bike Route
- Cycle Track



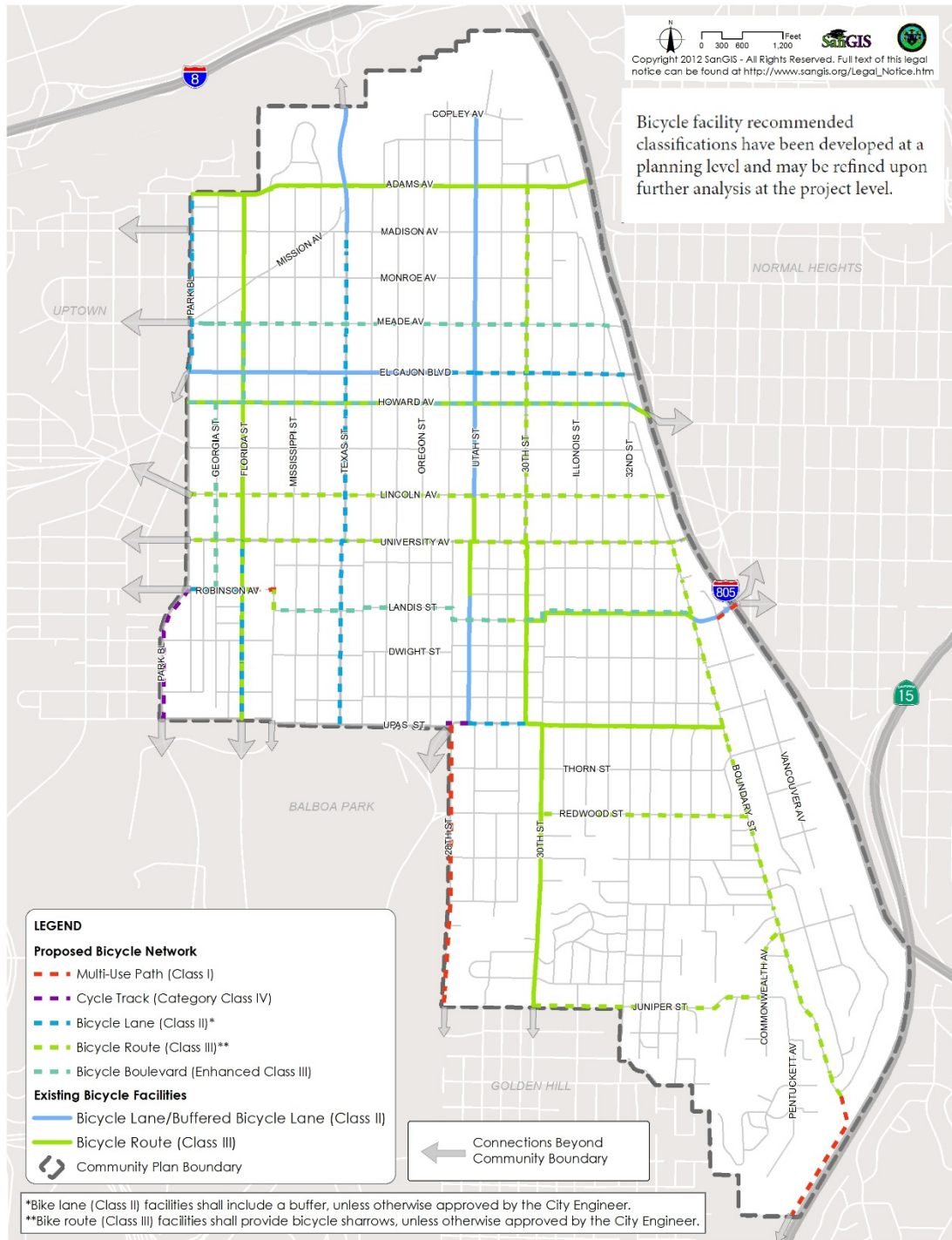


Figure 10 – Existing and Planned Bicycle Facilities: North Park  
 Revised September 7, 2016

Table 3 – Planned Bicycle Facilities: North Park

Street Name	Facility Type	Limit 1	Limit 2
Park Boulevard	Cycle track (Class IV) <sup>1</sup>	<i>Village Place</i>	<i>Robinson Avenue</i>
	Bike lane (Class II) <sup>*</sup>	<i>El Cajon Boulevard</i>	<i>Adams Avenue</i>
Georgia Street	Bike blvd. (Class III) <sup>**</sup>	<i>Robinson Avenue</i>	<i>Howard Avenue</i>
Florida Street	Bike lane (Class II) <sup>*</sup>	<i>Upas Street</i>	<i>University Avenue</i>
	Bike blvd. (Class III) <sup>1**</sup>	<i>Howard Avenue</i>	<i>Meade Avenue</i>
Texas Street	Bike lane (Class II) <sup>*</sup>	<i>Upas Street</i>	<i>Madison Avenue</i>
28th Street	Multi-use path	<i>Golden Hill</i>	<i>Upas Street</i>
30th Street	Bike route (Class III) <sup>**</sup>	<i>University Avenue</i>	<i>Adams Avenue</i>
Boundary Street	Multi-use path	<i>Golden Hill</i>	<i>Haller Street</i>
	Bike route (Class III) <sup>**</sup>	<i>Haller Street</i>	<i>University Avenue</i>
Meade Avenue	Bike blvd. (Class III) <sup>1**</sup>	<i>Park Boulevard</i>	<i>Boundary Street</i>
El Cajon Boulevard	Bike lane (Class II) <sup>*</sup>	<i>Idaho Street</i>	<i>Boundary Street</i>
Howard Avenue	Bike blvd. (Class III) <sup>1**</sup>	<i>Park Boulevard</i>	<i>Boundary Street</i>
Lincoln Avenue	Bike route (Class III) <sup>**</sup>	<i>Park Boulevard</i>	<i>I-805</i>
University Avenue	Bike route (Class III) <sup>**</sup>	<i>Park Boulevard</i>	<i>I-805</i>
Robinson Avenue	Bike lane (Class II) <sup>*</sup>	<i>Park Boulevard</i>	<i>Florida Street</i>
	Multi-use path <sup>1</sup>	<i>Florida Street</i>	<i>Alabama Street</i>
Landis Street	Bike blvd. (Class III) <sup>1**</sup>	<i>Alabama Street</i>	<i>Boundary Street</i>
	Multi-use path <sup>1</sup>	<i>Nile Street</i>	<i>I-805</i>
Upas Street	Bike lane (Class II) <sup>*</sup>	<i><u>Utah<del>28th</del> Street</u></i>	<i>30th Street</i>
	<i><u>Cycle track (Class IV)<sup>1</sup></u></i>	<i><u>Pershing Drive</u></i>	<i><u>Utah Street</u></i>
Redwood Street	Bike route (Class III) <sup>**</sup>	<i>30th Street</i>	<i>Boundary Street</i>
Juniper Street	Bike route (Class III) <sup>**</sup>	<i>30th Street</i>	<i>Boundary Street</i>

<sup>1</sup> Facility is anticipated to be funded through SANDAG and is not included in the DIF basis.

<sup>\*</sup>Bike lane (Class II) facilities shall include a buffer, unless otherwise approved by the City Engineer.

<sup>\*\*</sup>Bike route (Class III) facilities shall provide bicycle sharrows, unless otherwise approved by the City Engineer.

The build out of the proposed bicycle network will create an integrated bicycle system within the North Park community and provide new inter-community connections:

- Several of the planned facilities connect with planned facilities in Uptown, providing connections between the communities along these roadways:
  - Lincoln Avenue
  - Howard Avenue
  - University Avenue
  - Robinson Avenue
  - Park Boulevard

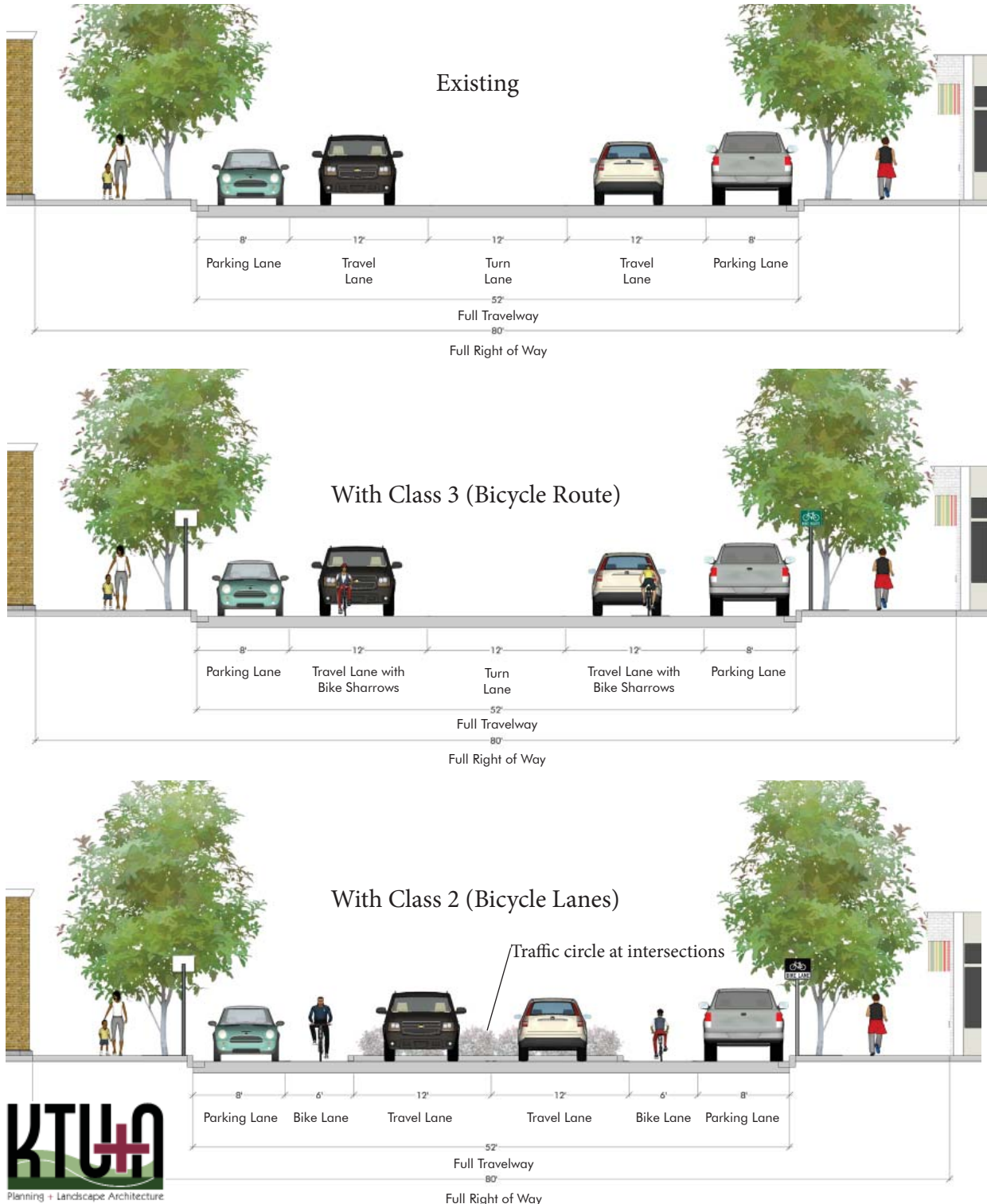
- Several of the planned facilities provide new connections to Normal Heights and City Heights along these roadways:
  - Adams Avenue
  - Meade Avenue
  - El Cajon Boulevard
  - Lincoln Avenue
  - University Avenue
- Two new multi-use paths will provide new connections with Golden Hill. One planned facility runs along 28th Street, adjacent to Balboa Park, and the other connects between Boundary Street and C Street.

The extensive amount of proposed facilities within the community will greatly increase intra-community connections. Upon implementation of the plan, the grid-like network will provide several options for bicyclists to get to destinations within the community.

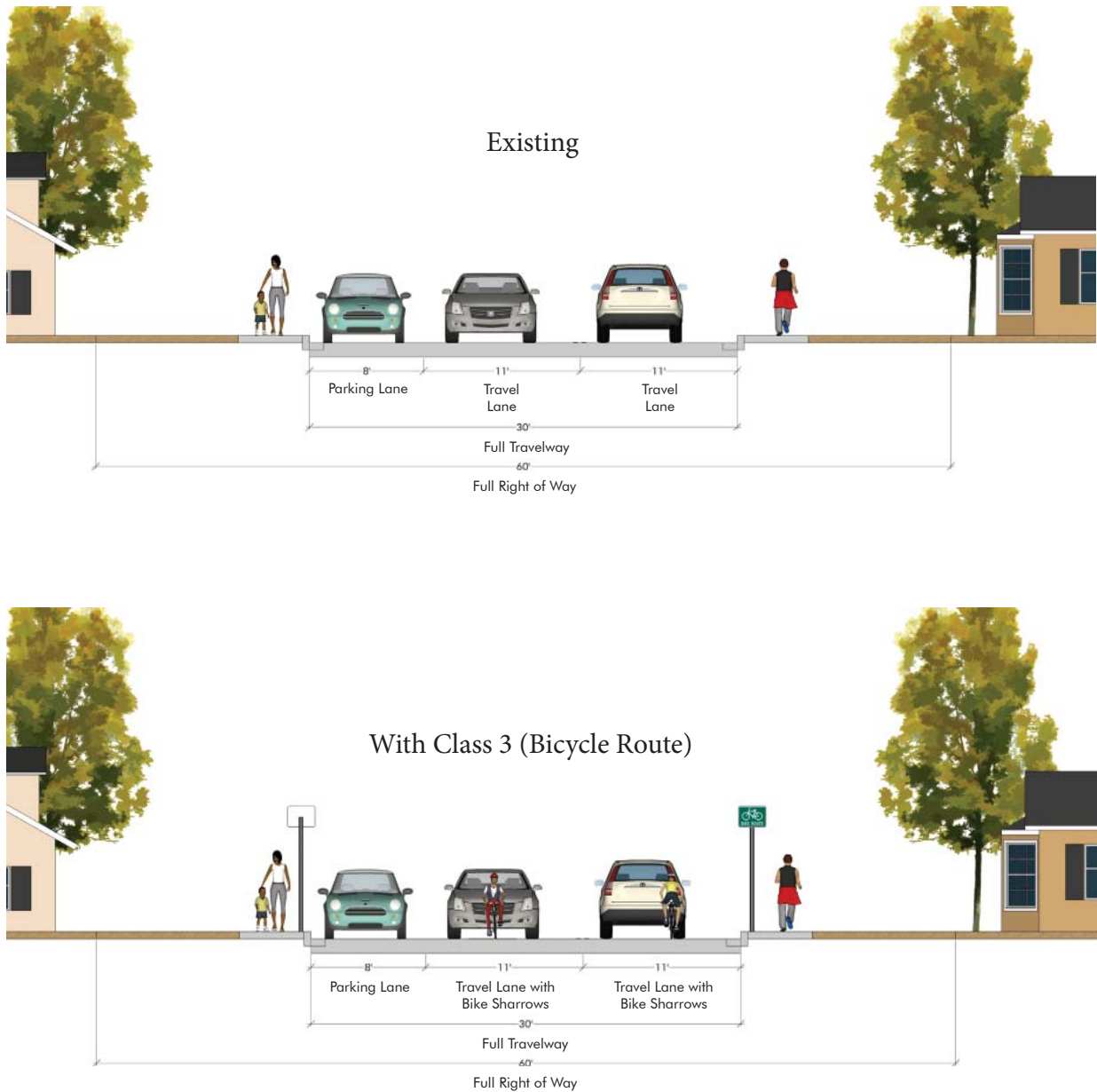
Some roadways are planned as having either a Class II (bicycle lanes) or Class III (bicycle route) facility. These routes often would require modifications to the streetscape or sacrifice of parking spaces or turn lanes to fit in the more accommodating Class II facility. One example of this in North Park is 30th Street. As presented in **Figure 11**, the existing cross-section could be converted to a Class III facility and maintain a similar configuration, or become a Class II facility by removing the center turn lane. These types of decisions will be made on a project-level evaluation.

Routes that are designated simply as a Class III (bicycle route) facility can be easily implemented. An example cross-section of Boundary Street presented in **Figure 12** illustrates the potential implementation of a Class III facility into the existing street geometry.

*Conceptual street layouts, cross sections, lane dimensions, and bicycle facility configurations are provided to demonstrate general feasibility of proposals only. Actual improvements will require additional engineering studies and design work and shall be to the satisfaction of the City Engineer.*



*Cross-Section of 30th Street Bicycle Facility Options*



*Conceptual street layouts, cross sections, lane dimensions, and bicycle facility configurations are provided to demonstrate general feasibility of proposals only. Actual improvements will require additional engineering studies and design work and shall be to the satisfaction of the City Engineer.*



### Golden Hill

Golden Hill has transformed into a community that is very supportive of bicycle travel. The South Park merchants hosted the first Ciclovía event in San Diego in 2013 to promote and celebrate biking. Merchants generously provide bike racks as they see the benefits of attracting customers who travel on bicycle. Golden Hill has already begun improving bicycle facilities within the community with implementation of a road diet on 25th Street planned for completion in 2015. That project will reduce the number of vehicle lanes from two to one in each direction, making room for Class II bicycle lanes and reverse angle parking.

Transportation corridors in Golden Hill are limited due to canyons and topography. As a result, bicyclists and vehicles often share the same space, either with bicycle lanes or shared lanes. This is particularly the case on north-south routes between Golden Hill and North Park. Fortunately, roadways are narrow and bicyclist travel at speeds comparable to vehicles.

Golden Hill sits adjacent to and on a hill above downtown San Diego. Broadway is the least steep of the streets that connect to downtown and currently has Class II bicycle lanes. State Route 15 forms a boundary to the east of the community with no vehicle, bike or pedestrian connections. To the south, State Route 94 has several roadways connecting into the Sherman Heights community.

SANDAG's regional bicycle facilities planned for the Golden Hill community planning area are shown on **Figure 13**.

The recommended bicycle facility network for the Golden Hill community planning area that interfaces with the regional bicycle network is shown on **Figure 14** and summarized in **Table 4**.

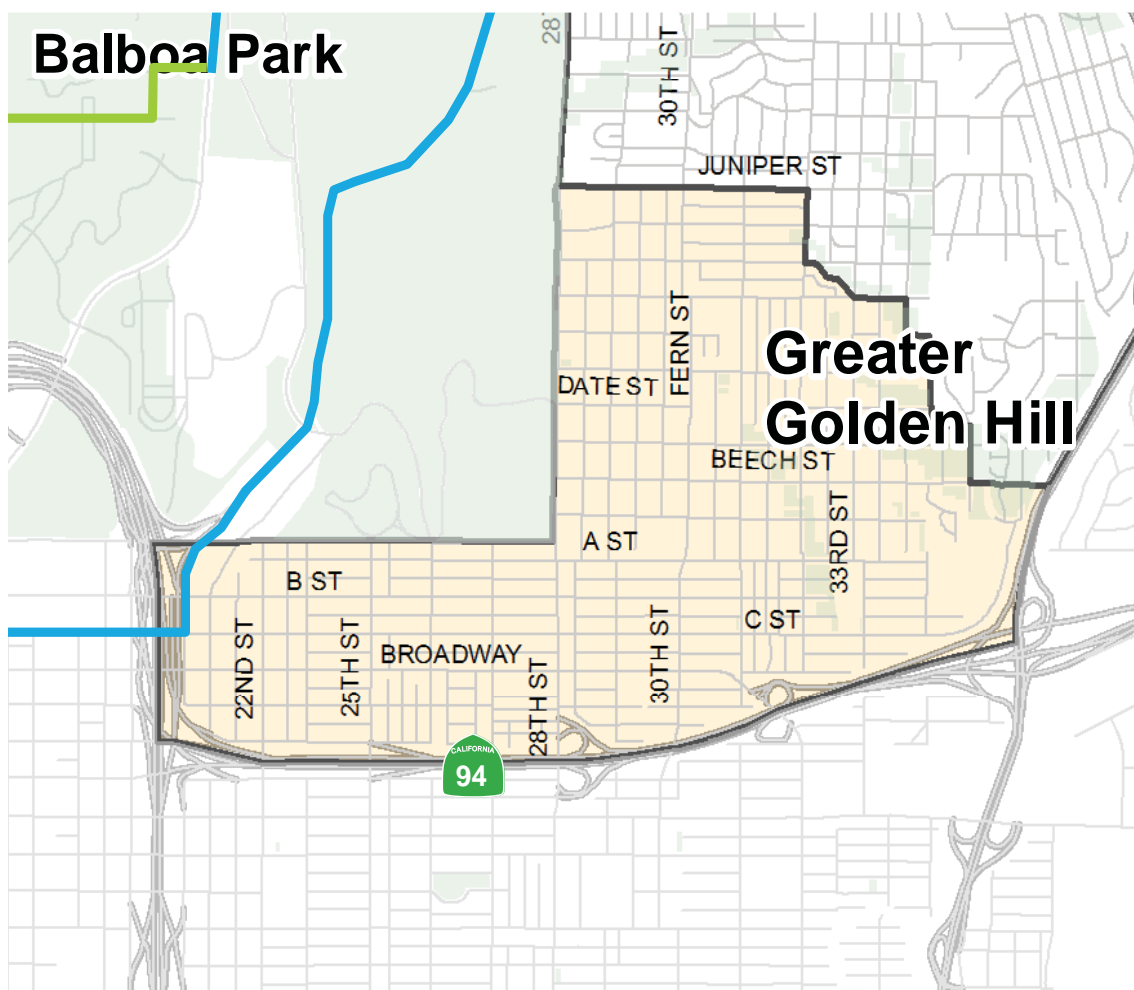
The build out of the proposed bicycle network will expand the bicycle routes through the community and provide a few new inter-community connections:

- Two new multi-use paths will provide new connections with Golden Hill. One planned facility runs along 28th Street, adjacent to Balboa Park, and the other connects between Boundary Street and C Street.

Many of the other planned facilities are upgraded facilities to existing routes. The ultimate plan for the community provides great intra-community connections, with several options to go east-west or north-south. Shorter trips within the community or to adjacent communities will become prevalent, despite the grade challenges the community faces. The number of longer trips, such as trips to work, will also increase with the upgraded facilities and new connections leading to Downtown.

A cross-section of the planned Class II (bicycle lanes) on 30th Street is presented in **Figure 15**. This example cross-section illustrates the potential implementation of a bicycle facility into the existing street geometry.





The identified regional bicycle facility recommended classifications are subject to change pending further project level evaluation demonstrating implementation feasibility of these facilities.

- Bicycle Boulevard
- Class I - Bike Path
- Class II - Bike Lane
- Class II or III
- Class III - Bike Route
- Cycle Track

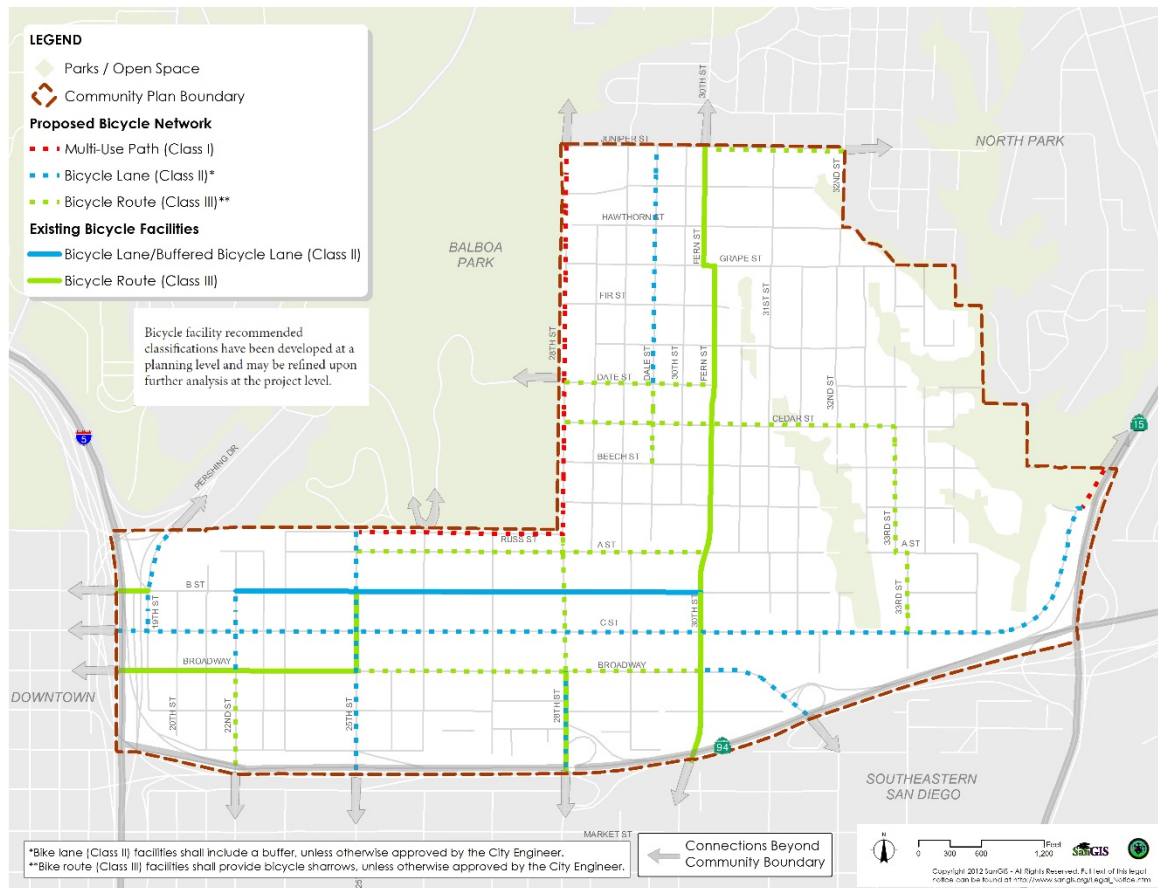


Figure 14 – Existing and Planned Bicycle Facilities: Golden Hill  
 Revised September 7, 2016

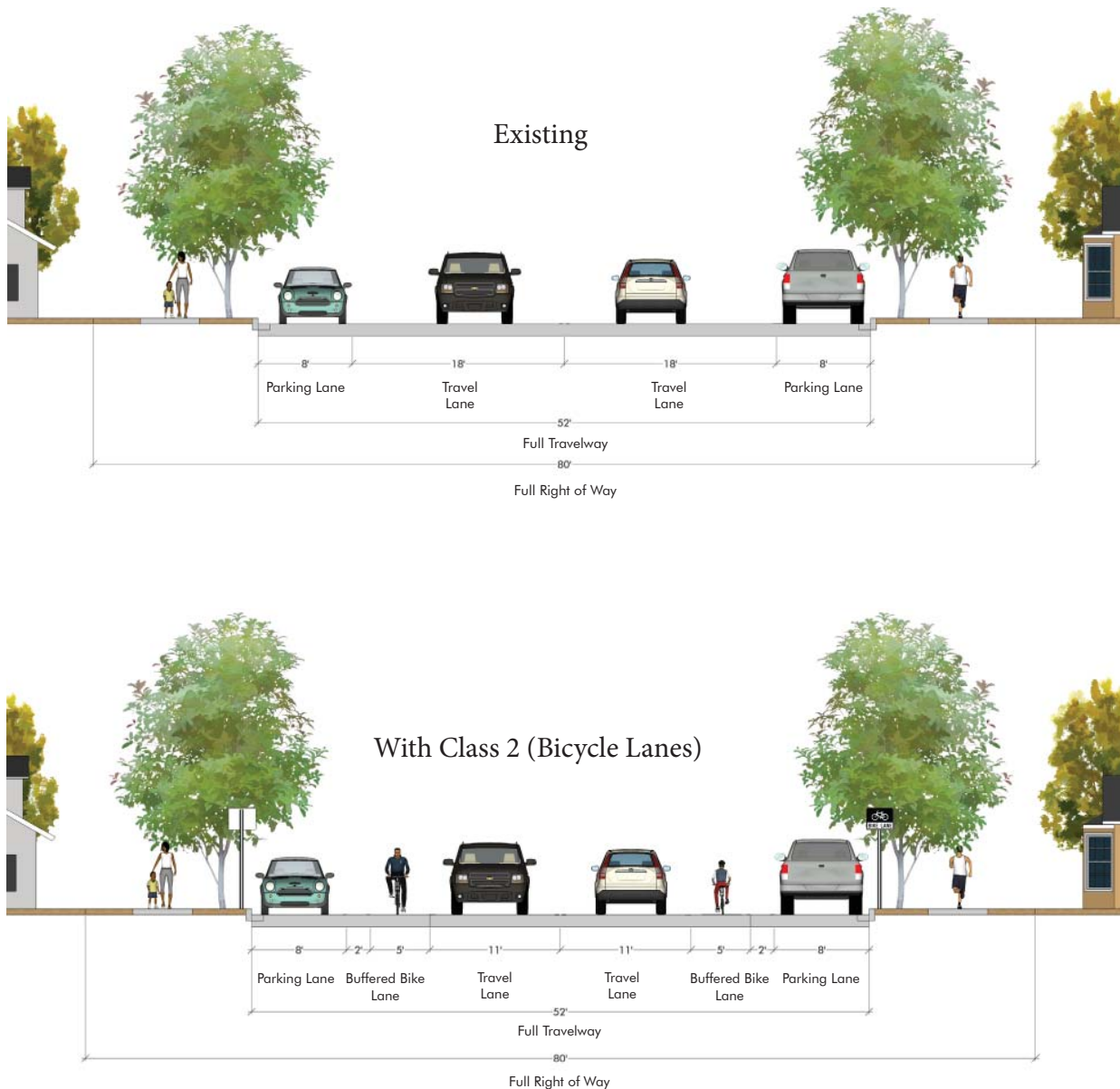
**Table 4 – Planned Bicycle Facilities: Golden Hill**

Street Name	Facility Type	Limit 1	Limit 2
Juniper Street	Bike route (Class III)**	<i>Dale Street</i>	<i>32nd Street</i>
Date Street	Bike route (Class III)**	<i>28th Street</i>	<i>Fern Street</i>
Cedar Street	Bike route (Class III)**	<i>28th Street</i>	<i>33rd Street</i>
A Street	Bike route (Class III)**	<i>25th Street</i>	<i>30th Street</i>
C Street	Bike lane (Class II)*	<i>I-5</i>	<i>Ash Street</i>
	Multi-Use path	<i>Ash Street</i>	<i>North Park</i>
Broadway	Bike route (Class III)**	<i>25th Street</i>	<i>30th Street</i>
	Bike lane (Class II)*	<i>30th Street</i>	<i>SR-94</i>
19th Street	Bike lane (Class II)*	<i>C Street</i>	<i>Pershing Drive</i>
22nd Street	Bike route (Class III)**	<i>SR-94</i>	<i>Broadway</i>
	Bike lane (Class II)*	<i>Broadway</i>	<i>B Street</i>
25th Street	Bike lane (Class II)*	<i>SR-94</i>	<i>Balboa Park</i>
28th Street	Bike lane (Class II)*	<i>SR-94</i>	<i>Broadway</i>
	Bike route (Class III)**	<i>Broadway</i>	<i>Balboa Park</i>
	Multi-Use Path	<i>Balboa Park</i>	<i>North Park</i>
Dale Street	Bike route (Class III)**	<i>Beech Street</i>	<i>Date Street</i>
	Bike lane (Class II)*	<i>Date Street</i>	<i>Juniper Street</i>
33rd Street	Bike route (Class III)**	<i>C Street</i>	<i>Cedar Street</i>
Russ Boulevard	Multi-Use Path	<i>25th Street</i>	<i>28th Street</i>

<sup>1</sup> To be constructed by SANDAG as part of the Regional Bicycle Plan

\*Bike lane (Class II) facilities shall include a buffer, unless otherwise approved by the City Engineer.

\*\*Bike route (Class III) facilities shall provide bicycle sharrows, unless otherwise approved by the City Engineer.



*Conceptual street layouts, cross sections, lane dimensions, and bicycle facility configurations are provided to demonstrate general feasibility of proposals only. Actual improvements will require additional engineering studies and design work and shall be to the satisfaction of the City Engineer.*

## Walkable Communities

The City of San Diego conducted a pedestrian planning effort to guide the way the City plans and implements new or enhanced pedestrian projects. The planning effort identifies and prioritizes pedestrian projects based on technical analysis and community input. The pedestrian planning effort developed a Pedestrian Priority Model to determine the most likely areas where pedestrians are or want to be. The pedestrian planning effort also identified areas within communities that should be the focus of pedestrian improvements, as well as identified specific pedestrian-facility projects throughout the City.

The pedestrian planning effort identified seven different pedestrian route types to distinguish between pedestrian facilities. More information on each route type is shown in **Table 5**, referenced from the pedestrian planning effort document.

**Table 5 – Pedestrian Facility Route Types**

ROUTE TYPE:	1. District Sidewalks	2. Corridor Sidewalks	3. Connector Sidewalks	4. Neighborhood Sidewalks	5. Ancillary Pedestrian Facilities	6. Path	7. Trail (Included for Reference Only, not a Focus of this Plan)
<b>Purpose</b>	Sidewalks Along Roads that Support Heavy Pedestrian Levels in Mixed-use Concentrated Urban Areas	Sidewalks Along Roads that Support Moderate Density Business & Shopping Districts with Moderate Pedestrian Levels	Sidewalks Along Roads that Support Institutional, Industrial or Business Complexes with Limited Lateral Access & Low Pedestrian Levels	Sidewalks Along Roads that Support Low to Moderate Density Housing with Low to Moderate Pedestrian Levels	Facilities Away or Crossing Over Streets such as Plazas, Paseos, Promenades, Courtyards or Pedestrian Bridges & Stairways	Walkways and Paved Paths that are not Adjacent to Roads that Support Recreational and Transportation Purposes	Unpaved Walk Not Adjacent to Roads Used for Recreational Purposes
<b>Typical Adjacent "Street Design Manual" Classifications</b>	All types of adjacent streets are possible	Commercial, Urban Collector, Urban Major & Arterial	Commercial, Industrial, Urban Major, Rural Collector & Arterial	Rural, Low Volume Residential, Residential Local & Sub-collector	Not associated with a street	Not associated with a street	Not associated with a street
<b>Cross Reference to Related "Strategic Framework Plan" Definitions</b>	Existing: Regional Centers, Urban Villages & Neighborhood Villages	Existing: Sub-regional Districts and Transit Corridors	Existing: Sub-regional Districts, Transit Corridors, & Suburban Residential along Major Arterials	All other Residential Areas not Classified under the Strategic Framework Plan	Most common in Regional Centers, Urban or Neighborhood Villages but can be in any area	Can occur in any area, but most often found in Recreation, Tourist or Open Space Areas	Can occur in any area, but most often found in Recreation or Open Space Areas
<b>Typical Adjacent Land Uses</b>	Mixed-use Housing, Commercial, Office & Entertainment with Urban Densities	Multiple Land Uses but may be Separated. Often Strip Commercial or Office Complex.	Open Space, Industrial Uses, Institutional Uses or other Pedestrian Restricted Uses	Single-family and Moderate Density Multi-Family with Limited Supporting Neighborhood Commercial	Adjacent Land Uses Vary	Adjacent Uses Vary. Often Recreational or Open Space or Housing	Open Space, Parks and Natural Areas

The pedestrian planning effort efforts of establishing "project focus areas" for individual communities determined areas rated highest on the priority model that should be looked at for potentially gaining funds for pedestrian improvements. As these areas are looked at for the community plan update,



potential pedestrian facility improvements that should be considered for implementation are provided. Typical improvements recommended include:

- Add **curb ramps** at intersection corners to maximize pedestrian accessibility.
- Add **sidewalks** where currently there are not facilities along streets with heavy pedestrian activity.
- **Pedestrian countdown signals** inform pedestrians how long they have to cross the street. Research suggests that pedestrians are more likely to obey the “don’t walk” signal when they know how much time there is left to cross.
- Pedestrian phasing at signals:
  - **Leading pedestrian intervals** give pedestrians the walk sign for 3 to 5 seconds prior to concurrent green intervals for vehicles to enable the pedestrian to get a head start into the intersection.
  - **Pedestrian scramble phases** provide an exclusive phase for pedestrians that stops traffic on all legs of an intersection to allow pedestrians to cross in all directions at the same time, even diagonally.
  - **Pedestrian recall phases** provide a walk signal during every cycle without needing any detection.
- **Corner bulb-outs:** These improvements extend the sidewalk or curb line towards the street. With the treatment, pedestrians are able to walk toward the edge of the roadway without entering the roadway. Installing bulb-outs reduces the crossing distance a pedestrian encounters. This treatment should be considered where parallel parking is allowed.

## Uptown

Uptown is a large community, several miles wide and long in some places, with some challenging terrain for pedestrians. There are differences in the pedestrian environment throughout the community. Several areas have high pedestrian activity, but there are also large areas with low pedestrian activity.

Near the edges of downtown and Balboa Park there is a mix of residential and commercial attractions that instigate a lot of pedestrian activity. People live, work, and play in these areas of the community and the gridded street network helps with pedestrian connectivity. However, portions of that area have steep hills that make it difficult for pedestrians to walk long distances. The terrain encourages people to try to find parking close to their destination even though there are good pedestrian facilities available. Fourth, Fifth, and Sixth Avenues are all designated as Corridor Sidewalks south of Robinson Avenue, and several other streets are Connector Sidewalks.

Further north the terrain flattens out and there is a long stretch of high pedestrian activity area near University Avenue, about a block on either side from Washington Street into North Park. There is also high pedestrian activity near the hospital area adjacent to and north of Washington Street. University Avenue and the adjacent sections of Fourth, Fifth, and Sixth Avenues are all designated as a combination of District and Corridor Sidewalks in this area. Washington Street is designated as a Corridor Sidewalk. Several other streets in the vicinity are Connector Sidewalks.

On the western side of the community, India Street is the main pedestrian attraction with its row of restaurants. It is classified as a Corridor Sidewalk north of Sassafras Street, and a Connector Sidewalk to the south. The section of India Street designated as a Corridor Sidewalk is an isolated pedestrian activity area with steep terrain, busy freeway connections, and wide streets creating barriers from other nearby residential and commercial areas. Washington Street between India Street and Goldfinch Street is a steep section of roadway with high traffic volumes and high speeds and does not provide any pedestrian facilities. This results in lack of connectivity between the different areas of the community, primarily due to the natural terrain barriers.

The low pedestrian activity areas are the residential areas challenged with steep terrain on the western side of the community.

State Route 163 impedes pedestrian connectivity within the eastern portion of the community, providing crossings only on University Avenue and Robinson Avenue. There is one other pedestrian crossing farther south within Balboa Park near Laurel Street.

The pedestrian planning effort identified several locations where curb ramps are not provided, which creates accessibility issues. Some of these locations are along steep terrains where accessibility requirements cannot be met due to the grade of the adjacent roadway. The City should continue to look for opportunities to implement missing curb ramps to improve accessibility where feasible.

Throughout the residential areas in the community, a landscape buffer is provided to separate pedestrians from the travel lanes. This provides an area for pedestrians to access their cars without impeding on the sidewalk, as well as provide opportunities for shade, protection, and aesthetics. While a buffer is not provided along the collectors and majors in the community, landscaping is still incorporated into the sidewalks where possible for the same reasons.

**Figure 16** illustrates the planned pedestrian network for the Uptown community.

There are no major planned and funded pedestrian facility improvement projects known, but the pedestrian planning effort provides some recommendations on project focus areas and potential improvement projects. The project focus areas for the Uptown community identified in the pedestrian planning effort are illustrated in **Figure 17** and described below. Park Boulevard would also be included and is shown on the North Park focus area map. As these areas are looked at for the community plan update, potential pedestrian facility improvements that should be considered for implementation are provided. [In addition, SANDAG's Uptown Bikeways Project incorporates pedestrian improvements to provide pedestrian access along the corridors identified in the Banker's Hill "Walk the Walk" Plan. This project will include improvements to enhance east-west pedestrian connectivity across Fourth and Fifth Avenues along the following streets: Upas, Spruce, Quince, Nutmeg, Laurel, Juniper, Grape, and Elm.](#)

### **Focus Areas**

The segments described below were identified as a focus area in the pedestrian planning effort. Potential pedestrian improvement measures were identified and included in the pedestrian planning effort for each of these areas. To supplement the information obtained in the pedestrian planning

effort, additional improvement measures are provided as described below for each pedestrian planning effort focus area.

#### Uptown Focus Area: Washington Street between Interstate 5 and Park Boulevard

This segment of Washington Street was identified as a focus area in the pedestrian planning effort document. The following is an additional improvement measure recommended for the segment of Washington Street between India Street and Hawk Street.

- Washington Street between India Street and Hawk Street is a missing connection that would provide benefit to the community but is a long, steep section of the roadway adjacent to high speeds. A pedestrian facility with a buffer should be put in place as part of this improvement to protect pedestrians from vehicle traffic.

#### Uptown Focus Area: University Avenue between Washington Street and Park Boulevard

This segment of University Avenue was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This core commercial area has a mix of all modes of travel and on-street parking. Sidewalk widths are wider and seem to accommodate the pedestrian demands. Pedestrian ramps should be provided on all corners within this area. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed. Corner bulb-outs should be considered at the intersections with First Avenue, Third Avenue, Tenth Avenue, Richmond Street, and Normal Street.

#### Uptown Focus Area: Normal Street between Lincoln Avenue and Park Boulevard

This segment of Normal Street was identified as a focus area in the pedestrian planning effort document. The following describes recent changes to and provides additional improvement measures recommended for the segment.

- This stretch of Normal Street provides nice sidewalk facilities but has very complicated and wide intersections. The [BRT-Rapid](#) project that recently was completed on Park Boulevard did not include specific pedestrian facilities at the intersection of Normal Street and Park Boulevard, but gave pedestrians a place to cross at Howard Avenue. Previously, there was no place for pedestrians to cross near the Normal Street and Park Boulevard intersection. Now the nearby intersection of Park Boulevard with Howard Avenue provides striped pedestrian crossings with median refuge areas and curb ramps at all corners. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed. Bulb-outs should be considered to shorten the crossing times at Campus Avenue/Polk Avenue.

#### Uptown Focus Area: Campus Avenue/Polk Avenue between Tyler Street and Park Boulevard

This segment of Campus Avenue/Polk Avenue was identified as a focus area in the pedestrian planning effort document. The following describes recent changes to and provides additional improvement measures recommended for the segment.

- The intersections with Normal Street and Park Boulevard are very wide crossings. The [BRT-Rapid](#) project that recently was completed on Park Boulevard improved the

pedestrian facilities at the intersection with Polk Avenue by providing pedestrian refuge areas and improved curb ramps and crossing areas. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed. Bulb-outs should be considered to shorten the crossing times at both locations.

#### **Uptown Focus Area: Robinson Avenue between Third and Sixth Avenues**

This segment of Robinson Avenue was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This commercial area has intersections of smaller roadways with lower speeds, but still experiences heavy traffic volumes. Pedestrian ramps should be provided on all corners within this area. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed. Corner bulb-outs should be considered at the intersections with Fourth Avenue and Fifth Avenue. Additional landscaping would also benefit this area as there is a lot of sidewalk space without any shade or buffer.

#### **Uptown Focus Area: Elm Street between First and Sixth Avenues**

This segment of Elm Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This stretch of roadway has heavy traffic volumes and high pedestrian activity. There is a mix of signalized and unsignalized intersections in close proximity and some fairly steep grades. The sidewalks provide adequate space and shading for pedestrians. Pedestrian ramps should be provided on all corners within this area. Crossings should be clearly marked at each intersection.

#### **Uptown Focus Area: Fourth and Fifth Avenues between Interstate 5 and Robinson Avenue**

These sections of Fourth and Fifth Avenues were identified as special consideration corridors in the pedestrian planning effort document that defer to the Hillcrest Mobility Study. The following are additional improvement measures recommended for the segments.

- These are two important corridors within the community that provide connectivity between different parts of Uptown and to downtown San Diego, not only for pedestrians, but for all modes of travel. Portions of these segments have steep grades for pedestrians. Pedestrian ramps should be provided on all corners within this area unless infeasible due to grades. In that case, alternate routes should be provided at or prior to the lack of crossing. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed at signalized intersections. Corner bulb-outs should be considered at intersections along Fourth Avenue and Fifth Avenue to improve pedestrian visibility and shorten crossing times.

#### **Uptown Focus Area: Sixth Avenue between Interstate 5 and Robinson Avenue**

This portion of Sixth Avenue was identified as a special consideration corridor in the pedestrian planning effort document that defers to the Hillcrest Mobility Study. The following are additional improvement measures recommended for the segments.

- Sixth Avenue fronts Balboa Park and provides an excellent pedestrian environment on the east side. However, it is a difficult roadway to cross. It is a four-lane roadway with

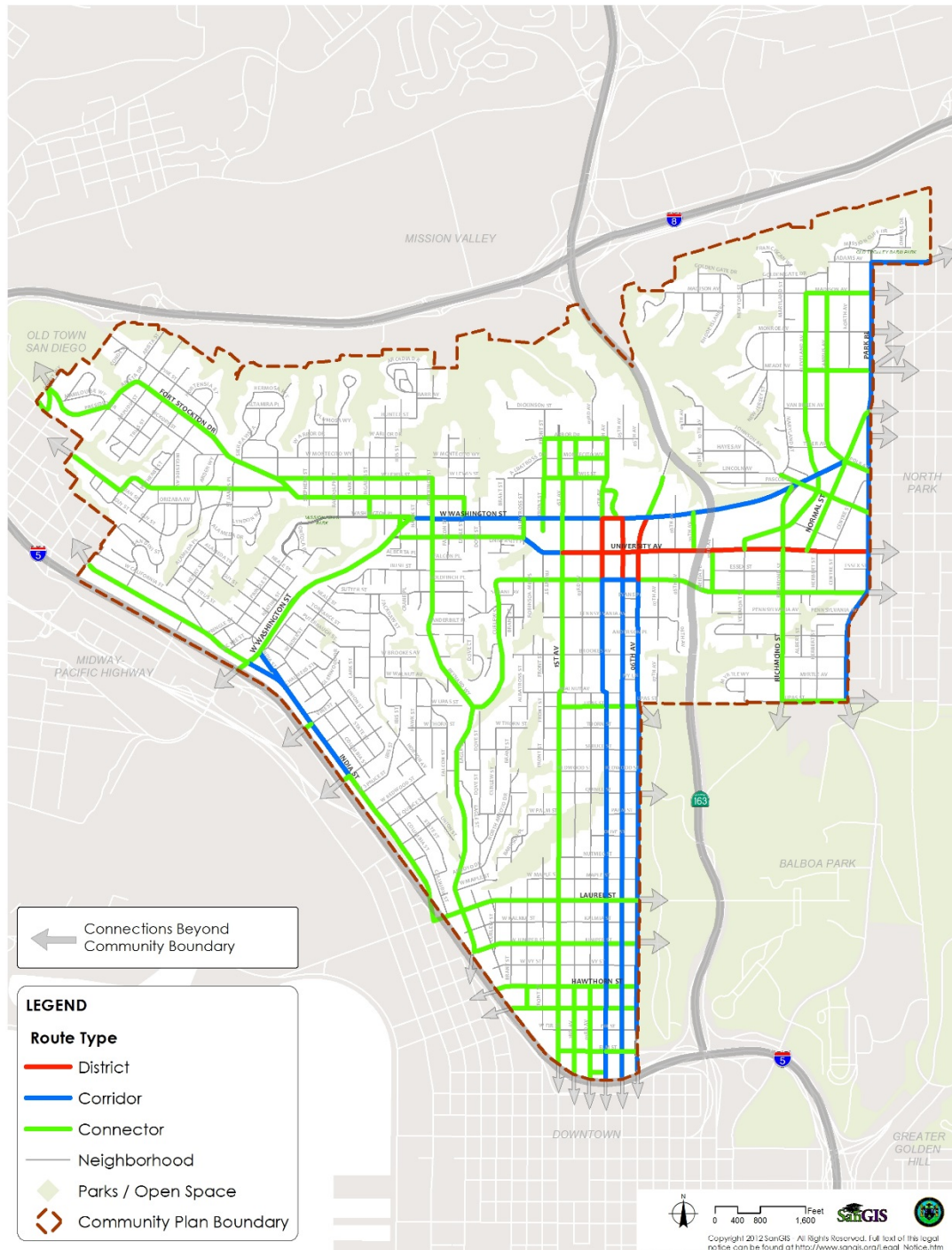
parking on both sides of the street and no median. In order to improve pedestrian crossings and maintain the roadway capacity, the crossing distances could be shortened with the use of corner bulb-outs or a raised median refuge area.

**Uptown Focus Area: Park Boulevard between Upas Street and Meade Avenue**

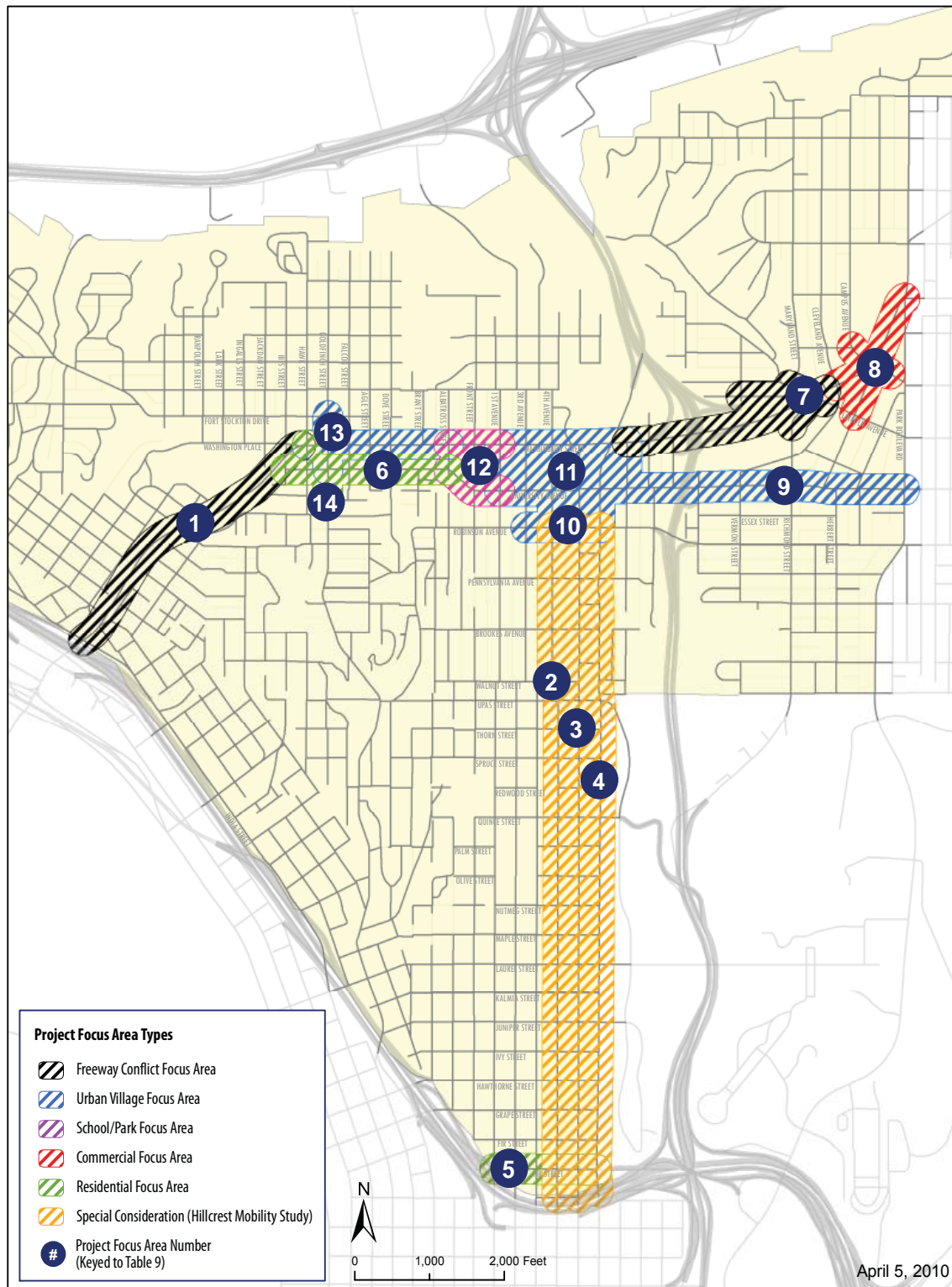
This segment of Park Boulevard was identified as a focus area in the pedestrian planning effort document. The following describes recent changes to and provides additional improvement measures recommended for the segment.

- Park Boulevard provides wide sidewalks often times buffered by landscaping. It supports all modes of travel, typically has on-street parking, and is a wide roadway to cross. The [BRT-Rapid](#) project that recently was completed on Park Boulevard improved the pedestrian facilities along Park Boulevard between University Avenue and El Cajon Boulevard by providing new pedestrian crossing areas, pedestrian refuge areas mid-block, and new curb ramps and other supporting facilities. Corner bulb-outs should be considered at the intersections with Upas Street and Myrtle Avenue.





*Pedestrian Routes: Uptown*



Source: City of San Diego Pedestrian Master Plan

Pedestrian Project Focus Areas: Uptown

## North Park

With the majority of this large community laid out in a grid-like street network with a good mix of land uses, North Park has fairly high pedestrian activity throughout the community. The only area in the community that does not score high on the pedestrian priority model is the southeastern portion of the community where it is residential neighborhoods faced with steeper terrains and streets disconnected by canyons.

The entire northern portion of the community starting from North Park Way on the southern end is an attractive pedestrian environment. The land uses provide opportunities for people to live, work, and play in this area, and it benefits from its short blocks and consistent pedestrian facilities. It is common for people to park several blocks from their destination and walk. El Cajon Boulevard, Adams Avenue, 30th Street, and a portion of North Park Way are designated as Corridor Sidewalk areas. University Avenue is a combination of District and Corridor Sidewalk. An array of Connector Sidewalks are spread throughout this portion of the community. There are several connections provided over I-805 to areas to the east. Texas Street provides the only connection further north to the Mission Valley area. Since this community is set up on a mesa, this connection down to Mission Valley is steep and can be difficult for pedestrians to traverse.

The western border of the community where it meets Uptown has integrated pedestrian facilities that help the two communities maintain pedestrian paths of travel. Park Boulevard separates the communities, but also serves high levels of pedestrian activity. This is partly due to the seamless transition between the communities. In the southern portion of the community, most pedestrian activity stays around the 30th Street corridor, with the surrounding residential areas seeing less activity. Switzer Canyon severs many of the connections near the southern border of the community, with 30th and 32nd Streets being the largest connections. Redwood Street and Upas Street provide pedestrian connections to Balboa Park, which hosts various trails and recreation activities.

The pedestrian planning effort identified many locations in the community where curb ramps are not provided. Lack of curb ramps creates accessibility issues and can be a deterrent for pedestrians. The City should continue to look for opportunities to implement missing curb ramps to improve accessibility where feasible.

Throughout the residential areas in the community, a landscape buffer is provided to separate pedestrians from the travel lanes. This provides an area for pedestrians to access their cars without impeding on the sidewalk, as well as provide opportunities for shade, protection, and aesthetics. While a buffer is not provided along the collectors and majors in the community, landscaping is still incorporated into the sidewalks where possible for the same reasons.

**Figure 18** illustrates the planned pedestrian network for the North Park community.

There are no major planned and funded pedestrian facility improvement projects known, but the pedestrian planning effort provides some recommendations on project focus areas and potential improvement projects. The project focus areas for the North Park community identified in the pedestrian planning effort document are illustrated in **Figure 19** and described below. As these areas

are looked at for the community plan update, potential pedestrian facility improvements that should be considered for implementation are provided.

### **Focus Areas**

The segments described below were identified as a focus area in the pedestrian planning effort. Potential pedestrian improvement measures were identified and included in the pedestrian planning effort for each of these areas. To supplement the information obtained in the pedestrian planning effort, additional improvement measures are provided as described below for each pedestrian planning effort focus area.

#### **North Park Focus Area: El Cajon Boulevard between Park Boulevard and I-805**

This segment of El Cajon Boulevard was identified as a focus area in the pedestrian planning effort document. The following discusses planned improvement measures recommended for the segment.

- This is a commercial corridor that also experiences large vehicle and transit demand. It is a six lane roadway that makes it difficult for pedestrians to cross at unsignalized intersections and requires long green times for crossing at signalized intersections. The planned transit improvements along El Cajon Boulevard would provide similar benefits that Park Boulevard experienced, providing median refuge areas for pedestrians, signalized intersections throughout the corridor, and improved pedestrian facilities throughout.

#### **North Park Focus Area: University Avenue between Park Boulevard and I-805**

This segment of University Avenue was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This is a commercial corridor that experiences a mix of all modes of travel. It provides regular crossings at signalized intersections. Pedestrian countdown signals and/or pedestrian phasing should be installed. The sidewalk on the south side of the street between Park Boulevard and Florida Street should be improved to include a buffer from vehicles and widened if feasible. There is existing sidewalk on the north side of the street in this stretch that transitions to nothing halfway through and is not used. That unused sidewalk space would be beneficial as extra width for the active sidewalk on the south side. Corner bulb-outs should be considered at the intersections with Arnold Avenue and Pershing Avenue. Potential transit improvements along this corridor could be an impetus for improving pedestrian facilities as well.

#### **North Park Focus Area: Park Boulevard between Upas Street and Meade Avenue**

This segment of Park Boulevard was identified as a focus area in the pedestrian planning effort document. The following describes recent changes to and provides additional improvement measures recommended for the segment.

- Park Boulevard provides wide sidewalks often times buffered by landscaping. It supports all modes of travel, typically has on-street parking, and is a wide roadway to cross. The [BRT-Rapid](#) project that recently was completed on Park Boulevard improved the pedestrian facilities along Park Boulevard between University Avenue and El Cajon



Boulevard by providing new pedestrian crossing areas, pedestrian refuge areas mid-block, and new curb ramps and other supporting facilities. Corner bulb-outs should be considered at the intersections with Upas Street and Myrtle Avenue.

#### North Park Focus Area: Florida Street between Upas Street and Polk Avenue

This segment of Florida Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- Florida Street provides one of the few roadway connections to Balboa Park on the south end, connects to popular commercial areas on the north end, and runs through residential neighborhoods in between. It is a two lane roadway with on-street parking that can experience some heavier traffic volumes than most residential streets. Crosswalks should be striped at some of the major all-way stop intersections to emphasize high pedestrian activity levels. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed. Pedestrian ramps should be provided on all corners within this area.

#### North Park Focus Area: Texas Street between Wightman Street and Meade Avenue

This segment of Texas Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This section of Texas Street is a two lane roadway that experiences high traffic volumes with its access between Mission Valley and North Park. It is a busy street with on-street parking, residential driveways, transit stops, and high traffic volumes. The sidewalks have a landscape buffer to separate them from the traveled way which helps pedestrians feel protected from the busy street. Corner bulb-out and crosswalks should be considered at some of the unsignalized intersections along this section to emphasize pedestrians are in the area. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed at the signalized intersections. Pedestrian ramps should be provided on all corners within this area.

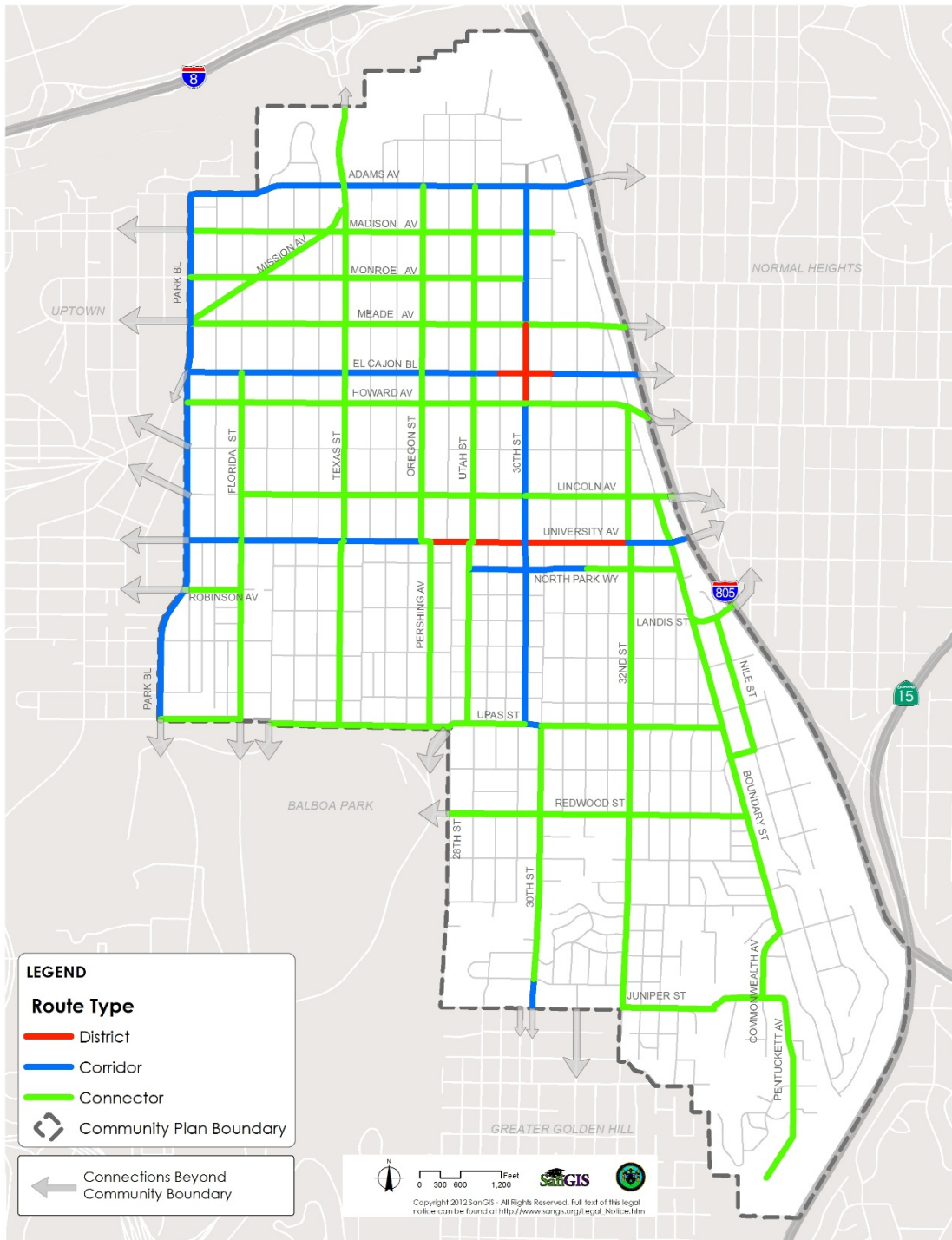
#### North Park Focus Area: 30th Street between Upas Street and Adams Avenue

This segment of 30th Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

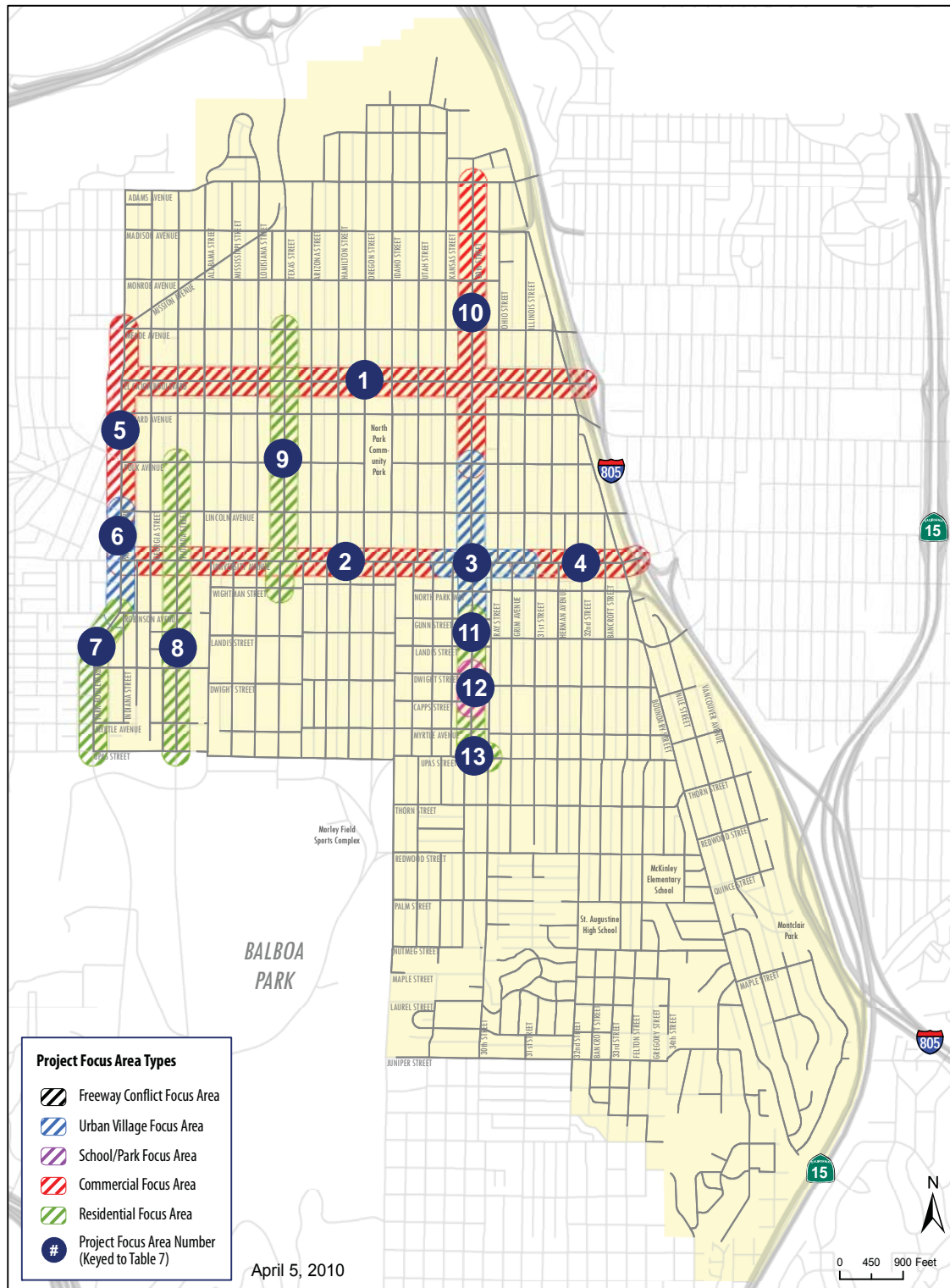
- Between Upas Street and Adams Avenue is a long section of 30th Street that has varying characteristics. Pedestrian activity levels are consistently high, though, with some more intense areas near Adams Avenue, University Avenue, and Upas Street. Pedestrian ramps should be provided on all corners within this area. Corner bulb-outs already exist at the intersection with Adams Avenue and should be considered at the intersections with Howard Avenue, North Park Way, and Dwight Street. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed at the signalized intersections.
- The pedestrian crossings at Upas Street are currently inadequate, as the crossing on the east side of the intersection feeds directly to the parking lot for Jack-in-the-box. The crossing on the west side of the intersection does not have a curb ramp on the south side, or even a sidewalk connection at all. This intersection is a busy all-way stop controlled intersection with the intersection of Dale Street less than 100 feet to the west



which further complicates the issue. In addition, the offset intersection immediately to the east (also Upas Street and 30th Street) has long crossings at an all-way stop-controlled intersection. This area should be reconfigured as shown in **Figure 20**.



Pedestrian Routes: North Park

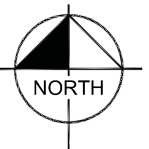


Source: City of San Diego Pedestrian Master Plan

Pedestrian Project Focus Areas: North Park



GRAPHIC SCALE IN FEET  
0 50 100 200



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

## 30TH ST AND UPAS ST PEDESTRIAN IMPROVEMENT CONCEPT

### Golden Hill

With its vicinity to Balboa Park, downtown San Diego, and adjacent walkable communities, Golden Hill is an active pedestrian community. Despite its challenges with steep grades that can make it difficult for long pedestrian trips, the grid-like street network and variety of land uses makes it attractive for pedestrians.

The entire area of the community west of 30th Street and south of A Street rated high on the pedestrian priority model. 25th Street is designated as a combination of District and Corridor Sidewalk, while several other roadways in that area were designated as Connector Sidewalks. 28th Street runs adjacent to Balboa Park and connects with trails and provides an excellent pedestrian environment on the west side of the street. It is designated as a combination of Connector and Corridor Sidewalk.

30th Street and Fern Street create a core commercial area in the community that draws a lot of pedestrian activity. They are both designated as Corridor Sidewalk north of Broadway. People like to park and walk around these neighborhoods to shop and dine. There are many events hosted in this area that encourage pedestrian involvement, such as the quarterly South Park Walkabouts.

On the east side of the community pedestrian activity is much lower as it is separated by canyons and more removed from retail and recreation attractions.

The pedestrian planning effort identified several locations where curb ramps are not provided, which creates accessibility issues. Some of these locations are along steep terrains where accessibility requirements cannot be met due to the grade of the adjacent roadway. The City should continue to look for opportunities to implement missing curb ramps to improve accessibility where feasible.

A landscape buffer is provided along most of the roadways in the community to separate pedestrians from the travel lanes. This provides an area for pedestrians to access their cars without impeding on the sidewalk, as well as provide opportunities for shade, protection, and aesthetics. This should continue to be encouraged with future developments and roadway improvements.

**Figure 21** illustrates the planned pedestrian network for the Golden Hill community.

There are no major planned and funded pedestrian facility improvement projects known, but the pedestrian planning effort document provides some recommendations on project focus areas and potential improvement projects. The project focus areas for the Golden Hill community identified in the pedestrian planning effort are illustrated in **Figure 22** and described below. As these areas are looked at for the community plan update, potential pedestrian facility improvements that should be considered for implementation are provided.

### Focus Areas

The segments described below were identified as a focus area in the pedestrian planning effort. Potential pedestrian improvement measures were identified and included in the pedestrian planning effort for each of these areas. To supplement the information obtained in the pedestrian planning



effort, additional improvement measures are provided as described below for each pedestrian planning effort focus area.

#### Golden Hill Focus Area: 19th Street between C and B Streets

This segment of 19th Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This short segment of roadway has fine pedestrian facilities on both sides of the street. There is a wall running along the west side of the street that makes it difficult for vehicles to see approaching pedestrians. This is of particular concern at the intersection of C Street, where the two turning lanes of traffic have a free movement. A corner bulb-out should be considered here to give more visibility to the pedestrians. Pedestrian countdown signals and/or pedestrian phasing should be installed at the signalized intersection at B Street. Pedestrian ramps should be provided at the crosswalk locations.

#### Golden Hill Focus Area: B Street between 19th and 20th Streets

This segment of B Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This short segment of roadway has narrow sidewalks on both sides of the street, but the bigger concern is the intersections on either end of the segment. The intersection at 19th Street serves the freeway and already has limited the crossing locations to help with intersection operations and keep pedestrians on the designated sidewalks. Pedestrian countdown signals and/or pedestrian phasing should be installed at the signalized intersection at B Street. Pedestrian ramps should be provided at the crosswalk locations. The intersection at 20th Street is very wide and provides a long crossing for pedestrians. Just east of the intersection, B Street is a steep hill that is hard for pedestrians to traverse and can also lead to higher vehicle speeds and poor sight distance. Corner bulb-outs and a pedestrian crossing should be considered on the west side of the intersection to improve the situation.

#### Golden Hill Focus Area: B Street between 24th Street and 26th Street

This segment of B Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This portion of B Street is a two lane roadway with on-street parking that is used frequently and stop-controlled intersections. Improvements at 25th Street currently being implemented by the City will add corner bulb-outs and crosswalk markings to the intersection with B Street. These modifications will enhance the pedestrian crossings to improve safety and should further encourage pedestrian activity. Corner bulb-outs may also be beneficial at 24th Street.

#### Golden Hill Focus Area: 25th Street between F Street and Balboa Park

This segment of 25th Street was identified as a focus area in the pedestrian planning effort document. The following describes planned improvements along this corridor.

- Improvements along 25th Street currently being implemented by the City will add corner bulb-outs at Broadway, C Street, and B Street, as well as new crosswalk markings at B Street. The project will also reduce the number of travel lanes on 25th Street from four lanes to two lanes, reducing potential conflicts with pedestrians. These modifications will enhance the pedestrian crossings to improve safety and should further encourage pedestrian activity.

**Golden Hill Focus Area: B Street between 29th and 30th Streets**

This segment of B Street was identified as a focus area in the pedestrian planning effort document.

- This short segment of roadway has sidewalks with landscape buffers and fronts residential buildings. The sidewalks and curb ramps should be examined to determine if maintenance is necessary; otherwise, it adequately serves pedestrians in this area.

**Golden Hill Focus Area: C Street between 29th and Edgemont Streets**

This segment of C Street was identified as a focus area in the pedestrian planning effort document.

- This short segment of roadway has sidewalks with landscape buffers and fronts residential buildings. The sidewalks and curb ramps should be examined to determine if maintenance is necessary; otherwise, it adequately serves pedestrians in this area.

**Golden Hill Focus Area: 30th Street between Broadway and B Street**

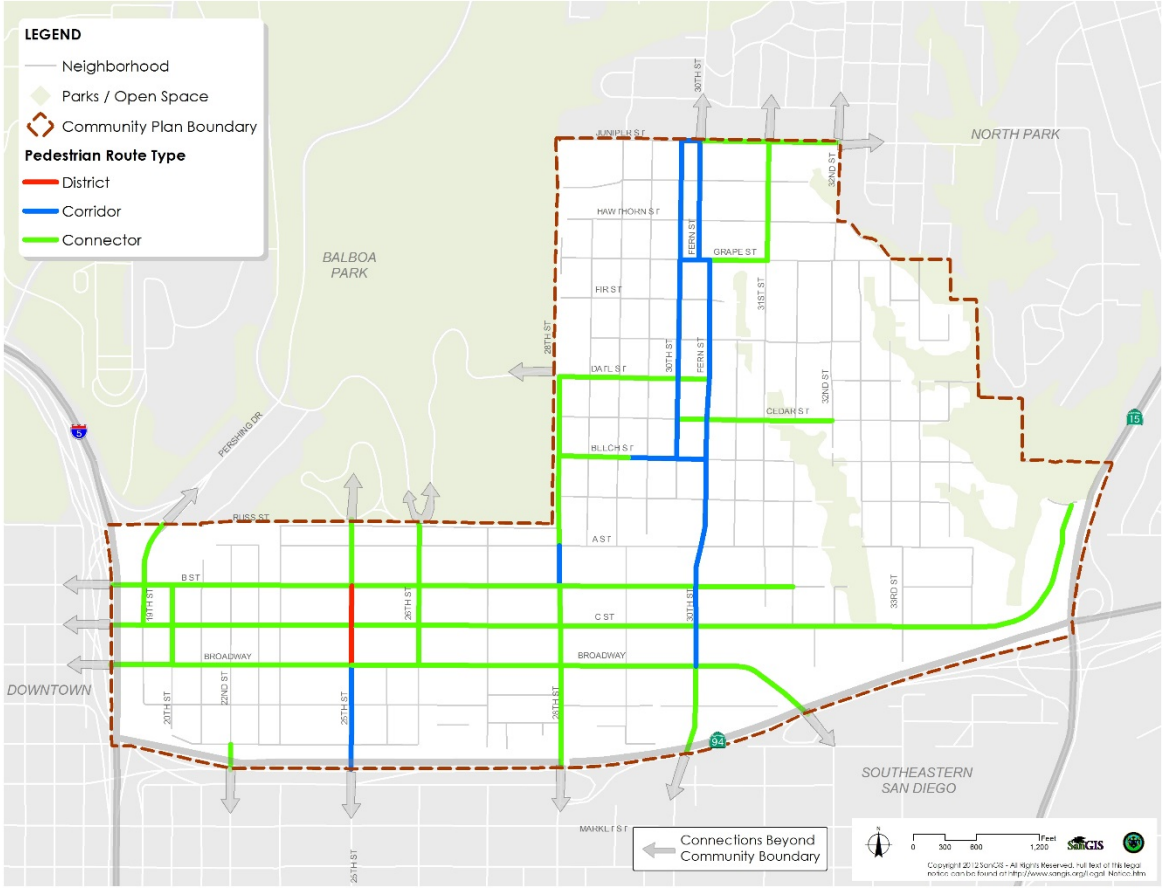
This segment of 30th Street was identified as a focus area in the pedestrian planning effort document. The following are additional improvement measures recommended for the segment.

- This segment of roadway connects residential blocks and can experience high traffic volumes at times. Pedestrian ramps should be provided on all corners within this area. Pedestrian countdown signals and/or pedestrian phasing at signals should be installed.

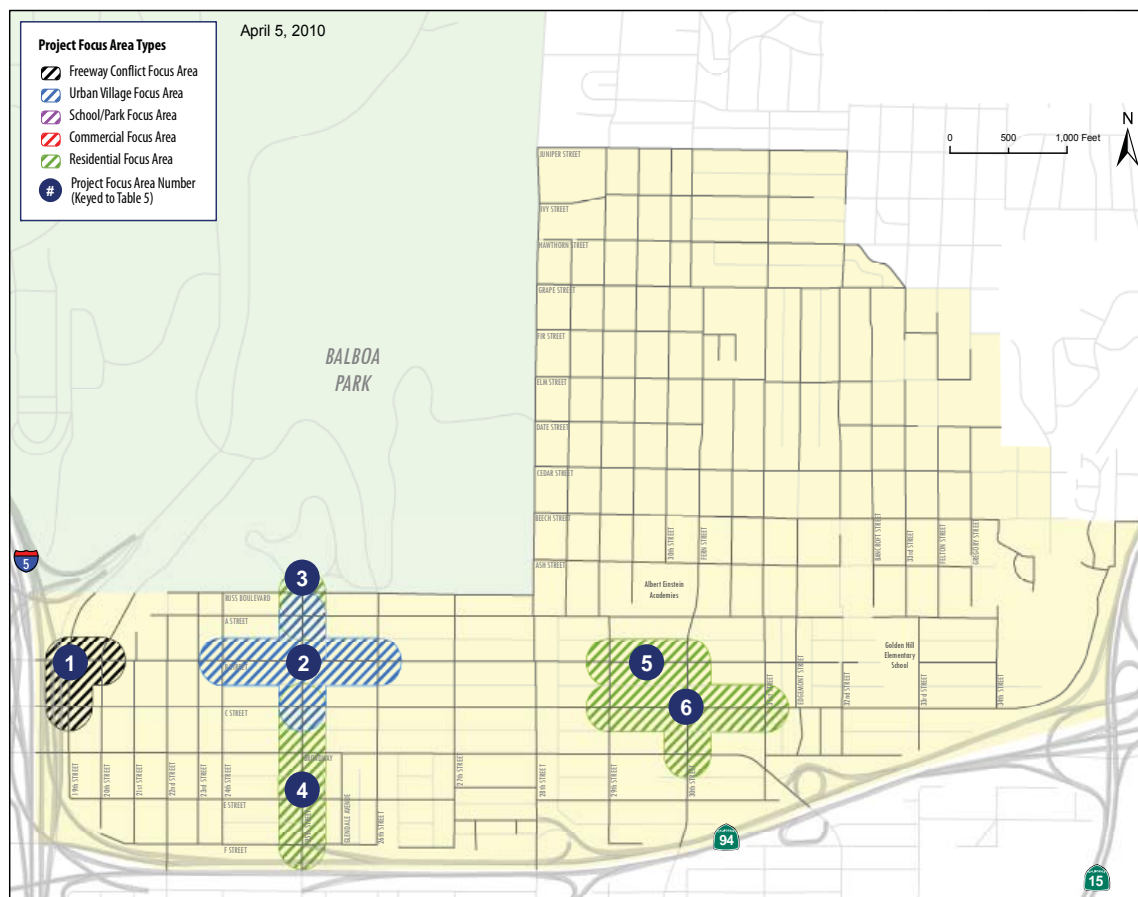
**BEST PRACTICES: PEDESTRIAN FACILITIES**

More information on best practices for implementing pedestrian facilities was prepared as part of this community plan update and is included in **Appendix B**.

Figure 21



Pedestrian Routes: Golden Hill



Source: City of San Diego Pedestrian Master Plan

## Street System

### YEAR 2035 MODEL DEVELOPMENT

A Year 2035 model was developed by the City of San Diego to reflect the change in traffic volumes associated with the proposed land use plan. The model used in this evaluation, 2035 Without Lane Reductions Alternative, represents Year 2035 Conditions with the existing roadway geometry in place.

### Land Use and Trip Generation

The projections of land use intensities were developed using GIS analysis techniques by the City of San Diego's Planning Department staff. Allowable uses, floor-to-area ratios, residential densities, allowable heights, and space for parking were all considered when determining the reasonably expected land use plan alternatives. **Tables 6, 7, and 8** show the trip generation comparison for base year 2008, adopted community plan, and proposed Land Use plan for each of the communities. **Figures 23, 24 and 25** show the proposed Land Use Staff Alternatives for each community.



Table 6. Model Trip Generation Comparison: Uptown

Land Use	2008			Adopted			Proposed		
	Amount	Person	Vehicle	Amount	Person	Vehicle	Amount	Person	Vehicle
ACTIVE PARK (AC)	27.7 acre	2098	1382	27.7 acre	2100	1381	47.7 acre	3616	2378
ARTERIAL COMMERCIAL	869.6 ksf	47664	34620	791.2 ksf	43366	31499	752.5 ksf	41239	29954
AUTO DEALERSHIP (KSF)	6.9 ksf	490	346	0 ksf	0	0	0 ksf	0	0
AUTO RENTAL SERV (LS-KSF)	4.5 ls-ksf	78	57	0 ls-ksf	0	0	0 ls-ksf	0	0
AUTO REPAIR (KSF)	48.7 ksf	1388	1007	12.5 ksf	354	257	12.5 ksf	354	257
Carwash (F service-site)	1.0 site	1269	922	0 site	0	0	0 site	0	0
CHURCH (NO DAY-CARE KSF)	345.4 ksf	2247	1724	343.1 ksf	2232	1712	343.1 ksf	2232	1712
CHURCH (W/DAY-CARE KSF)	114.3 ksf	2229	1713	80.5 ksf	1570	1207	80.5 ksf	1570	1207
CHURCH (W/O DAYCARE-AC)	1.0 acre	41	32	1 acre	40	30	1 acre	40	30
COMMUNICATION OR UTILITY	3.0 ksf	9	8	2.9 ksf	9	7	2.9 ksf	9	7
COMMUNITY COMMERCIAL (KSF)	107.6 ksf	10617	7513	1829 ksf	180476	127713	1833.9 ksf	181011	128093
CONVALESCENT/NURSING (BED)	23.0 bed	90	67	23 bed	90	67	23 bed	90	67
CONVALESCENT/NURSING (BED)	105.0 bed	410	304	104 bed	406	301	104 bed	406	301
CORPORATE HEADQTRS/SING(KSF)	19.9 ksf	259	199	0 ksf	0	0	0 ksf	0	0
DAY CARE/PRE-SCHOOL (STU)	70.0 stu	427	352	0 stu	0	0	0 stu	0	0
DMV (KSF)	15.5 ksf	3703	2678	15.5 ksf	3703	2678	15.5 ksf	3703	2678
DRINKING PLACE (KSF)	20.3 ksf	3643	2646	5.8 ksf	1043	758	5.8 ksf	1043	758
DRUG STORE (KSF)	58.7 ksf	7281	5288	58.7 ksf	7281	5288	58.7 ksf	7281	5288
ELEMENTARY SCHOOL (STU)	2519.0 stu	13099	7319	3062 stu	15923	8897	3062 stu	15923	8897
FINAN INST(W/O-DR/THR-KSF)	24.0 ksf	4670	3392	24 ksf	4670	3392	24 ksf	4670	3392
FINANCIAL INST(W DR/THR-KSF)	49.0 ksf	12739	9252	49 ksf	12739	9252	49 ksf	12739	9252
FIRE OR POLICE STATION	3.0 site	927	684	3 site	927	684	3 site	927	684
FURNITURE STORE (KSF)	56.5 ksf	470	340	8.1 ksf	67	49	8.1 ksf	67	49
GAS STA W MART/CARWASH(PUMP)	12.0 pump	2549	1856	12 pump	2549	1856	12 pump	2549	1856

Table 6. Model Trip Generation Comparison: Uptown (cont.)

Land Use	2008			Adopted			Proposed		
	Amount	Person	Vehicle	Amount	Person	Vehicle	Amount	Person	Vehicle
GAS STATION W FMART (PUMP)	52.0 pump	10686	7782	52 pump	10686	7782	52 pump	10686	7782
GOV'T OFFICE/CENTER(KSF)	11.1 ksf	454	341	0 ksf	0	0	0 ksf	0	0
HIGH RISE OFFICE (KSF)	140.8 ksf	2845	2255	140.8 ksf	2845	2255	140.8 ksf	2845	2255
HIGH-RISE HOTEL (ROOM)	74.0 room	1199	739	74 room	1199	739	74 room	1199	739
HOSPITAL-GENERAL (KSF)	499.5 ksf	13987	10308	499.5 ksf	13987	10308	499.5 ksf	13987	10308
INACTIVE USE	438.9 o	0	0	413.5 o	0	0	408.5 o	0	0
LIBRARY (KSF)	4.5 ksf	333	226	4.5 ksf	333	226	4.5 ksf	333	226
LIGHT INDUSTRY (KSF)	1.2 ksf	22	18	0 ksf	0	0	0 ksf	0	0
LOW-RISE HOTEL/MOTEL-ROOM	795.0 room	11606	7145	146 room	2132	1313	146 room	2132	1313
LR OFFICE (10.1k-20k-KSF)	439.6 ksf	15247	11741	398.1 ksf	14981	11535	398.1 ksf	13809	10633
LR OFFICE (20.1k-35k-KSF)	321.7 ksf	9649	7431	321.7 ksf	9649	7431	321.7 ksf	9649	7431
LR OFFICE (35.1K-75K KSF)	158.3 ksf	4274	3291	158.3 ksf	4274	3291	158.3 ksf	4274	3291
LR OFFICE (50.1k-75k-KSF)	163.8 ksf	4029	3102	111.8 ksf	2750	2117	111.8 ksf	2750	2117
LR OFFICE (5K-10K KSF)	383.9 ksf	15766	12142	123.1 ksf	4825	3715	93.1 ksf	3825	2944
LR OFFICE (U 5K KSF)	474.3 ksf	24039	18513	96.4 ksf	4826	3715	90.1 ksf	4568	3517
MARKET OPEN 16HR/DAY (KSF)	5.6 ksf	3871	2811	5.6 ksf	3871	2811	5.6 ksf	3871	2811
MARKET OPEN 24HR/DAY (KSF)	4.8 ksf	4628	3360	4.8 ksf	4628	3360	4.8 ksf	4628	3360
MEDICAL OFFICE (KSF)	206.8 ksf	13844	10661	236.1 ksf	15813	12178	294.1 ksf	19430	14911
MONASTERY (ksf)	3.6 ksf	6	5	0 ksf	0	0	0 ksf	0	0
MOVIE THEATER (KSF)	15.6 ksf	1785	1218	15.6 ksf	1785	1218	15.6 ksf	1785	1218
MULTI-FAMILY (O 20DU/AC)	14329.0 du	123231	86510	28504 du	245134	172097	26379 du	226856	159265
MULTI-FAMILY (U 20DU/AC)	549.0 du	6259	4392	466 du	5314	3728	473 du	5394	3784
NEIGHBORHOOD COMM (KSF)	65.4 ksf	11075	7838	39.4 ksf	6666	4718	39.4 ksf	6666	4718
NURSERY (KSF)	5.3 ksf	291	211	4.5 ksf	245	178	4.5 ksf	245	178
OTHER CHILD SCHOOL(KSF)	13.4 ksf	629	519	13.4 ksf	629	519	13.4 ksf	629	519

Table 6. Model Trip Generation Comparison: Uptown (cont.)

Land Use	2008			Adopted			Proposed					
	Amount	Person	Vehicle	Amount	Person	Vehicle	Amount	Person	Vehicle			
OTHER GROUP QUARTERS	4.3 acre	19	13	1 acre	4	3	1 acre	4	3			
OTHER GROUP QUARTERS (DU)	1.0 du	5	4	0 du	0	0	0 du	0	0			
OTHER HEALTH CARE (KSF)	603.3 ksf	40658	30192	541.7 ksf	36506	27109	541.7 ksf	36506	27109			
OTHER PUBLIC SERVICE	0.7 ksf	289	208	0 ksf	0	0	0 ksf	0	0			
OTHER RECREATION-LOW	2.9 ksf	19	13	2.4 ksf	16	11	0 ksf	0	0			
OTHER RETAIL COMM. (KSF)	52.5 ksf	2876	2090	8.2 ksf	449	326	8.2 ksf	449	326			
OTHER SCHOOL (STU)	125.0 stu	438	361	125 stu	438	361	125 stu	438	361			
OTHER UNIV./COLLEGE (KSF)	850.0 ksf	1700	1382	0 ksf	0	0	0 ksf	0	0			
PARKING	28.5 acre	0	0	9.3 acre	0	0	3.4 acre	0	0			
POST OFFICE W/MAIL DROP(KSF)	15.9 ksf	6882	4783	15.9 ksf	6882	4783	15.9 ksf	6882	4783			
RBALL/TENNIS/HEALTH(KSF)	18.0 ksf	1030	703	18 ksf	1030	703	18 ksf	1030	703			
RESTAURANT (FAST-FOOD KSF)	22.2 ksf	21512	15627	22.2 ksf	21512	15627	22.2 ksf	21512	15627			
RESTAURANT (SIT-DOWN KSF)	127.8 ksf	22915	16644	103.7 ksf	18597	13506	103.7 ksf	18597	13506			
RESTUARANT (QUALITY-KSF)	195.7 ksf	26975	19593	183.1 ksf	25246	18337	168.1 ksf	23180	16837			
RETIREMENT/SENIOR HOME (DU)	0.0 du	0	0	84 du	479	336	84 du	479	336			
RETIREMENT/SENIOR HOME(DU)	140.0 du	798	560	154 du	878	616	154 du	878	616			
RIGHT-OF-WAY	756.9 ksf	0	0	732.1 ksf	0	0	740 ksf	0	0			
SCHOOL DISTRICT OFF (ksf)	139.9 ksf	5722	4387	139.9 ksf	5722	4387	139.9 ksf	5722	4387			
SINGLE FAMILY (DETACHED)	4762.0 du	60952	42536	4252 du	54424	37981	4284 du	54835	38264			
SINGLE-MULTI UNIT	2770.0 du	31581	22039	1286 du	14657	10234	1155 du	13167	9193			
SPECIALTY COMMERCIAL(KSF)	46.5 ksf	2573	1822	2.5 ksf	141	100	19 ksf	2287	1656			
SPORT FACILITY-IN (AC)	0.2 acre	10	7	0 acre	0	0	0 acre	0	0			
SUPERMARKET (KSF)	63.8 ksf	13212	9597	19.3 ksf	3999	2905	19.3 ksf	3999	2905			
UCSD Hospital (ksf)	183.9 ksf	4967	3659	183.9 ksf	4967	3659	368 ksf	9934	7320			
UNDER CONTRUCTION	2.4 acre	14	11	0 acre	0	0	0 acre	0	0			
WAREHOUSING (KSF)	18.5 ksf	111	93	0 ksf	0	0	0 ksf	0	0			
Grand Total	34594.6	0.0	643410	462584	46166	0	832064	593246	44137	0	818929	584112

Table 7. Model Trip Generation Comparison: North Park

Land Use	2008			Adopted			Proposed		
	Amount	Person	Vehicle	Amount	Person	Vehicle	Amount	Person	Vehicle
ACTIVE PARK (AC)	15.5 acre	1174	773	15.5 acre	1175	773	16 acre	1213	798
ARTERIAL COMMERCIAL (KSF)	1163.9 ksf	63508	46126	608.3 ksf	33336	24213	608.3 ksf	33336	24213
AUTO DEALERSHIP (KSF)	32.3 ksf	2287	1621	0.6 ksf	42	30	0.6 ksf	42	30
AUTO PART SALE (KSF)	18.7 ksf	1650	1198	0 ksf	0	0	0 ksf	0	0
AUTO RENTAL SERV (LS-KSF)	2.8 ls-ksf	49	36	0 ls-ksf	0	0	0 ls-ksf	0	0
AUTO REPAIR (KSF)	82.6 ksf	2350	1703	14.4 ksf	407	296	14.4 ksf	407	296
CAR-WASH (SELF-WASH STALL)	8 stalls	1098	797	0 stalls	0	0	0 stalls	0	0
CASINO (ksf)	0.3 ksf	4	3	0 ksf	0	0	0 ksf	0	0
CHURCH (NO DAY-CARE KSF)	358.2 ksf	2331	1791	358.2 ksf	2331	1791	358.2 ksf	2331	1791
CLINIC (KSF)	0 ksf	0	0	1 ksf	44	33	1 ksf	44	33
COMMUNICATION OR UTILITY	1 acre	3	3	1 acre	3	2	1 acre	3	2
COMMUNITY COMMERCIAL (KSF)	12.6 ksf	1242	879	637.5 ksf	62927	44531	613.8 ksf	60587	42876
CONVALESCENT/NURSING (BED)	12 bed	47	35	12 bed	47	35	12 bed	47	35
DAY CARE/PRE-SCHOOL (STU)	250 stu	1525	1259	250 stu	1525	1259	250 stu	1525	1259
DRINKING PLACE (KSF)	29.6 ksf	5283	3838	10.7 ksf	1905	1384	10.7 ksf	1905	1384
DRUG STORE (KSF)	37.7 ksf	4676	3397	37.7 ksf	4676	3397	37.7 ksf	4676	3397
ELEMENTARY SCHOOL (STU)	1282 stu	6667	3725	1897 stu	9865	5512	1897 stu	9865	5512
FINAN INST(W/O-DR/THR-KSF)	20.3 ksf	3951	2870	20.3 ksf	3951	2870	20.3 ksf	3951	2870
FINANCIAL INST(W DR/THR-KSF)	11.7 ksf	3039	2207	11.7 ksf	3039	2207	11.7 ksf	3039	2207
FIRE OR POLICE STATION	0 site	0	0	1 site	309	228	1 site	309	228
FURNITURE STORE (KSF)	47.1 ksf	391	283	2 ksf	17	12	2 ksf	17	12
GAS STATION W FMART (PUMP)	56 pump	11508	8379	56 pump	11508	8379	56 pump	11508	8379
GOV'T OFFICE/CENTER(KSF)	15.5 ksf	632	475	0 ksf	0	0	0 ksf	0	0
HIGH RISE OFFICE (KSF)	2.8 ksf	57	45	0 ksf	0	0	0 ksf	0	0
HOSPITAL-GENERAL (KSF)	75.7 ksf	2120	1562	75.7 ksf	2120	1562	75.7 ksf	2120	1562
INACTIVE USE	175.3 acre	0	0	167.6 acre	0	0	165.4 acre	0	0
LIBRARY (KSF)	18.8 ksf	1386	939	18.8 ksf	1386	939	18.8 ksf	1386	939
LIGHT INDUSTRY (KSF)	17.4 ksf	319	263	0 ksf	0	0	0 ksf	0	0
LOW-RISE HOTEL/MOTEL-ROOM	217 room	3168	1950	205 room	2993	1842	205 room	2993	1842
LR OFFICE (10.1k-20k-KSF)	97.2 ksf	3373	2598	97.2 ksf	3373	2598	83.6 ksf	2901	2234
LR OFFICE (20.1k-35k-KSF)	25.2 ksf	756	582	25.2 ksf	756	582	25.2 ksf	756	582
LR OFFICE (35.1K-75K KSF)	44.6 ksf	1204	927	44.6 ksf	1204	927	44.6 ksf	1204	927
LR OFFICE (5K-10K KSF)	81 ksf	3335	2568	81 ksf	3335	2568	81 ksf	3335	2568

Table 7. Model Trip Generation Comparison: North Park (cont.)

Land Use	2008			Adopted			Proposed		
	Amount	Person	Vehicle	Amount	Person	Vehicle	Amount	Person	Vehicle
LR OFFICE (U 5K KSF)	73.4 ksf	3725	2869	73.4 ksf	3725	2869	73.4 ksf	3725	2869
MARKET OPEN 16HR/DAY (KSF)	78.5 ksf	54237	39395	78.5 ksf	54237	39395	78.5 ksf	54237	39395
MARKET OPEN 24HR/DAY (KSF)	9.8 ksf	9421	6843	9.8 ksf	9421	6843	9.8 ksf	9421	6843
MEDICAL OFFICE (KSF)	33 ksf	2217	1707	32 ksf	2147	1653	32 ksf	2147	1653
MOVIE THEATER (KSF)	23 ksf	2631	1796	23 ksf	2631	1796	23 ksf	2631	1796
MULTI-FAMILY (O 20DU/AC)	17330 du/acre	149041	104633	26946 du/acre	231739	162689	27947 du/acre	240346	168735
MULTI-FAMILY (U 20DU/AC)	1908 du/acre	21754	15264	2276 du/acre	25948	18209	2451 du/acre	27942	19609
NEIGHBORHOOD COMM (KSF)	45.2 ksf	7645	5411	45.2 ksf	7645	5411	45.2 ksf	7645	5411
NURSERY (KSF)	0.2 ksf	11	8	0 ksf	0	0	0 ksf	0	0
OTHER GROUP QUARTERS (DU)	13 du	67	48	13 du	67	48	12 du	62	44
OTHER HEALTH CARE (KSF)	66.5 ksf	4497	3339	66.5 ksf	4497	3339	66.5 ksf	4497	3339
OTHER PUBLIC SERVICE	0.9 acre	292	213	0.3 acre	119	86	0.3 acre	119	86
OTHER RECREATION-HIGH	2.8 acre	161	109	2.6 acre	153	104	2.6 acre	153	104
OTHER RETAIL COMM. (KSF)	1.5 ksf	81	59	0 ksf	0	0	0 ksf	0	0
PARKING	12.3 acre	0	0	4.9 acre	0	0	4.8 acre	0	0
POST OFFICE W/MAIL DROP(KSF)	6.2 ksf	2683	1865	0 ksf	0	0	0 ksf	0	0
PUBLIC STORAGE(KSF)	20.3 ksf	49	41	0 ksf	0	0	0 ksf	0	0
RBALL/TENNIS/HEALTH(KSF)	12.7 ksf	726	495	12.7 ksf	726	495	12.7 ksf	726	495
RESTAURANT (FAST-FOOD KSF)	29.4 ksf	28433	20652	29.4 ksf	28433	20652	29.4 ksf	28433	20652
RESTAURANT (SIT-DOWN KSF)	104.2 ksf	18680	13569	104.2 ksf	18680	13569	104.2 ksf	18680	13569
RESTUARANT (QUALITY-KSF)	76.7 ksf	10612	7709	76.7 ksf	10612	7709	76.7 ksf	10612	7709
RIGHT-OF-WAY	760.4 acre	0	0	760.4 acre	0	0	760.4 acre	0	0
SENIOR HIGH SCHOOL(STU)	1441 stu	5764	2594	1441 stu	5764	2594	1441 stu	5764	2594
SINGLE FAMILY (DETACHED)	5007 du	64085	44721	4633 du	59300	41384	4640 du	59390	41447
SINGLE-MULTI UNIT	961 du	10956	7646	614 du	7001	4885	614 du	7001	4885
SPECIALTY COMMERCIAL(KSF)	3.7 ksf	203	143	0 ksf	0	0	0 ksf	0	0
SPORT FACILITY-IN (AC)	0.3 ksf	15	10	0.3 ksf	14	9	0.3 ksf	14	9
SUPERMARKET (KSF)	86.5 ksf	17913	13011	86.5 ksf	17913	13011	86.5 ksf	17913	13011
TIRE STORE (KSF)	4.8 ksf	170	124	0 ksf	0	0	0 ksf	0	0
UNDER CONTRUCTION	0.7 ksf	4	3	0 ksf	0	0	0 ksf	0	0
WAREHOUSING (KSF)	5 ksf	30	25	0 ksf	0	0	0 ksf	0	0
<b>Grand Total</b>		<b>545236</b>	<b>387134</b>	<b>41979.4</b>	<b>643046</b>	<b>454720</b>		<b>650958</b>	<b>460231</b>

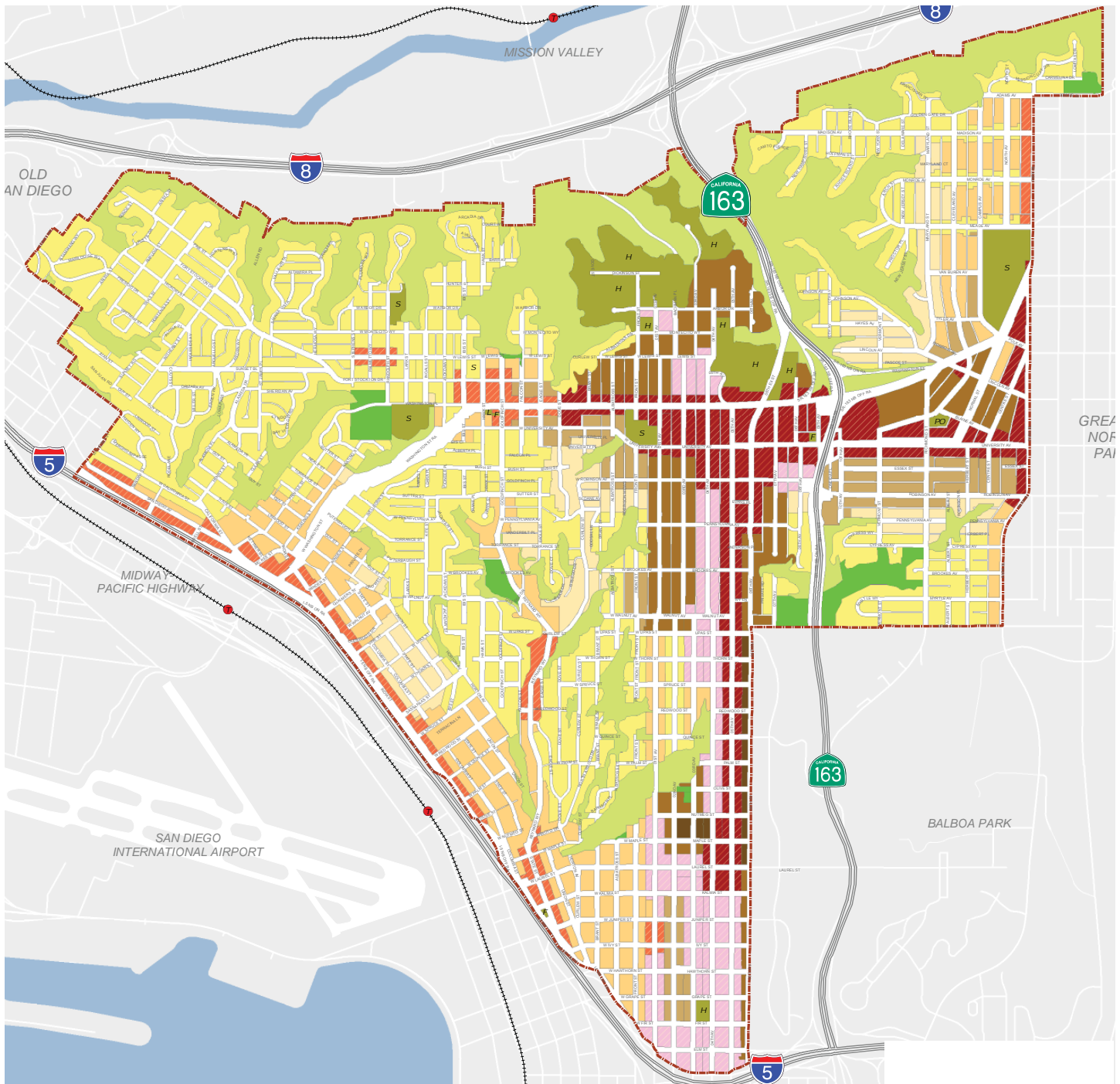


Table 8. Model Trip Generation Comparison: Golden Hill

Land Use	2008			Adopted			Proposed		
	Amount	Person	Vehicle	Amount	Person	Vehicle	Amount	Person	Vehicle
ARTERIAL COMMERCIAL (KSF)	124.3 ksf	6803	4942	33.9 ksf	1867	1355	35.9 ksf	1979	1437
AUTO REPAIR (KSF)	6.2 ksf	176	128	2 ksf	57	41	2 ksf	57	41
CHURCH (NO DAY-CARE KSF)	44.5 ksf	290	222	44.5 ksf	290	222	44.5 ksf	290	222
CHURCH (W/DAY-CARE KSF)	21.4 ksf	417	321	21.4 ksf	417	321	21.4 ksf	417	321
COMMUNITY COMMERCIAL (KSF)	0 ksf	0	0	264 ksf	26058	18439	214.6 ksf	21197	14999
CONVALESCENT/NURSING (KSF)	32 ksf	317	235	28 ksf	278	205	28 ksf	278	205
DRINKING PLACE (KSF)	4.6 ksf	831	604	4.6 ksf	831	604	4.6 ksf	831	604
ELEMENTARY SCHOOL (STU)	949 stu	4935	2758	1226 stu	6375	3563	1226 stu	6375	3563
ESTATE HOUSING (DU)	1 du	17	12	1 du	17	12	1 du	17	12
FIRE OR POLICE STATION	1 site	309	228	1 site	309	228	1 site	309	228
FURNITURE STORE (KSF)	2.1 ksf	18	13	0 ksf	0	0	0 ksf	0	0
GAS STATION W FMART (PUMP)	12 pump	2466	1796	12 pump	2466	1796	12 pump	2466	1796
INACTIVE USE	109.2 acre	0	0	96.3 acre	0	0	54.3 acre	0	0
LIGHT INDUSTRY (KSF)	112.8 ksf	2053	1696	102.6 ksf	1867	1543	102.6 ksf	1867	1543
LR OFFICE (10.1k-20k-KSF)	14 ksf	486	374	14 ksf	486	374	14 ksf	486	374
LR OFFICE (U 5K KSF)	18.7 ksf	948	729	18.7 ksf	948	729	18.7 ksf	948	729
MARKET OPEN 16HR/DAY (KSF)	20.1 ksf	13816	10036	20.1 ksf	13816	10036	20.1 ksf	13816	10036
MEDICAL OFFICE (KSF)	4.5 ksf	300	231	4.5 ksf	300	231	4.5 ksf	300	231
MULTI-FAMILY (O 20DU/AC)	3903 du/acre	33565	23565	6389 du/acre	54946	38574	6365 du/acre	54738	38430
MULTI-FAMILY (U 20DU/AC)	237 du/acre	2702	1896	305 du/acre	3477	2441	305 du/acre	3477	2441
NEIGHBORHOOD COMM (KSF)	12.4 ksf	2104	1489	7.2 ksf	1221	864	17.2 ksf	2913	2062
OTHER CHILD SCHOOL(KSF)	6 ksf	281	232	0 ksf	0	0	0 ksf	0	0
OTHER GROUP QUARTERS	0.8 acre	3	3	0 acre	0	0	0 acre	0	0
OTHER GROUP QUARTERS (DU)	7 du	37	26	7 du	37	26	7 du	37	26
OTHER HEALTH CARE (KSF)	10.7 ksf	720	534	10.7 ksf	720	534	10.7 ksf	720	534
OTHER PUBLIC SERVICE	0.7 ksf	272	196	0 ksf	0	0	0 ksf	0	0
OTHER RETAIL COMM. (KSF)	2.1 ksf	114	83	2.1 ksf	114	83	2.1 ksf	114	83
POST OFFICE W/MAIL DROP(KSF)	3.8 ksf	1620	1126	0 ksf	0	0	0 ksf	0	0
RESTAURANT (FAST-FOOD KSF)	2.8 ksf	2657	1930	2.8 ksf	2657	1930	2.8 ksf	2657	1930

Table 8. Model Trip Generation Comparison: Golden Hill (cont.)

Land Use	2008				Adopted			Proposed		
	Amount	Person	Vehicle		Amount	Person	Vehicle	Amount	Person	Vehicle
RESTAURANT (SIT-DOWN KSF)	10.3 ksf	1855	1349		10.3 ksf	1855	1349	10.3 ksf	1855	1349
RESTUARANT (QUALITY-KSF)	6.4 ksf	879	638		6.4 ksf	879	638	6.4 ksf	879	638
RETIREMENT/SENIOR HOME(DU)	0 du	0	0		4 du	23	16	4 du	23	16
RIGHT-OF-WAY	227.6 acre	0	0		228 acre	0	0	228.2 acre	0	0
SINGLE FAMILY (DETACHED)	1356 du	17358	12110		1087 du	13914	9709	1114 du	14259	9950
SINGLE-MULTI UNIT	1564 du	17831	12441		844 du	9621	6713	844 du	9621	6713
SPORT FACILITY-IN (AC)	0.1 acre	5	3		0.1 acre	5	3	0.1 acre	5	3
SUPERMARKET (KSF)	36.1 ksf	7481	5433		36.1 ksf	7481	5433	36.1 ksf	7481	5433
<b>Grand Total</b>	<b>8871.4</b>	<b>124346</b>	<b>87900</b>		<b>10840.7</b>	<b>154015</b>	<b>108535</b>	<b>10763.5</b>	<b>150987</b>	<b>106389</b>



**LEGEND**

**Residential**

- Residential - Low
- Residential - Low Medium
- Residential - Medium
- Residential - Medium High

**Residential - High**

**Residential - Very High**

**Commercial, Employment, Retail, and Services**

- Community Commercial - Residential Permitted
- Neighborhood Commercial - Residential Permitted

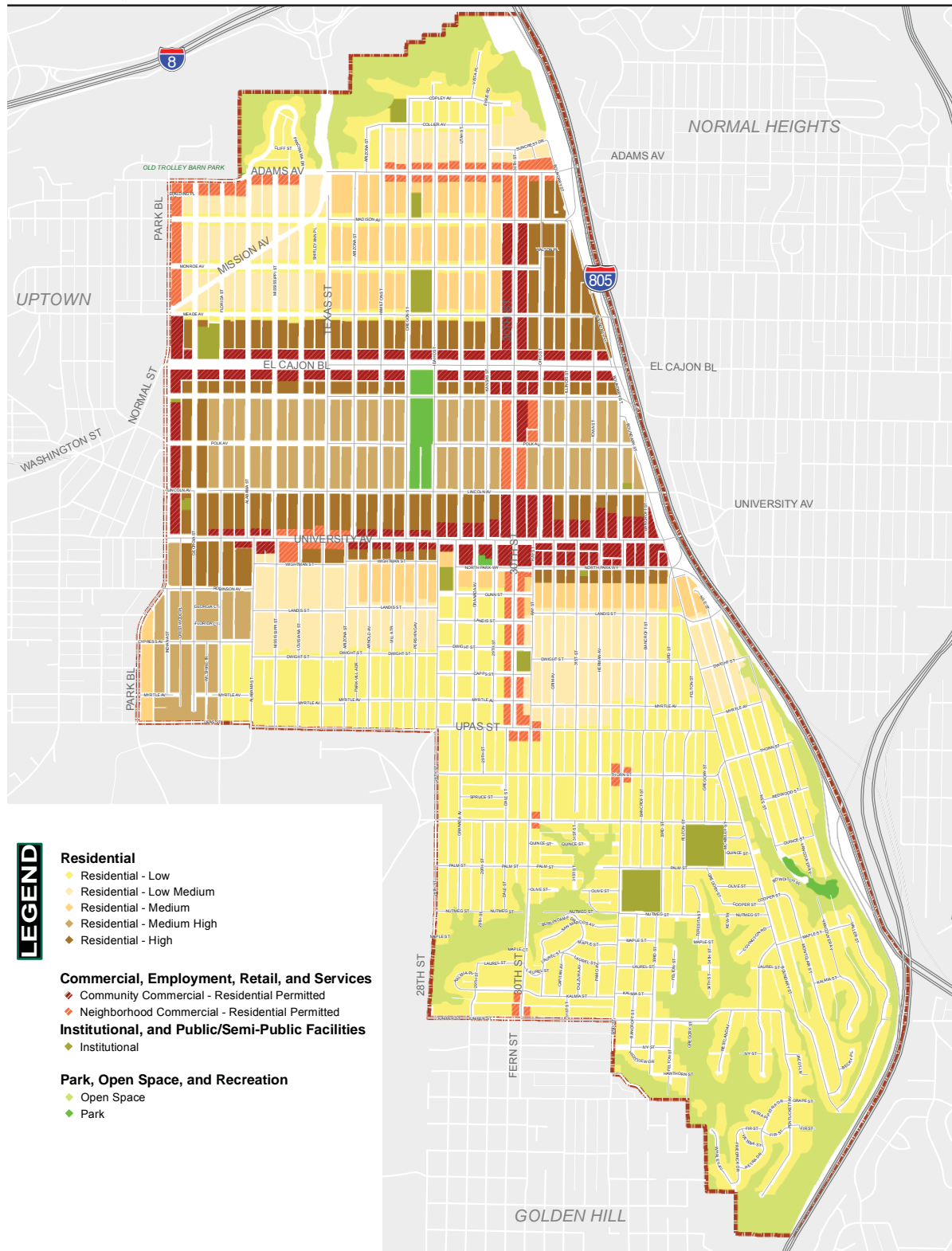
**Office Commercial - Residential Permitted  
Institutional, and Public/Semi-Public Facilities**

**Institutional**

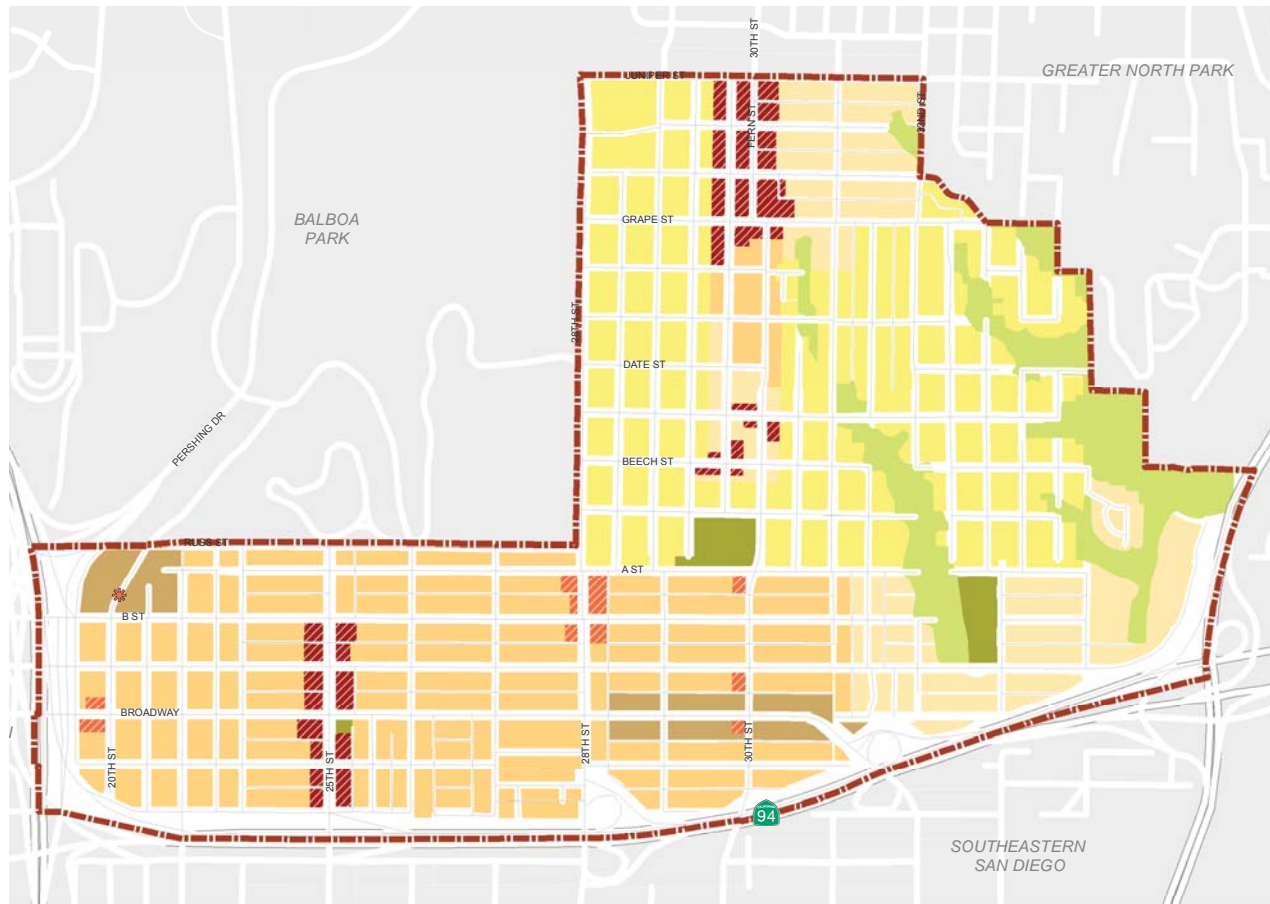
**Park, Open Space, and Recreation**

- Open Space
- Park

*Proposed Land Use: Uptown*



Proposed Land Use: North Park



LEGEND	Residential	Commercial, Employment, Retail, and Services	Institutional, and Public/Semi-Public Facilities
	Residential - Low	Community Commercial - Residential Permitted	Institutional
	Residential - Low Medium	Neighborhood Commercial - Residential Permitted	Park, Open Space, and Recreation
	Residential - Medium	Limited Commercial (See Land Use Element)	Open Space
	Residential - Medium High		Park

Proposed Land Use: Golden Hill



## FUTURE DAILY TRAFFIC VOLUMES

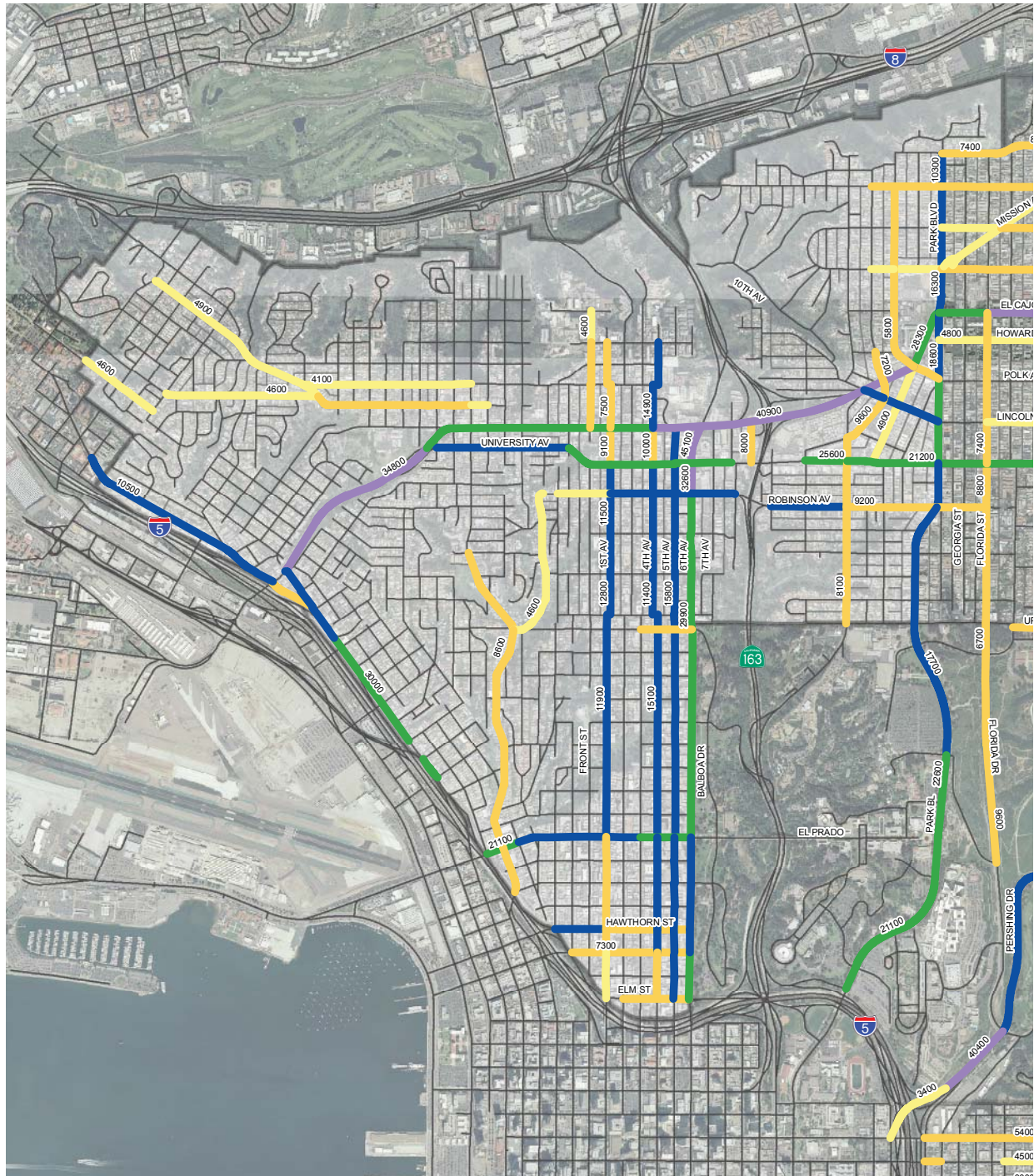
In the process of calibrating the existing model, it was concluded that several post model adjustments were needed for the forecasted Year 2035 traffic model volumes to make them consistent with existing vehicular counts and expected overall traffic patterns within the three communities.

- For roadway segments where the difference between the calibrated existing 2008 model and the actual count exceeded 10% or 2,000 daily vehicles, the difference was subtracted or added to the Year 2035 forecast model to adjust the future volume based on the discrepancy noted between base year model volumes and count data. For roadway segments that have existing daily volumes less than 5,000, no adjustments were applied to the future model volumes.

The post model adjustment details for the Future Year scenario are included in **Appendix A**. The resulting daily traffic volumes for Future Year are presented in **Figures 26, 27, and 28**.

## FUTURE PEAK HOUR TRAFFIC VOLUMES

Future Year peak hour turning movements at the study area intersections were developed using methodologies from National Cooperative Highway Research Program (NCHRP) 255 – Highway Traffic Data for Urbanized Area Project Planning and Design, Chapter 8. NCHRP Report 255 is a compilation of the best techniques that are currently being used in urban areas to forecast future traffic volumes. These techniques were identified through a survey of state and local agencies with follow-up field visits to obtain detailed information on procedural steps and typical applications. The method used to forecast the future turning movement volumes for the Uptown, North Park, and Golden Hill Community Plans evaluation is the NCHRP's "Directional Volume Forecast". For this method, existing and future daily traffic volumes, existing peak hour turning movements, and projected peak hour "K" and directional "D" factors are used to calculate future year turning movements. Existing daily segment traffic volumes and peak hour intersection turning movements were counted in the field. Future Year daily traffic volumes were obtained from Year 2035 forecast model. Using the "Directional Volume Forecast" technique, the existing turning movements at each study area intersection were factored based on increases in daily approach traffic and existing K and D factors. Each respective movement was derived using an iterative approach that balances the inflows and outflows for each approach. The supporting worksheets for calculating Future Year volumes are included in **Appendix A**. Resulting peak hour intersection turning movements are presented in **Figures 29, 30 and 31**.



**LEGEND**

- 5000 or Less
- 5001 - 10000
- 10001 - 20000
- 20001 - 30000
- Greater than 30000

0 500 1,000 2,000 Feet

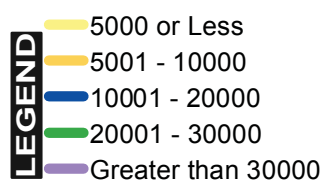
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Future Year Proposed Land Use Roadway ADT Volumes: Uptown



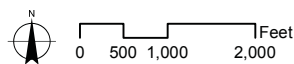
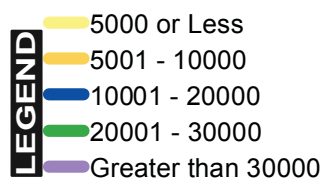
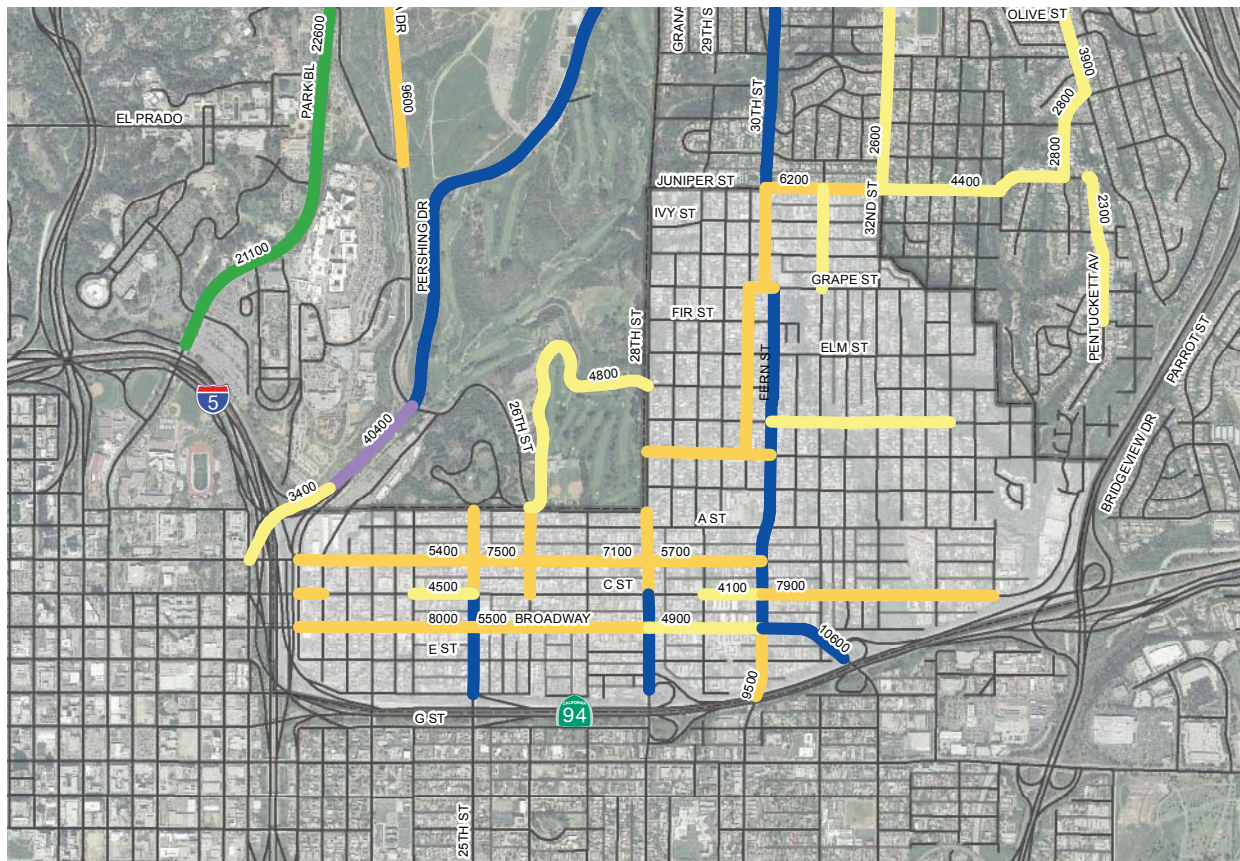


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*Future Year Proposed Land Use Roadway ADT Volumes: North Park*





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Future Year Proposed Land Use Roadway ADT Volumes: Golden Hill

<p><b>1</b></p> <p>46 / 49 204 / 221 665 / 1181</p> <p>Hancock St</p> <p>257 / 249 689 / 710</p> <p>Washington St</p> <p>150 / 361 47 / 68</p>	<p><b>2</b></p> <p>San Diego Ave</p> <p>986 / 792 850 / 735</p> <p>Washington St</p> <p>48 / 149 772 / 1559</p> <p>146 / 136 207 / 286 46 / 85</p>	<p><b>3</b></p> <p>4 / 24 0 / 1 1 / 6</p> <p>India St</p> <p>0 / 7 1698 / 1387 16 / 44</p> <p>Washington St</p> <p>5 / 39 746 / 1369 21 / 131</p> <p>168 / 251 0 / 13 321 / 379</p>	<p><b>4</b></p> <p>88 / 107 214 / 244 312 / 813</p> <p>Fourth Ave</p> <p>176 / 89 1099 / 908 481 / 525</p> <p>Washington St</p> <p>81 / 56 507 / 1103 112 / 113</p>
<p><b>5</b></p> <p>25 / 98</p> <p>Fifth Ave</p> <p>0 / 260 1657 / 1117</p> <p>Washington St</p> <p>819 / 1769</p> <p>339 / 319 0 / 181 190 / 531</p>	<p><b>6</b></p> <p>13 / 5 17 / 12 23 / 14</p> <p>SR-163 On-Ramp</p> <p>8 / 5 1144 / 657 0 / 13</p> <p>Washington St</p> <p>983 / 2782 96 / 291</p> <p>76 / 76 10 / 14 21 / 53</p>	<p><b>7</b></p> <p>SR-163 On-Ramp</p> <p>1680 / 874 839 / 551</p> <p>Washington St</p> <p>627 / 1006 940 / 2510 180 / 587</p> <p>Richmond St</p> <p>17 / 30</p>	<p><b>8</b></p> <p>20 / 24 1229 / 716 11 / 12 14 / 26</p> <p>Normal St</p> <p>22 / 22 77 / 45 309 / 127 1 / 4</p> <p>Campus Ave</p> <p>10 / 22 18 / 27 0 / 4 101 / 154</p> <p>Polk Ave</p> <p>32 / 46 26 / 33</p>
<p><b>9</b></p> <p>326 / 160 224 / 281 43 / 70</p> <p>Park Blvd</p> <p>80 / 59 591 / 439 198 / 221</p> <p>Normal St</p> <p>163 / 409 223 / 694 63 / 172</p> <p>69 / 100 126 / 368 109 / 304</p>	<p><b>10</b></p> <p>23 / 48 533 / 480 20 / 110</p> <p>Fourth Ave</p> <p>50 / 508 88 / 250</p> <p>University Ave</p> <p>66 / 380 39 / 115</p>	<p><b>11</b></p> <p>354 / 343 755 / 745</p> <p>University Ave</p> <p>16 / 49 472 / 541</p> <p>67 / 108 331 / 551 253 / 474</p>	<p><b>12</b></p> <p>542 / 515 1006 / 788 175 / 273</p> <p>Sixth Ave</p> <p>184 / 171 475 / 535 164 / 165</p> <p>University Ave</p> <p>482 / 371 212 / 459 45 / 70</p> <p>73 / 73 698 / 946 47 / 126</p>
<p><b>13</b></p> <p>90 / 238 15 / 23 2 / 7</p> <p>Tenth Ave</p> <p>4 / 6 958 / 857 37 / 13</p> <p>University Ave</p> <p>108 / 311 454 / 1160 229 / 353</p> <p>131 / 180 4 / 10 3 / 7</p>	<p><b>14</b></p> <p>106 / 125 93 / 287</p> <p>Normal St</p> <p>115 / 96 550 / 607</p> <p>University Ave</p> <p>79 / 210 285 / 854</p>	<p><b>15</b></p> <p>67 / 95 365 / 437 71 / 238</p> <p>Park Blvd</p> <p>147 / 129 514 / 448 135 / 100</p> <p>University Ave</p> <p>49 / 159 216 / 598 81 / 125</p> <p>77 / 113 194 / 517 61 / 182</p>	<p><b>16</b></p> <p>56 / 104 713 / 581 94 / 137</p> <p>Fourth Ave</p> <p>195 / 337 87 / 81</p> <p>Robinson Ave</p> <p>263 / 282 82 / 97</p>

**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES

 SIGNAL



Future Year Proposed Land Use Peak Hour Intersection Volumes: Uptown

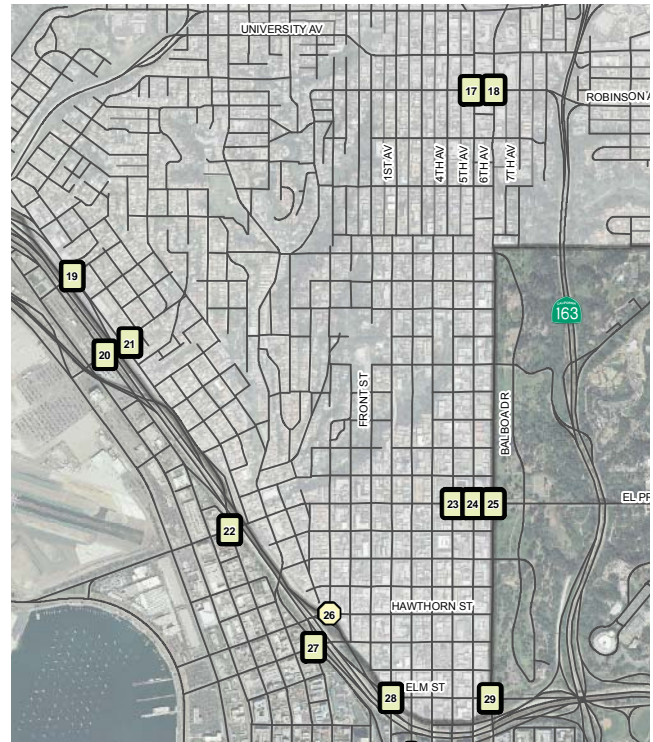


<p><b>17</b></p> <p>Fifth Ave</p> <p>72 / 113 256 / 260</p> <p>Robinson Ave</p> <p>65 / 65 280 / 340</p> <p>95 / 152 546 / 993 115 / 267</p>	<p><b>18</b></p> <p>119 / 154 1042 / 991 1 / 6</p> <p>Sixth Ave</p> <p>9 / 22 198 / 193 82 / 130</p> <p>Robinson Ave</p> <p>180 / 187 144 / 295 50 / 57</p> <p>11 / 10 604 / 890 53 / 110</p>	<p><b>19</b></p> <p>India St</p> <p>57 / 35 23 / 19</p> <p>Vine St</p> <p>23 / 31 1572 / 2544 10 / 20</p>	<p><b>20</b></p> <p>440 / 358 1273 / 1797 150 / 292</p> <p>Kettner Blvd</p> <p>148 / 76 168 / 103</p> <p>Sassafras St</p> <p>78 / 272 79 / 107</p>
<p><b>21</b></p> <p>India St</p> <p>41 / 26 70 / 48</p> <p>Sassafras St</p> <p>130 / 408 26 / 78 83 / 115</p> <p>226 / 111 957 / 1677 14 / 39</p>	<p><b>22</b></p> <p>India St</p> <p>180 / 252 70 / 10 216 / 231</p> <p>Laurel St</p> <p>580 / 1138 362 / 573</p> <p>32 / 37 6 / 1 206 / 470 29 / 60</p>	<p><b>23</b></p> <p>131 / 125 594 / 595 42 / 80</p> <p>Fourth Ave</p> <p>0 / v 313 / 375 78 / 55</p> <p>Laurel St</p> <p>431 / 751 126 / 74</p>	<p><b>24</b></p> <p>Fifth Ave</p> <p>72 / 103 258 / 445</p> <p>Laurel St</p> <p>186 / 291 300 / 580</p> <p>117 / 96 806 / 1038 79 / 143</p>
<p><b>25</b></p> <p>177 / 173 696 / 766 105 / 159</p> <p>Sixth Ave</p> <p>29 / 174 53 / 100 21 / 96</p> <p>Laurel St</p> <p>164 / 303 117 / 381 70 / 147</p> <p>78 / 100 484 / 588 38 / 93</p>	<p><b>26</b></p> <p>9 / 9</p> <p>Brant St</p> <p>363 / 752 121 / 259</p> <p>Hawthorn St</p> <p>2 / 2 0 / 1 74 / 168</p>	<p><b>27</b></p> <p>State St</p> <p>136 / 92 443 / 720 936 / 1967</p> <p>Grape St</p> <p>123 / 210 112 / 119</p>	<p><b>28</b></p> <p>First Ave</p> <p>109 / 28 176 / 460</p> <p>Elm St</p> <p>585 / 1375 238 / 364 31 / 43</p>
<p><b>29</b></p> <p>91 / 47 1073 / 1053</p> <p>Sixth Ave</p> <p>1888 / 646 728 / 242 1216 / 422</p> <p>Elm St</p>	<p><b>30</b></p> <p>154 / 345 324 / 255 130 / 122</p> <p>Second St</p> <p>739 / 463 267 / 44</p> <p>Cedar St</p> <p>46 / 177 6 / 2</p>		

**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES

- SIGNAL
- AWSC
- TWSC

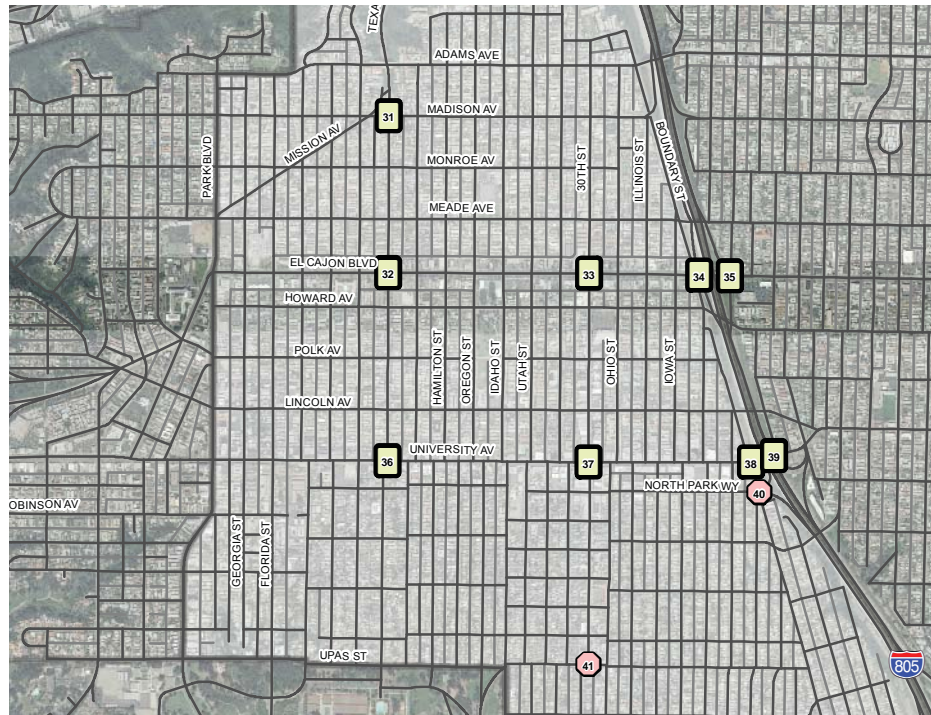


Future Year Proposed Land Use Peak Hour Intersection Volumes: Uptown

<b>31</b> <div>69 / 192 333 / 1116 88 / 304</div> <div>Texas St</div> <div>503 / 272 25 / 32 12 / 12</div> <div>Madison Ave</div> <div>419 / 353 20 / 58 10 / 20</div> <div>7 / 17 824 / 744 10 / 11</div>	<b>32</b> <div>97 / 199 161 / 631 94 / 372</div> <div>Texas St</div> <div>112 / 136 707 / 648 46 / 66</div> <div>El Cajon Blvd</div> <div>102 / 256 368 / 907 16 / 34</div> <div>65 / 47 288 / 334 23 / 61</div>	<b>33</b> <div>50 / 99 140 / 419 144 / 210</div> <div>30th St</div> <div>102 / 110 1020 / 1256 82 / 198</div> <div>El Cajon Blvd</div> <div>34 / 105 650 / 1326 40 / 125</div> <div>71 / 132 144 / 315 80 / 141</div>	<b>34</b> <div>427 / 1088 2 / 6 149 / 808</div> <div>I-805 SB Ramps</div> <div>1182 / 1028 190 / 350</div> <div>El Cajon Blvd</div> <div>904 / 1229 568 / 780</div>
<b>35</b> <div>I-805 NB Ramps</div> <div>453 / 349 702 / 974</div> <div>El Cajon Blvd</div> <div>667 / 448 4 / 2 134 / 301</div>	<b>36</b> <div>115 / 112 71 / 177 43 / 225</div> <div>Texas St</div> <div>30 / 80 386 / 553 9 / 13</div> <div>University Ave</div> <div>90 / 139 262 / 720 32 / 48</div> <div>124 / 61 82 / 177 11 / 32</div>	<b>37</b> <div>57 / 124 197 / 547 50 / 133</div> <div>30th St</div> <div>49 / 84 362 / 453 110 / 151</div> <div>University Ave</div> <div>75 / 146 343 / 610 36 / 81</div> <div>61 / 98 190 / 414 103 / 134</div>	<b>38</b> <div>1 / 3 86 / 144 29 / 39</div> <div>Boundary St</div> <div>0 / 2 466 / 641 220 / 265</div> <div>University Ave</div> <div>7 / 8 875 / 926 161 / 253</div> <div>125 / 166 8 / 19 121 / 271</div>
<b>39</b> <div>18 / 41 73 / 44 32 / 72</div> <div>Wabash Ave</div> <div>16 / 22 349 / 418 340 / 192</div> <div>University Ave</div> <div>11 / 15 308 / 585 719 / 644</div> <div>I-805 NB Ramps</div> <div>338 / 476 114 / 204 168 / 269</div>	<b>40</b> <div>61 / 97 29 / 100 405 / 517</div> <div>Boundary St</div> <div>250 / 571 128 / 209 92 / 317</div> <div>I-805 SB Ramps</div> <div>128 / 263 8 / 41</div> <div>33rd St</div> <div>44 / 47 81 / 85</div>	<b>41</b> <div>228 / 236 92 / 406</div> <div>30th St (W)</div> <div>194 / 306 385 / 202</div> <div>Upas St</div> <div>152 / 268 139 / 312</div> <div>2 / 1</div>	

**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES

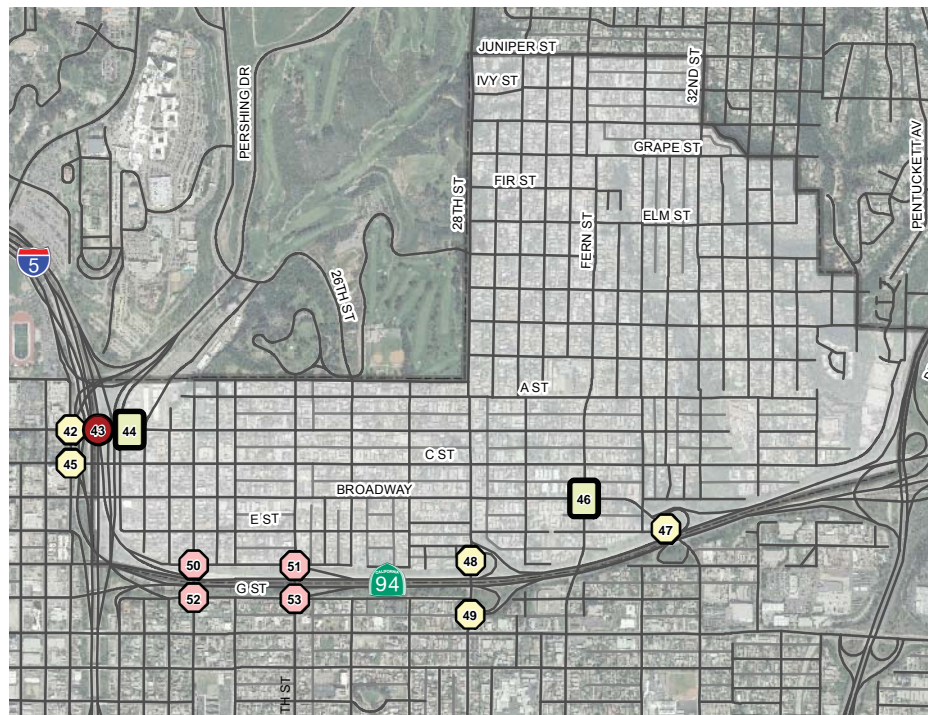
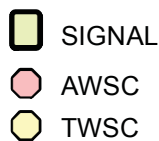


Future Year Proposed Land Use Peak Hour Intersection Volumes: North Park

<b>42</b> 913 / 399 87 / 72 I-5 SB Ramps 1317 / 606 158 / 52 B St 17th St	<b>43</b> 715 / 163 B St I-5 NB Off-Ramp 1069 / 529 58 / 42	<b>44</b> I-5 NB On-Ramp 19th St 21 / 28 422 / 129 369 / 140 B St 2 / 0 17 / 21	<b>45</b> 51 / 37 140 / 98 17th St 315 / 865 229 / 363
<b>46</b> 63 / 68 226 / 250 361 / 477 30th St 374 / 623 109 / 62 9 / 31 Broadway 46 / 84 16 / 42 35 / 36	<b>47</b> 273 / 646 87 / 66 Broadway 518 / 677 568 / 263 SR-94 WB Ramps 21 / 137 86 / 65	<b>48</b> 0 / 9 482 / 620 121 / 89 28th St 535 / 256 32 / 11 292 / 257 SR-94 WB Ramps 4 / 3 5 / 3 46 / 24	<b>49</b> 483 / 498 413 / 584 28th St 100 / 190 41 / 63 SR-94 EB Ramps 346 / 268 223 / 286
<b>50</b> 45 / 31 49 / 110 22nd St 36 / 19 1043 / 111 78 / 69 F St 151 / 87 78 / 104	<b>51</b> 101 / 66 552 / 739 Robinson Ave 25th St 152 / 281 570 / 85 155 / 201 F St 336 / 73 343 / 265	<b>52</b> 49 / 114 81 / 75 22nd St 46 / 92 201 / 221 30 / 82 G St 163 / 118 161 / 43	<b>53</b> 424 / 526 405 / 489 25th St 77 / 90 205 / 145 55 / 114 G St V / 0 517 / 281 268 / 301

**Legend**

X / Y = AM / PM PEAK HOUR  
TURNING VOLUMES



Future Year Proposed Land Use Peak Hour Intersection Volumes: Golden Hill



## FUTURE YEAR VEHICLE LEVEL OF SERVICE

Study intersections and roadway segments were evaluated using the forecasted Future Year daily and peak hour volumes.

Intersections within the communities were analyzed using their existing lane configurations, displayed on **Figures 32, 33 and 34**, and the future peak-hour traffic volumes. Signal timings were optimized at all signalized intersections. The results of the analysis are presented in **Table 9** and displayed on **Figures 35, 36, and 37**. As shown,

- 6 of the 30 intersections within Uptown would operate at unacceptable LOS;
- 8 of the 11 intersections within North Park would operate at unacceptable LOS; and
- 6 of the 12 intersections within Golden Hill would operate at unacceptable LOS.

Roadway segments within the communities were analyzed using their existing roadway classification, displayed on **Figures 38, 39 and 40**, and the future daily roadway traffic volumes. **Table 10** presents the findings of the roadway segment analysis. As shown,

- 54 of the 105 roadway segments within Uptown would operate at unacceptable LOS;
- 35 of the 95 roadway segments within North Park would operate at unacceptable LOS; and
- 15 of the 33 roadway segments within Golden Hill would operate at unacceptable LOS.

Freeway segments adjacent to the communities were analyzed using their existing freeway classification and future daily freeway traffic volumes as shown in **Table 11**. The following freeway segments would operate at unacceptable LOS:

### AM PEAK

- I-5 NB between SR-94 and Old Town Avenue
- I-8 WB between SR-15 and Hotel Circle East
- SR-15 SB between SR-94 and I-805
- I-805 NB between SR-15 and I-8
- SR-94 WB between SR-15 and 25th Street
- SR-163 NB between Washington Street and I-8
- SR-163 SB between I-8 and I-5

### PM PEAK

- I-5 NB between SR-94 and Old Town Avenue
- I-5 SB between Old Town Avenue and SR-94
- I-8 WB between SR-15 and I-805
- I-8 EB between Hotel Circle East and SR-15
- SR-15 SB between SR-94 and I-805
- SR-15 NB between I-805 and SR-94
- I-805 NB between SR-15 and University Avenue
- I-805 SB between I-8 and SR-15
- SR-94 EB between 25th Street and SR-15

- SR-163 NB between I-5 and I-8
- SR-163 SB between Washington Street and I-5

Freeway ramps within the communities were analyzed using their existing ramp metering rates and future traffic volumes as shown in **Table 12**. As shown in the table, the study area ramp meters are calculated to operate at an acceptable delay of 15 minutes or less, except at three locations. The following ramp meters would experience delays greater than 15 minutes:

- I-5 SB On-ramp from Hancock Street (PM peak)
- I-5 SB On-ramp from Kettner Boulevard (PM peak)
- I-5 SB On-ramp from Fifth Avenue (PM peak)

Washington St/ Hancock St	Washington St/ San Diego Ave	Washington St/ India St	Washington St/ Fourth Ave
Washington St/ Fifth Ave	Washington St/ Eighth Ave/SR-163	Washington St/ Richmond St/SR-163	Washington St/Normal St Campus Ave/Polk Ave
Normal St/El Cajon Blvd Park Blvd	University Ave/ Fourth Ave	University Ave/ Fifth Ave	University Ave/ Sixth Ave
University Ave/ Tenth Ave	University Ave/ Normal St	University Ave/ Park Blvd	Robinson Ave/ Fourth Ave

Legend:



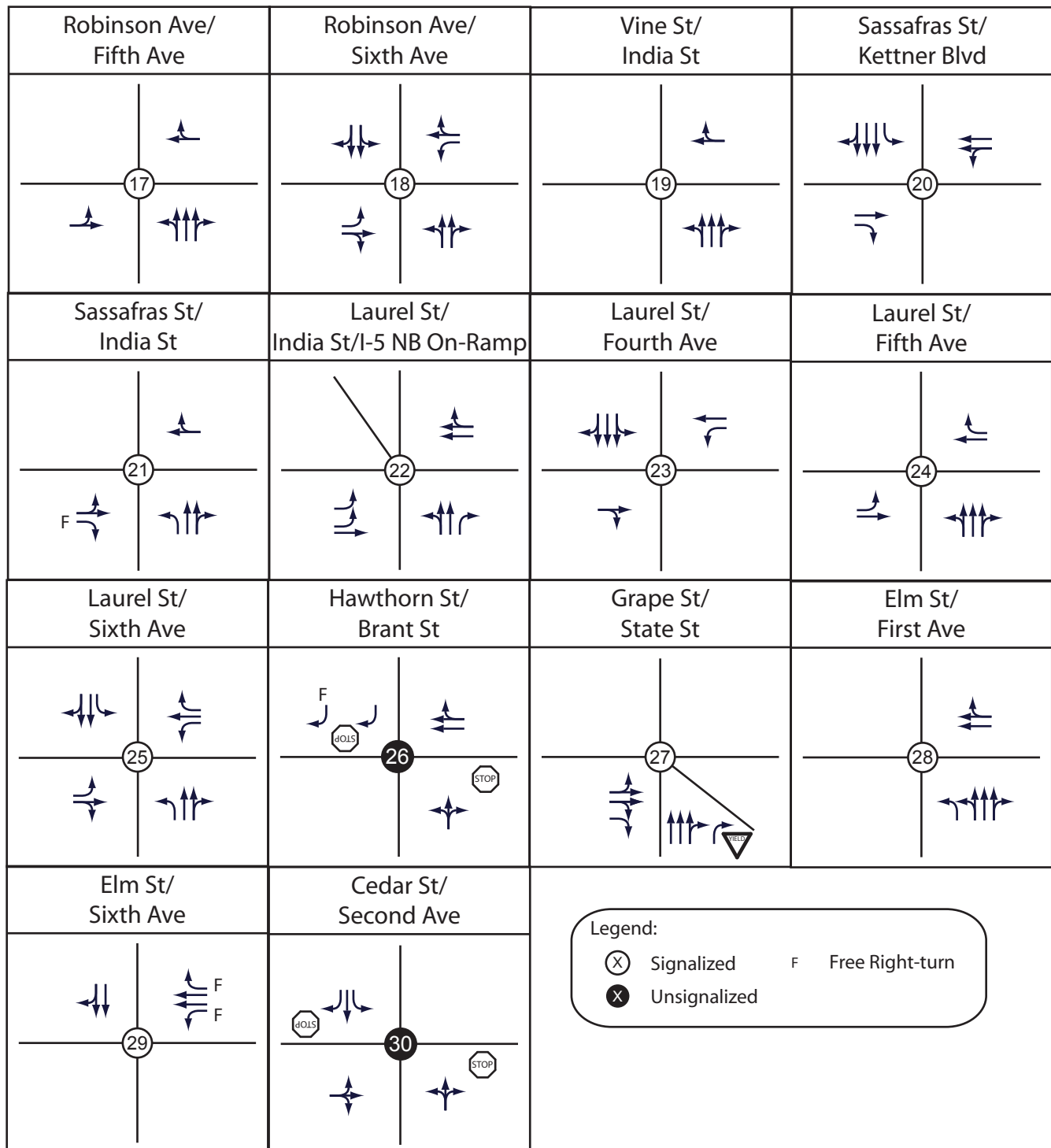
Signalized

F

Free Right-turn

Existing Lane Geometry: Uptown





Madison Ave/ Texas St	El Cajon Blvd/ Texas St	El Cajon Blvd/ 30th St	El Cajon Blvd/ I-805 SB Ramps
El Cajon Blvd/ I-805 NB Ramps	University Ave/ Texas St	University Ave/ 30th St	University Ave/ Boundary St
University Ave/Wabash Ave/I-805 NB Ramps	North Park Wy/I-805 SB/ Boundary St/33rd St	Upas St/ 30th St (W)	

Legend:

- Signalized
- Unsignalized
- F Free Right-turn

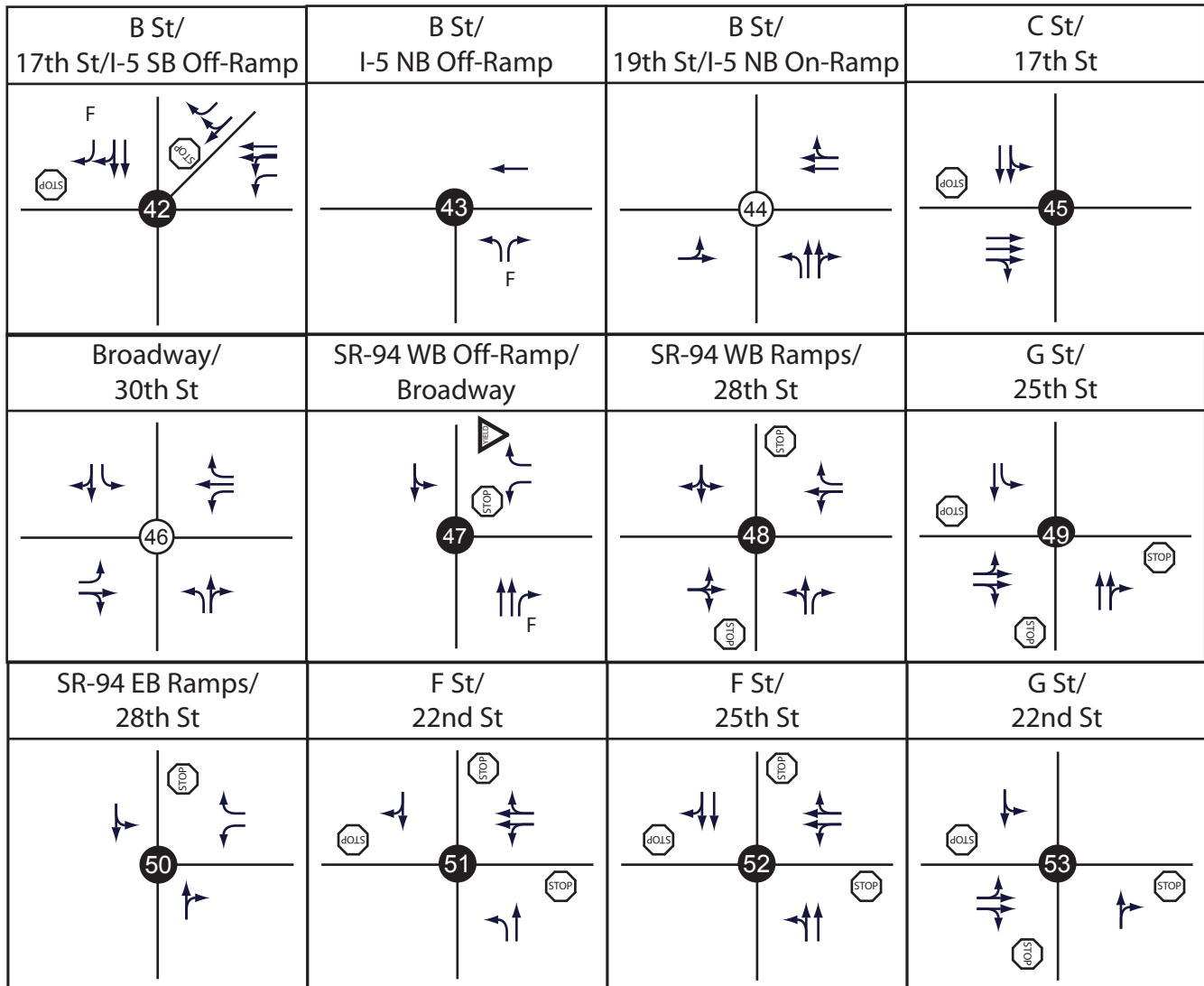


Table 9. Future Year Intersection Analysis Summary

INTERSECTION		TRAFFIC CONTROL	PEAK HOUR	FUTURE YEAR	
				DELAY (a)	LOS (b)
UPTOWN					
1	Washington St & Hancock St	Signal	AM	33.2	C
			PM	51.6	D
2	Washington St & San Diego Ave	Signal	AM	15.4	B
			PM	21.9	C
3	Washington St & India St	Signal	AM	15.8	B
			PM	20.3	C
4	Washington St & Fourth Ave	Signal	AM	31.8	C
			PM	59.9	E
5	Washington St & Fifth Ave	Signal	AM	14.1	B
			PM	19.2	B
6	Washington St & Eighth Ave/SR-163 Off-Ramp	Signal	AM	71.5	E
			PM	331.7	F
7	Washington St & Richmond St/SR-163 On-Ramp	Signal	AM	51.4	D
			PM	33.9	C
8	Washington St/Normal St & Campus Ave/Polk Ave	Signal	AM	62.7	E
			PM	57.3	E
9	Normal St/El Cajon Blvd & Park Blvd	Signal	AM	26.6	C
			PM	43.8	D
10	University Ave & Fourth Ave	Signal	AM	31.8	C
			PM	30.3	C
11	University Ave & Fifth Ave	Signal	AM	13.7	B
			PM	28.0	C
12	University Ave & Sixth Ave	Signal	AM	38.7	D
			PM	55.3	E
13	University Ave & Tenth St	Signal	AM	17.5	B
			PM	37.0	D
14	University Ave & Normal St	Signal	AM	6.3	A
			PM	13.3	B
15	University Ave & Park Blvd	Signal	AM	25.2	C
			PM	42.1	D
16	Robinson Ave & Fourth Ave	Signal	AM	27.0	C
			PM	20.8	C
17	Robinson Ave & Fifth Ave	Signal	AM	12.5	B
			PM	17.5	B
18	Robinson Ave & Sixth Ave	Signal	AM	22.7	C
			PM	30.9	C
19	Vine St & India St	Signal	AM	5.9	A
			PM	8.5	A
20	Sassafras St & Kettner Blvd	Signal	AM	13.2	B
			PM	43.6	D
21	Sassafras St & India St	Signal	AM	8.4	A
			PM	47.4	D

Notes:

**Bold** values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8

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Table 9. Future Year Intersection Analysis Summary (cont.)

INTERSECTION		TRAFFIC CONTROL	PEAK HOUR	FUTURE YEAR	
				DELAY (a)	LOS (b)
UPTOWN (cont.)					
22	Laurel St & India St/I-5 NB On-Ramp	Signal	AM	19.7	B
			PM	29.5	C
23	Laurel St & Fourth Ave	Signal	AM	13.8	B
			PM	23.8	C
24	Laurel St & Fifth Ave	Signal	AM	13.3	B
			PM	17.8	B
25	Laurel St & Sixth Ave	Signal	AM	15.8	B
			PM	27.9	C
26	Hawthorn St & Brant St	Two-Way Stop	AM	10.0	B (SB R)
			PM	12.9	B (SB R)
27	Grape St & State St	Signal	AM	12.6	B
			PM	41.7	D
28	Elm St & First Ave	Signal	AM	17.8	B
			PM	21.0	C
29	Elm St & Sixth Ave	Signal	AM	153.6	F
			PM	18.8	B
30	Cedar St & Second Ave	Two-Way Stop	AM	459.3	F (SB L)
			PM	43.0	E (SB L)
NORTH PARK					
31	Madison Ave & Texas St	Signal	AM	144.4	F
			PM	63.9	E
32	El Cajon Blvd & Texas St	Signal	AM	37.6	D
			PM	85.3	F
33	El Cajon Blvd & 30th St	Signal	AM	29.7	C
			PM	68.1	E
34	El Cajon Blvd & I-805 SB Ramps	Signal	AM	21.9	C
			PM	96.8	F
35	El Cajon Blvd & I-805 NB Ramps	Signal	AM	30.1	C
			PM	24.7	C
36	University Ave & Texas St	Signal	AM	25.5	C
			PM	49.5	D
37	University Ave & 30th St	Signal	AM	26.5	C
			PM	57.8	E
38	University Ave & Boundary St	Signal	AM	26.0	C
			PM	50.0	D
39	University Ave, Wabash Ave & I-805 NB Ramps	Signal	AM	45.5	D
			PM	80.9	F
40	North Park Way/I-805 SB Ramps & Boundary St/33rd St	All-Way Stop	AM	18.1	C
			PM	134.8	F
41	Upas St & 30th St (W)	All-Way Stop	AM	40.1	E
			PM	54.8	F

Notes:

**Bold** values indicate intersections operating at LOS E or F.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 2000 *Highway Capacity Manual* and performed using Synchro 8

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Table 9. Future Year Intersection Analysis Summary (cont.)

INTERSECTION		TRAFFIC CONTROL	PEAK HOUR	FUTURE YEAR	
				DELAY (a)	LOS (b)
GOLDEN HILL					
42	B St & 17th St/I-5 SB Off-Ramp	One-Way Stop	AM	ECL	F (SB TR)
			PM	20.4	C (SB TR)
43	B St & I-5 NB Off-Ramp	No Conflicting Movements	AM	N/A	N/A
			PM	N/A	N/A
44	B St & 19th St/I-5 NB On-Ramp	Signal	AM	11.2	B
			PM	7.1	A
45	C St & 17 St	One-Way Stop	AM	14.3	B (SB TL)
			PM	32.6	D (SB TL)
46	Broadway & 30th St	Signal	AM	14.6	B
			PM	14.3	B
47	SR-94 WB Ramps & Broadway	One-Way Stop	AM	187.5	F (WB L)
			PM	185.9	F (WB L)
48	SR-94 WB Ramps & 28th St	Two-Way Stop	AM	ECL	F (WB LT)
			PM	883.9	F (WB LT)
49	SR-94 EB Ramps & 28th St	One-Way Stop	AM	245.3	F (WB L)
			PM	ECL	F (WB L)
50	F St & 22nd St	All-Way Stop	AM	17.4	C
			PM	8.7	A
51	F St & 25th St	All-Way Stop	AM	82.3	F
			PM	39.4	E
52	G St & 22nd St	All-Way Stop	AM	10.4	B
			PM	10.1	B
53	G St & 25th St	All-Way Stop	AM	55.2	F
			PM	68.0	F

Notes:

**Bold** values indicate intersections operating at LOS E or F.

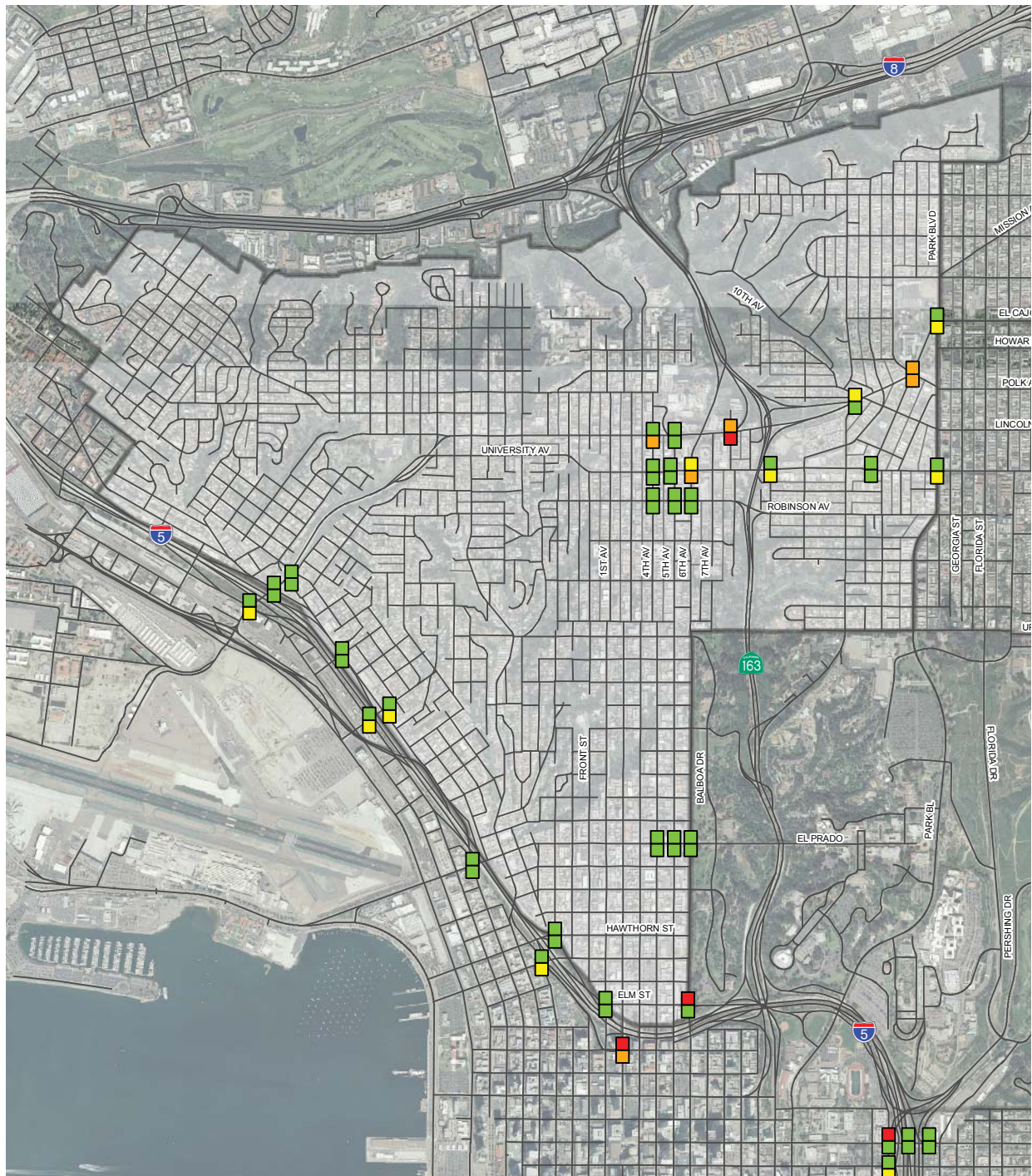
ECL = Exceeds Calculable Limit.

(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a one-way or two-way stop-controlled intersection, delay refers to the worst movement.

(b) LOS calculations are based on the methodology outlined in the 2000 *Highway Capacity Manual* and performed using Synchro 8

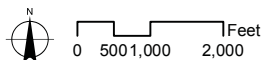
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**LEGEND**

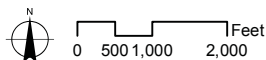
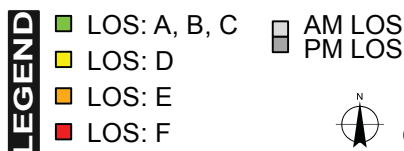
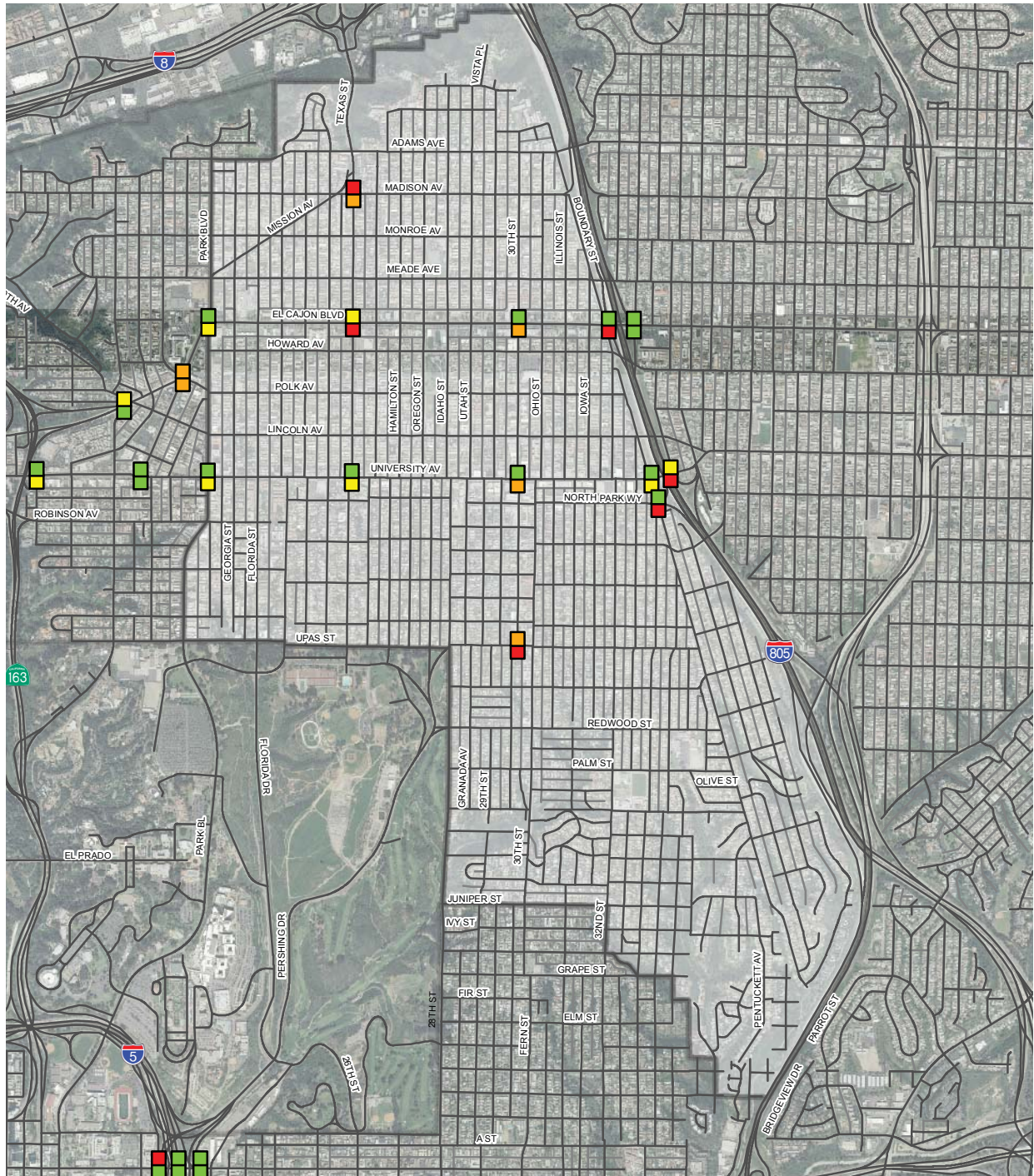
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- LOS: D
- LOS: E
- LOS: F
- AM LOS
- PM LOS



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Future Year Intersection Operation Summary: Uptown

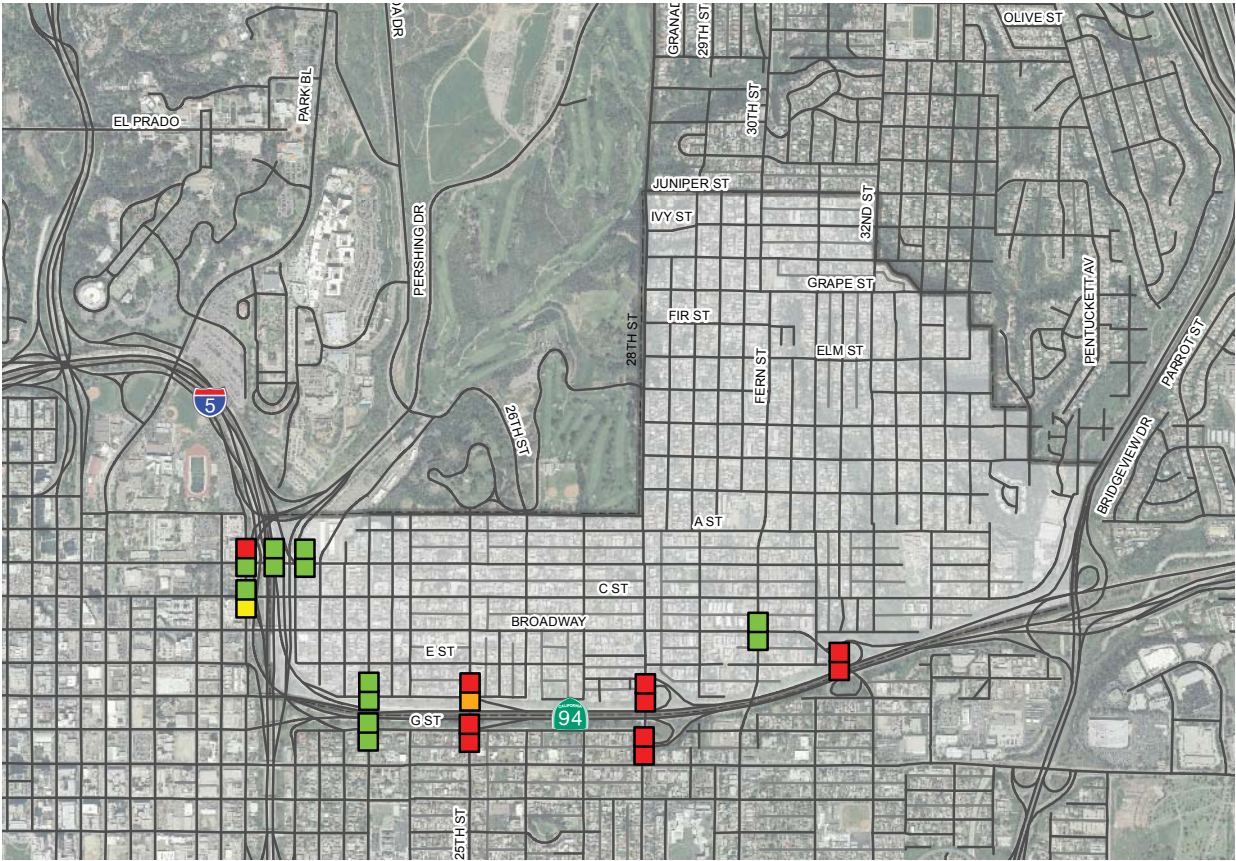




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Future Year Intersection Operation Summary: North Park





**LEGEND**

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LOS: A, B, C

■

LOS: D

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LOS: E

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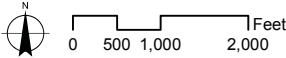
LOS: F

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AM LOS

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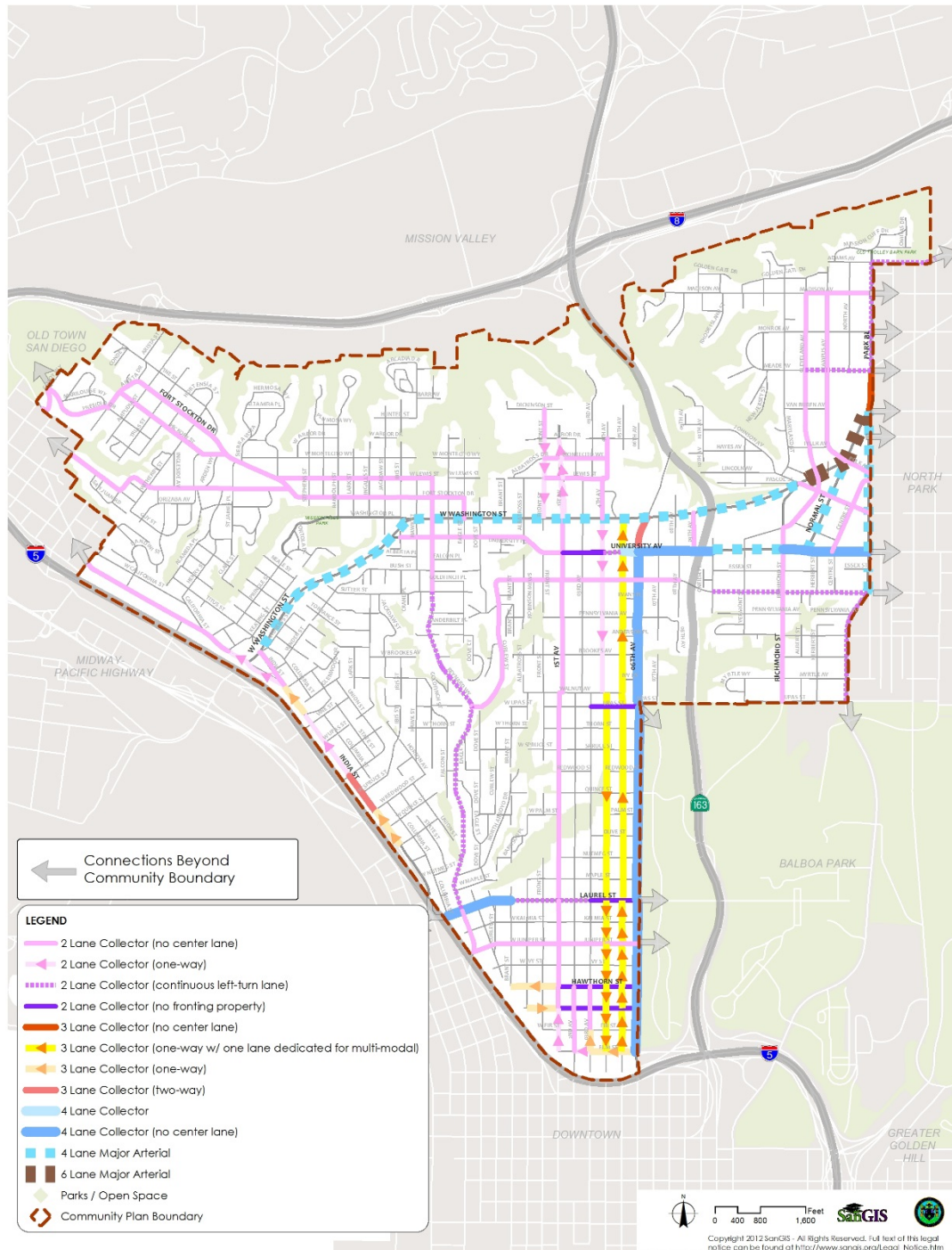
PM LOS



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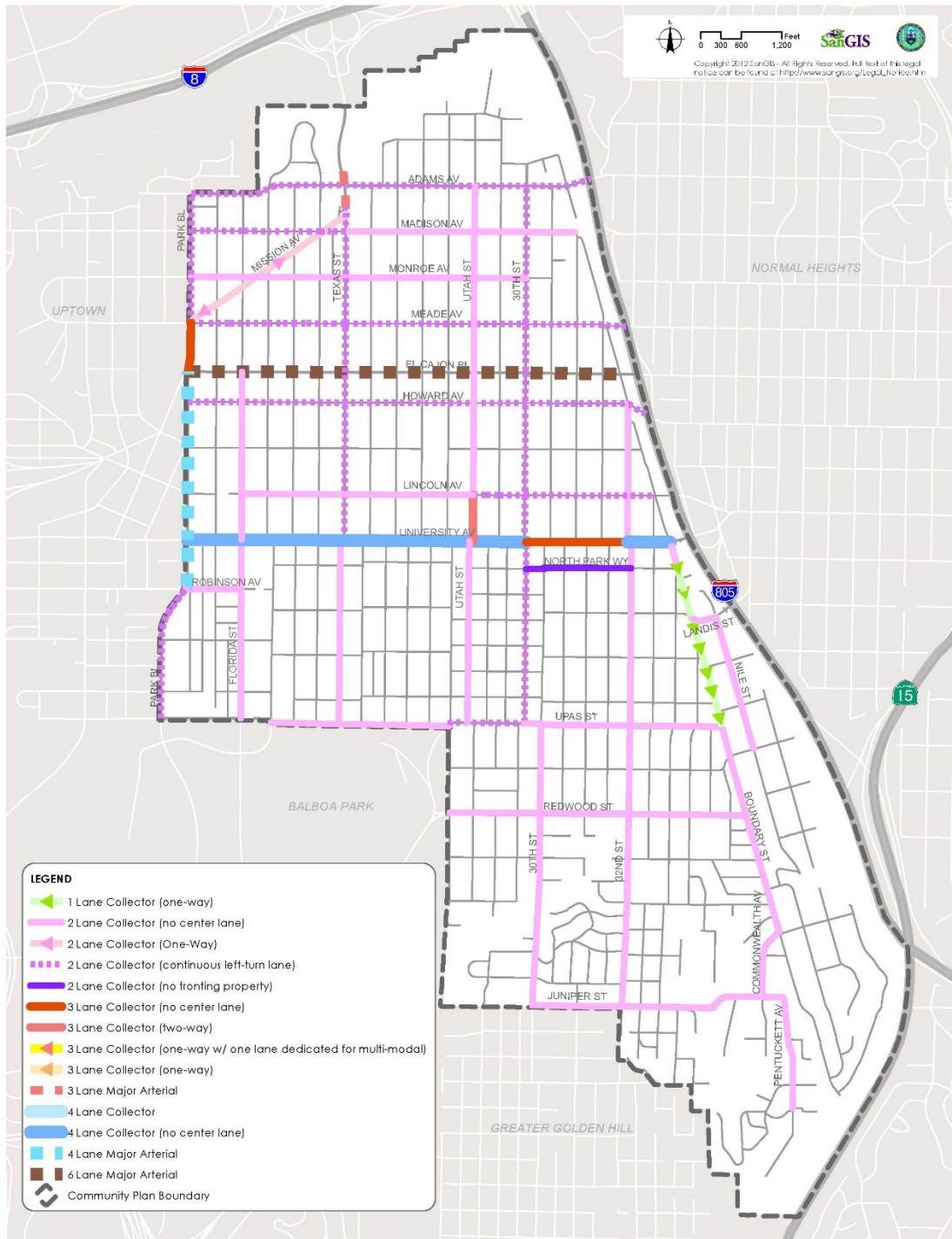
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Future Year Intersection Operation Summary: Golden Hill

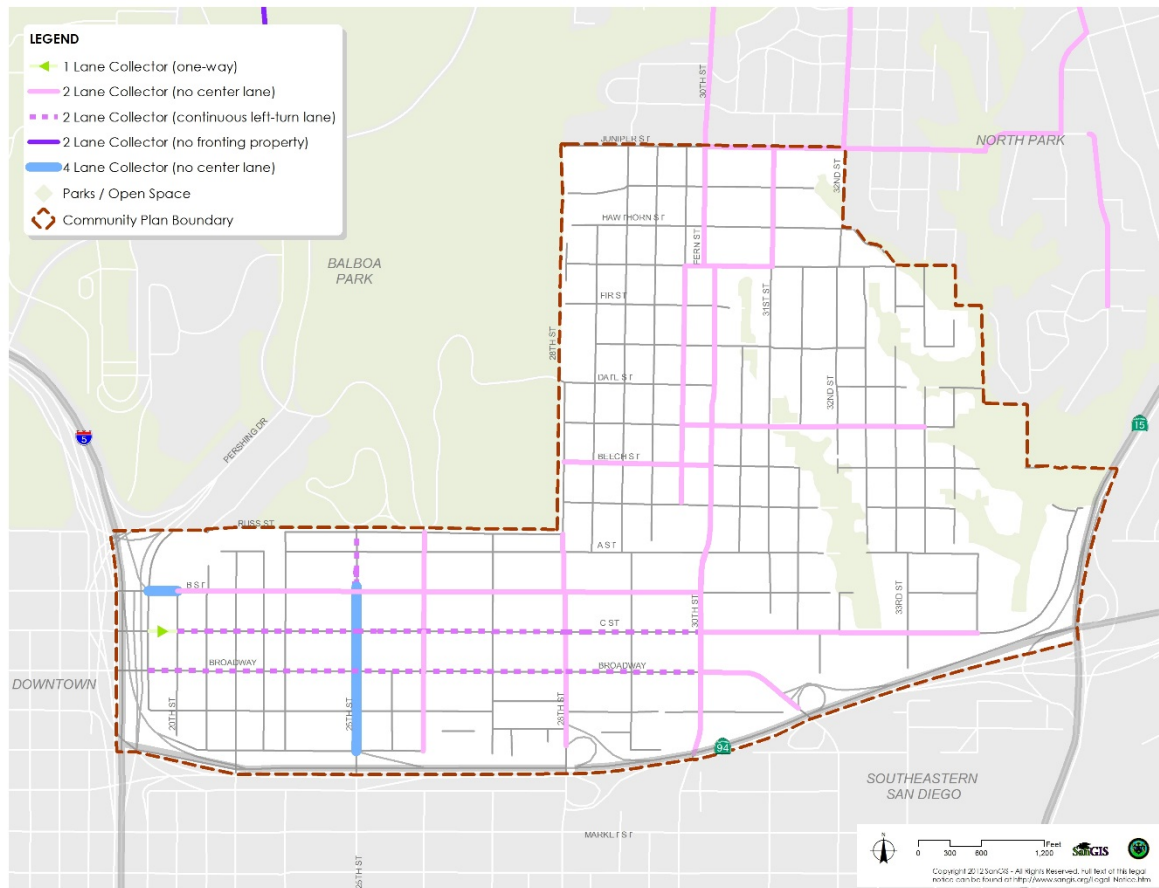


Existing Functional Street Classification: Uptown





Existing Functional Street Classification: North Park



Existing Functional Street Classification: Golden Hill



Table 10. Future Year Roadway Segment Analysis Summary

ROADWAY SEGMENT	ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	FUTURE YEAR ADT	V/C RATIO (a)	LOS
<b>UPTOWN</b>					
<b>First Ave</b>					
Arbor Dr to Washington St	2 Lane Collector (one-way)	17,500	7,500	0.429	B
Washington St to University Ave	2 Lane Collector (no center lane)	8,000	9,100	1.138	F
University Ave to Robinson Ave	2 Lane Collector (no center lane)	8,000	16,300	2.038	F
Robinson Ave to Pennsylvania Ave	2 Lane Collector (no center lane)	8,000	11,500	1.438	F
Pennsylvania Ave to Walnut Ave	2 Lane Collector (no center lane)	8,000	12,800	1.600	F
Walnut Ave to Laurel St	2 Lane Collector (no center lane)	8,000	11,900	1.488	F
Laurel St to Hawthorn St	2 Lane Collector (no center lane)	8,000	8,400	1.050	F
Hawthorn St to Grape St	2 Lane Collector (no center lane)	8,000	6,800	0.850	E
Grape St to Elm St	2 Lane Collector (one-way)	17,500	4,500	0.257	A
<b>Fourth Ave</b>					
Arbor Dr to Washington St	2 Lane Collector (no center lane)	8,000	14,900	1.863	F
Washington St to University Ave	2 Lane Collector (one-way)	17,500	10,400	0.594	C
University Ave to Robinson Ave	2 Lane Collector (one-way)	17,500	12,900	0.737	D
Robinson Ave to Walnut Ave	2 Lane Collector (one-way)	17,500	11,400	0.651	C
Walnut Ave to Laurel St	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	15,100	0.863	E
Laurel St to Grape St	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	13,700	0.783	D
Grape St to Elm St	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	9,700	0.554	C
<b>Fifth Ave</b>					
Washington St to University Ave	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	11,800	0.674	C
University Ave to Robinson Ave	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	14,000	0.800	D
Robinson Ave to Walnut Ave	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	15,800	0.903	E
Walnut Ave to Laurel St	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	14,800	0.846	D
Laurel St to Hawthorn St	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	14,400	0.823	D
Hawthorn St to Grape St	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	14,300	0.817	D
Grape St to Elm St	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	10,100	0.577	C
<b>Sixth Ave</b>					
Washington St to University Ave	3 Lane Collector (two-way)	20,000	45,100	2.255	F
University Ave to Robinson Ave	4 Lane Collector (no center lane)	15,000	32,600	2.173	F
Robinson Ave to Upas St	4 Lane Collector (no center lane)	15,000	29,900	1.993	F
Upas St to Laurel St	4 Lane Collector (no center lane)	15,000	25,900	1.727	F
Laurel St to Juniper St	2 Lane Collector (continuous left-turn lane)	15,000	16,600	1.107	F
Juniper St to Grape St	2 Lane Collector (continuous left-turn lane)	15,000	18,700	1.247	F
Grape St to Elm St	2 Lane Collector (continuous left-turn lane)	15,000	20,300	1.353	F
<b>Ninth Ave</b>					
Washington St to University Ave	2 Lane Collector (no center lane)	8,000	8,000	1.000	F
<b>Campus Ave/Polk Ave</b>					
Madison Ave to Washington St	2 Lane Collector (no center lane)	8,000	5,800	0.725	D
Washington St to Park Blvd	2 Lane Collector (no center lane)	8,000	7,400	0.925	E
<b>Cleveland Ave</b>					
Tyler St to Lincoln Ave	2 Lane Collector (no center lane)	8,000	7,200	0.900	E
Lincoln Ave to Richmond St	2 Lane Collector (no center lane)	8,000	9,600	1.200	F
<b>Curlew St</b>					
Robinson Ave to Reynard Wy	2 Lane Collector (no center lane)	8,000	4,600	0.575	C
<b>Elm St</b>					
Second Ave to Third Ave	2 Lane Collector (one-way)	17,500	8,500	0.486	B
Third Ave to Fifth Ave	3 Lane Collector (one-way)	26,000	9,100	0.350	A
Fifth Ave to Sixth Ave	3 Lane Collector (one-way)	26,000	8,100	0.312	A

Notes:

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(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 10. Future Year Roadway Segment Analysis Summary (cont.)

ROADWAY SEGMENT	ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	FUTURE YEAR ADT	V/C RATIO (a)	LOS
<b>UPTOWN</b>					
<b>Fort Stockton Dr</b>					
Arista St to Sunset Blvd	2 Lane Collector (no center lane)	8,000	4,900	0.613	C
Sunset Blvd to Hawk St	2 Lane Collector (no center lane)	8,000	7,900	0.988	E
Hawk St to Goldfinch St	2 Lane Collector (no center lane)	8,000	8,900	1.113	F
Goldfinch St to Falcon St	2 Lane Collector (no center lane)	8,000	3,300	0.413	B
<b>Front St</b>					
Dickinson St to Arbor Dr	2 Lane Collector (no center lane)	8,000	4,600	0.575	C
Arbor Dr to Washington St	2 Lane Collector (one-way)	17,500	7,900	0.451	B
<b>Grape St</b>					
Albatross St to First Ave	3 Lane Collector (one-way)	26,000	7,300	0.281	A
First Ave to Third Ave	2 Lane Collector (no center lane)	8,000	7,300	0.913	E
Third Ave to Sixth Ave	2 Lane Collector (no center lane)	8,000	9,000	1.125	F
<b>Hawthorn St</b>					
Brant St to First Ave	3 Lane Collector (one-way)	26,000	15,000	0.577	C
First Ave to Third Ave	2 Lane Collector (no center lane)	8,000	7,300	0.913	E
Third Ave to Sixth Ave	2 Lane Collector (no center lane)	8,000	8,700	1.088	F
<b>India St</b>					
Washington St to Winder St	2 Lane Collector (no center lane)	8,000	11,000	1.375	F
Winder St to Glenwood Dr	3 Lane Collector (one-way)	26,000	10,700	0.412	A
Glenwood Dr to Sassafras St	2 Lane Collector (one-way)	17,500	30,000	1.714	F
Sassafras St to Redwood St	3 Lane Collector (two-way)	20,000	21,300	1.065	F
Redwood St to Palm St	3 Lane Collector (one-way)	26,000	20,300	0.781	D
<b>Juan St</b>					
Harney St to Witherby St	2 Lane Collector (no center lane)	8,000	4,600	0.575	C
<b>Laurel St</b>					
Columbia St to Union St	4 Lane Collector (no center lane)	15,000	21,100	1.407	F
Union St to First Ave	2 Lane Collector (continuous left-turn lane)	15,000	17,900	1.193	F
First Ave to Third Ave	2 Lane Collector (continuous left-turn lane)	15,000	16,100	1.073	F
Third Ave to Sixth Ave	2 Lane Collector (continuous left-turn lane)	15,000	20,200	1.347	F
<b>Lewis St</b>					
Fort Stockton Dr to Goldfinch St	2 Lane Collector (no center lane)	8,000	4,100	0.513	C
<b>Lincoln Ave</b>					
Washington St to Park Blvd	2 Lane Collector (no center lane)	8,000	11,100	1.388	F
<b>Madison Ave</b>					
Cleveland Ave to Park Blvd	2 Lane Collector (no center lane)	8,000	6,100	0.763	D
<b>Meade Ave</b>					
Cleveland Ave to Park Blvd	2 Lane Collector (continuous left-turn lane)	15,000	3,500	0.233	A
<b>Normal St</b>					
Park Blvd to Washington St	6 Lane Major Arterial	50,000	28,300	0.566	C
Washington St to University Ave	4 Lane Major Arterial	40,000	4,974	0.124	A

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Table 10. Future Year Roadway Segment Analysis Summary (cont.)

ROADWAY SEGMENT	ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	FUTURE YEAR ADT	V/C RATIO (a)	LOS
<b>UPTOWN</b>					
<b>Park Blvd</b>					
Adams Ave to Mission Ave	2 Lane Collector (continuous left-turn lane)	15,000	14,893	0.993	<b>E</b>
Mission Ave to El Cajon Blvd	3 Lane Collector (no center lane)	11,500	16,300	1.417	<b>F</b>
El Cajon Blvd to Polk Ave	4 Lane Major Arterial	40,000	18,600	0.465	<b>B</b>
Polk Ave to University Ave	4 Lane Major Arterial	40,000	22,500	0.563	<b>C</b>
University Ave to Robinson Ave	4 Lane Major Arterial	40,000	19,800	0.495	<b>B</b>
Robinson Ave to Upas St	2 Lane Collector (continuous left-turn lane)	15,000	17,200	1.147	<b>F</b>
Upas St to Zoo Pl	4 Lane Major Arterial	40,000	17,700	0.443	<b>B</b>
<b>Reynard Wy</b>					
Torrance St to Curlew St	2 Lane Collector (continuous left-turn lane)	15,000	5,300	0.353	<b>B</b>
Curlew St to Laurel St	2 Lane Collector (continuous left-turn lane)	15,000	8,600	0.573	<b>C</b>
<b>Richmond St</b>					
Cleveland Ave to University Ave	2 Lane Collector (no center lane)	8,000	9,000	1.125	<b>F</b>
University Ave to Robinson Ave	2 Lane Collector (no center lane)	8,000	6,700	0.838	<b>E</b>
Robinson Ave to Upas St	2 Lane Collector (no center lane)	8,000	8,100	1.013	<b>F</b>
<b>Robinson Ave</b>					
Brant St to First Ave	2 Lane Collector (no center lane)	8,000	4,600	0.575	<b>C</b>
First Ave to Third Ave	2 Lane Collector (no center lane)	8,000	11,500	1.438	<b>F</b>
Third Ave to Eighth Ave	2 Lane Collector (no center lane)	8,000	14,400	1.800	<b>F</b>
Tenth Ave to Richmond St	2 Lane Collector (continuous left-turn lane)	15,000	12,300	0.820	<b>D</b>
Richmond St to Park Blvd	2 Lane Collector (continuous left-turn lane)	15,000	9,200	0.613	<b>C</b>
<b>San Diego Ave</b>					
Hortensia St to Pringle St	2 Lane Collector (no center lane)	8,000	10,500	1.313	<b>F</b>
McKee St to Washington St	3 Lane Collector (one-way)	26,000	18,200	0.700	<b>C</b>
Washington St to India St	2 Lane Collector (one-way)	17,500	7,100	0.406	<b>A</b>
<b>State St</b>					
Laurel St to Juniper St	2 Lane Collector (no center lane)	8,000	8,200	1.025	<b>F</b>
<b>Sunset Blvd</b>					
Wetherby St to Fort Stockton Dr	2 Lane Collector (no center lane)	8,000	4,600	0.575	<b>C</b>
<b>University Ave</b>					
Ibis St to Albatross St	2 Lane Collector (no center lane)	8,000	14,700	1.838	<b>F</b>
Albatross St to First Ave	2 Lane Collector (no center lane)	8,000	20,800	2.600	<b>F</b>
First Ave to Fourth Ave	2 Lane Collector (no fronting property)	10,000	14,100	1.410	<b>F</b>
Fourth Ave to Fifth Ave	2 Lane Collector (continuous left-turn lane)	15,000	21,600	1.440	<b>F</b>
Fifth Ave to Sixth Ave	4 Lane Collector	30,000	24,900	0.830	<b>D</b>
Sixth Ave to Eighth Ave	4 Lane Collector (no center lane)	15,000	29,300	1.953	<b>F</b>
Vermont St to Normal St	4 Lane Major Arterial	40,000	25,600	0.640	<b>C</b>
Normal St to Park Blvd	4 Lane Collector (no center lane)	15,000	21,200	1.413	<b>F</b>
<b>Upas St</b>					
Third Ave to Sixth Ave	2 Lane Collector (no fronting property)	10,000	8,500	0.850	<b>D</b>
<b>Washington St</b>					
India St to University Ave	4 Lane Major Arterial	40,000	34,800	0.870	<b>D</b>
University Ave to First Ave	4 Lane Major Arterial	40,000	25,400	0.635	<b>C</b>
First Ave to Fourth Ave	4 Lane Major Arterial	40,000	25,745	0.644	<b>C</b>
Fourth Ave to Fifth Ave	4 Lane Major Arterial	40,000	37,300	0.933	<b>E</b>
Fifth Ave to Sixth Ave	4 Lane Major Arterial	40,000	41,100	1.028	<b>F</b>
Sixth Ave to Richmond St	4 Lane Major Arterial	40,000	41,778	1.044	<b>F</b>
Richmond St to Normal St	6 Lane Major Arterial	50,000	47,100	0.942	<b>E</b>

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Table 10. Future Year Roadway Segment Analysis Summary (cont.)

ROADWAY SEGMENT	ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	FUTURE YEAR ADT	V/C RATIO (a)	LOS
<b>NORTH PARK</b>					
<b>30th St</b>					
Adams Ave to Meade Ave	2 Lane Collector (continuous left-turn lane)	15,000	10,400	0.693	D
Meade Ave to El Cajon Blvd	2 Lane Collector (continuous left-turn lane)	15,000	14,400	0.960	E
El Cajon Blvd to Howard Ave	2 Lane Collector (continuous left-turn lane)	15,000	12,684	0.846	D
Howard Ave to Lincoln Ave	2 Lane Collector (continuous left-turn lane)	15,000	17,900	1.193	F
Lincoln Ave to University Ave	2 Lane Collector (continuous left-turn lane)	15,000	14,000	0.933	E
University Ave to North Park Way	2 Lane Collector (continuous left-turn lane)	15,000	12,500	0.833	D
North Park Way Ave to Upas St	2 Lane Collector (continuous left-turn lane)	15,000	16,500	1.100	F
Upas St to Redwood St	2 Lane Collector (no center lane)	8,000	11,900	1.488	F
Redwood St to Juniper St	2 Lane Collector (no center lane)	8,000	12,100	1.513	F
<b>32nd St</b>					
Howard Ave to Lincoln Ave	2 Lane Collector (no center lane)	8,000	4,400	0.550	C
Lincoln Ave to University Ave	2 Lane Collector (no center lane)	8,000	3,300	0.413	B
University Ave to Myrtle Ave	2 Lane Collector (no center lane)	8,000	11,200	1.400	F
Myrtle Ave to Upas St	2 Lane Collector (no center lane)	8,000	7,900	0.988	E
Upas St to Redwood St	2 Lane Collector (no center lane)	8,000	5,200	0.650	D
Redwood St to Juniper St	2 Lane Collector (no center lane)	8,000	2,600	0.325	B
<b>Adams Ave</b>					
Park Blvd to Alabama St	2 Lane Collector (continuous left-turn lane)	15,000	7,400	0.493	C
Alabama St to Texas St	2 Lane Collector (continuous left-turn lane)	15,000	8,966	0.598	C
Texas St to 30th St	2 Lane Collector (continuous left-turn lane)	15,000	13,800	0.920	E
30th St to W Mountain View Dr	2 Lane Collector (continuous left-turn lane)	15,000	19,929	1.329	F
<b>Boundary St</b>					
University Ave to North Park Way	2 Lane Collector (no center lane)	8,000	16,000	2.000	F
North Park Way to Myrtle Ave	1 Lane Collector (one-way)	7,500	3,300	0.440	B
Myrtle Ave to Redwood St	2 Lane Collector (no center lane)	8,000	6,000	0.750	D
Redwood St to Commonwealth Ave	2 Lane Collector (no center lane)	8,000	3,900	0.488	C
<b>Commonwealth Ave</b>					
Boundary St to Juniper St	2 Lane Collector (no center lane)	8,000	2,800	0.350	B
<b>El Cajon Blvd</b>					
Park Blvd to Florida St	6 Lane Major Arterial	50,000	27,100	0.542	B
Florida St to Texas St	6 Lane Major Arterial	50,000	34,600	0.692	C
Texas St to Oregon St	6 Lane Major Arterial	50,000	34,800	0.696	C
Oregon St to Utah St	6 Lane Major Arterial	50,000	42,800	0.856	D
Utah St to 30th St	6 Lane Major Arterial	50,000	39,800	0.796	C
30th St to Illinois St	6 Lane Major Arterial	50,000	48,800	0.976	E
Illinois St to I-805 Ramps	6 Lane Major Arterial	50,000	58,900	1.178	F
<b>Florida St</b>					
El Cajon Blvd to University Ave	2 Lane Collector (no center lane)	8,000	7,400	0.925	E
University Ave to Robinson Ave	2 Lane Collector (no center lane)	8,000	8,800	1.100	F
Robinson Ave to Upas St	2 Lane Collector (no center lane)	8,000	6,800	0.850	E
<b>Florida Dr</b>					
Upas St to Morley Field Dr	2 Lane Collector (no fronting property)	10,000	6,700	0.670	C
<b>Howard Ave</b>					
Park Blvd to Florida St	2 Lane Collector (no center lane)*	8,000	4,800	0.600	C
Florida St to Texas St	2 Lane Collector (no center lane)*	8,000	3,900	0.488	C
Texas St to Utah St	2 Lane Collector (no center lane)*	8,000	11,300	1.413	F
Utah St to 30th St	2 Lane Collector (no center lane)*	8,000	10,200	1.275	F
30th St to 32nd St	2 Lane Collector (no center lane)*	8,000	10,500	1.313	F

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Table 10. Future Year Roadway Segment Analysis Summary (cont.)

ROADWAY SEGMENT	ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	FUTURE YEAR ADT	V/C RATIO (a)	LOS
<b>NORTH PARK</b>					
<b>Juniper St</b>					
30th St to 32nd St	2 Lane Collector (no center lane)	8,000	6,200	0.775	D
32nd St to Commonwealth Ave	2 Lane Collector (no center lane)	8,000	4,400	0.550	C
<b>Landis St</b>					
Boundary St to Nile St	2 Lane Collector (no center lane)	8,000	4,000	0.500	C
<b>Lincoln Ave</b>					
Florida St to Texas St	2 Lane Collector (no center lane)	8,000	4,300	0.538	C
Texas St to Utah St	2 Lane Collector (no center lane)	8,000	3,200	0.400	B
Utah St to 30th St	2 Lane Collector (continuous left-turn lane)	15,000	7,500	0.500	C
30th St to 32nd St	2 Lane Collector (continuous left-turn lane)	15,000	9,200	0.613	C
32nd St to Boundary St	2 Lane Collector (continuous left-turn lane)	15,000	9,800	0.653	C
<b>Madison Ave</b>					
Park Blvd to Mission Ave	2 Lane Collector (continuous left-turn lane)	15,000	8,100	0.540	C
Mission Ave to Texas St	2 Lane Collector (continuous left-turn lane)	15,000	10,300	0.687	D
Texas St to Ohio St	2 Lane Collector (no center lane)	8,000	12,200	1.525	F
<b>Meade Ave</b>					
Park Blvd to Texas St	2 Lane Collector (no center lane)*	8,000	8,200	1.025	F
Texas St to 30th St	2 Lane Collector (no center lane)*	8,000	9,900	1.238	F
30th St to Illinois Ave	2 Lane Collector (no center lane)*	8,000	11,500	1.438	F
Illinois St to Iowa St	2 Lane Collector (no center lane)*	8,000	11,900	1.488	F
<b>Mission Ave</b>					
Park Blvd to Mississippi St	2 Lane Collector (one-way)	17,500	3,700	0.211	A
<b>Monroe Ave</b>					
Park Blvd to Mission Ave	2 Lane Collector (no center lane)	8,000	3,200	0.400	B
Mission Ave to Texas St	2 Lane Collector (no center lane)	8,000	5,500	0.688	D
Texas St to 30th St	2 Lane Collector (no center lane)	8,000	5,700	0.713	D
<b>Nile St</b>					
Landis St to Thorn St	2 Lane Collector (no center lane)	8,000	5,000	0.625	D
<b>North Park Way</b>					
30th St to 32nd St	2 Lane Collector (no fronting property)	10,000	8,500	0.850	D
32nd St to Boundary St	2 Lane Collector (no fronting property)	10,000	10,600	1.060	F
<b>Orange Ave/Howard Ave</b>					
Iowa St to I-805	2 Lane Collector (continuous left-turn lane)	15,000	8,200	0.547	C
<b>Pentuckett Ave</b>					
Juniper St to Fir St	2 Lane Collector (no center lane)	8,000	2,300	0.288	A
<b>Pershing Dr</b>					
Upas St to Redwood St	2 Lane Collector (continuous left-turn lane)	15,000	10,500	0.700	D
<b>Redwood St</b>					
28th St to 30th St	2 Lane Collector (no center lane)	8,000	7,200	0.900	E
30th St to 32nd St	2 Lane Collector (no center lane)	8,000	4,912	0.614	C
32nd St to Boundary St	2 Lane Collector (no center lane)	8,000	4,400	0.550	C
<b>Robinson Ave</b>					
Park Blvd to Florida St	2 Lane Collector (no center lane)	8,000	5,900	0.738	D

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Table 10. Future Year Roadway Segment Analysis Summary (cont.)

ROADWAY SEGMENT	ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	FUTURE YEAR ADT	V/C RATIO (a)	LOS
<b>NORTH PARK</b>					
<b>Texas St</b>					
Adams Ave to Mission Ave	3 Lane Major Arterial	30,000	39,100	1.303	<b>F</b>
Mission Ave to El Cajon Blvd	2 Lane Collector (continuous left-turn lane)	15,000	38,300	2.553	<b>F</b>
El Cajon Blvd to Howard Ave	2 Lane Collector (continuous left-turn lane)	15,000	12,700	0.847	D
Howard Ave to University Ave	2 Lane Collector (continuous left-turn lane)	15,000	14,400	0.960	<b>E</b>
University Ave to Myrtle Ave	2 Lane Collector (no center lane)	8,000	5,700	0.713	D
Myrtle Ave to Upas St	2 Lane Collector (no center lane)	8,000	4,100	0.513	C
<b>University Ave</b>					
Park Blvd to Florida St	4 Lane Collector (no center lane)	15,000	23,900	1.593	<b>F</b>
Florida St to Texas St	4 Lane Collector (no center lane)	15,000	21,611	1.441	<b>F</b>
Texas St to Oregon St	4 Lane Collector (no center lane)	15,000	23,700	1.580	<b>F</b>
Oregon St to Utah St	4 Lane Collector (no center lane)	15,000	22,900	1.527	<b>F</b>
Utah St to 30th St	4 Lane Collector (no center lane)	15,000	20,800	1.387	<b>F</b>
30th St to Illinois St	3 Lane Collector (no center lane)	11,500	22,800	1.983	<b>F</b>
Illinois St to 32nd St	3 Lane Collector (no center lane)	11,500	22,600	1.965	<b>F</b>
32nd St to Boundary St	4 Lane Collector (no center lane)	15,000	29,600	1.973	<b>F</b>
<b>Upas St</b>					
Alabama St to Texas St	2 Lane Collector (no center lane)	8,000	8,600	1.075	<b>F</b>
Texas St to Pershing Rd	2 Lane Collector (no center lane)	8,000	11,500	1.438	<b>F</b>
Pershing Rd to 30th St	2 Lane Collector (continuous left-turn lane)	15,000	16,300	1.087	<b>F</b>
30th St to 32nd St	2 Lane Collector (no center lane)	8,000	6,100	0.763	D
32nd St to Boundary St	2 Lane Collector (no center lane)	8,000	2,700	0.338	B
<b>Utah St</b>					
Adams Ave to Monroe Ave	2 Lane Collector (no center lane)	8,000	5,000	0.625	D
Meade Ave to El Cajon Blvd	2 Lane Collector (no center lane)	8,000	5,300	0.663	D
El Cajon Blvd to Howard Ave	2 Lane Collector (no center lane)	8,000	6,400	0.800	D
Howard Ave to Lincoln Ave	2 Lane Collector (no center lane)	8,000	7,300	0.913	<b>E</b>
Lincoln Ave to University Ave	3 Lane Collector (no center lane)	11,500	4,700	0.409	B
University Ave to North Park Way	2 Lane Collector (no center lane)	8,000	5,100	0.638	D
North Park Way to Upas St	2 Lane Collector (no center lane)	8,000	7,500	0.938	<b>E</b>

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Table 10. Future Year Roadway Segment Analysis Summary (cont.)

ROADWAY SEGMENT	ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	FUTURE YEARADT	V/C RATIO (a)	LOS
<b>GOLDEN HILL</b>					
<b>25th St</b>					
Russ Blvd to B St	2 Lane Collector (continuous left-turn lane)	15,000	7,800	0.520	C
B St to Broadway	2 Lane Collector (continuous left-turn lane)	15,000	10,900	0.727	D
Broadway to F St	2 Lane Collector (continuous left-turn lane)	15,000	17,400	1.160	F
<b>26th St</b>					
Russ Blvd to B St	2 Lane Collector (no center lane)	8,000	9,152	1.144	F
B St to C St	2 Lane Collector (no center lane)	8,000	5,100	0.638	D
<b>28th St</b>					
Russ Blvd to C St	2 Lane Collector (no center lane)	8,000	8,800	1.100	F
C St to Broadway	2 Lane Collector (no center lane)	8,000	10,500	1.313	F
Broadway to SR-94	2 Lane Collector (no center lane)	8,000	19,100	2.388	F
<b>30th St</b>					
Grape St to Ash St	2 Lane Collector (no center lane)	8,000	6,900	0.863	E
A St to Broadway	2 Lane Collector (no center lane)	8,000	19,800	2.475	F
Broadway to SR-94	2 Lane Collector (no center lane)	8,000	9,500	1.188	F
<b>31st St</b>					
Juniper St to Grape St	2 Lane Collector (no center lane)	8,000	4,700	0.588	C
<b>B St</b>					
19th St to 20th St	4 Lane Collector (no center lane)	15,000	6,500	0.433	B
20th St to 25th St	2 Lane Collector (no center lane)	8,000	5,400	0.675	D
25th St to 26th St	2 Lane Collector (no center lane)	8,000	7,500	0.938	E
26th St to 28th St	2 Lane Collector (no center lane)	8,000	7,100	0.888	E
28th St to 30th St	2 Lane Collector (no center lane)	8,000	5,700	0.713	D
<b>Beech St</b>					
28th St to Fern St	2 Lane Collector (no center lane)	8,000	6,200	0.775	D
<b>Broadway</b>					
19th St to 20th St	2 Lane Collector (continuous left-turn lane)	15,000	6,000	0.400	B
20th St to 25th St	2 Lane Collector (continuous left-turn lane)	15,000	8,000	0.533	C
25th St to 28th St	2 Lane Collector (continuous left-turn lane)	15,000	5,500	0.367	B
28th St to 30th St	2 Lane Collector (continuous left-turn lane)	15,000	4,900	0.327	A
30th St to SR-94	2 Lane Collector (no center lane)	8,000	15,811	1.976	F
<b>C St</b>					
19th St to 20th St	1 Lane Collector (one-way)	7,500	6,100	0.813	D
20th St to 25th St	2 Lane Collector (continuous left-turn lane)	15,000	4,500	0.300	A
25th St to 28th St	2 Lane Collector (continuous left-turn lane)	15,000	5,500	0.367	B
28th St to 30th St	2 Lane Collector (continuous left-turn lane)	15,000	4,100	0.273	A
30th St to 34th St	2 Lane Collector (no center lane)	8,000	7,900	0.988	E
<b>Cedar St</b>					
Fern St to Felton St	2 Lane Collector (no center lane)	8,000	3,400	0.425	B
<b>Fern St</b>					
Juniper St to Grape St	2 Lane Collector (no center lane)	8,000	8,900	1.113	F
Grape St to A St	2 Lane Collector (no center lane)	8,000	15,000	1.875	F
<b>Grape St</b>					
30th St to 31st St	2 Lane Collector (no center lane)	8,000	9,000	1.125	F

Notes:

**Bold** values indicate roadway segments operating at LOS E or F.

Capacity for non-standard roadway classifications were provided by City of San Diego staff.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 11. Future Year Freeway Segment Analysis Summary

FREEWAY SEGMENT	DIRECTION	NUMBER OF LANES	CAPACITY (a)	FUTURE YEAR							
				ADT (b)	K (PEAK HOUR %)	D (DIRECTIONAL SPLIT)	TRUCK %	TRUCK FACTOR	PEAK-HOUR VOLUME (c)	V/C RATIO	LOS
AM PEAK											
I-5											
Old Town Ave to Washington St	NB	4 M + 1 A	9,200	247,000	0.072	0.597	4.10%	0.980	10,885	1.18	F0
	SB	4 M + 1 A	9,200		0.072	0.403	4.10%	0.980	7,339	0.80	C
Washington St to Pacific Highway	NB	4 M	8,000	199,000	0.072	0.597	4.10%	0.980	8,770	1.10	F0
	SB	4 M	8,000		0.072	0.403	4.10%	0.980	5,913	0.74	C
First Ave to Sixth Ave	NB	4 M + 1 A	9,200	280,000	0.072	0.597	4.10%	0.980	12,340	1.34	F1
	SB	5 M + 1 A	11,200		0.072	0.403	4.10%	0.980	8,319	0.74	C
SR-163 to SR-94	NB	5 M + 1 A	11,200	297,000	0.076	0.560	4.50%	0.978	12,866	1.15	F0
	SB	5 M + 1 A	11,200		0.076	0.440	4.50%	0.978	10,093	0.90	D
SR-94 to Imperial Ave	NB	4 M + 1 A	9,200	226,000	0.076	0.560	4.50%	0.978	9,790	1.06	F0
	SB	4 M + 1 A	9,200		0.076	0.440	4.50%	0.978	7,680	0.83	D
I-8											
Hotel Circle (W) to Hotel Circle (E)	WB	4 M + 1 A	9,200	246,000	0.074	0.668	3.20%	0.984	12,266	1.33	F1
	EB	4 M	8,000		0.074	0.332	3.20%	0.984	6,104	0.76	C
Mission Center Rd to Qualcomm Wy	WB	4 M + 1 A	9,200	252,000	0.074	0.668	3.20%	0.984	12,565	1.37	F2
	EB	4 M + 1 A	9,200		0.074	0.332	3.20%	0.984	6,253	0.68	C
I-805 to SR-15	WB	4 M + 1 A	9,200	270,000	0.078	0.669	3.00%	0.985	14,217	1.55	F2
	EB	4 M + 1 A	9,200		0.078	0.332	3.00%	0.985	7,050	0.77	C
SR-15											
I-805 to SR-94	NB	3 M + 1 A	7,200	152,000	0.079	0.455	4.98%	0.976	5,559	0.77	C
	SB	2 M + 1 A	5,200		0.079	0.545	4.98%	0.976	6,670	1.28	F1
I-805											
I-8 to Adams Ave	NB	4 M + 1 A	9,200	293,800	0.063	0.731	6.00%	0.971	13,938	1.52	F2
	SB	5 M + 1 A	11,200		0.063	0.269	6.00%	0.971	5,126	0.46	B
El Cajon Blvd to University Ave	NB	4 M	8,000	240,700	0.063	0.731	6.00%	0.971	11,419	1.43	F2
	SB	4 M + 1 A	9,200		0.063	0.269	6.00%	0.971	4,200	0.46	B
University Ave to SR-15	NB	4 M + 1 A	9,200	235,200	0.062	0.742	6.00%	0.971	11,101	1.21	F0
	SB	4 M + 1 A	9,200		0.062	0.259	6.00%	0.971	3,870	0.42	B
SR-94											
25th St to 28th St	WB	4 M	8,000	179,000	0.075	0.725	3.60%	0.982	9,926	1.24	F0
	EB	4 M	8,000		0.075	0.275	3.60%	0.982	3,759	0.47	B
28th St to 30th St	WB	4 M	8,000	188,000	0.075	0.725	3.60%	0.982	10,425	1.30	F1
	EB	4 M	8,000		0.075	0.275	3.60%	0.982	3,948	0.49	B
Broadway to SR-15	WB	4 M	8,000	204,000	0.075	0.725	3.60%	0.982	11,312	1.41	F2
	EB	4 M + 1 A	9,200		0.075	0.275	3.60%	0.982	4,284	0.47	B
SR-163											
I-8 to Washington St	NB	3 M + 1 A	7,200	163,000	0.090	0.541	3.70%	0.982	8,071	1.12	F0
	SB	3 M + 1 A	7,200		0.090	0.459	3.70%	0.982	6,837	0.95	E
Washington St to Robinson Ave	NB	2 M	4,000	115,400	0.091	0.310	3.70%	0.982	3,321	0.83	D
	SB	2 M	4,000		0.091	0.690	3.70%	0.982	7,386	1.85	F2
Quince Dr to I-5	NB	2 M	4,000	127,000	0.091	0.310	3.70%	0.982	3,655	0.91	D
	SB	2 M	4,000		0.091	0.690	3.70%	0.982	8,128	2.03	F3

Notes:  
**Bold** values indicate freeway segments operating at LOS E or F.  
M=Main Lane, A= Auxiliary Lane.  
(a) The capacity is calculated as 2,000 ADT per main lane and 1,200 ADT per auxiliary lane.  
(b) Traffic volumes provided by City of San Diego model.  
(c) Peak-hour volume calculated by: (ADT\*(K\*D)/Truck Factor  
K=SDND TPTD/0.9524042 E=sdnd12002F001.sdsSummary

Table 11. Future Year Freeway Segment Analysis

FREEWAY SEGMENT	DIRECTION	NUMBER OF LANES	CAPACITY (a)	FUTURE YEAR							
				PM PEAK							
				ADT (b)	K (PEAK HOUR %)	D (DIRECTIONAL SPLIT)	TRUCK %	TRUCK FACTOR	PEAK-HOUR VOLUME (c)	V/C RATIO	LOS
I-5											
Old Town Ave to Washington St	NB	4 M + 1 A	9,200	247,000	0.080	0.457	4.10%	0.980	9,196	1.00	E
	SB	4 M + 1 A	9,200		0.080	0.543	4.10%	0.980	10,918	1.19	F0
Washington St to Pacific Highway	NB	4 M	8,000	199,000	0.080	0.457	4.10%	0.980	7,409	0.93	E
	SB	4 M	8,000		0.080	0.543	4.10%	0.980	8,796	1.10	F0
First Ave to Sixth Ave	NB	4 M + 1 A	9,200	280,000	0.080	0.457	4.10%	0.980	10,425	1.13	F0
	SB	5 M + 1 A	11,200		0.080	0.543	4.10%	0.980	12,377	1.11	F0
SR-163 to SR-94	NB	5 M + 1 A	11,200	297,000	0.085	0.474	4.50%	0.978	12,222	1.09	F0
	SB	5 M + 1 A	11,200		0.085	0.527	4.50%	0.978	13,591	1.21	F0
SR-94 to Imperial Ave	NB	4 M + 1 A	9,200	226,000	0.085	0.474	4.50%	0.978	9,301	1.01	F0
	SB	4 M + 1 A	9,200		0.085	0.527	4.50%	0.978	10,342	1.12	F0
I-8											
Hotel Circle (W) to Hotel Circle (E)	WB	4 M + 1 A	9,200	246,000	0.079	0.414	3.20%	0.984	8,175	0.89	D
	EB	4 M	8,000		0.079	0.587	3.20%	0.984	11,595	1.45	F2
Mission Center Rd to Qualcomm Wy	WB	4 M + 1 A	9,200	252,000	0.079	0.414	3.20%	0.984	8,374	0.91	D
	EB	4 M + 1 A	9,200		0.079	0.587	3.20%	0.984	11,878	1.29	F1
I-805 to SR-15	WB	4 M + 1 A	9,200	270,000	0.082	0.379	3.00%	0.985	8,464	0.92	E
	EB	4 M + 1 A	9,200		0.082	0.622	3.00%	0.985	13,898	1.51	F2
SR-15											
I-805 to SR-94	NB	3 M + 1 A	7,200	152,000	0.097	0.532	4.98%	0.976	8,065	1.12	F0
	SB	2 M + 1 A	5,200		0.097	0.469	4.98%	0.976	7,109	1.37	F2
I-805											
I-8 to Adams Ave	NB	4 M + 1 A	9,200	293,800	0.080	0.402	6.00%	0.971	9,776	1.06	F0
	SB	5 M + 1 A	11,200		0.080	0.598	6.00%	0.971	14,524	1.30	F1
El Cajon Blvd to University Ave	NB	4 M	8,000	240,700	0.080	0.402	6.00%	0.971	8,009	1.00	F0
	SB	4 M + 1 A	9,200		0.080	0.598	6.00%	0.971	11,899	1.29	F1
University Ave to SR-15	NB	4 M + 1 A	9,200	235,200	0.079	0.419	6.00%	0.971	7,976	0.87	D
	SB	4 M + 1 A	9,200		0.079	0.581	6.00%	0.971	11,065	1.20	F0
SR-94											
25th St to 28th St	WB	4 M	8,000	179,000	0.092	0.292	3.60%	0.982	4,893	0.61	B
	EB	4 M	8,000		0.092	0.708	3.60%	0.982	11,853	1.48	F2
28th St to 30th St	WB	4 M	8,000	188,000	0.092	0.292	3.60%	0.982	5,139	0.64	C
	EB	4 M	8,000		0.092	0.708	3.60%	0.982	12,449	1.56	F2
Broadway to SR-15	WB	4 M	8,000	204,000	0.092	0.292	3.60%	0.982	5,577	0.70	C
	EB	4 M + 1 A	9,200		0.092	0.708	3.60%	0.982	13,508	1.47	F2
SR-163											
I-8 to Washington St	NB	3 M + 1 A	7,200	163,000	0.091	0.620	3.70%	0.982	9,367	1.30	F1
	SB	3 M + 1 A	7,200		0.091	0.380	3.70%	0.982	5,741	0.80	C
Washington St to Robinson Ave	NB	2 M	4,000	115,400	0.091	0.620	3.70%	0.982	6,631	1.66	F2
	SB	2 M	4,000		0.091	0.380	3.70%	0.982	4,064	1.02	F0
Quince Dr to I-5	NB	2 M	4,000	127,000	0.078	0.540	3.70%	0.982	5,448	1.36	F2
	SB	2 M	4,000		0.078	0.460	3.70%	0.982	4,641	1.16	F0

Notes:

**Bold** values indicate freeway segments operating at LOS E or F.

M=Main Lane, A= Auxiliary Lane.

(a) The capacity is calculated as 2,000 ADT per main lane and 1,200 ADT per auxiliary lane.

(b) Traffic volumes provided by City of San Diego model.

(c) Peak-hour volume calculated by:  $(ADT \times K \times D) / \text{Truck Factor}$

K=0.50, D=1.00, Truck Factor=4.00 (assumed) unless noted.

Table 12. Future Year Freeway Ramp Meter Analysis Summary

ON-RAMP	PEAK PERIOD	METER RATE <sup>1</sup> (veh/hr)	DEMAND <sup>2</sup> (veh/hr)	EXCESS DEMAND (veh/hr)	AVERAGE DELAY (min)
INTERSTATE 5					
Washington St to I-5 NB	AM	996	1241	245	14.8
	PM	996	1227	231	13.9
India St to I-5 NB	AM	996	1007	11	0.6
	PM	996	1173	177	10.6
Hawthorn St to I-5 NB	AM	996	460	0	0.0
	PM	996	825	0	0.0
Hancock St to I-5 SB	AM	Ramp not metered in the a.m. peak			
	PM	1140	1542	402	21.2
Kettner Blvd to I-5 SB	AM	Ramp not metered in the a.m. peak			
	PM	498	861	363	43.7
Fifth Ave to I-5 SB	AM	Ramp not metered in the a.m. peak			
	PM	996	1894	898	54.1
INTERSTATE 8					
NB Texas St to I-8 EB	AM	Ramp not metered in the a.m. peak			
	PM	498	579	81	9.8
SB Texas St to I-8 EB	AM	Ramp not metered in the a.m. peak			
	PM	1140	888	0	0.0
INTERSTATE 805					
El Cajon Blvd to I-805 NB	AM	1140	1118	0	0.0
	PM	Ramp not metered in the p.m. peak			
University Ave to I-805 NB	AM	1140	1132	0	0.0
	PM	Ramp not metered in the p.m. peak			
STATE ROUTE 94					
28th St to SR-94 WB	AM	534	205	0	0.0
	PM	Ramp not metered in the p.m. peak			
32nd St/Broadway to SR-94 WB	AM	570	173	0	0.0
	PM	Ramp not metered in the p.m. peak			
25th St to SR-94 EB	AM	Ramp not metered in the a.m. peak			
	PM	960	935	0	0.0
28th St to SR-94 EB	AM	Ramp not metered in the a.m. peak			
	PM	960	870	0	0.0
32nd St/Broadway to SR-94 EB	AM	Ramp not metered in the a.m. peak			
	PM	570	558	0	0.0
STATE ROUTE 163					
Washington St to SR-163 SB	AM	498	615	117	14.2
	PM	Ramp not metered in the p.m. peak			

Notes:

1) Meter rate is the assumed peak hour capacity expected to be processed through the ramp meter (using Caltrans fast rate)

2) Demand is the peak hour demand using the on-ramp

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## IMPROVEMENT FEASIBILITY EVALUATION

All roadway segments and study intersections determined to have unacceptable LOS for the Future Year were further analyzed to determine what measures would be needed to return the facility to acceptable operations. **Tables 13, 14, and 15** provide a summary of the improvement analysis for the Uptown, North Park, and Golden Hill communities, respectively. Each potential improvement was evaluated for feasibility, documenting the associated effect to the network that the change in geometry would cause. The supporting exhibits are provided in **Figures 41 - 137**.

Table 13. Summary of Improvement Evaluation: Uptown

#	Intersection Number & Name	Baseline		Improvements			Recommend Improvement?	Potential Impact to:					
		AM Delay / LOS	PM Delay / LOS	Improvement Description	AM Delay / LOS	PM Delay / LOS		Ped Δ Crossing Distance (ft.)	Bike Bike Lanes Impacted	Shared Use Bike Ways Impacted	Parking Spaces Removed	ROW (Properties Impacted)	
U-1	4. Washington St at Fourth Ave	31.8 / C	59.9 / E	Add second SBL lane and change SBTL to SBT	27.3 / C	42.7 / D	No	4			10	2	
U-2	6. Washington St, Eighth Ave & SR-163 Off Ramp	71.5 / E	ECL / F	Add third and fourth EB through lane; Add third WB through lane; Add second SW through (off-ramp) lane	22.3 / C	49.5 / D	No	20			15	1	4
U-3	8. Washington St, Normal St & Campus Ave, Polk Ave	62.7 / E	57.3 / E	Add exclusive NE right-turn lane on Washington St	49.9 / D	39.5 / D	No					1	
U-4	12. University Ave & Sixth Ave	38.7 / D	55.3 / E	Add second SBL lane	40.0 / D	50.8 / D	No	12				2	
U-5	29. Elm St & Sixth Ave	153.6 / F	18.8 / B	Add second WBR lane	20.6 / C	12.5 / B	No	12	2				
U-6	30. Cedar St & Second Ave	459.3 / F	43.0 / E	Signalize Intersection (peak-hour warrant met in AM)	25.9 / C	10.1 / B	No						

Notes:  
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.  
Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.  
LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8

Table 13. Summary of Improvement Evaluation: Uptown

#	ROADWAY SEGMENT	Future ADT		ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	V/C RATIO (a)	LOS	Recommend Improvement?	Potential Impact to:						
									Ped Δ Crossing Distance (ft.)	Bike Bike Lanes Impacted		Shared Use Bike Ways Impacted	Parking Spaces Removed	ROW (Properties Impacted)	
	First Ave														
U-7A	Washington St to University Ave	9,100	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.138	F	No				23			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.607	C								
	University Ave to Robinson Ave	16,300	Baseline Classification	2 Lane Collector (no center lane)	8,000	2.038	F	No	36		2		1	13	
			Proposed Classification	4 Lane Collector	30,000	0.543	C								
	Robinson Ave to Pennsylvania Ave	11,500	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.438	F	No				33			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.767	D								
U-7A to U-7B	Pennsylvania Ave to Walnut Ave	12,800	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.600	F	No				53			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.853	D								
U-7B to U-7C	Walnut Ave to Laurel St	11,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.488	F	No				22			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.793	D								
U-7C to U-7D	Laurel St to Hawthorn St	8,400	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.050	F	Yes							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.560	C								
U-7D	Hawthorn St to Grape St	6,800	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.850	E	No				8			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.453	B								
	Fourth Ave														
U-8A	Arbor Dr to Washington St	14,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.863	F	No	30					7	7
			Proposed Classification	4 Lane Collector	30,000	0.497	C								
U-8B*	Walnut Ave to Laurel St	15,100	Baseline Classification	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	0.863	E	No		1					
			Proposed Classification	3 Lane Collector (one-way)	26,000	0.581	C								
	Fifth Ave														
U-9*	Robinson Ave to Walnut Ave	15,800	Baseline Classification	3 Lane Collector (one-way w/ one lane dedicated for multi-modal)	17,500	0.903	E	No			1				
			Proposed Classification	3 Lane Collector (one-way)	26,000	0.608	C								
	Sixth Ave														
U-10A	Washington St to University Ave	45,100	Baseline Classification	3 Lane Collector (two-way)	20,000	2.255	F	No	12			2		3	
			Proposed Classification	6 Lane Prime Arterial	60,000	0.752	C								
	University Ave to Robinson Ave	32,600	Baseline Classification	4 Lane Collector (no center lane)	15,000	2.173	F	No	14			2		4	
			Proposed Classification	4 Lane Major Arterial	40,000	0.815	D								
U-10B to U-10C	Robinson Ave to Upas St	29,900	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.993	F	No	22			2		10	29
			Proposed Classification	4 Lane Major Arterial	40,000	0.748	C								
U-10C to U-10D	Upas St to Laurel St	25,900	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.727	F	No	20					5	15
			Proposed Classification	4 Lane Major Arterial	40,000	0.648	C								
U-10D	Laurel St to Juniper St	16,600	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.107	F	No	28					3	1
			Proposed Classification	4 Lane Collector	30,000	0.553	C								
U-10E	Juniper St to Grape St	18,700	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.247	F	No	28					1	5
			Proposed Classification	4 Lane Collector	30,000	0.623	C								
U-10E	Grape St to Elm St	20,300	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.353	F	No	30					1	4
			Proposed Classification	4 Lane Collector	30,000	0.677	D								

Notes: \*No figure provided

Capacity for non-standard roadway classifications were provided by City of San Diego staff.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 13. Summary of Improvement Evaluation: Uptown

#	ROADWAY SEGMENT	Future ADT		ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	V/C RATIO (a)	LOS	Recommend Improvement?	Potential Impact to:							
									Ped Δ Crossing Distance (ft.)	Bike Bike Lanes Impacted Shared Use Bike Ways Impacted		Parking Spaces Removed	ROW (Properties Impacted) Commercial Residential			
	Ninth Ave															
U-11	Washington St to University Ave	8,000	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.000	F	No					8			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.533	C									
	Campus Ave/Polk Ave															
U-12	Washington St to Park Blvd	7,400	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.925	E	No					11			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.493	C									
	Cleveland Ave															
U-13	Tyler St to Lincoln Ave	7,200	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.900	E	No			2		18			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.480	C									
	Lincoln Ave to Richmond St	9,600	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.200	F	No			2		17			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.640	C									
	Fort Stockton Dr															
U-14	Sunset Blvd to Hawk St	7,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.988	E	No					113			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.527	C									
	Hawk St to Goldfinch St	8,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.113	F	No								
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.593	C									
	Grape St															
U-15	First Ave to Third Ave	7,300	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.913	E	No					24			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.487	C									
	Third Ave to Sixth Ave	9,000	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.125	F	No					60			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.600	C									
	Hawthorn St															
U-16	First Ave to Third Ave	7,300	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.913	E	No					Future Diagonal			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.487	C									
	Third Ave to Sixth Ave	8,700	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.088	F	No						25		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.580	C									
	India St															
U-17A	Washington St to Winder St	11,000	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.375	F	No					25			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.733	D									
	Glenwood Dr to Sassafrass St	30,000	Baseline Classification	2 Lane Collector (one-way)	17,500	1.714	F	No	12			22	5	2		
			Proposed Classification	4 Lane Collector (one-way)	35,000	0.857	D									
U-17B	Sassafrass St to Redwood St	21,300	Baseline Classification	2 Lane Collector (one-way)	17,500	1.217	F	No				10	6	3		
			Proposed Classification	3 Lane Collector (one-way)	26,000	0.819	D									
	Laurel St															
U-18A	Columbia St to Union St	21,100	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.407	F	No	24					1	8	
			Proposed Classification	4 Lane Collector	30,000	0.703	D									
	Union St to First Ave	17,900	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.193	F	No	24				2	17		
			Proposed Classification	4 Lane Collector	30,000	0.597	C									
U-18B	First Ave to Third Ave	16,100	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.073	F	No	24				4	4		
			Proposed Classification	4 Lane Collector	30,000	0.537	C									
	Third Ave to Sixth Ave	20,200	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.347	F	No	24				7	2		
			Proposed Classification	4 Lane Collector	30,000	0.673	D									
	Lincoln Ave															
U-19	Washington St to Park Blvd	11,100	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.388	F	No					21			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.740	D									

Notes:  
Capacity for non-standard roadway classifications were provided by City of San Diego staff.  
(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 13. Summary of Improvement Evaluation: Uptown

#	ROADWAY SEGMENT	Future ADT		ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	V/C RATIO (a)	LOS	Recommend Improvement?	Potential Impact to:						
									Ped Δ Crossing Distance (ft.)	Bike Bike Lanes Impacted Shared Use Bike Ways Impacted		Parking Spaces Removed	ROW (Properties Impacted) Commercial Residential		
	Park Blvd														
U-20A	Adams Ave to Mission Ave	14,893	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.993	E	No	24		2			35	19
			Proposed Classification	4 Lane Collector	30,000	0.496	C								
U-20B	Mission Ave to El Cajon Blvd	16,300	Baseline Classification	3 Lane Collector (no center lane)	11,500	1.417	F	No	17		2			7	
			Proposed Classification	4 Lane Collector	30,000	0.543	C								
U-20B to U-20C	Robinson Ave to Upas St	17,200	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.147	F	No	8		2				8
			Proposed Classification	4 Lane Collector	30,000	0.573	C								
	Richmond St														
U-21A	Cleveland Ave to University Ave	9,000	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.125	F	Yes							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.600	C								
	University Ave to Robinson Ave	6,700	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.838	E	Yes							
			Proposed Classification	Lane Collector (continuous left-turn lane)	15,000	0.447	B								
U-21A to U-21B	Robinson Ave to Upas St	8,100	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.013	F	No				74			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.540	C								
	Robinson Ave														
U-22	First Ave to Third Ave	11,500	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.438	F	No					16		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.767	D								
	Third Ave to Eighth Ave	14,400	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.800	F	No	42		2		13	11	
			Proposed Classification	4 Lane Collector	30,000	0.480	C								
	San Diego Ave														
U-23A to U-23B	Hortensia St to Pringle St	10,500	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.313	F	No			2		32		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.700	D								
	State St														
U-24	Laurel St to Juniper St	8,200	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.025	F	Yes							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.547	C								
	University Ave														
U-25A	Ibis St to Albatross St	14,700	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.838	F	No	32					5	40
			Proposed Classification	4 Lane Collector	30,000	0.490	C								
U-25B	Albatross St to First Ave	20,800	Baseline Classification	2 Lane Collector (no center lane)	8,000	2.600	F	No	32		2		25		
			Proposed Classification	4 Lane Collector	30,000	0.693	D								
	First Ave to Fourth Ave	14,100	Baseline Classification	2 Lane Collector (no fronting property)	10,000	1.410	F	No							
			Proposed Classification	4 Lane Collector	30,000	0.470	C								
	Fourth Ave to Fifth Ave	21,600	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.440	F	No							
			Proposed Classification	4 Lane Collector	30,000	0.720	D								
U-25C	Sixth Ave to Eighth Ave	29,300	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.953	F	No					4		
			Proposed Classification	4 Lane Major Arterial	40,000	0.733	C								
U-25D	Normal St to Park Blvd	21,200	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.413	F	No	22				2	9	
			Proposed Classification	4 Lane Collector	30,000	0.707	D								
	Washington St														
U-26A	Fourth Ave to Fifth Ave	37,300	Baseline Classification	4 Lane Major Arterial	40,000	0.933	E	No	33			5	4		
			Proposed Classification	6 Lane Major Arterial	50,000	0.746	C								
	Fifth Ave to Sixth Ave	41,100	Baseline Classification	4 Lane Major Arterial	40,000	1.028	F	No	20				2		
			Proposed Classification	6 Lane Major Arterial	50,000	0.822	D								
U-26A to U-26B	Sixth Ave to Richmond St	41,778	Baseline Classification	4 Lane Major Arterial	40,000	1.044	F	No	14			7	2		
			Proposed Classification	6 Lane Major Arterial	50,000	0.836	D								
U-26C	Richmond St to Normal St	47,100	Baseline Classification	6 Lane Major Arterial	50,000	0.942	E	No					1	3	
			Proposed Classification	6 Lane Prime Arterial	60,000	0.785	C								

Notes:  
Capacity for non-standard roadway classifications were provided by City of San Diego staff.  
(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.



Table 14. Summary of Improvement Evaluation: North Park

#	Intersection Number & Name	Baseline		Improvements			Recommend Improvement?	Potential Impact to:					
		AM Delay / LOS	PM Delay / LOS	Improvement Description	AM Delay / LOS	PM Delay / LOS		Ped Δ Crossing Distance (ft.)	Bike Bike Lanes Impacted	Shared Use Bike Ways Impacted	Parking Spaces Removed	ROW (Properties Impacted)	
NP-1	31. Madison Ave & Texas St	144.4 / F	63.9 / E	Add second NBT lane; Add second WBR lane	36.2 / D	35.0 / D	No	13			3		9
NP-2A	32. El Cajon Blvd & Texas St	37.6 / D	85.3 / F	Reconfigure Texas Street to have a NB left and shared through-right and SB two lefts, one through, and one right.	25.9 / C	49.8 / D	No	10				2	
NP-2B				Reconfigure Texas Street to have a NB left and shared through-right and a SB left, through, and right.	36.0 / D	87.2 / F	No	10				2	
NP-3	33. El Cajon Blvd & 30th St	29.7 / C	68.1 / E	Add second SB left-turn lane; Add second WB left-turn lane	26.1 / C	52.0 / D	No				14		
NP-4	34. El Cajon Blvd & I-805 SB Ramps	21.9 / C	96.8 / F	Add second SB right-turn lane	15.5 / B	37.7 / D	No	6				1	
NP-5	37. University Ave & 30th St	26.5 / C	57.8 / E	Add second SB through lane	25.9 / C	44.3 / D	No				2		
NP-6	39. University Ave, Wabash Ave & I-805 NB Ramps	45.5 / D	80.9 / F	Add exclusive EB right turn lane; Reconfigure NB approach to have dual lefts and exclusive through and right-turn lanes; Add exclusive SB left turn lane; Reconfigure WB approach to have a left, through, and shared through-right lane	52.6 / D	54.9 / D	No	34			1	6	1
NP-7	40. North Park Way, I-805 SB Ramps, & Boundary St	18.1 / C	134.8 / F	Signalize intersection: Add a second SB left-turn lane and widen on-ramp to have two receiving lanes	15.6 / B	47.2 / D	Yes						1
NP-8	41. Upas St & 30th St	40.1 / E	54.8 / F	Add exclusive WB right-turn lane	14.5 / B	34.1 / D	No				1		

Notes:  
Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.  
LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8

Table 14. Summary of Improvement Evaluation: North Park

#	ROADWAY SEGMENT	Future ADT		ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	V/C RATIO (a)	LOS	Recommend Improvement?	Potential Impact to:					
									Ped Δ Crossing Distance (ft.)	Bike		Parking Spaces Removed	ROW (Properties Impacted)	
										Bike Lanes Impacted	Shared Use Bike Ways Impacted		Commercial	Residential
	30th St													
NP-9A	Meade Ave to El Cajon Blvd	14,400	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.960	E	No	24		2		2	4
			Proposed Classification	4 Lane Collector	30,000	0.480	C							
	Howard Ave to Lincoln Ave	17,900	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.193	F	No	24		2		14	8
			Proposed Classification	4 Lane Collector	30,000	0.597	C							
	Lincoln Ave to University Ave	14,000	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.933	E	No	24		2		12	1
			Proposed Classification	4 Lane Collector	30,000	0.467	C							
NP-9B	North Park Way Ave to Upas St	16,500	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.100	F	No	24		2		21	16
			Proposed Classification	4 Lane Collector	30,000	0.550	C							
NP-9B to NP-9C	Upas St to Redwood St	11,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.488	F	No				75		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.793	D							
NP-9C to NP-9D	Redwood St to Juniper St	12,100	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.513	F	No				87		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.807	D							
	32nd St													
NP-10	University Ave to Myrtle Ave	11,200	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.400	F	No				130		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.747	D							
	Myrtle Ave to Upas St	7,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.988	E	No						
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.527	C							
	Adams Ave													
NP-11A to NP 11B	Texas St to 30th St	13,800	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.920	E	No	24		2			
			Proposed Classification	4 Lane Collector	30,000	0.460	B							
NP-11B	30th St to W Mountain View Dr	19,929	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.329	F	No	29		2		12	2
			Proposed Classification	4 Lane Collector	30,000	0.664	C							
	Boundary St													
NP-12	University Ave to North Park Way	16,000	Baseline Classification	2 Lane Collector (no center lane)	8,000	2.000	F	Yes	23		2		5	
			Proposed Classification	4 Lane Collector	30,000	0.533	C							

Notes:

Capacity for non-standard roadway classifications were provided by City of San Diego staff.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 14. Summary of Improvement Evaluation: North Park

#	ROADWAY SEGMENT	Future ADT		ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	V/C RATIO (a)	LOS	Recommend Improvement?	Potential Impact to:						
									Ped Δ Crossing Distance (ft.)	Bike		Parking Spaces Removed	ROW (Properties Impacted)		
										Bike Lanes Impacted	Shared Use Bike Ways Impacted		Commercial	Residential	
	El Cajon Blvd														
NP-13	30th St to Illinois St	48,800	Baseline Classification	6 Lane Major Arterial	50,000	0.976	E	No	5			25			
			Proposed Classification	8 Lane Major Arterial	60,000	0.813	C								
	Illinois St to I-805 Ramps	58,900	Baseline Classification	6 Lane Major Arterial	50,000	1.178	F	No	12			5	3		
			Proposed Classification	8 Lane Major Arterial	60,000	0.982	E								
	Florida St														
NP-14A	El Cajon Blvd to University Ave	7,400	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.925	E	No				121			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.493	C								
NP-14A to NP-14B	University Ave to Robinson Ave	8,800	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.100	F	No				46			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.587	C								
NP-14B	Robinson Ave to Upas St	6,800	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.850	E	No				107			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.453	B								
	Howard Ave														
NP-15*	Texas St to Utah St	11,300	Baseline Classification	2 Lane Collector (no center lane)**	8,000	1.413	F	No			Bike Boulevard				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.753	D								
NP-15*	Utah St to 30th St	10,200	Baseline Classification	2 Lane Collector (no center lane)**	8,000	1.275	F	No			Bike Boulevard				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.680	D								
NP-15*	30th St to 32nd St	10,500	Baseline Classification	2 Lane Collector (no center lane)**	8,000	1.313	F	No			Bike Boulevard				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.700	D								
	Madison Ave														
NP-16	Texas St to Boundary St	12,200	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.525	F	Yes							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.813	D								
	Meade Ave														
NP-17*	Park Blvd to Texas St	8,200	Baseline Classification	2 Lane Collector (no center lane)**	8,000	1.025	F	No			Bike Boulevard				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.547	C								
NP-17*	Texas St to 30th St	9,900	Baseline Classification	2 Lane Collector (no center lane)**	8,000	1.238	F	No			Bike Boulevard				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.660	C								
NP-17*	30th St to Illinois St	11,500	Baseline Classification	2 Lane Collector (no center lane)**	8,000	1.438	F	No			Bike Boulevard				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.767	D								
NP-17*	Illinois St to Iowa St	11,900	Baseline Classification	2 Lane Collector (no center lane)**	8,000	1.488	F	No			Bike Boulevard				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.793	D								
	North Park Way														
NP-18	32nd St to Boundary St	10,600	Baseline Classification	2 Lane Collector (no fronting property)	10,000	1.060	F	No	4			30		8	
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.707	D								
	Redwood St														
NP-19	28th St to 30th St	7,200	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.900	E	No				60			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.480	C								
	Texas St														
NP-20A	Adams Ave to Mission Ave	39,100	Baseline Classification	3 Lane Major Arterial	30,000	1.303	F	No						3	
			Proposed Classification	6 Lane Major Arterial	50,000	0.782	C								
NP-20A to NP-20B	Mission Ave to El Cajon Blvd	38,300	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	2.553	F	No	52		2		8	65	
			Proposed Classification	6 Lane Major Arterial	50,000	0.766	C								
NP-20B to NP-20C	Howard Ave to University Ave	14,400	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.960	E	No	24		2		2	54	
			Proposed Classification	4 Lane Collector	30,000	0.480	C								
Notes: *No figure provided    **Roadway changed to 2 Lane Collector with implementation of bicycle boulevard projects															
Capacity for non-standard roadway classifications were provided by City of San Diego staff.															
(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.															

Table 14. Summary of Improvement Evaluation: North Park

#	ROADWAY SEGMENT	Future ADT		ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	V/C RATIO (a)	LOS	Recommend Improvement?	Potential Impact to:					
									Ped Δ Crossing Distance (ft.)	Bike		Parking Spaces Removed	ROW (Properties Impacted)	
										Bike Lanes Impacted	Shared Use Bike Ways Impacted		Commercial	Residential
	University Ave													
NP-21A	Park Blvd to Florida St	23,900	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.593	F	No	20					
			Proposed Classification	4 Lane Collector	30,000	0.797	D							
NP-21A to NP-21B	Florida St to Texas St	21,611	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.441	F	No	24				11	10
			Proposed Classification	4 Lane Collector	30,000	0.720	D							
NP-21B to NP-21C	Texas St to Oregon St	23,700	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.580	F	No	24				14	11
			Proposed Classification	4 Lane Collector	30,000	0.790	D							
NP-21C	Oregon St to Utah St	22,900	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.527	F	No	24				11	3
			Proposed Classification	4 Lane Collector	30,000	0.763	D							
NP-21C to NP-21D	Utah St to 30th St	20,800	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.387	F	No	24				13	
			Proposed Classification	4 Lane Collector	30,000	0.693	D							
NP-21D	30th St to Illinois St	22,800	Baseline Classification	3 Lane Collector (no center lane)	11,500	1.983	F	No	24				14	
			Proposed Classification	4 Lane Collector	30,000	0.760	D							
NP-21D to NP-21E	Illinois St to 32nd St	22,600	Baseline Classification	3 Lane Collector (no center lane)	11,500	1.965	F	No	24				12	
			Proposed Classification	4 Lane Collector	30,000	0.753	D							
NP-21E	32nd St to Boundary St	29,600	Baseline Classification	4 Lane Collector (no center lane)	15,000	1.973	F	No					6	
			Proposed Classification	4 Lane Major Arterial	40,000	0.740	C							
	Upas St													
NP-22A	Alabama St to Texas St	8,600	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.075	F	No				85		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.573	C							
NP-22A to NP-22B	Texas St to Pershing Rd	11,500	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.438	F	No				128		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.767	D							
NP-22B to NP-22C	Pershing Rd to 30th St	16,300	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.087	F	No	22		2		2	17
			Proposed Classification	4 Lane Collector	30,000	0.543	C							
	Utah St													
NP-23A	Howard Ave to Lincoln Ave	7,300	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.913	E	No		2				
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.487	C							
NP-23A to NP-23B	North Park Way to Upas St	7,500	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.938	E	No		2		25		
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.500	C							

Notes:

Capacity for non-standard roadway classifications were provided by City of San Diego staff.

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

Table 15. Summary of Improvement Evaluation: Golden Hill

#	Intersection Number & Name	Baseline		Improvements			Recommend Improvement?	Potential Impact to:					
		AM Delay / LOS	PM Delay / LOS	Improvement Description	AM Delay / LOS	PM Delay / LOS		Ped Δ Crossing Distance (ft.)	Bike Bike Lanes Impacted	Bike Shared Use Bike Ways Impacted	Parking Spaces Removed	ROW (Properties Impacted)	
GH-1	42. B St & 17th St/ I-5 SB Off-Ramp	ECL / F	20.4 / C	Signalize intersection (peak-hour warrant met in AM)	25.1 / C	7.2 / A	Yes						
GH-2	47. SR-94 WB Ramps & Broadway	ECL / F	ECL / F	Signalize intersection (peak-hour warrants not met)	11.1 / B	13.2 / B	No						
GH-3	48. SR-94 WB Ramps & 28th St	ECL / F	ECL / F	Signalize intersection (peak-hour warrant met in PM)	15.4 / B	14.6 / B	Yes						
GH-4	49. SR-94 EB Ramps & 28th St	ECL / F	ECL / F	Signalize intersection and add exclusive SB left-turn (peak-hour warrant met in PM)	13.8 / A	18.4 / B	Yes						
GH-5	51. F St & 25th St	82.3 / F	39.4 / E	Signalize intersection (peak-hour warrants not met)	12.5 / B	7.5 / A	No						
GH-6	53. G St & 25th St	55.2 / F	68.0 / F	Signalize intersection (peak-hour warrants not met)	19.8 / B	16.5 / B	No						

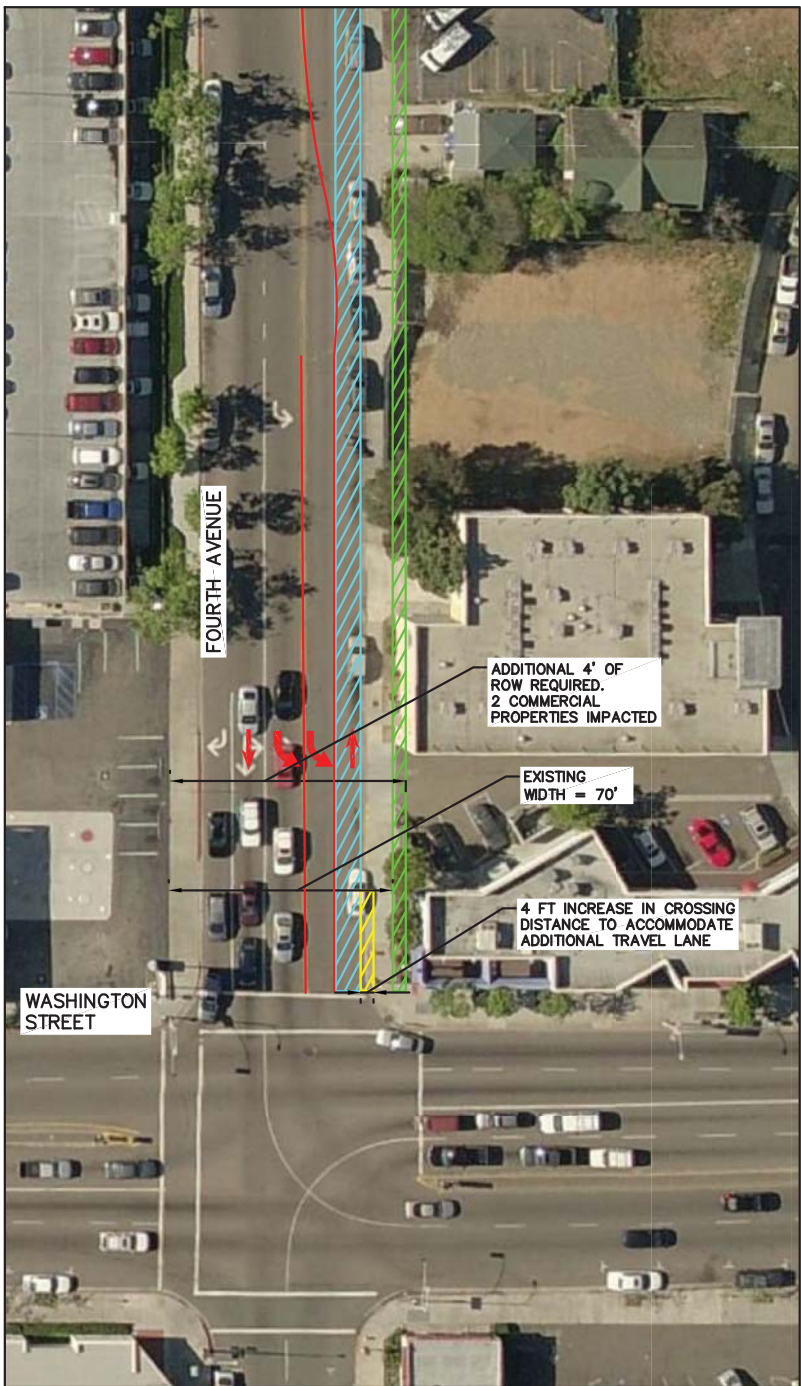
Notes:  
ECL = Exceeds Calculable Limit.  
Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.  
LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8



Table 15. Summary of Improvement Evaluation: Golden Hill





#	ROADWAY SEGMENT	Future ADT		ROADWAY FUNCTIONAL CLASSIFICATION	LOS E CAPACITY	V/C RATIO (a)	LOS	Recommend Improvement?	Potential Impact to:					ROW (Properties Impacted)	
									Ped Δ Crossing Distance (ft.)	Bike Lanes Impacted	Shared Use Bike Ways Impacted	Parking Spaces Removed	Commercial	Residential	
	25th St														
GH-7	Broadway to F St	17,400	Baseline Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.160	F	No	9		2				
			Proposed Classification	4 Lane Collector	30,000	0.580	C								
	26th St														
GH-8	Russ Blvd to B St	9,152	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.144	F	No				26			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.610	C								
	28th St														
GH-9A	Russ Blvd to C St	8,800	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.100	F	No				10			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.587	C								
GH-9B	C St to Broadway	10,500	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.313	F	No				16			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.700	D								
	Broadway to SR-94	19,100	Baseline Classification	2 Lane Collector (no center lane)	8,000	2.388	F	Yes	36		2			7	
			Proposed Classification	4 Lane Collector	30,000	0.637	C								
	30th St														
GH-10A	Grape St to Ash St	6,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.863	E	No							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.460	B								
GH-10B	A St to Broadway	19,800	Baseline Classification	2 Lane Collector (no center lane)	8,000	2.475	F	Yes	36		2		20		
			Proposed Classification	4 Lane Collector	30,000	0.660	C								
	Broadway to SR-94	9,500	Baseline Classification	2 Lane Collector (no fronting property)	10,000	0.950	E	Yes				33			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.633	C								
	B St														
GH-11	25th St to 26th St	7,500	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.938	E	No							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.500	C								
	26th St to 28th St	7,100	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.888	E	No							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.473	C								
	Broadway														
GH-12	30th St to SR-94	15,811	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.976	F	No							
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	1.054	F								
	C St														
GH-13	30th St to 34th St	7,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	0.988	E	No				80			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.527	C								
	Fern St														
GH-14A	Juniper St to Grape St	8,900	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.113	F	No				60			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.593	C								
GH-14A to GH-14B	Grape St to A St	15,000	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.875	F	No	36		2			76	
			Proposed Classification	4 Lane Collector	30,000	0.500	C								
	Grape St														
GH-15	30th St to 31st St	9,000	Baseline Classification	2 Lane Collector (no center lane)	8,000	1.125	F	No				13			
			Proposed Classification	2 Lane Collector (continuous left-turn lane)	15,000	0.600	C								

Notes:  
Capacity for non-standard roadway classifications were provided by City of San Diego staff.  
(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

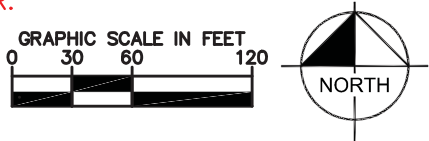


THE ADDITION OF A SOUTHBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF WASHINGTON STREET AND FOURTH AVENUE TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, RESULT IN LOSS OF PARKING, AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

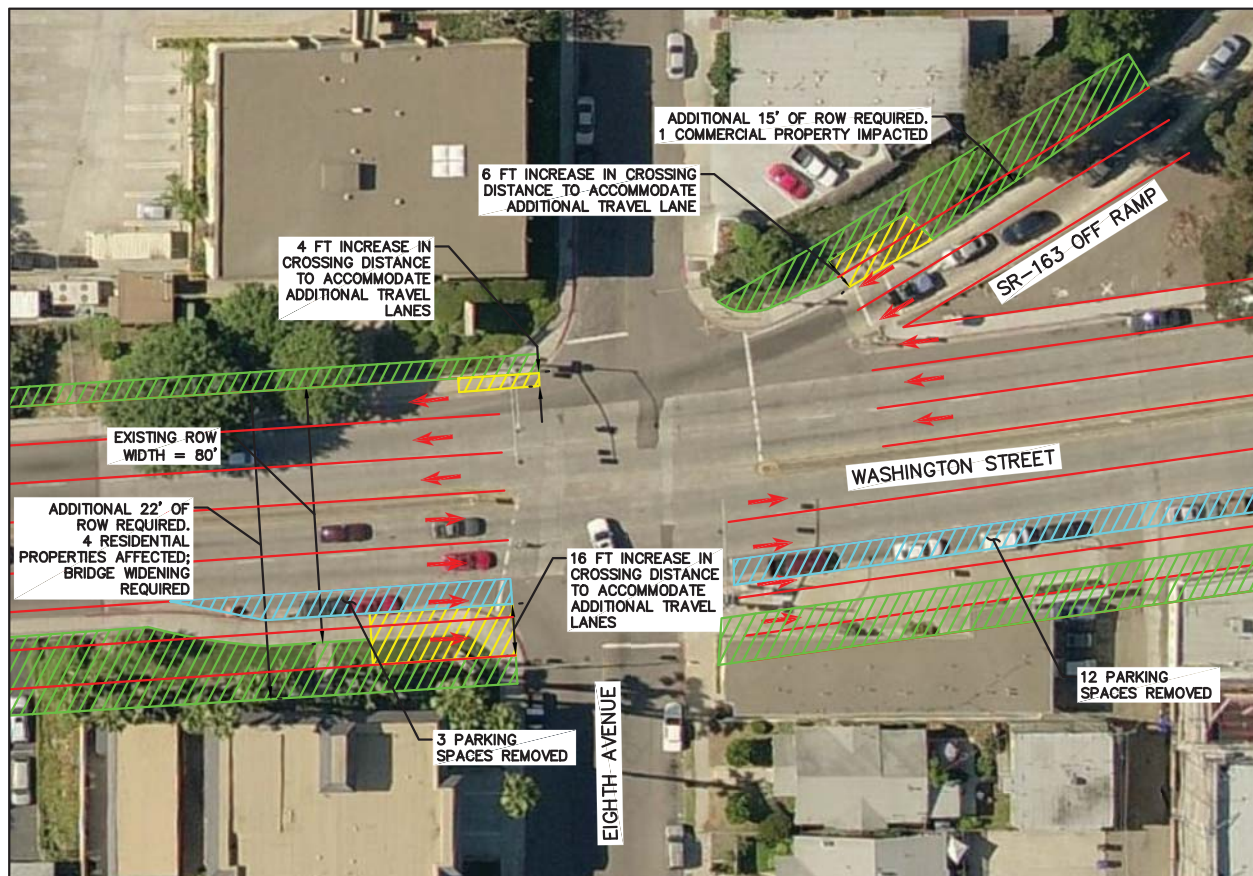
THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-1

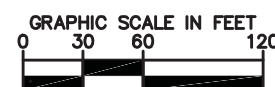


THE ADDITION OF TWO EASTBOUND LANES, A WESTBOUND LANE, AND A SOUTH-WESTBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF WASHINGTON AVENUE, EIGHTH AVENUE, AND THE STATE ROUTE-163 OFF RAMP TO LOS D OR BETTER DURING THE AM AND PM PEAK HOURS. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, RESULT IN LOSS OF PARKING, AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-2



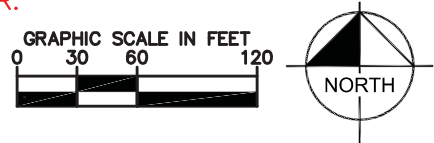


THE ADDITION OF A NORTH-EASTBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF WASHINGTON AVENUE, NORMAL STREET, CAMPUS AVENUE, AND POLK AVENUE TO LOS D OR BETTER DURING THE AM AND PM PEAK HOURS. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY.

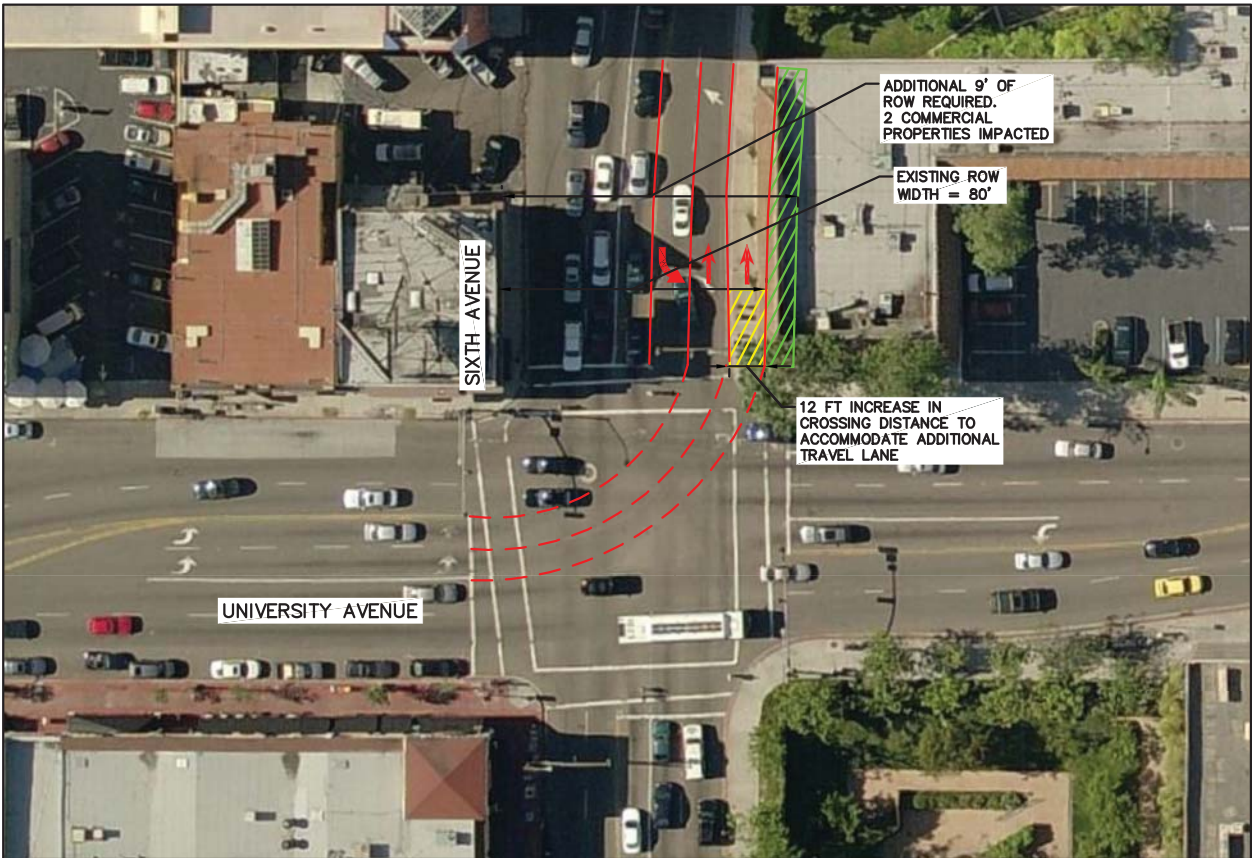
THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT U-3

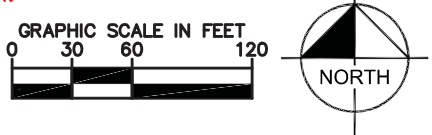


THE ADDITION OF A SOUTHBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF UNIVERSITY AVENUE AND SIXTH AVENUE TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.







## IMPROVEMENT U-4



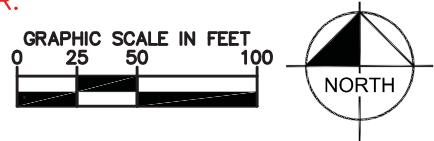


THE ADDITION OF A WESTBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF ELM STREET AND SIXTH AVENUE TO LOS D OR BETTER DURING THE AM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD INCREASE THE PEDESTRIAN CROSSING DISTANCE.

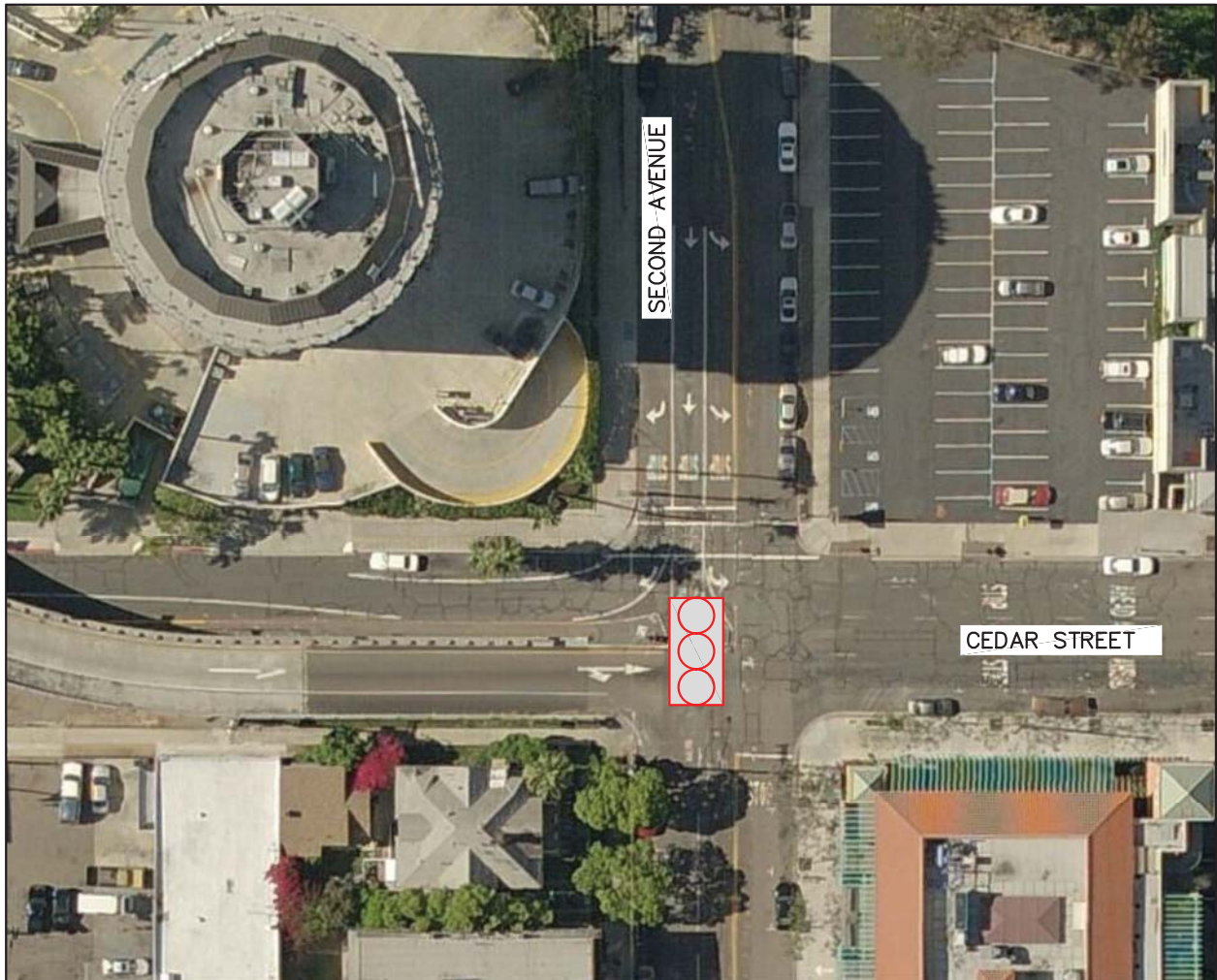
THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.







## IMPROVEMENT U-5

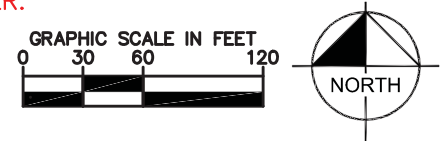


THE ADDITION OF A TRAFFIC SIGNAL WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF CEDAR STREET AND SECOND AVENUE TO LOS D OR BETTER DURING BOTH PEAK HOURS.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

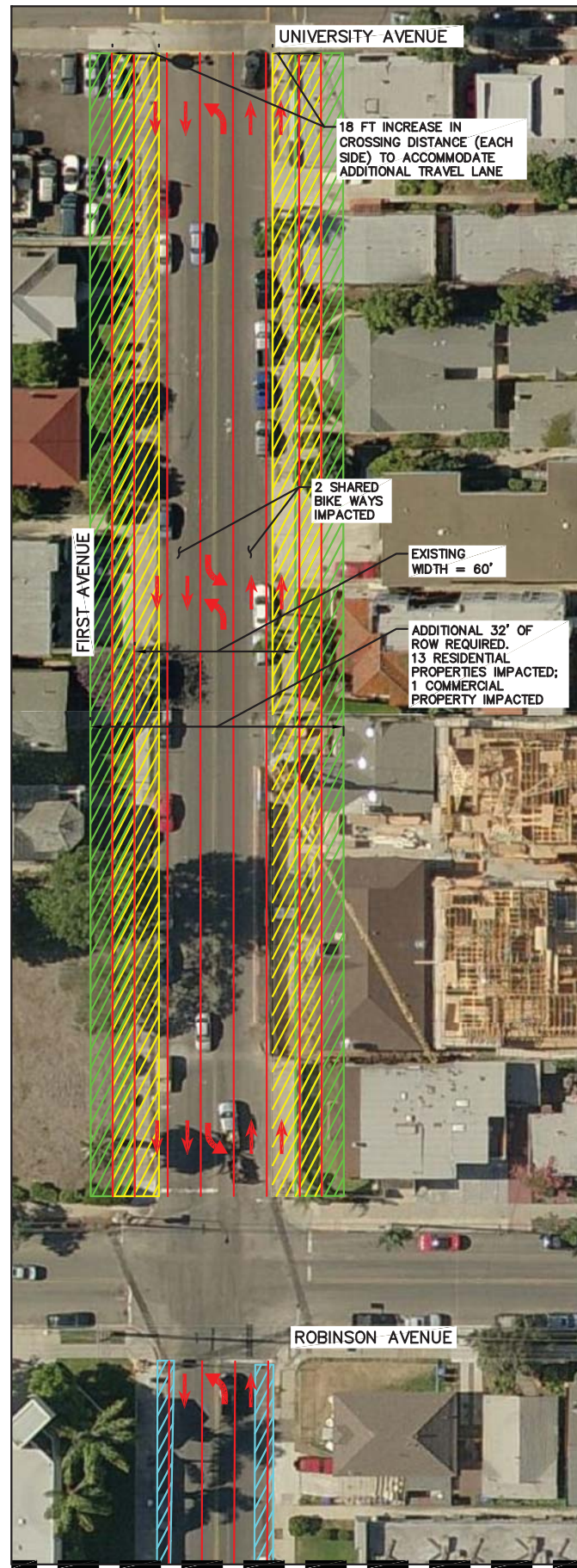
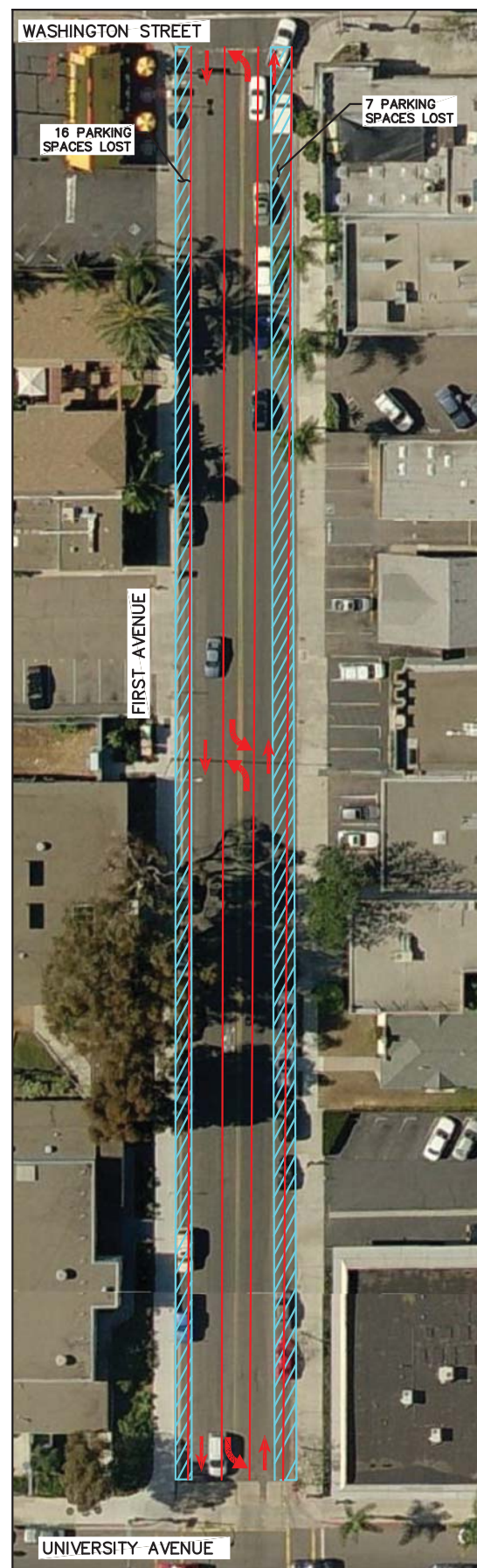
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



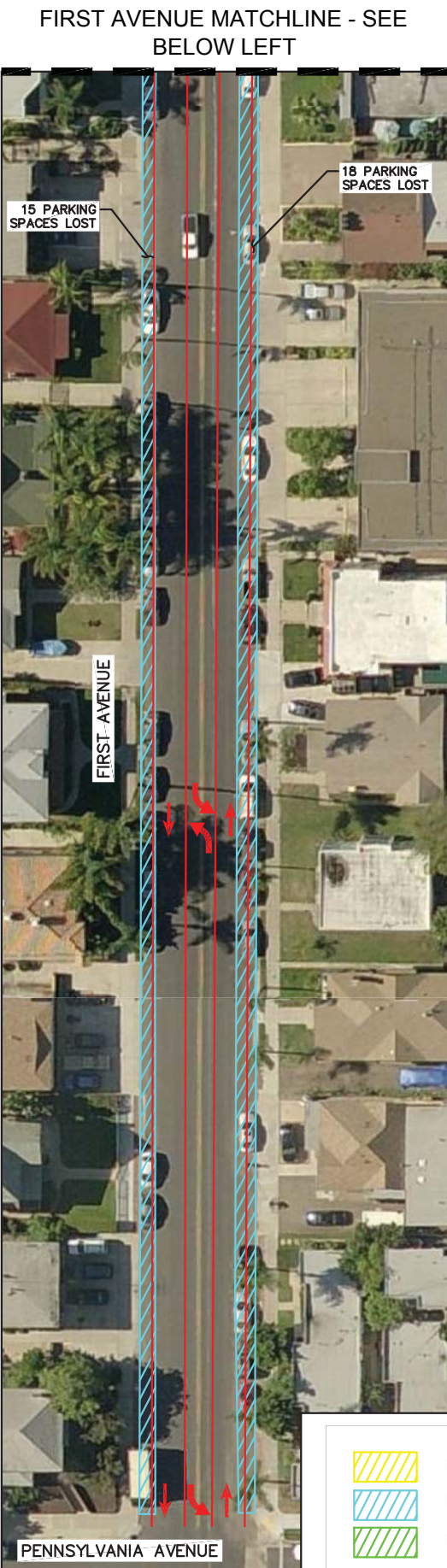
## IMPROVEMENT U-6



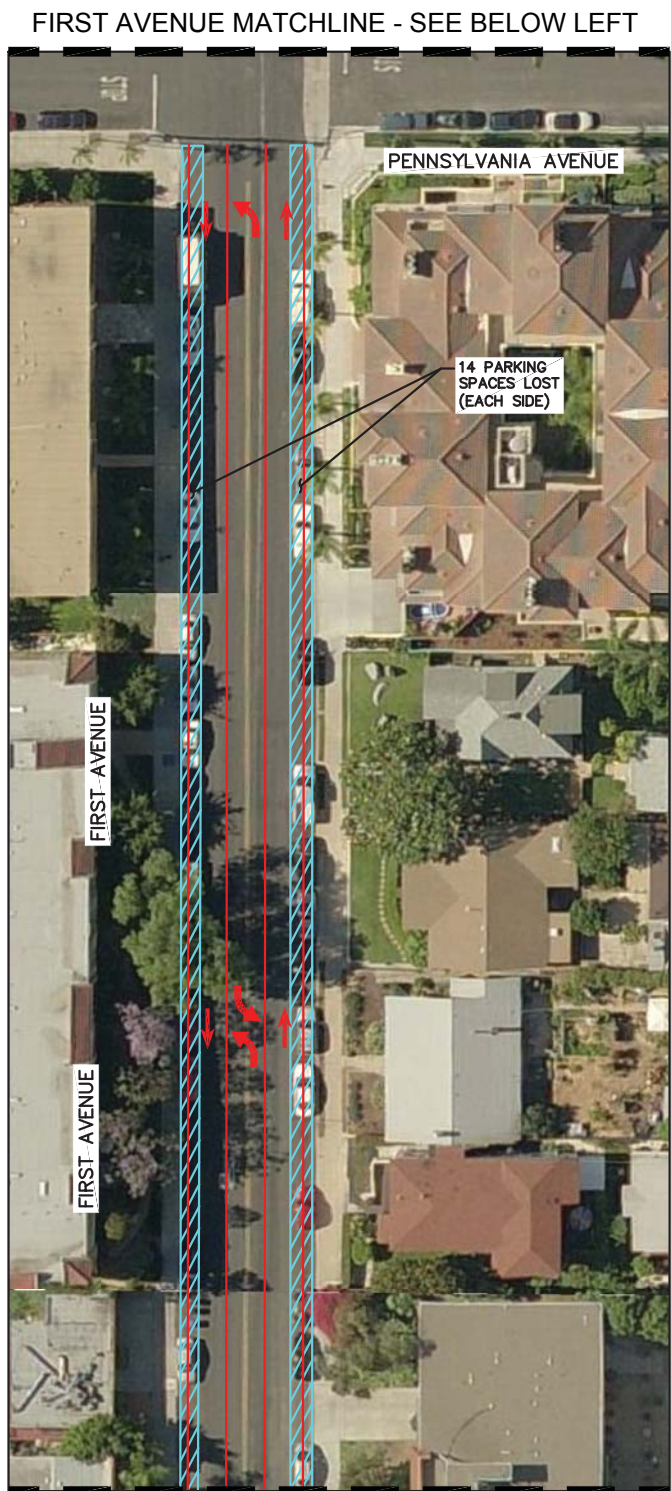
FIGURE 47



FIRST AVENUE MATCHLINE - SEE ABOVE RIGHT



FIRST AVENUE MATCHLINE - SEE BELOW LEFT



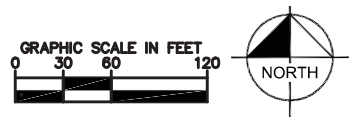
FIRST AVENUE MATCHLINE - SEE BELOW LEFT

FIRST AVENUE MATCHLINE - SEE IMPROVEMENT FIGURE U-7B

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT

CONVERTING SEGMENTS OF FIRST AVENUE INTO EITHER 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES OR 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, RESULT IN LOSS OF PARKING, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BIKE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

# IMPROVEMENT U-7A



FIRST AVENUE MATCHLINE - SEE PREVIOUS PAGE

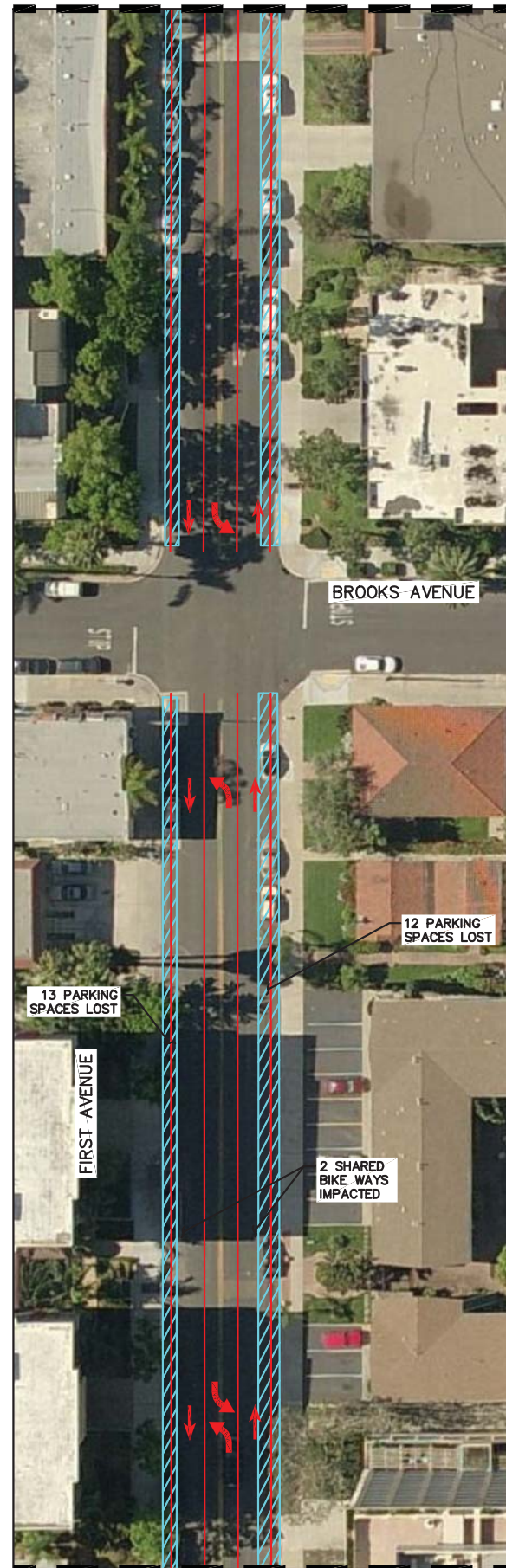
FIRST AVENUE MATCHLINE -  
SEE BELOW LEFT

MATCHLINE - SEE BELOW LEFT

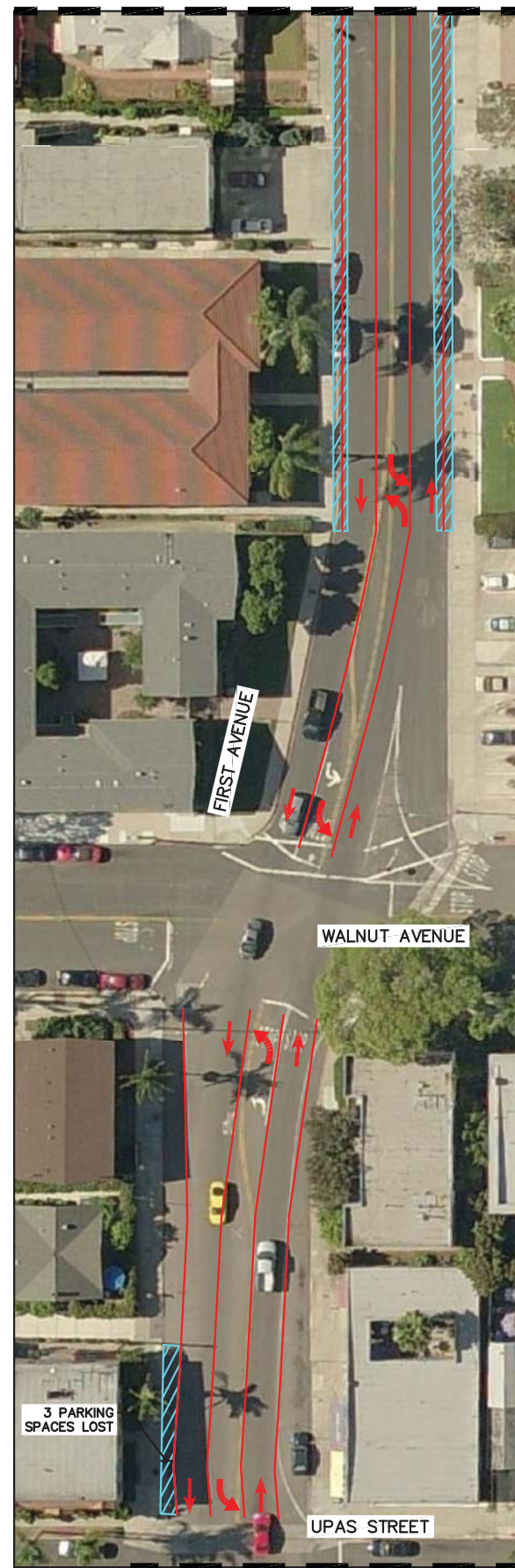
FIRST AVENUE MATCHLINE -  
SEE BELOW LEFT

FIRST AVENUE  
MATCHLINE - SEE  
BELOW LEFT

FIGURE 48



FIRST AVENUE MATCHLINE -  
SEE ABOVE RIGHT



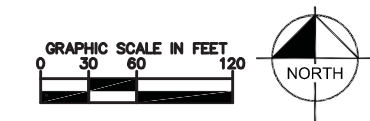
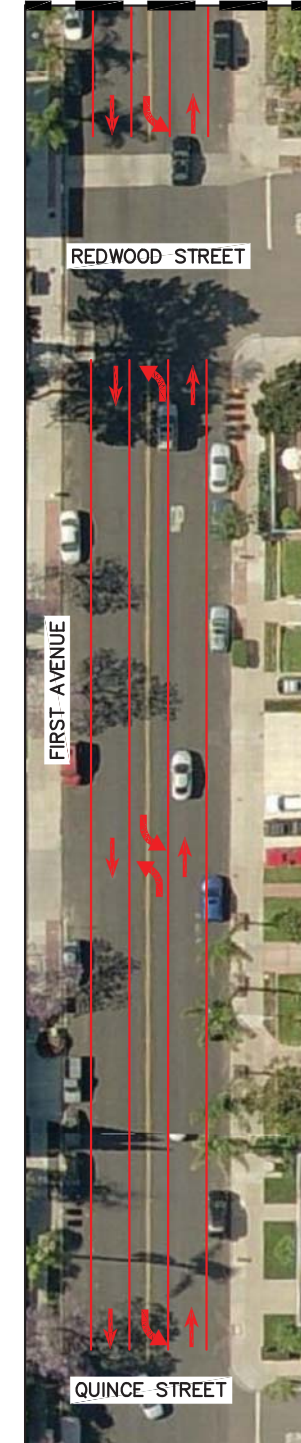
FIRST AVENUE MATCHLINE -  
SEE ABOVE RIGHT



FIRST AVENUE MATCHLINE -  
SEE ABOVE RIGHT



FIRST AVENUE  
MATCHLINE - SEE  
ABOVE RIGHT



CONVERTING SEGMENTS OF FIRST AVENUE INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING ALONG SOME SEGMENTS.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

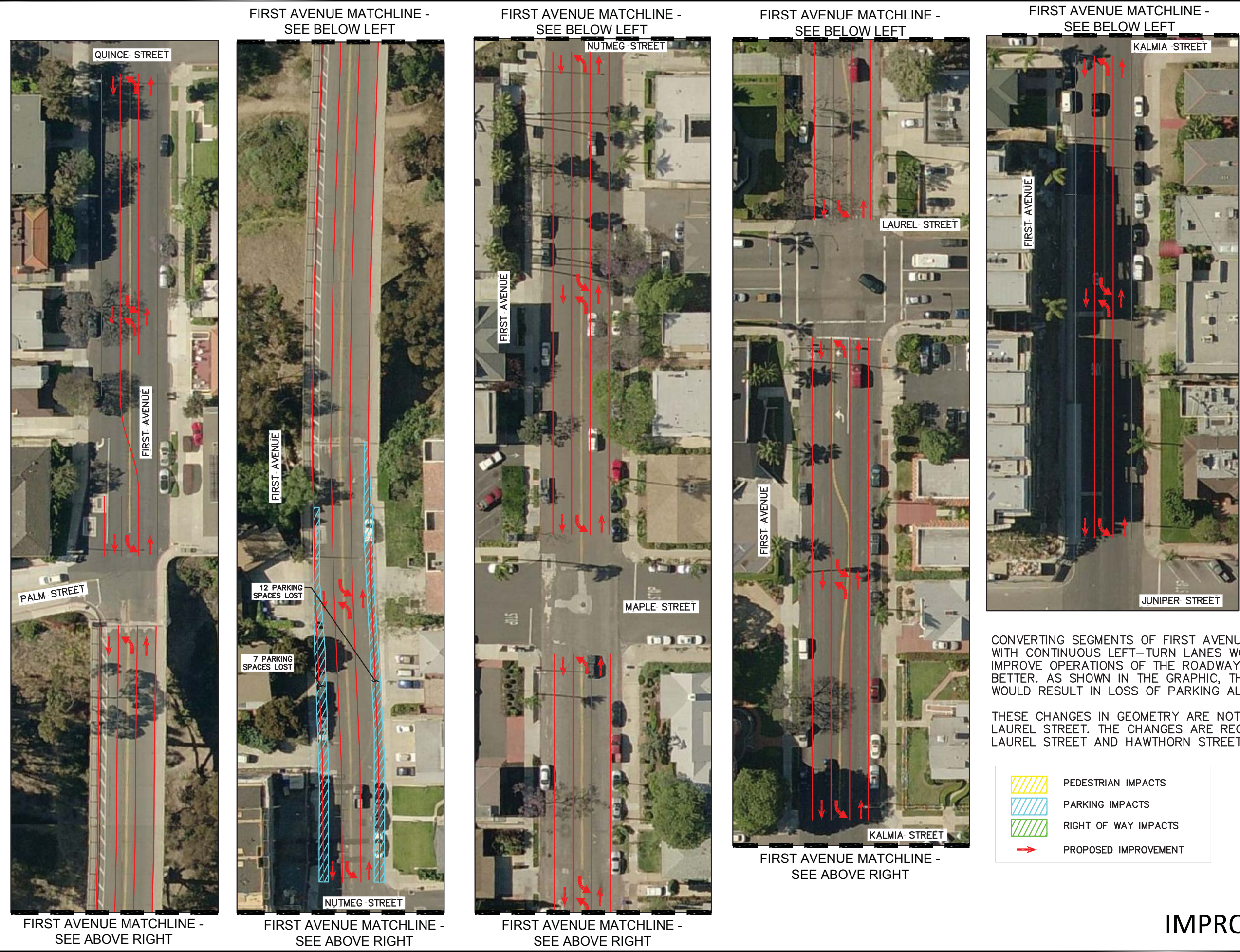
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



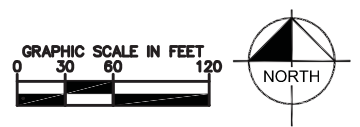
IMPROVEMENT U-7B



FIGURE 49



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS, LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

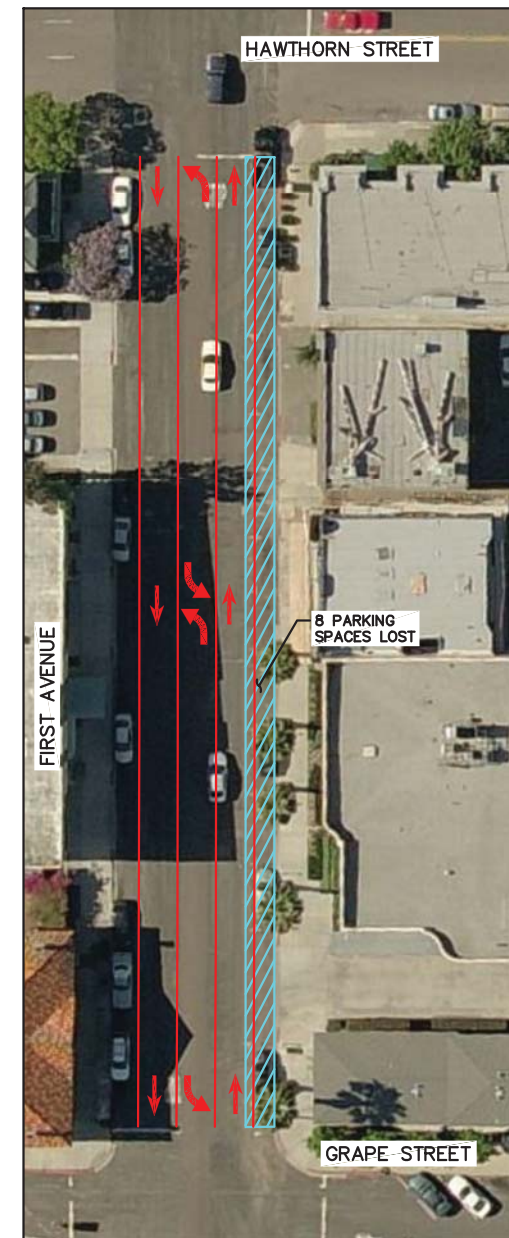
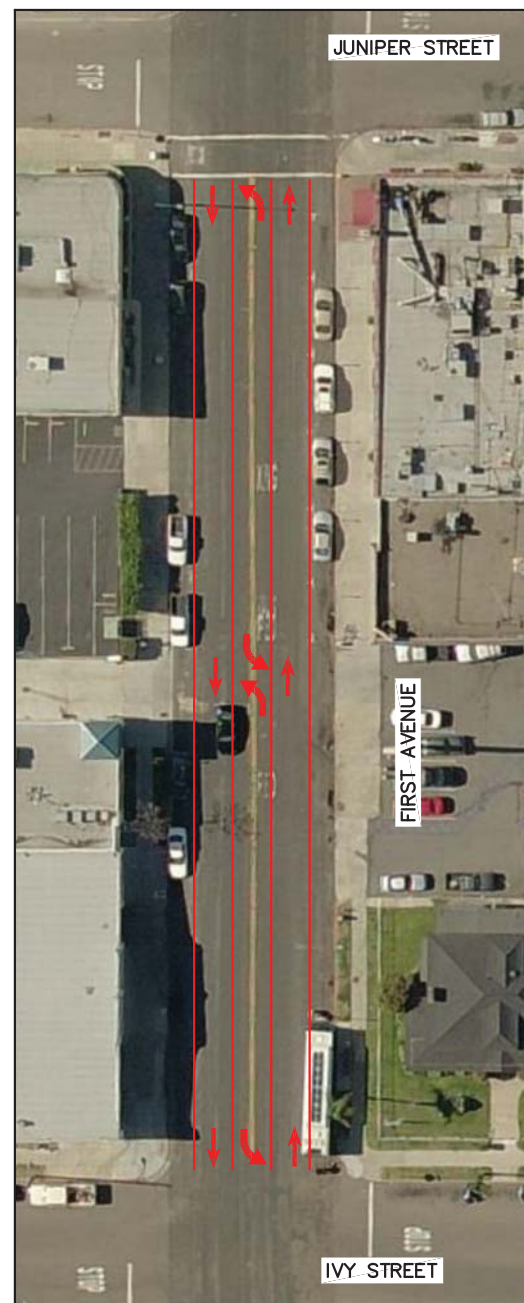


CONVERTING SEGMENTS OF FIRST AVENUE INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING ALONG SOME SEGMENTS.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED NORTH OF LAUREL STREET. THE CHANGES ARE RECOMMENDED BETWEEN LAUREL STREET AND HAWTHORN STREET.





# IMPROVEMENT U-7C



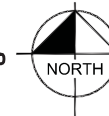


CONVERTING SEGMENTS OF FIRST AVENUE INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING SOUTH OF HAWTHORN STREET.

THESE CHANGES IN GEOMETRY ARE RECOMMENDED BETWEEN LAUREL STREET AND HAWTHORN STREET. THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED BETWEEN HAWTHORN STREET AND GRAPE STREET.

-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

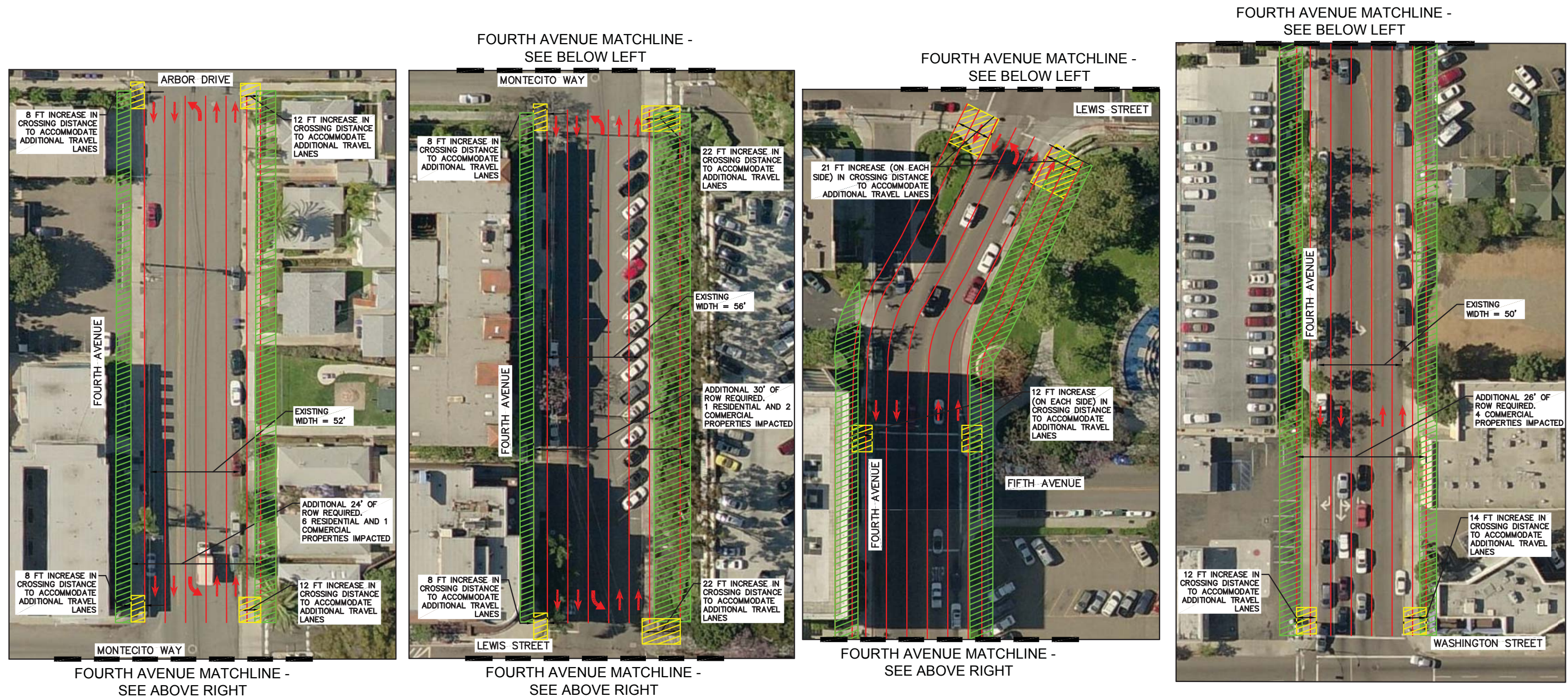
GRAPHIC SCALE IN FEET  
0 30 60 120



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-7D

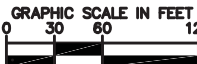




CONVERTING SEGMENTS OF FOURTH AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE THE PEDESTRIAN CROSSING DISTANCE

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

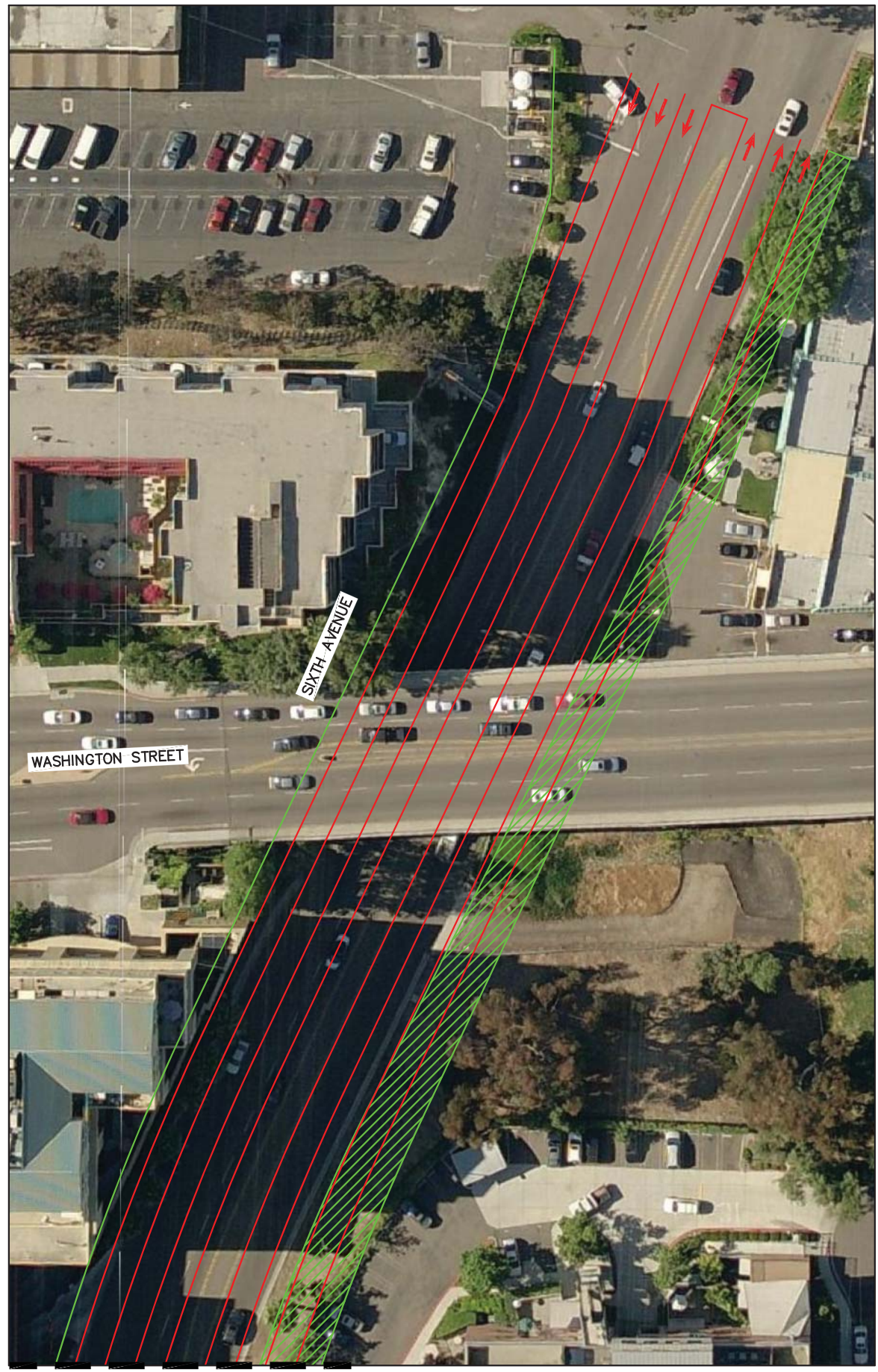
- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



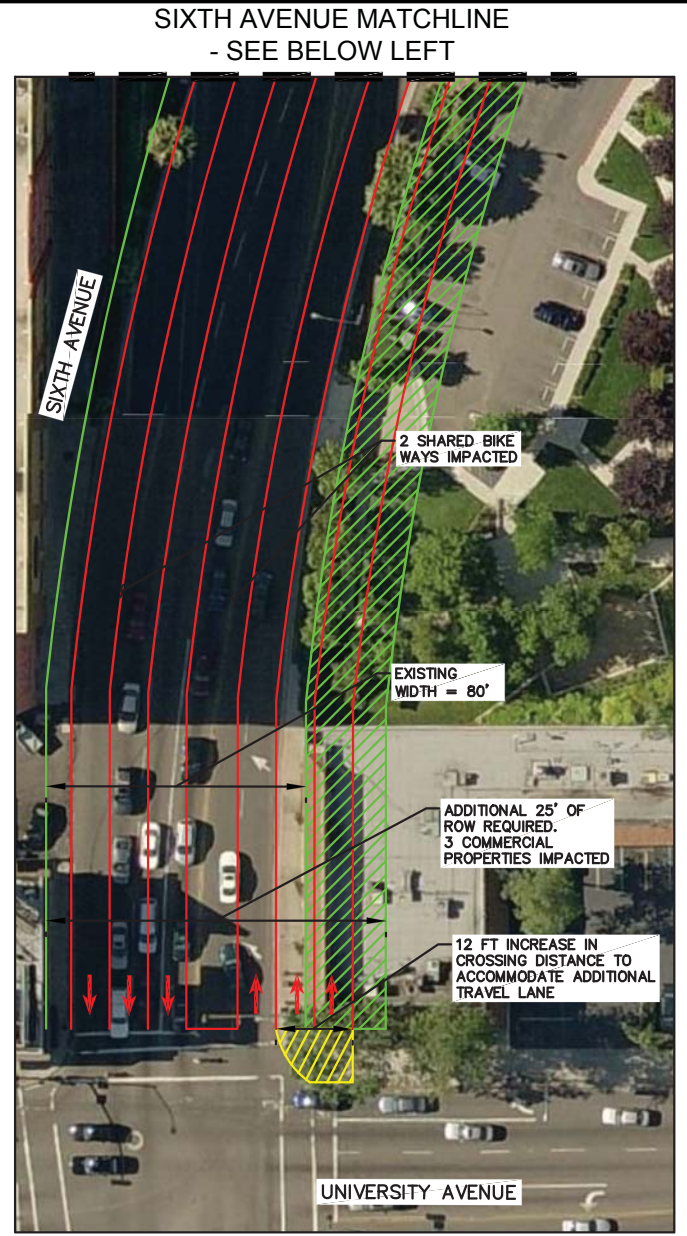
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-8A





SIXTH AVENUE MATCHLINE  
- SEE ABOVE RIGHT

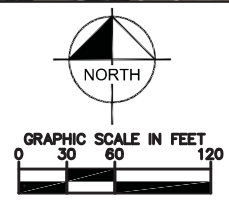
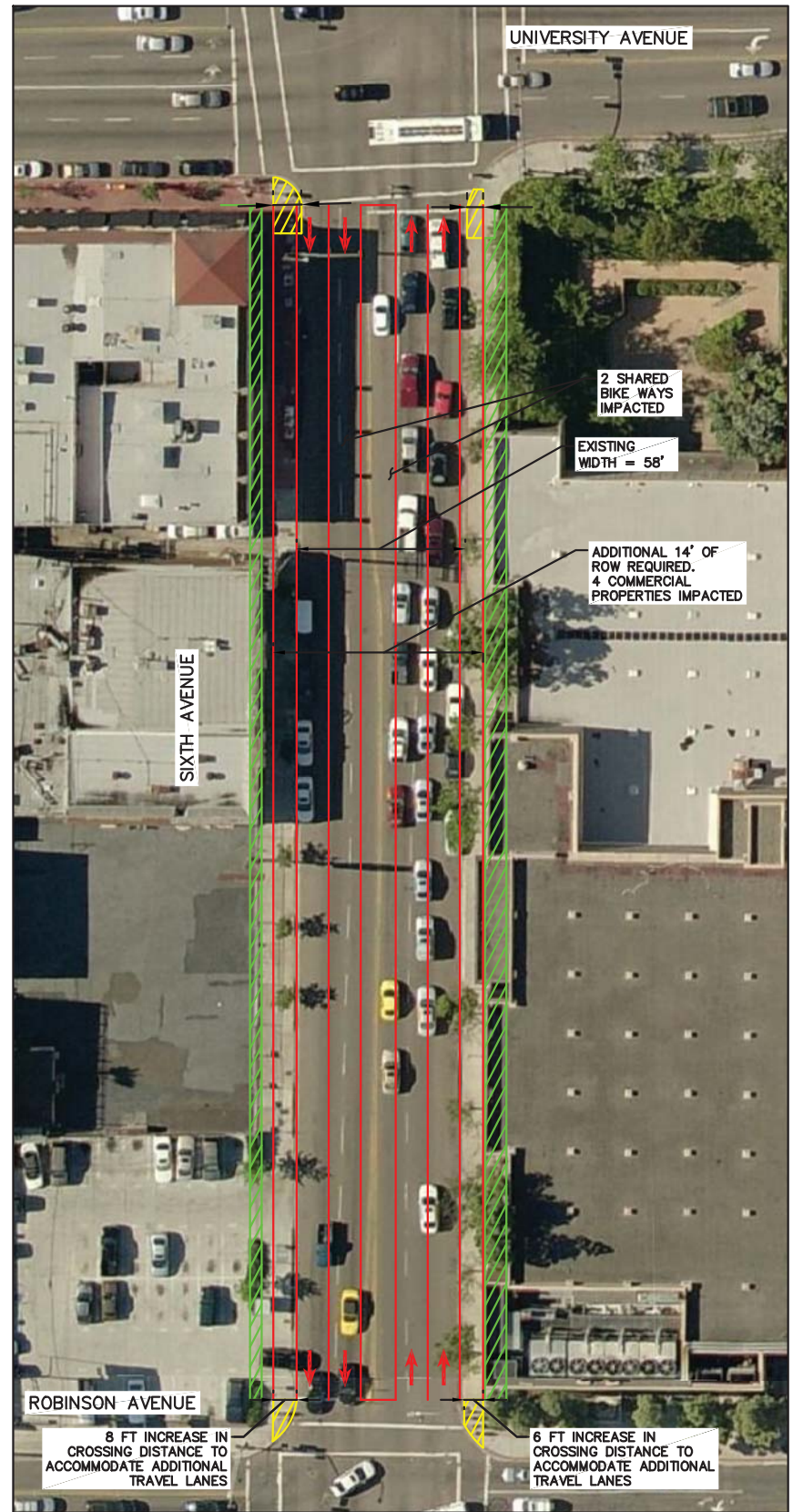


CONVERTING SEGMENTS OF SIXTH AVENUE INTO 6 LANE PRIME OR 4 LANE MAJOR ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BIKE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

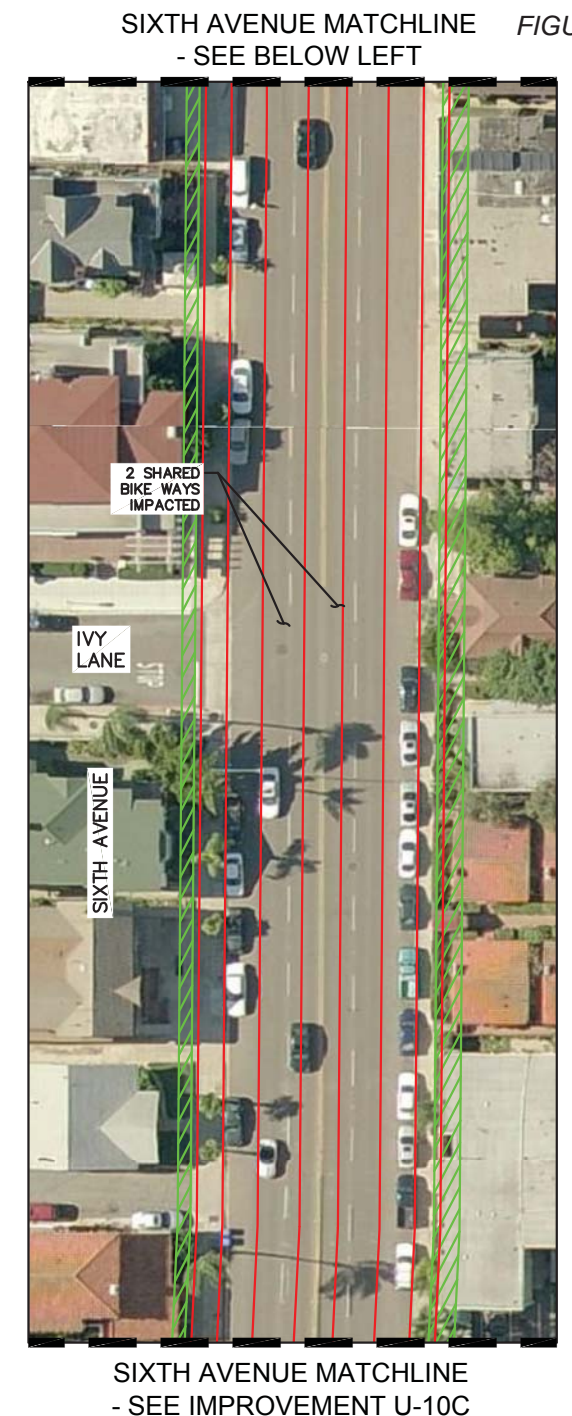
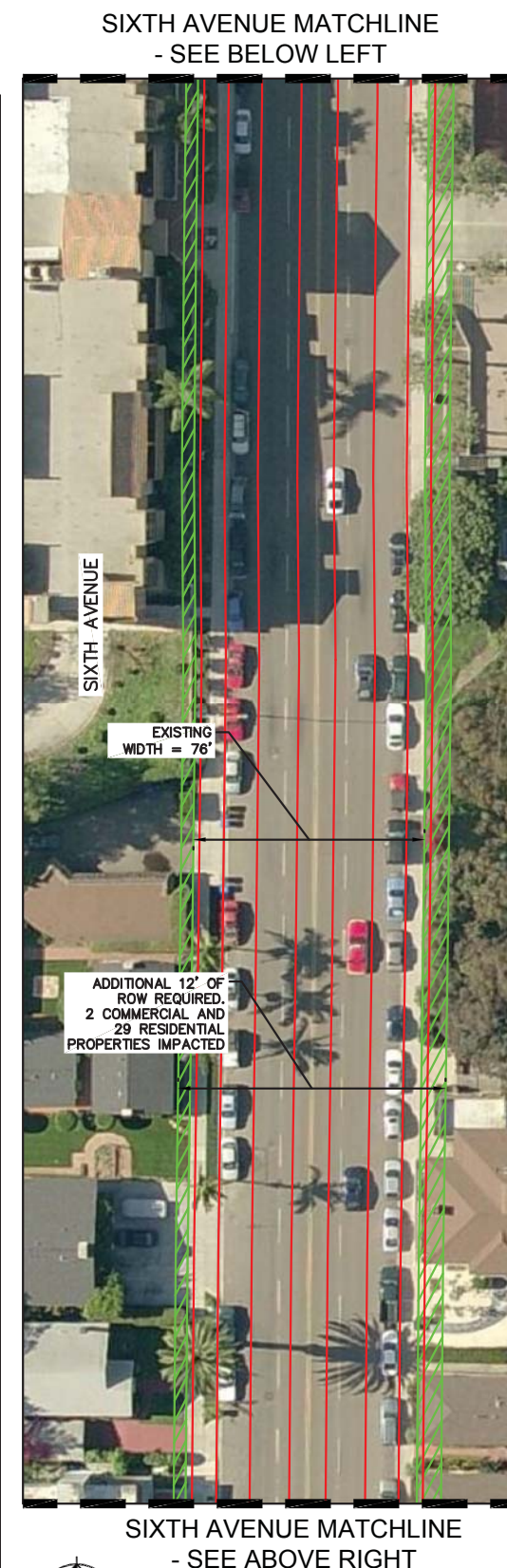
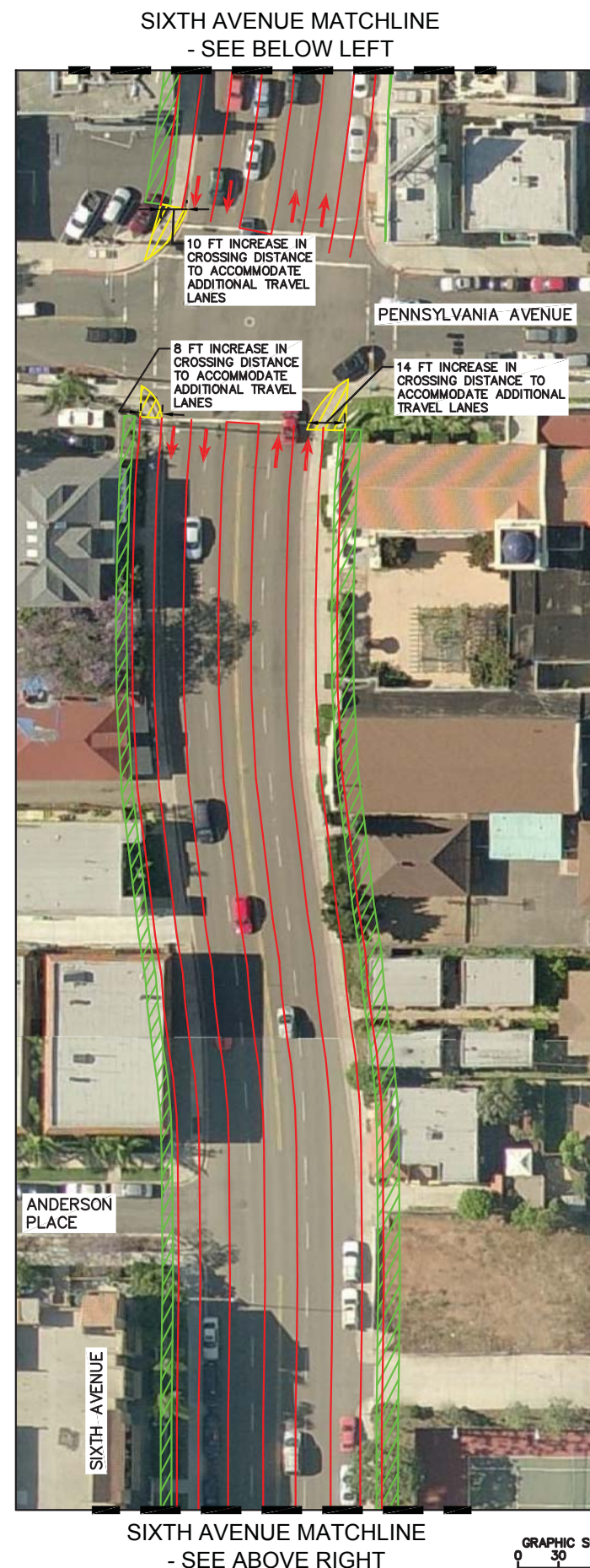
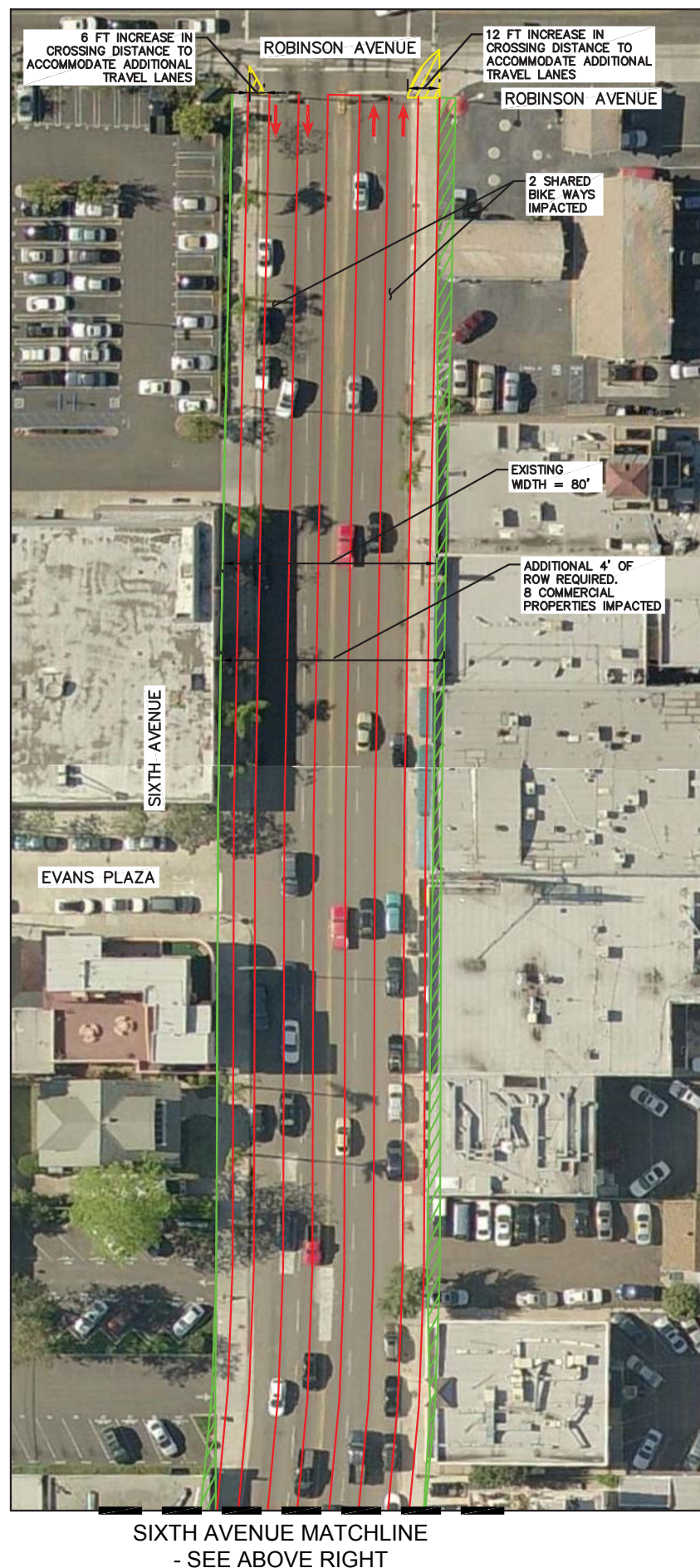
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



IMPROVEMENT U-10A



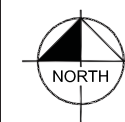


CONVERTING SEGMENTS OF SIXTH AVENUE INTO 4 LANE MAJOR ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BIKE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

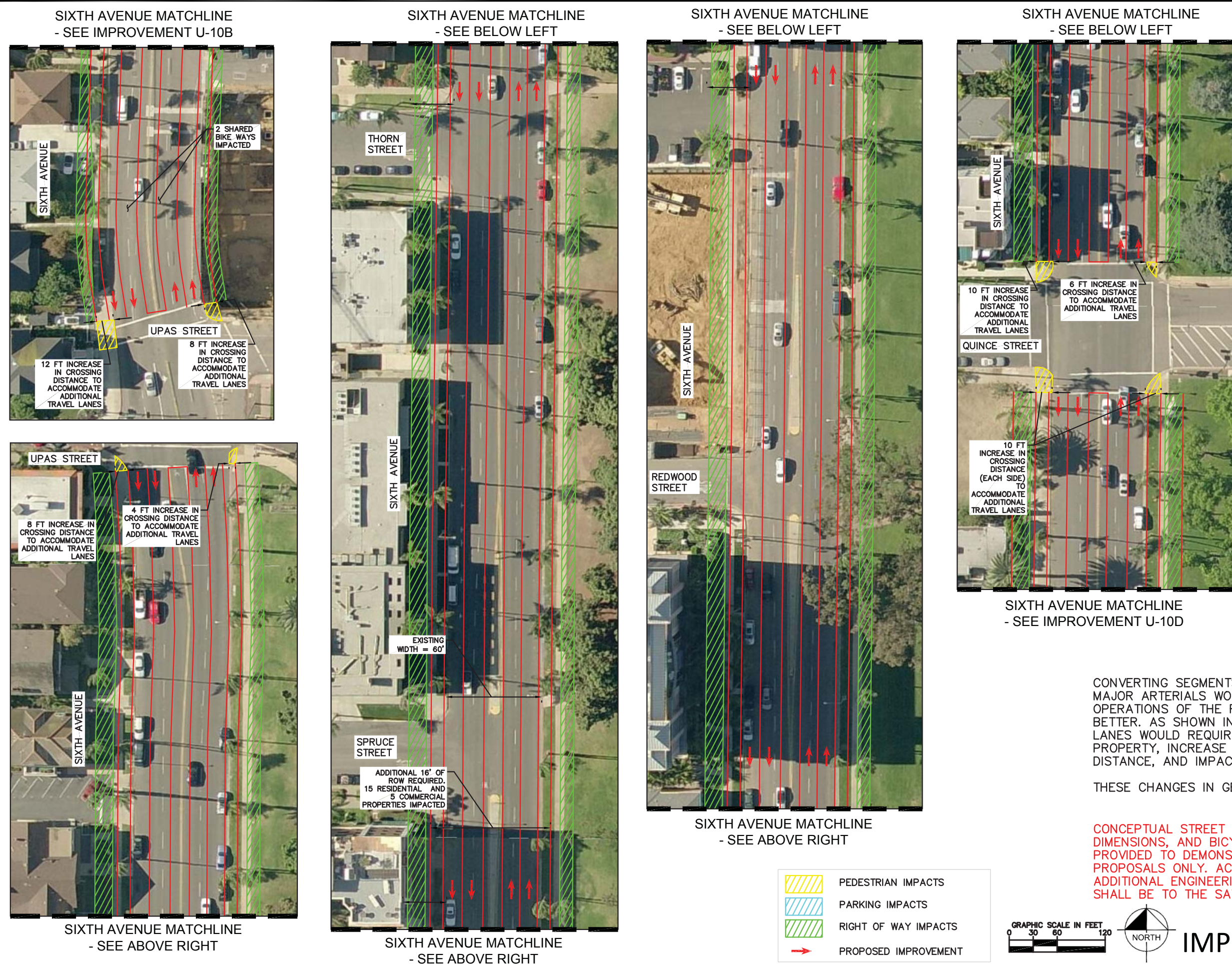
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

## IMPROVEMENT U-10B



- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT

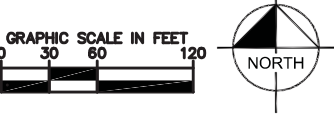




CONVERTING SEGMENTS OF SIXTH AVENUE INTO 4 LANE MAJOR ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BIKE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

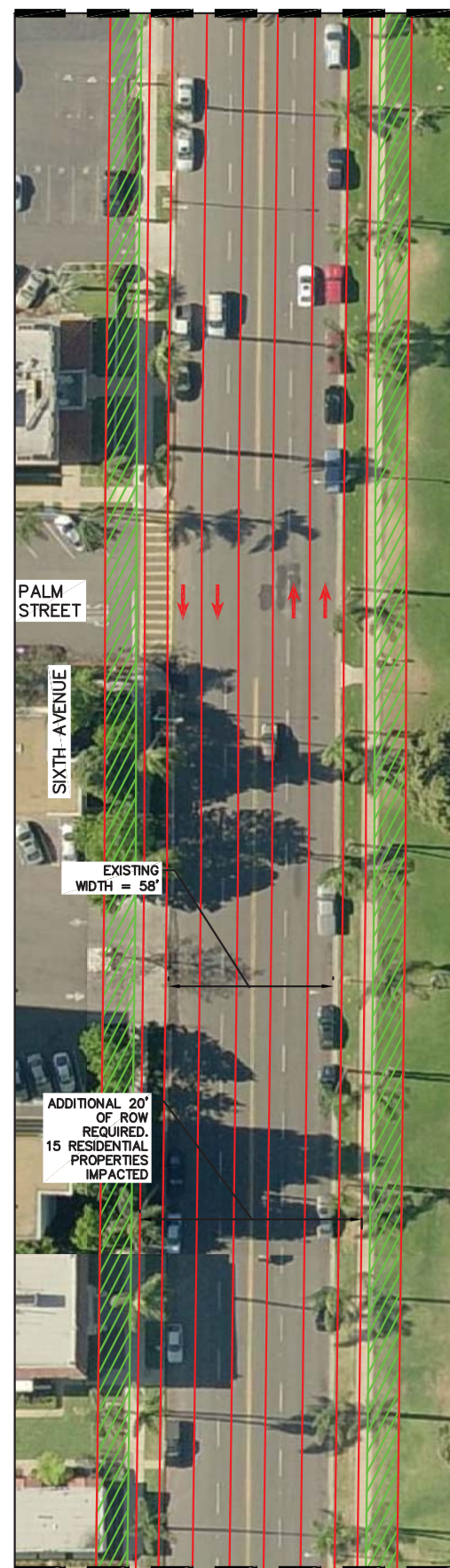
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-10C



SIXTH AVENUE MATCHLINE  
- SEE IMPROVEMENT U-10C



SIXTH AVENUE MATCHLINE  
- SEE ABOVE RIGHT

SIXTH AVENUE MATCHLINE  
- SEE BELOW LEFT

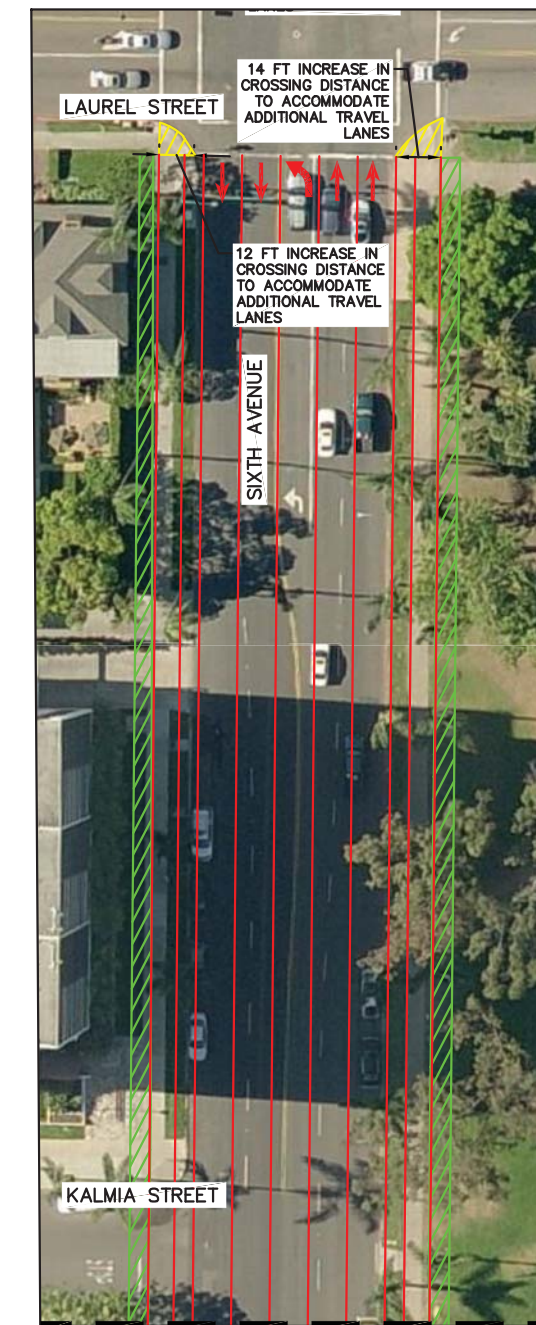


SIXTH AVENUE MATCHLINE  
- SEE ABOVE RIGHT

SIXTH AVENUE MATCHLINE  
- SEE BELOW LEFT

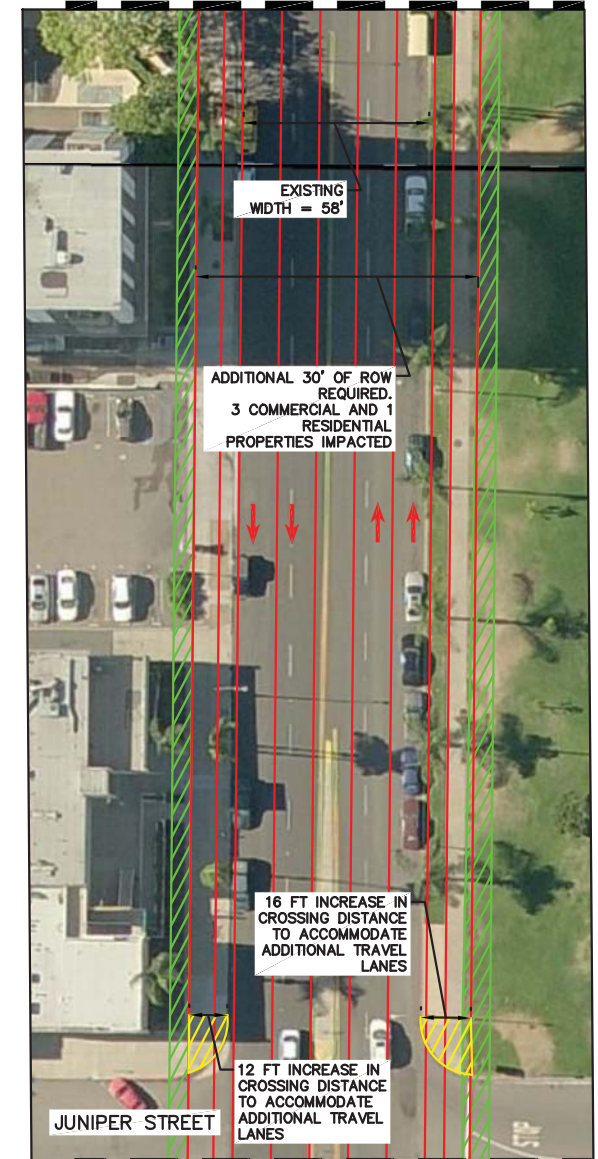


LAUREL STREET  
10 FT INCREASE IN CROSSING DISTANCE TO ACCOMMODATE ADDITIONAL TRAVEL LANES



SIXTH AVENUE MATCHLINE  
- SEE ABOVE RIGHT

SIXTH AVENUE MATCHLINE  
- SEE BELOW LEFT



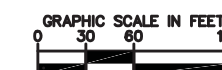
SIXTH AVENUE MATCHLINE  
- SEE IMPROVEMENT U-10E

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT

CONVERTING SEGMENTS OF SIXTH AVENUE INTO 4 LANE MAJOR ARTERIALS OR 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE THE PEDESTRIAN CROSSING DISTANCES.

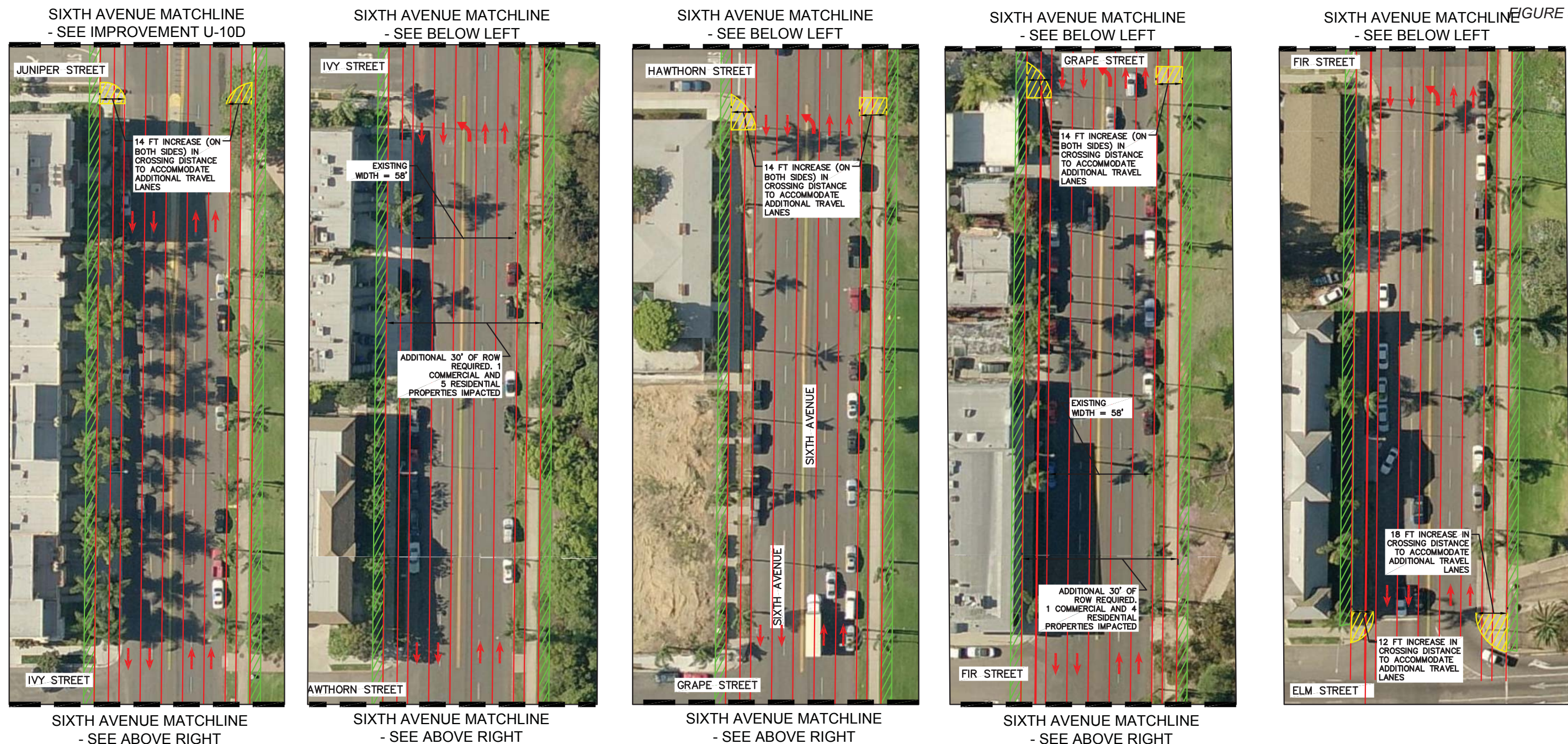
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-10D

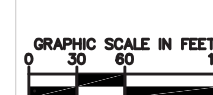




CONVERTING SEGMENTS OF SIXTH AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



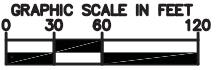
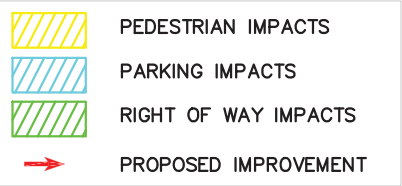
IMPROVEMENT U-10E



FIGURE 57

CONVERTING A SEGMENT OF NINTH AVENUE INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENT TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-11



FIGURE 58



CONVERTING A SEGMENT OF POLK AVENUE INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

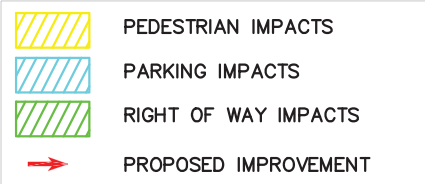
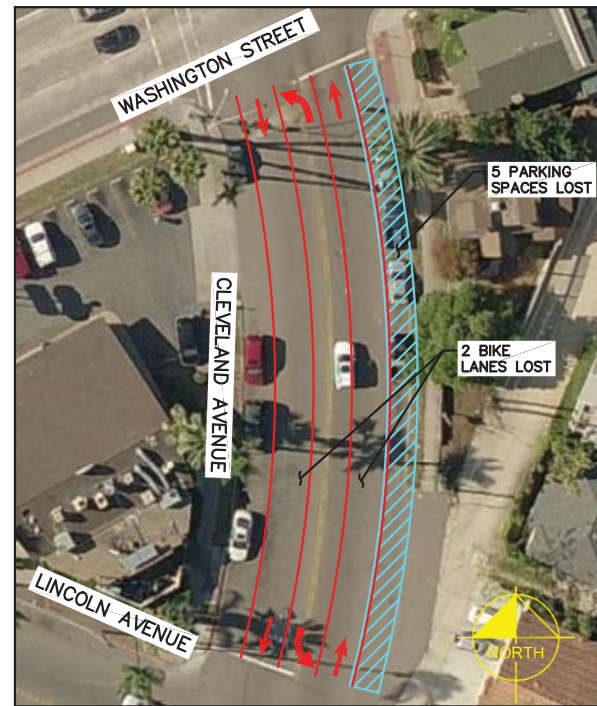
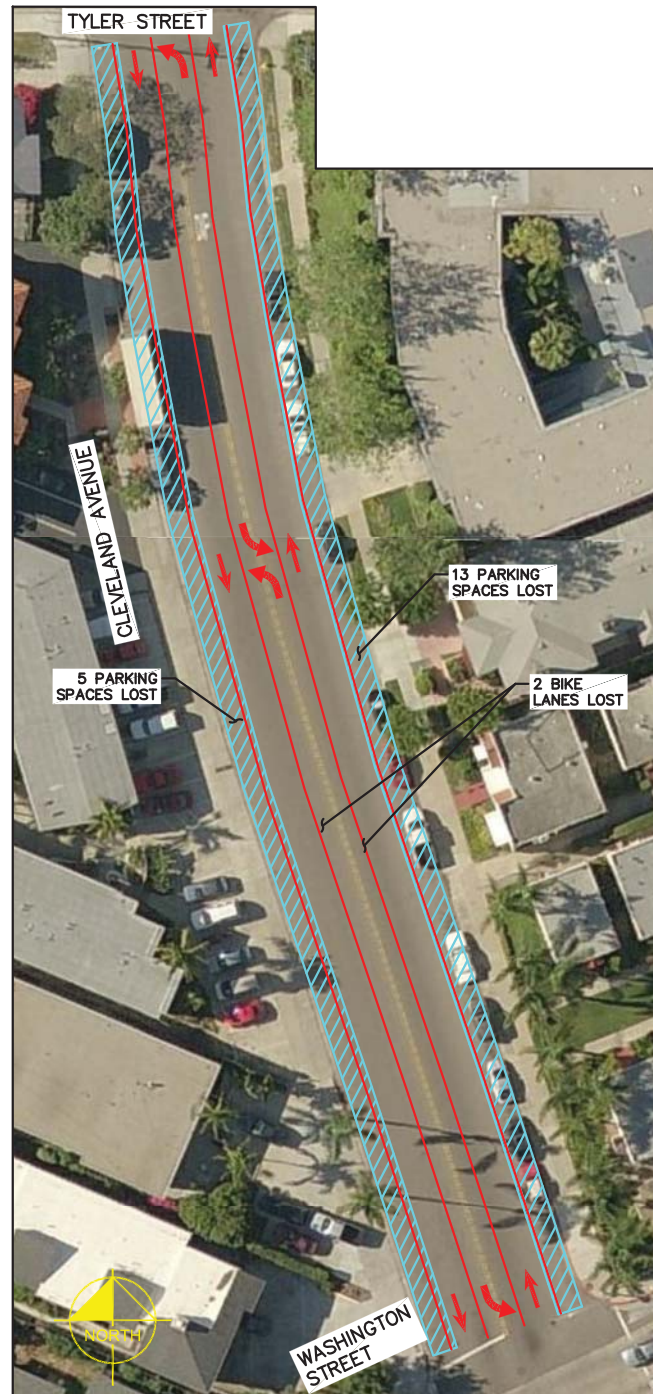
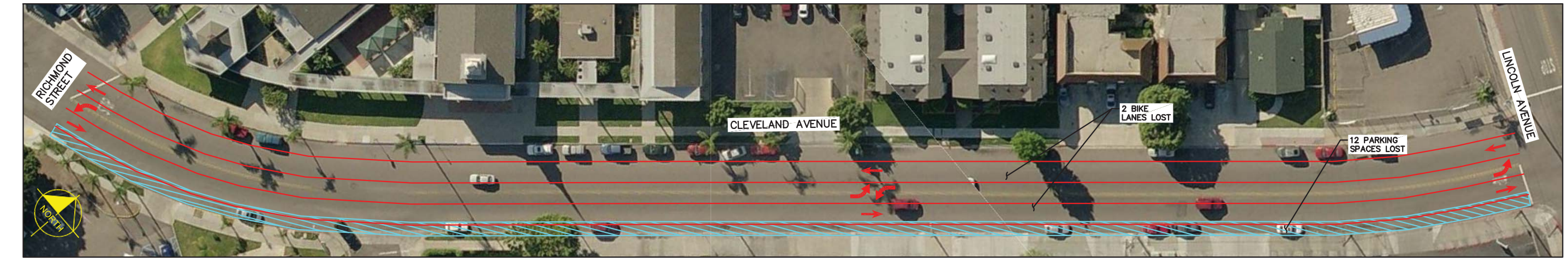




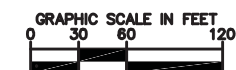
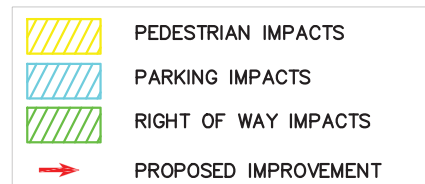
FIGURE 59



CONVERTING SEGMENTS OF CLEVELAND AVENUE INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING. FURTHER, BICYCLE LANES WERE RECENTLY ADDED TO ALL OF THESE SEGMENTS AND ARE NOT SHOWN IN THE AERIAL. THESE BICYCLE LANES WOULD BE IMPACTED BY THE STRIPING CHANGES SHOWN.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

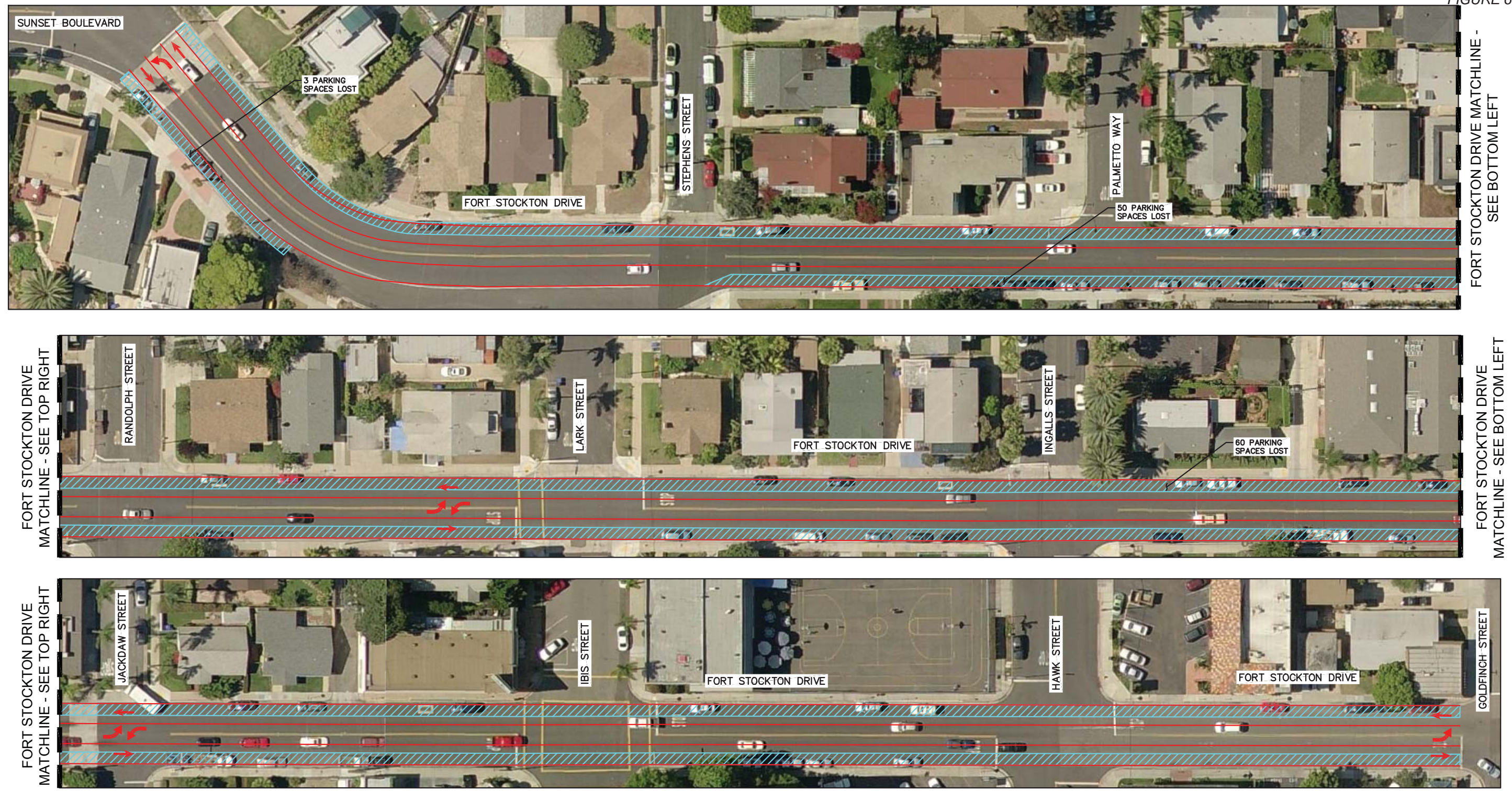
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-13



FIGURE 60



CONVERTING SEGMENTS OF FORT STOCKTON DRIVE INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

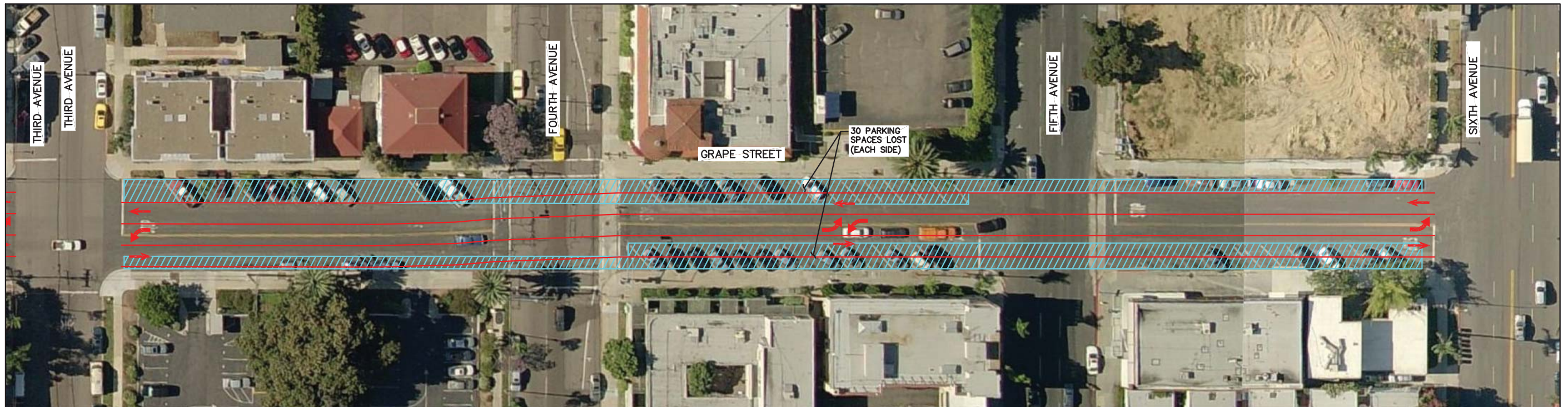
GRAPHIC SCALE IN FEET  
0 30 60 120

NORTH

IMPROVEMENT U-14

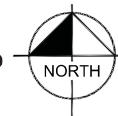
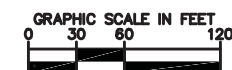
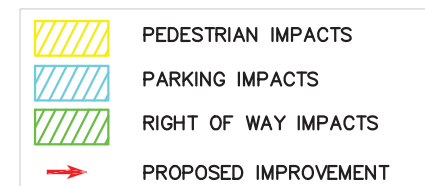


FIGURE 61



CONVERTING A SEGMENT OF GRAPE STREET INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENT TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-15







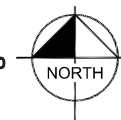
FIGURE 62



CONVERTING A SEGMENT OF HAWTHORN STREET INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENT TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

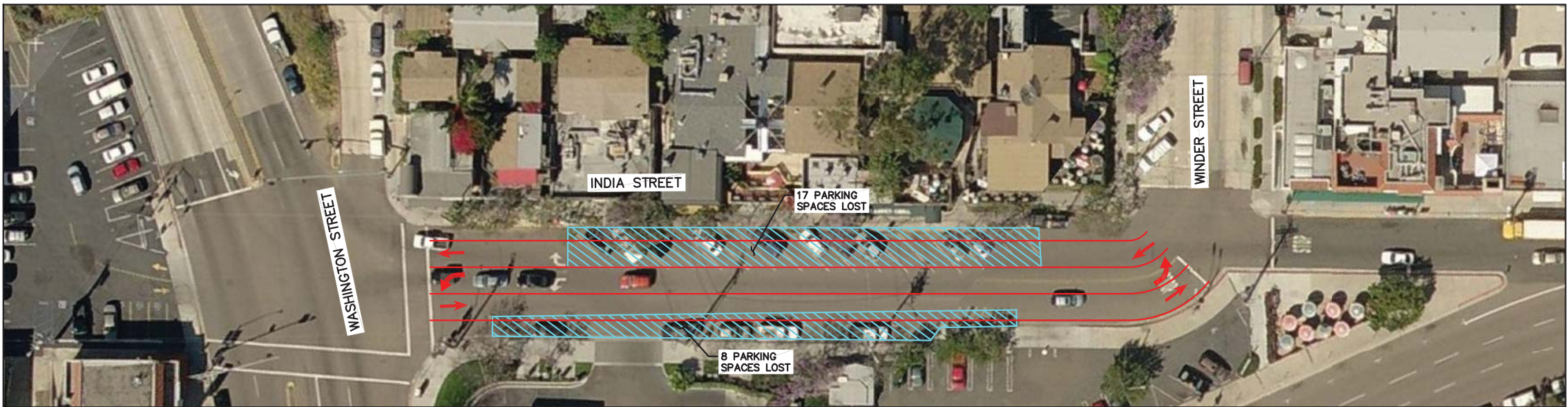
	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-16





INDIA STREET MATCHLINE -  
SEE BOTTOM LEFT



INDIA STREET MATCHLINE -  
SEE TOP RIGHT

CONVERTING SEGMENTS OF INDIA STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT TURN LANES, 3 LANE ONE-WAY COLLECTORS, AND 4 LANE ONE-WAY COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE PEDESTRIAN CROSSING DISTANCE, AND RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



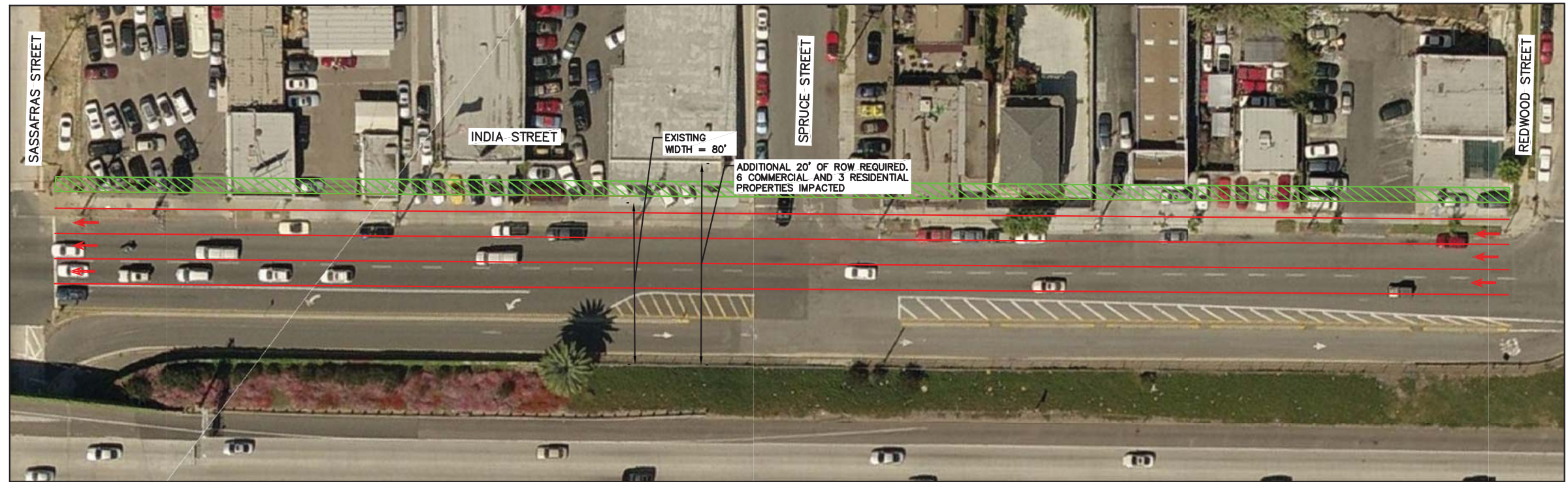
- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

## IMPROVEMENT U-17A

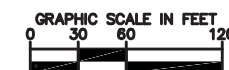
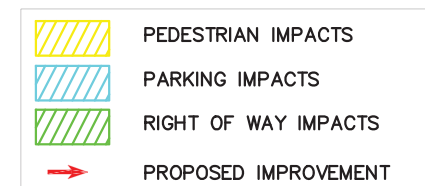


FIGURE 64



CONVERTING SEGMENTS OF INDIA STREET INTO A 3 LANE ONE-WAY COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



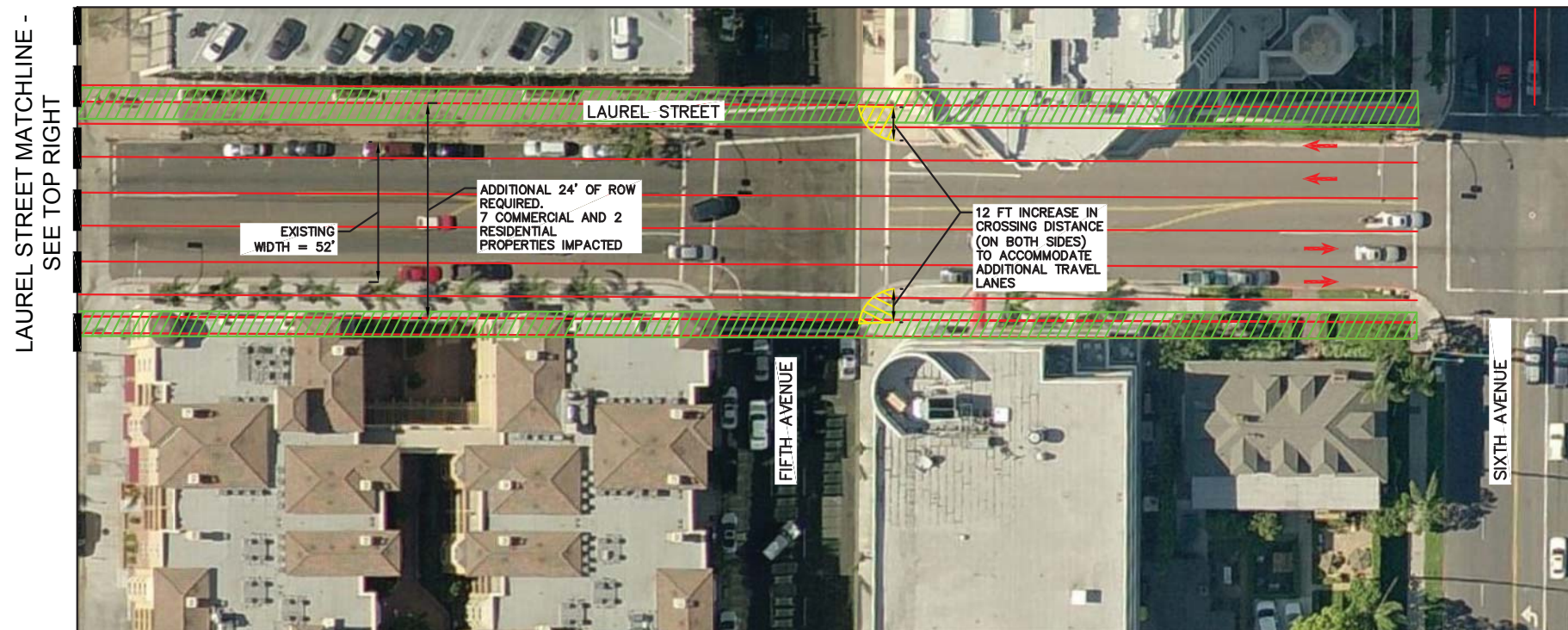
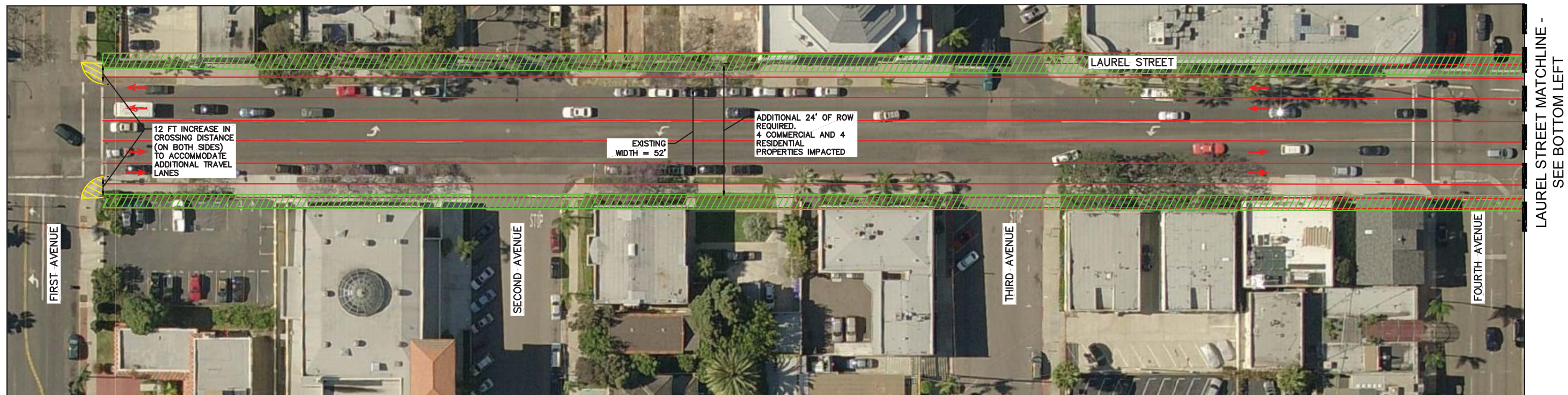
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-17B





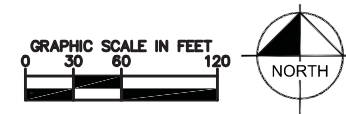
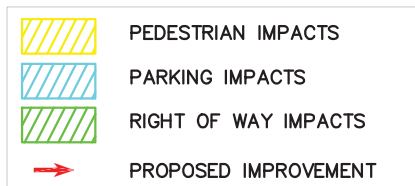




CONVERTING SEGMENTS OF LAUREL STREET INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD INCREASE PEDESTRIAN CROSSING DISTANCE AND REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

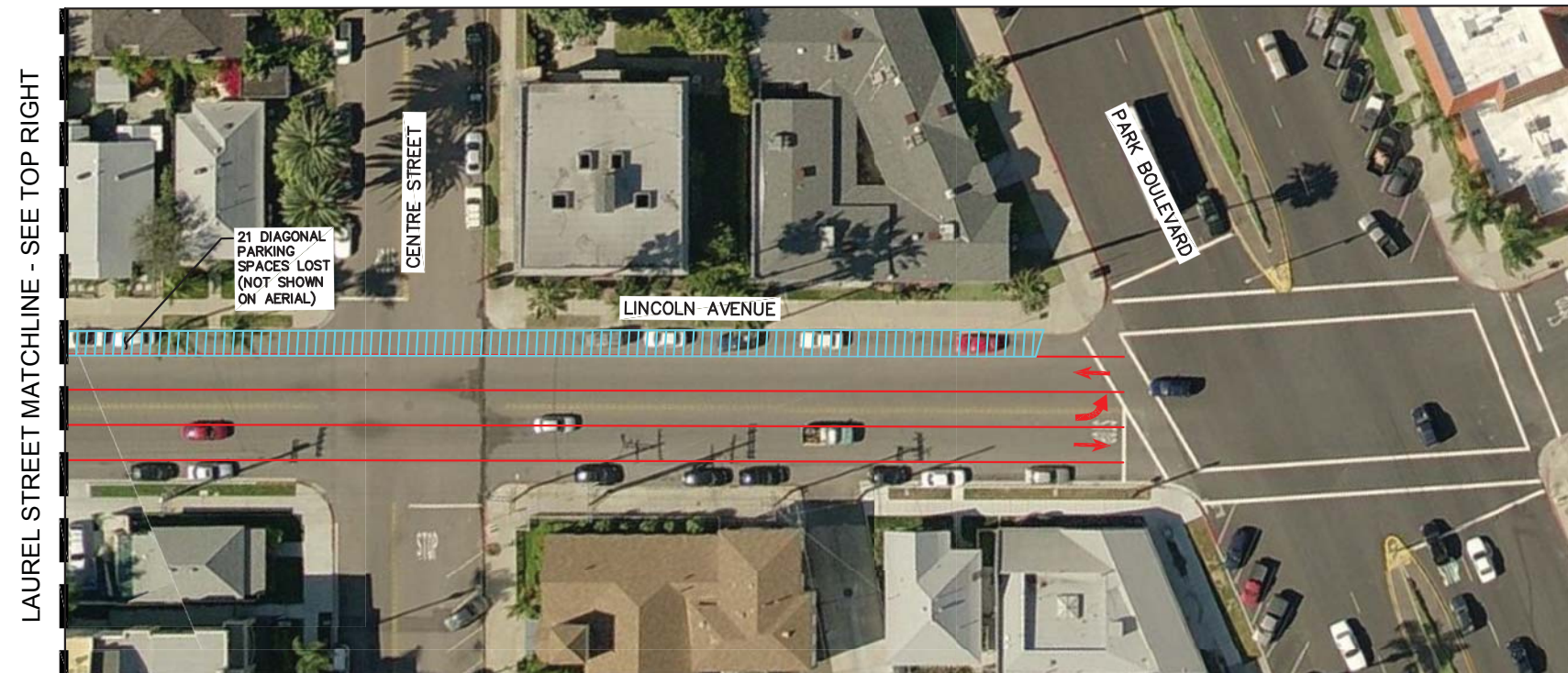


IMPROVEMENT U-18B





LAUREL STREET MATCHLINE - SEE BOTTOM LEFT



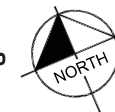
LAUREL STREET MATCHLINE - SEE TOP RIGHT

CONVERTING A SEGMENT OF LINCOLN AVENUE INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT

GRAPHIC SCALE IN FEET  
0 30 60 120



IMPROVEMENT U-19

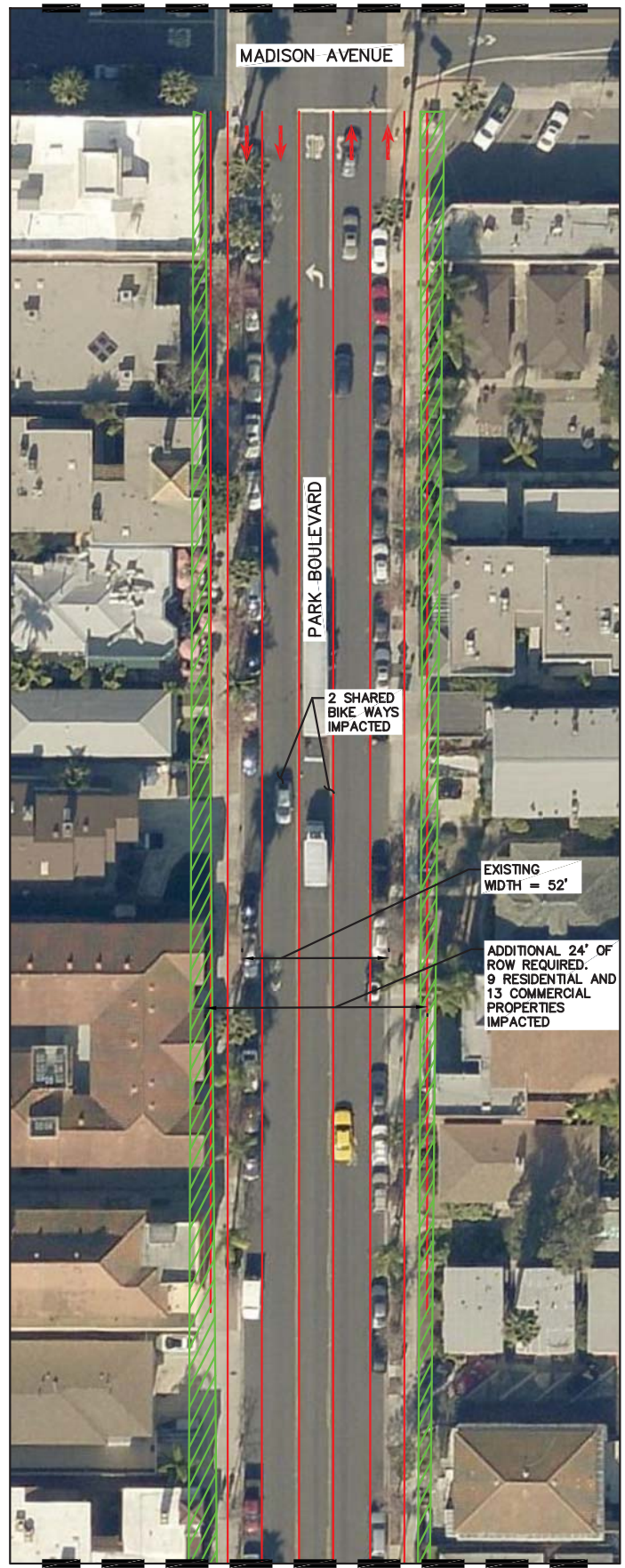
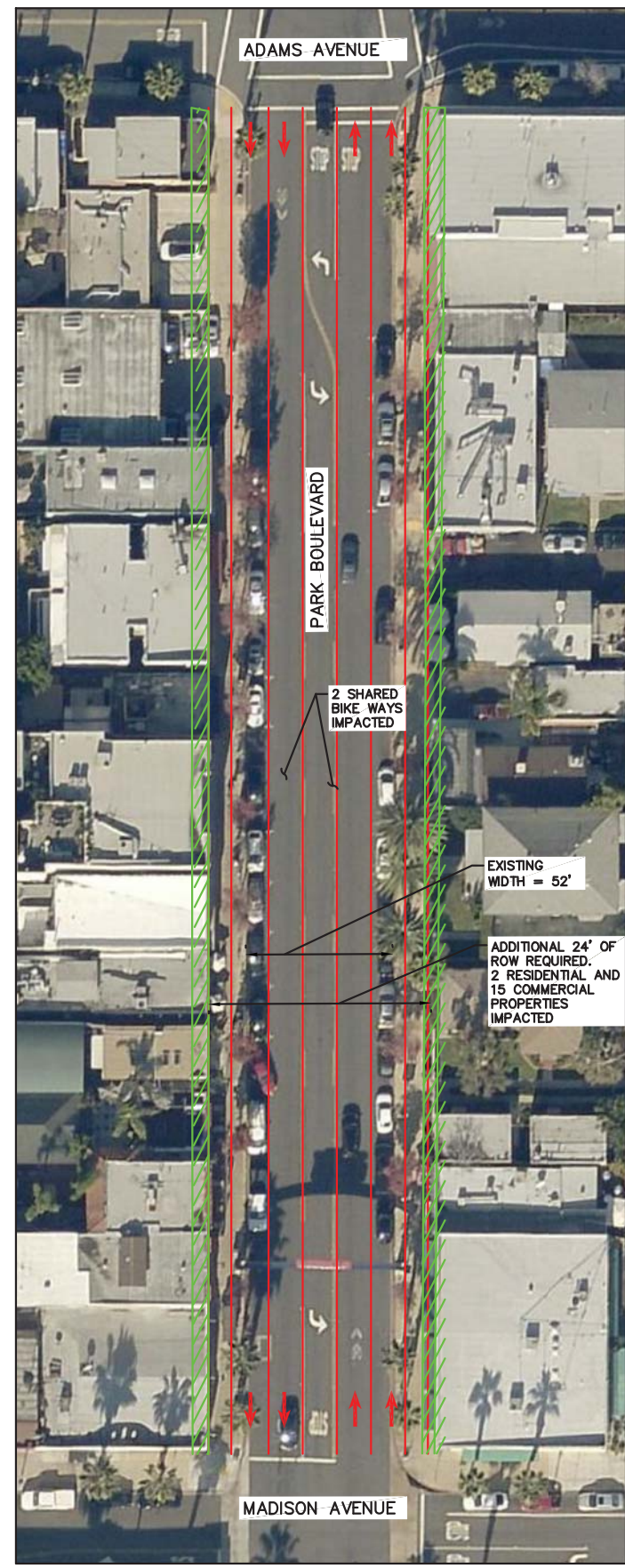
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



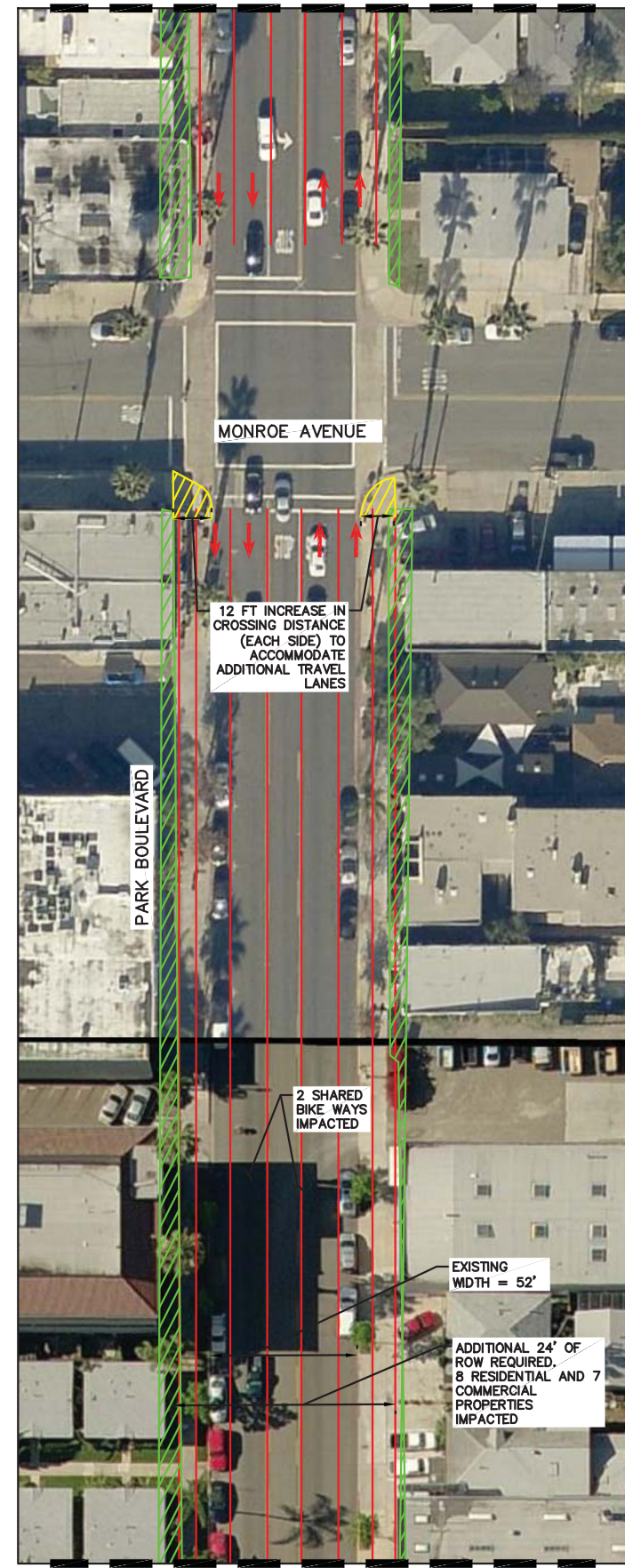
PARK BOULEVARD MATCHLINE -  
SEE BELOW LEFT

PARK BOULEVARD MATCHLINE -  
SEE BELOW LEFT

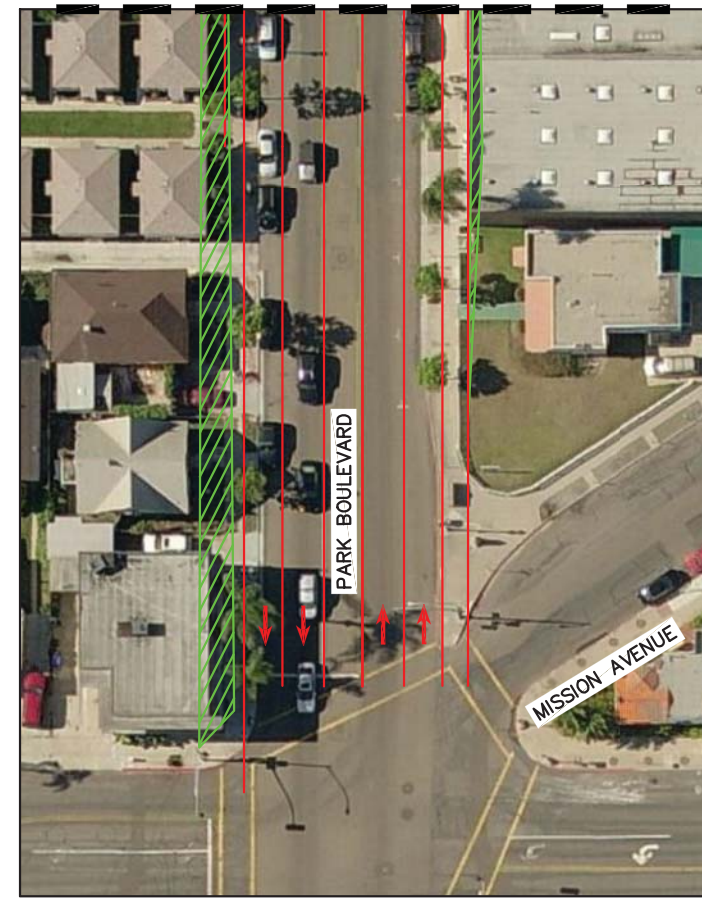
PARK BOULEVARD MATCHLINE -  
SEE BELOW LEFT



PARK BOULEVARD MATCHLINE -  
SEE ABOVE RIGHT



PARK BOULEVARD MATCHLINE -  
SEE ABOVE RIGHT



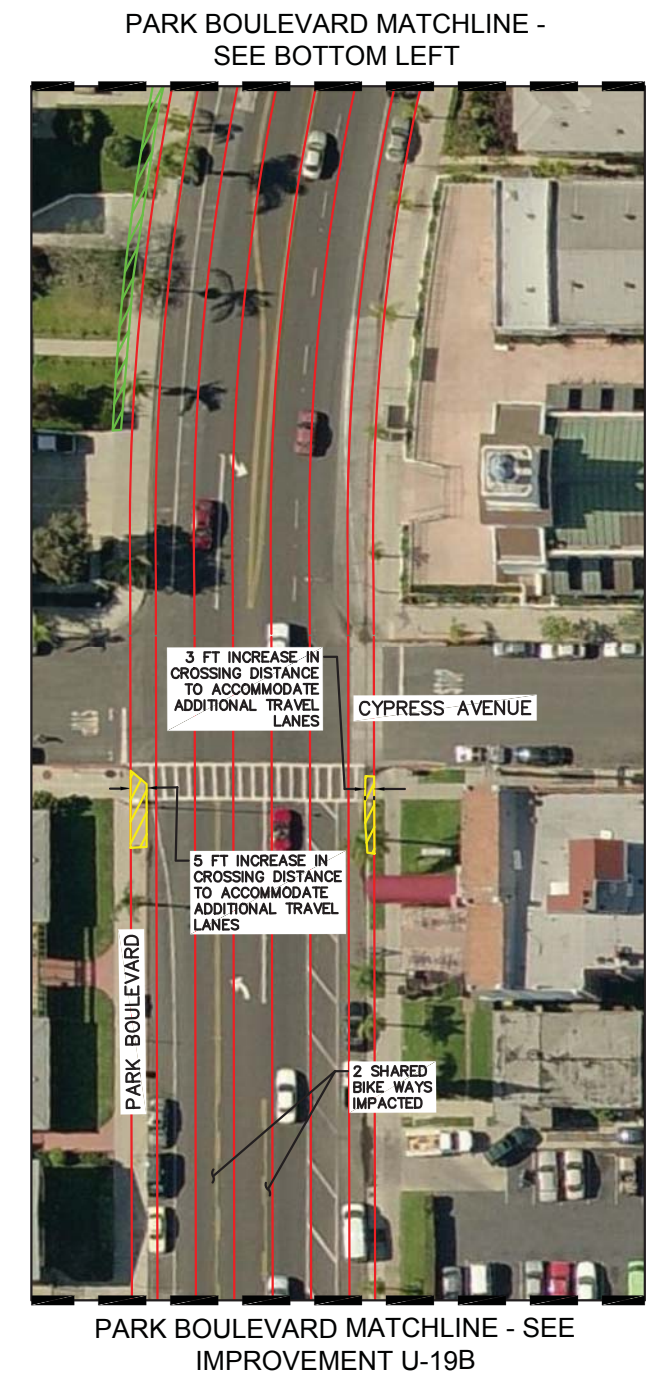
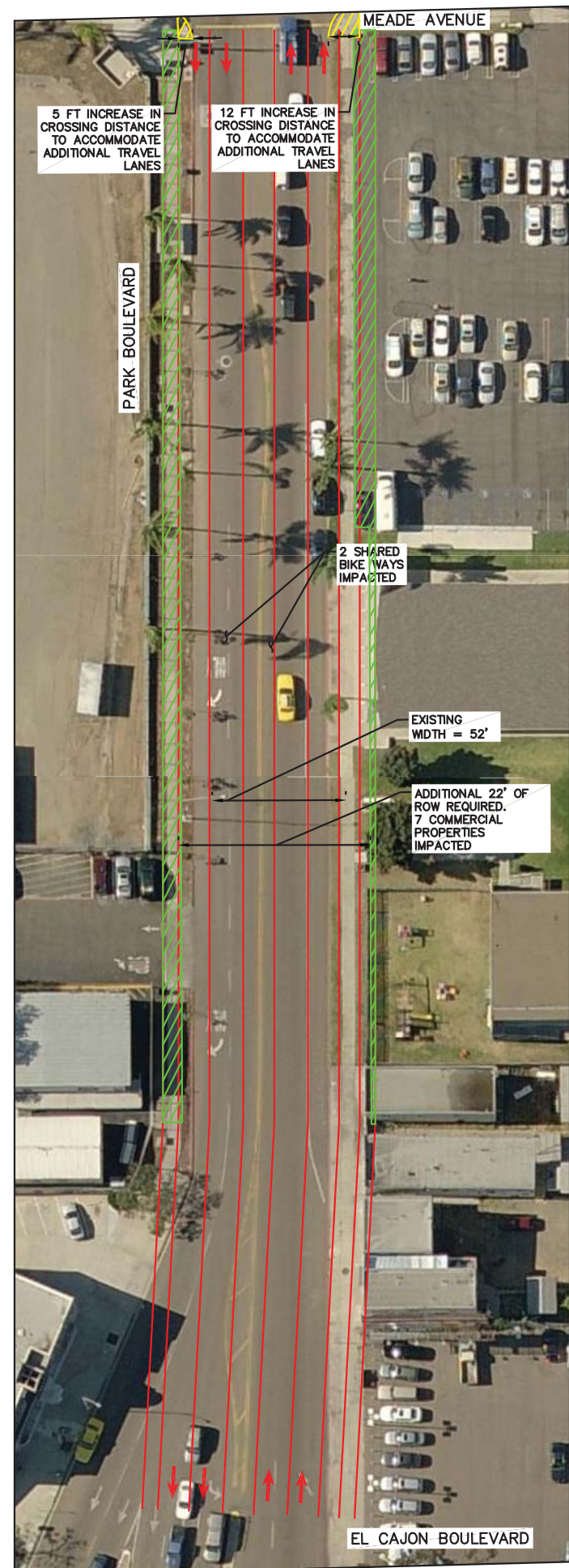
CONVERTING SEGMENTS OF PARK BOULEVARD INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANE WILL REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASED PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

## IMPROVEMENT U-20A

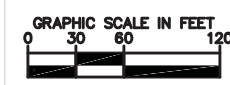




CONVERTING SEGMENTS OF PARK BOULEVARD INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANE WILL REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASED PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

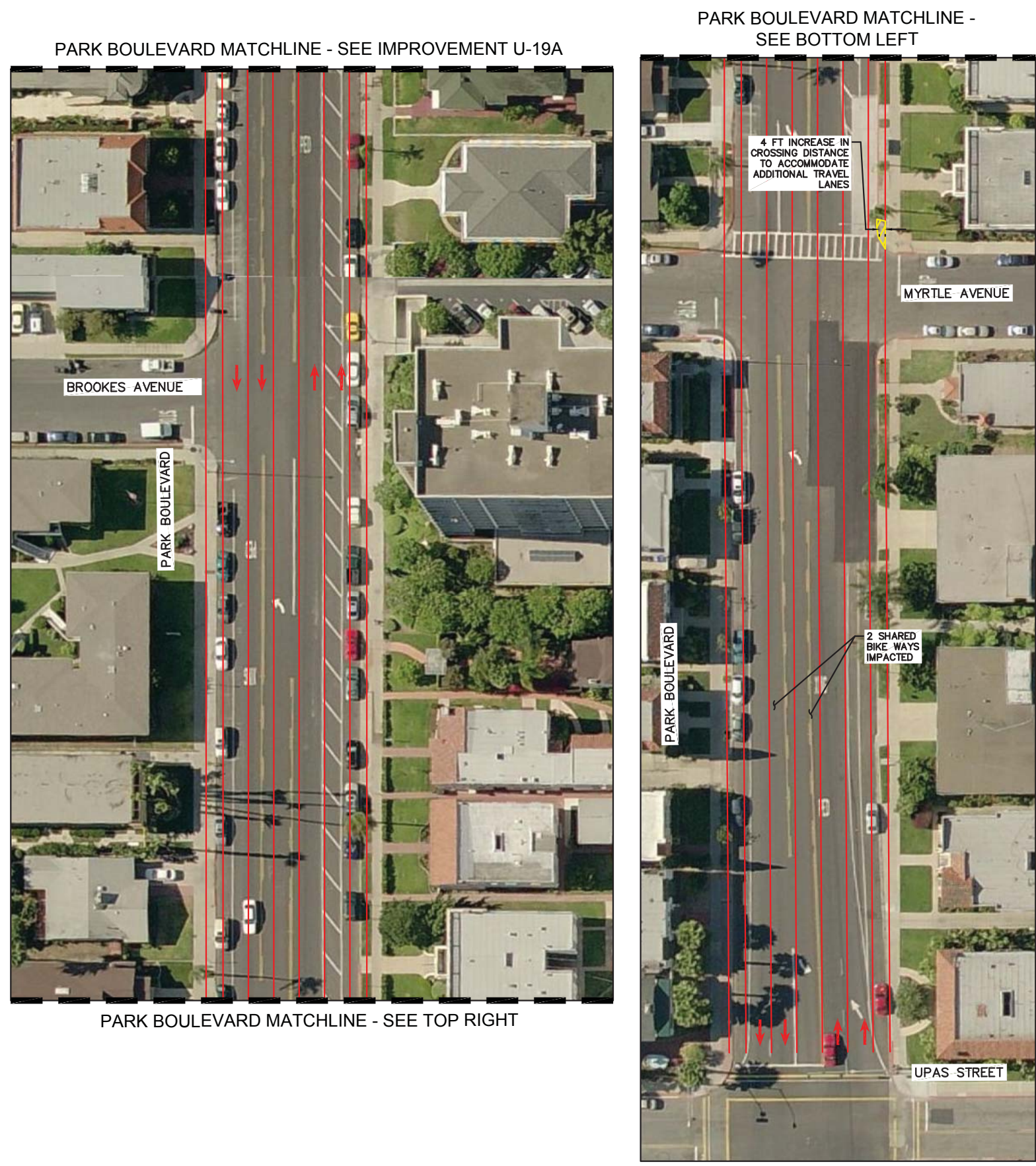
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED. CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



IMPROVEMENT U-20B



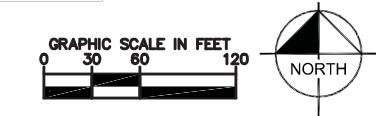


CONVERTING SEGMENTS OF PARK BOULEVARD INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANE WILL REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASED PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

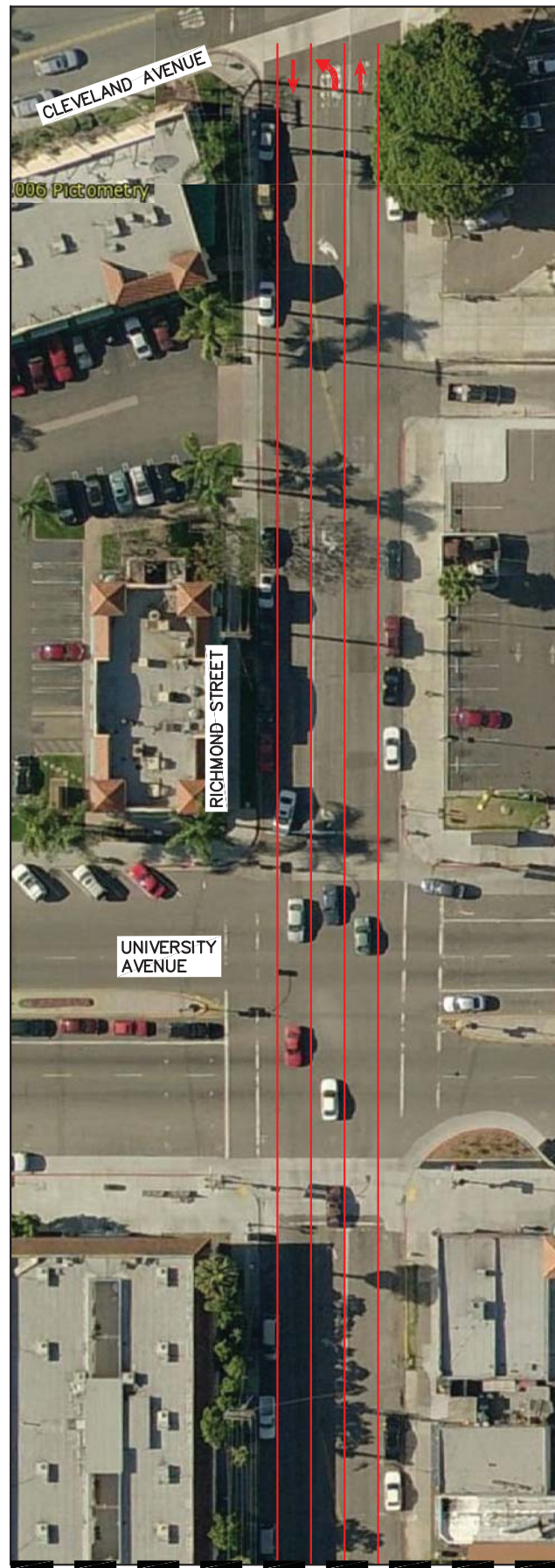
- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-20C

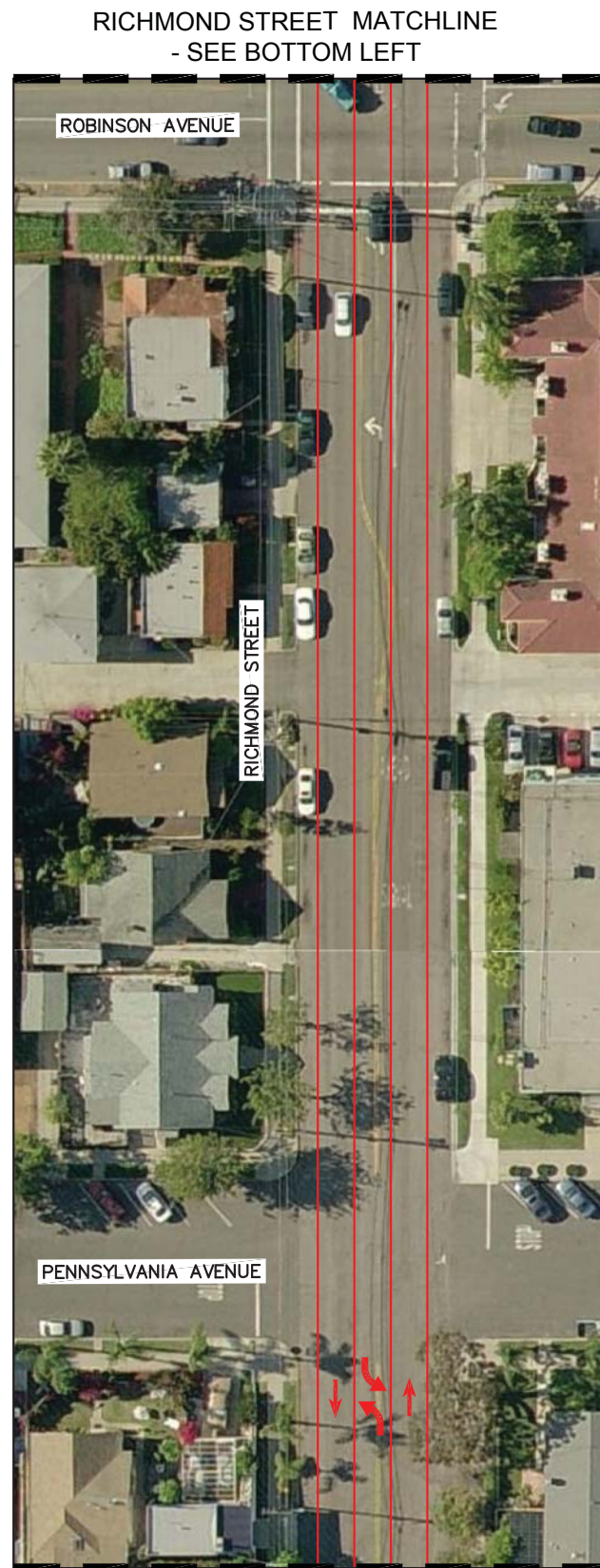




RICHMOND STREET MATCHLINE -  
SEE TOP RIGHT

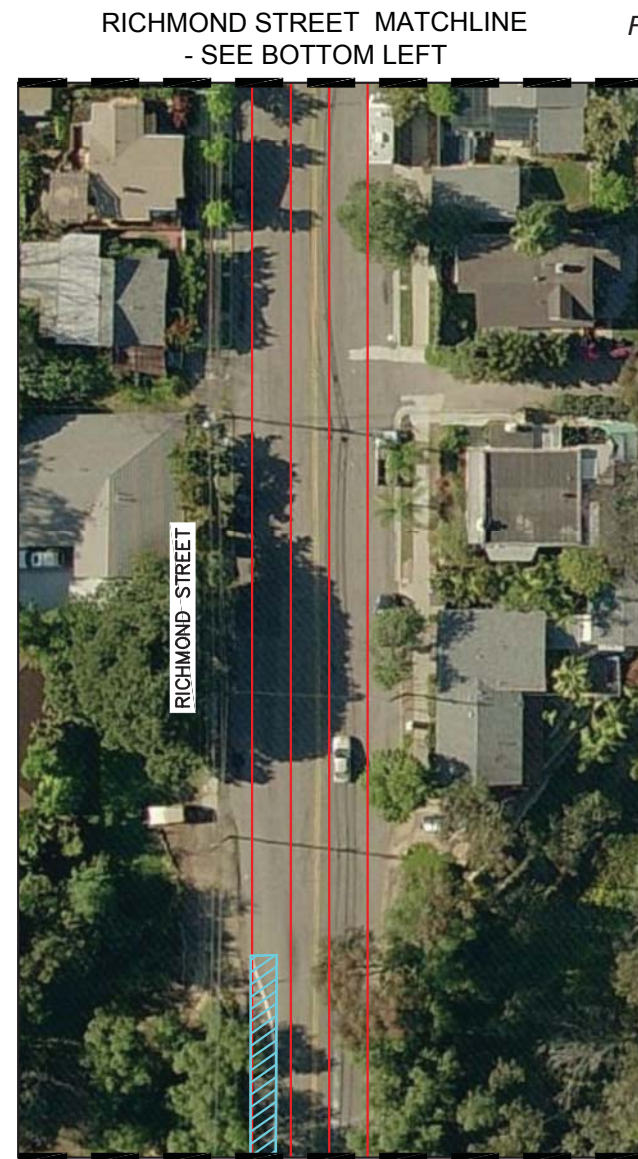
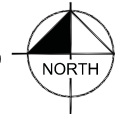


RICHMOND STREET MATCHLINE -  
SEE TOP RIGHT



RICHMOND STREET MATCHLINE -  
SEE TOP RIGHT

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



RICHMOND STREET MATCHLINE -  
SEE IMPROVEMENT U-20B

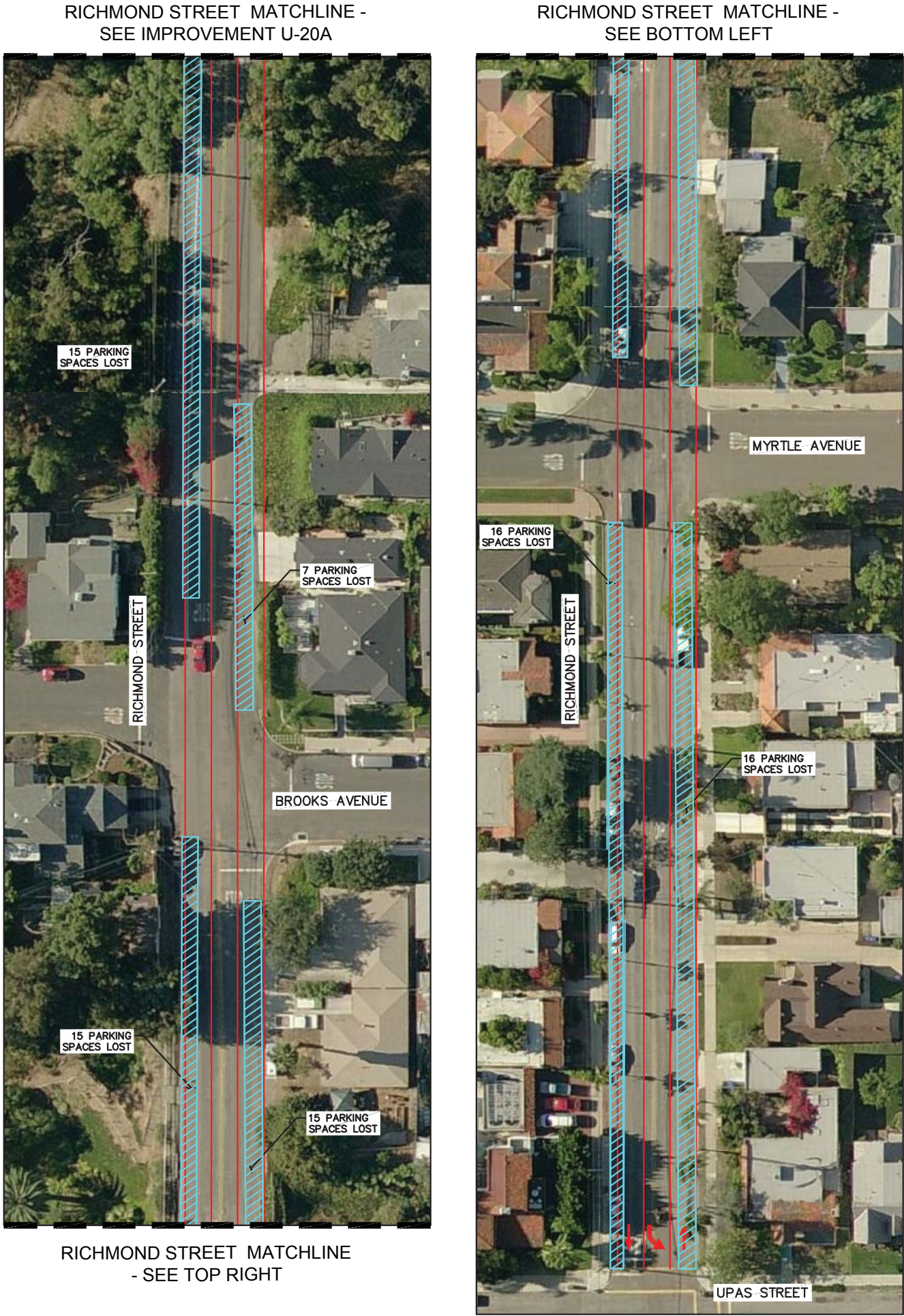
CONVERTING SEGMENTS OF RICHMOND STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS NORTH OF PENNSYLVANIA AVENUE. THE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING SPACES SOUTH OF PENNSYLVANIA AVENUE.

THESE CHANGES IN GEOMETRY ARE RECOMMENDED BETWEEN CLEVELAND AVENUE AND PENNSYLVANIA AVENUE.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-21A

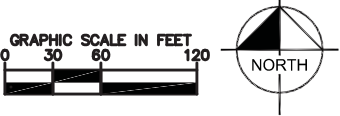




CONVERTING SEGMENTS OF RICHMOND STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WILL RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

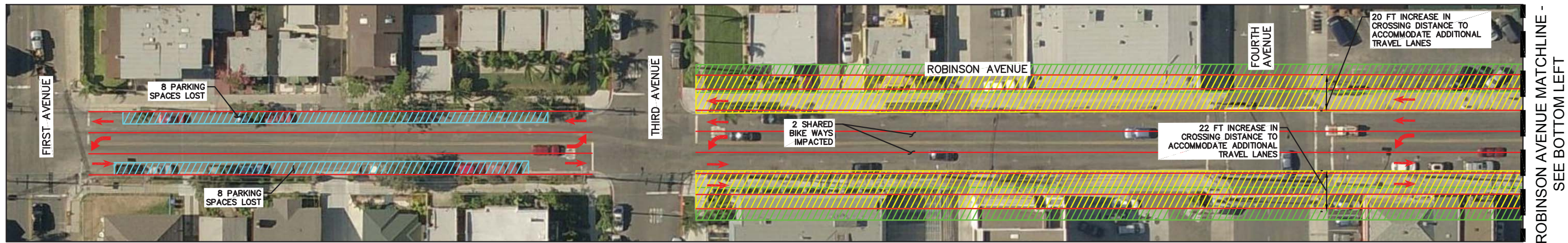
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-21B



FIGURE 73

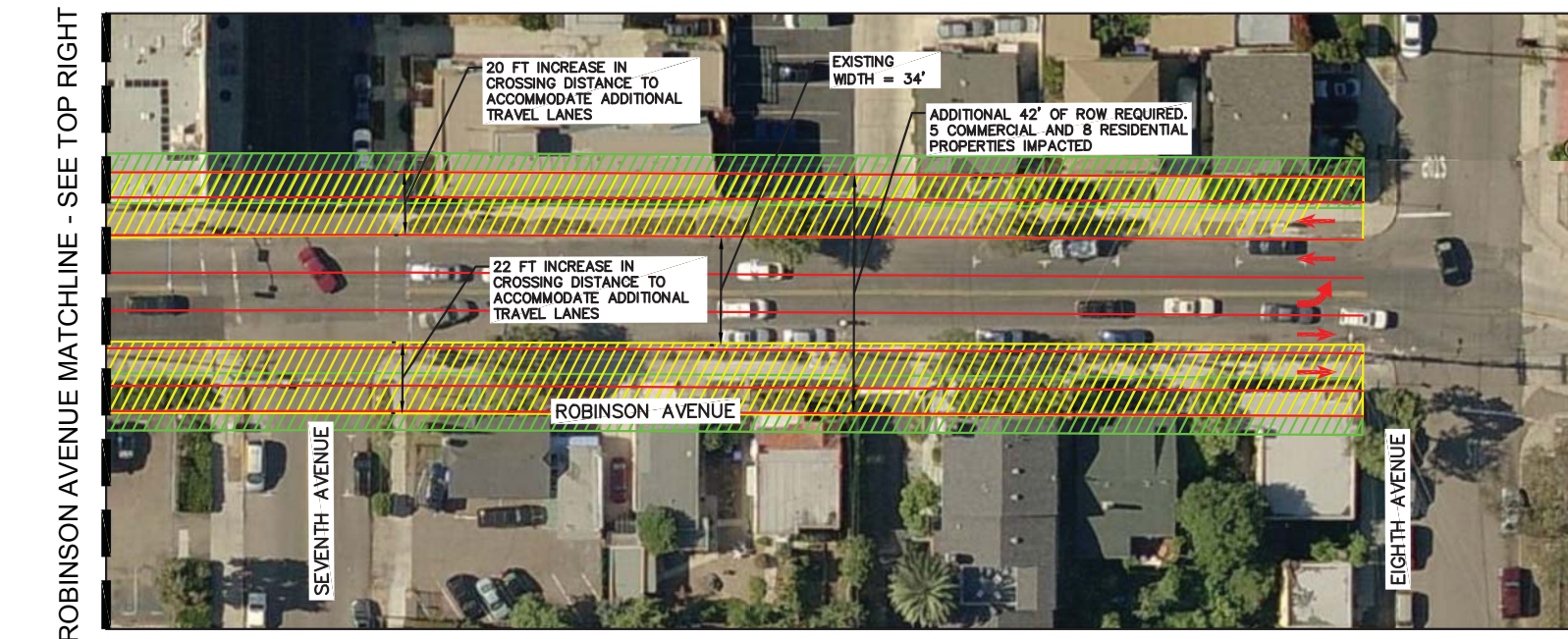


ROBINSON AVENUE MATCHLINE - SEE BOTTOM LEFT



ROBINSON AVENUE MATCHLINE - SEE TOP RIGHT

ROBINSON AVENUE MATCHLINE - SEE BOTTOM LEFT



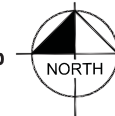
ROBINSON AVENUE MATCHLINE - SEE TOP RIGHT

CONVERTING SEGMENTS OF ROBINSON AVENUE INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES AND 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, IMPACT SHARED USE BICYCLE FACILITIES, AND RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT

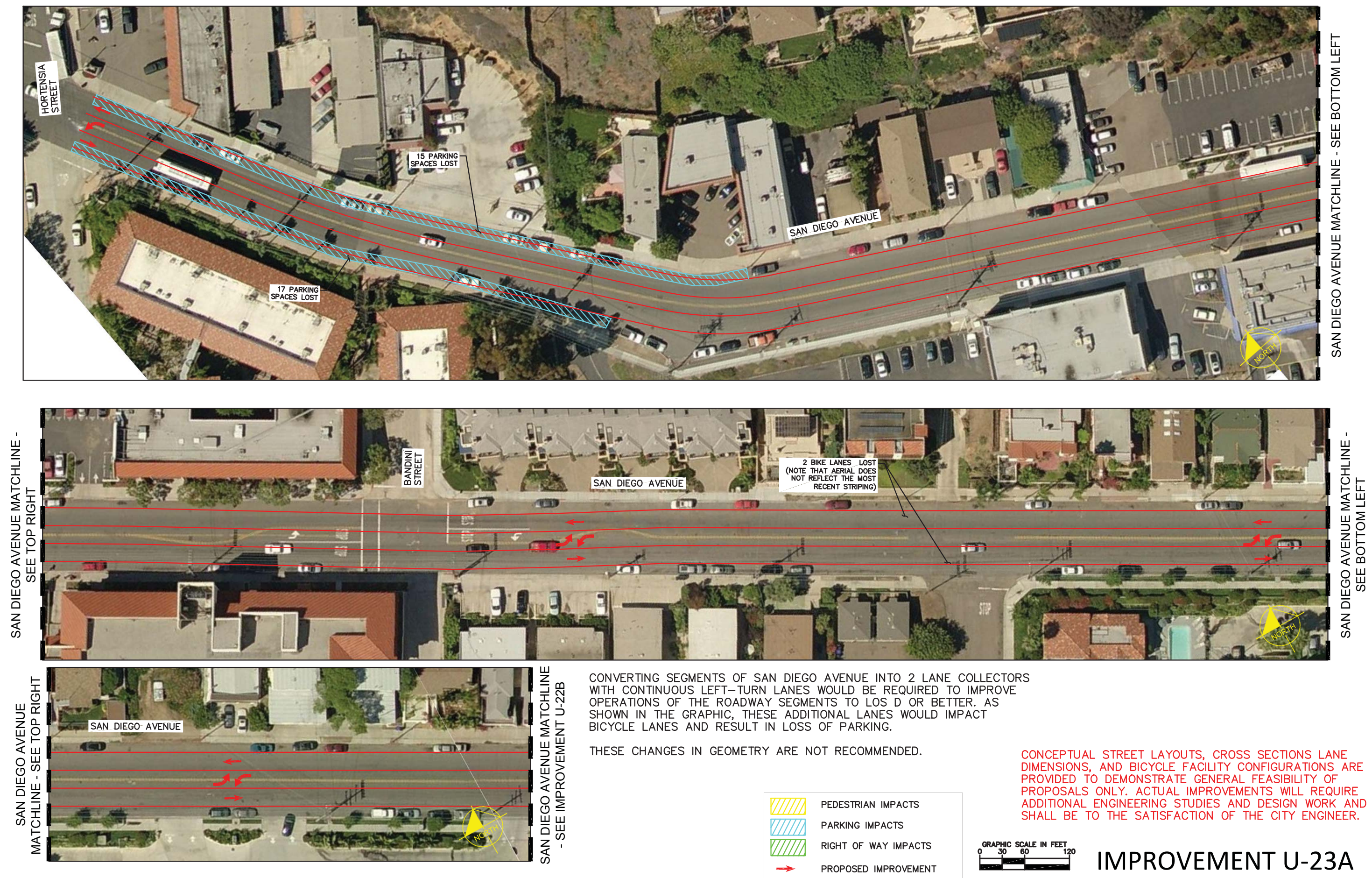
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-22



FIGURE 74





SAN DIEGO AVENUE MATCHLINE  
- SEE IMPROVEMENT U-22A



SAN DIEGO AVENUE MATCHLINE  
- SEE BOTTOM LEFT

SAN DIEGO AVENUE MATCHLINE -  
SEE TOP RIGHT



CONVERTING SEGMENTS OF SAN DIEGO AVENUE INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD IMPACT BICYCLE LANES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT

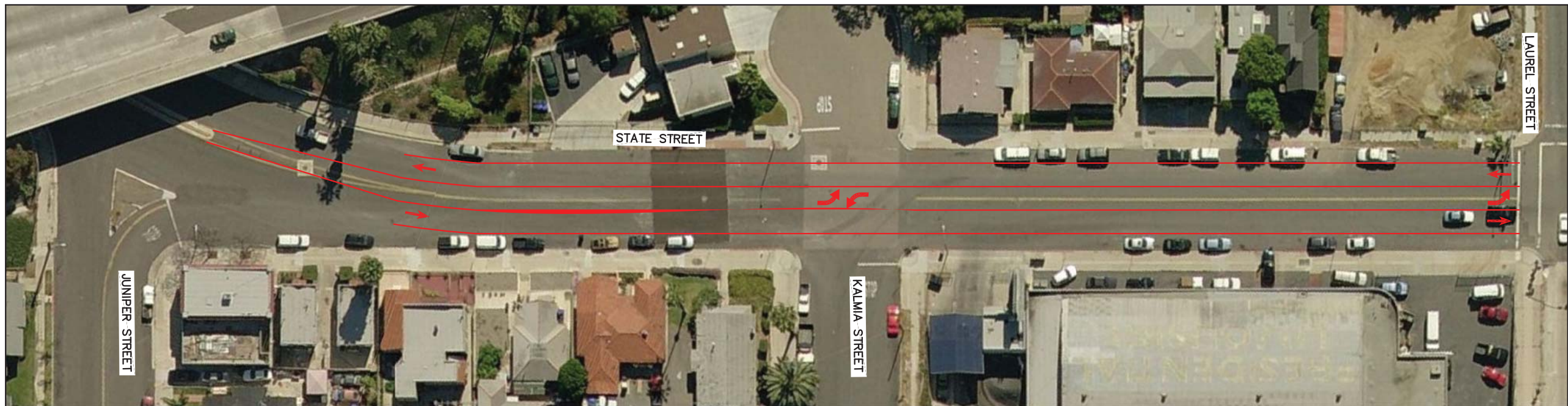
GRAPHIC SCALE IN FEET  
0 30 60 120



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

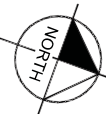
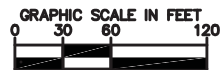
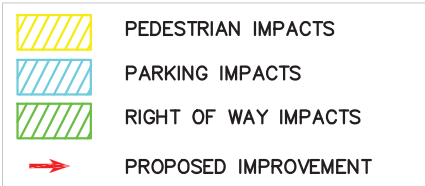
IMPROVEMENT U-23B





CONVERTING A SEGMENT OF STATE STREET INTO 2 LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENT TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS.

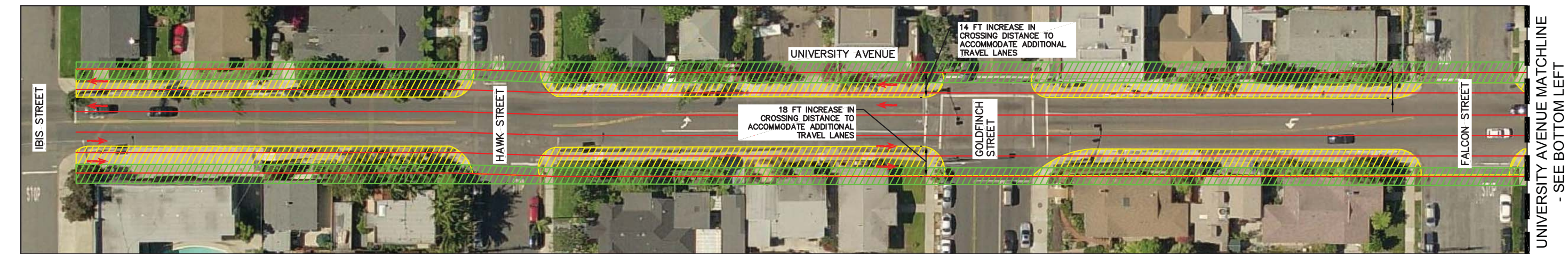
THIS CHANGE IN GEOMETRY IS RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-24

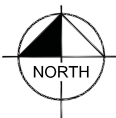
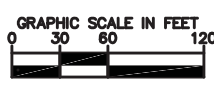




CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

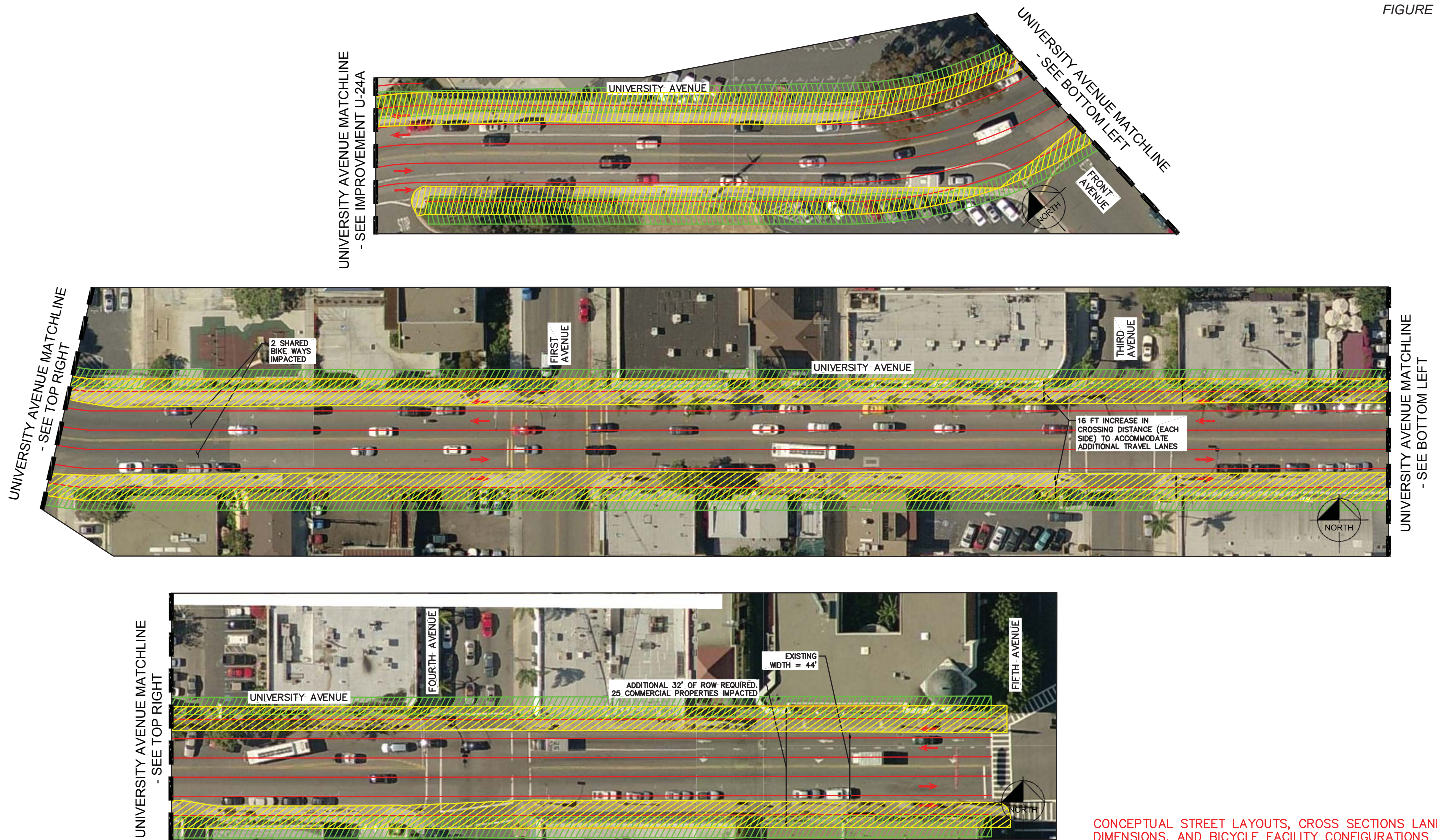
- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



IMPROVEMENT U-25A

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

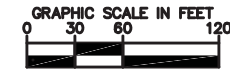




CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

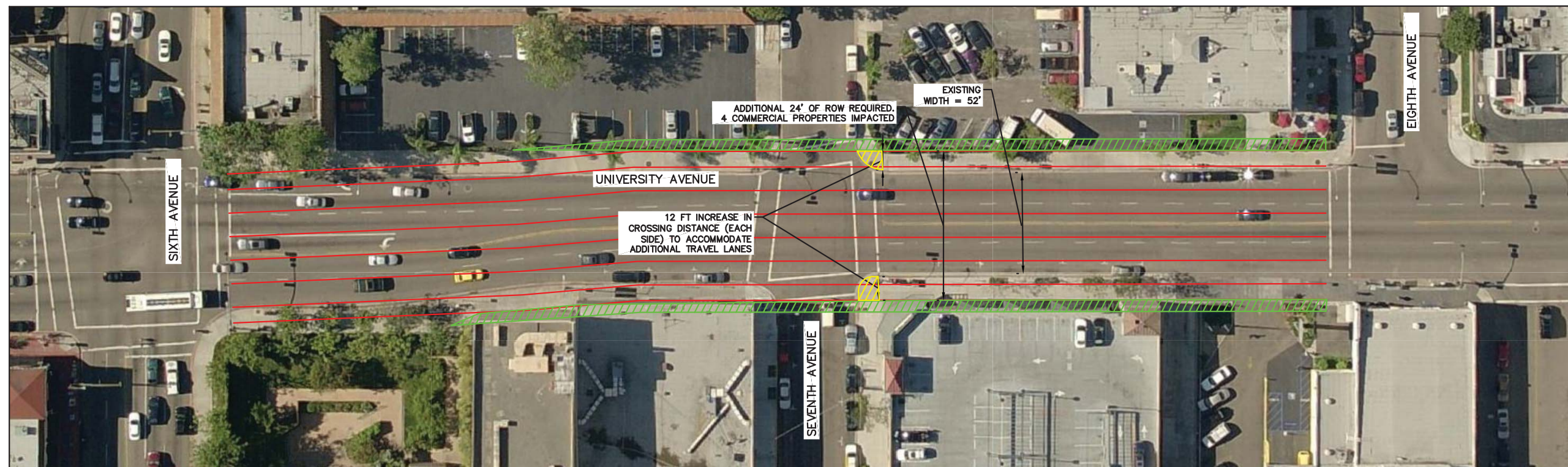
- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

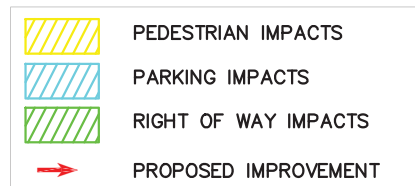
## IMPROVEMENT U-25B





CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

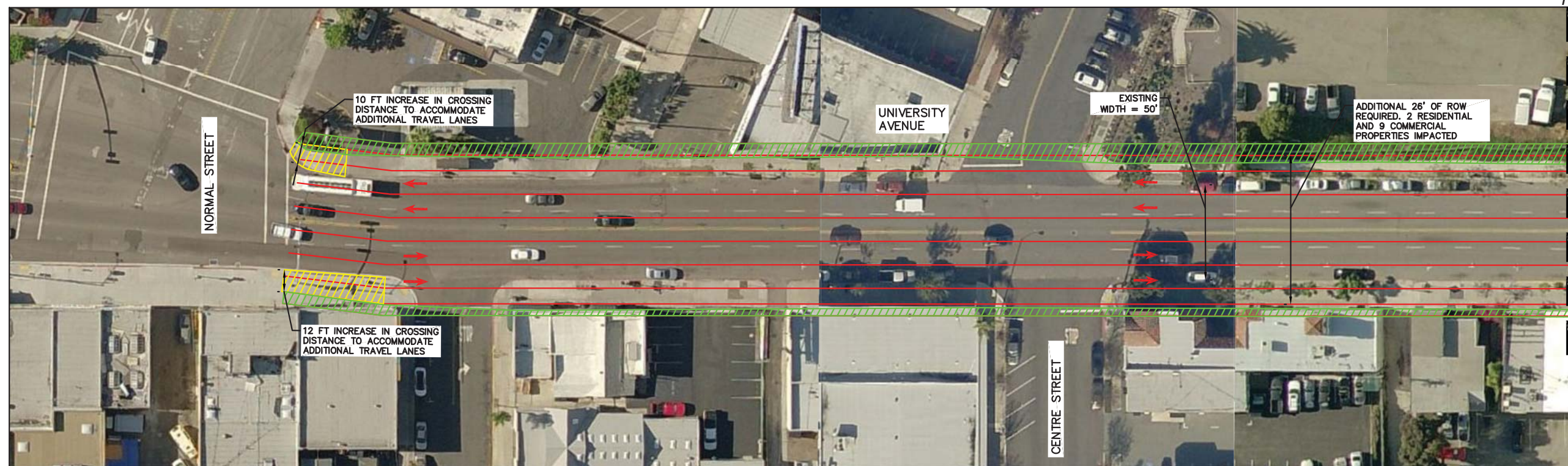


CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-25C

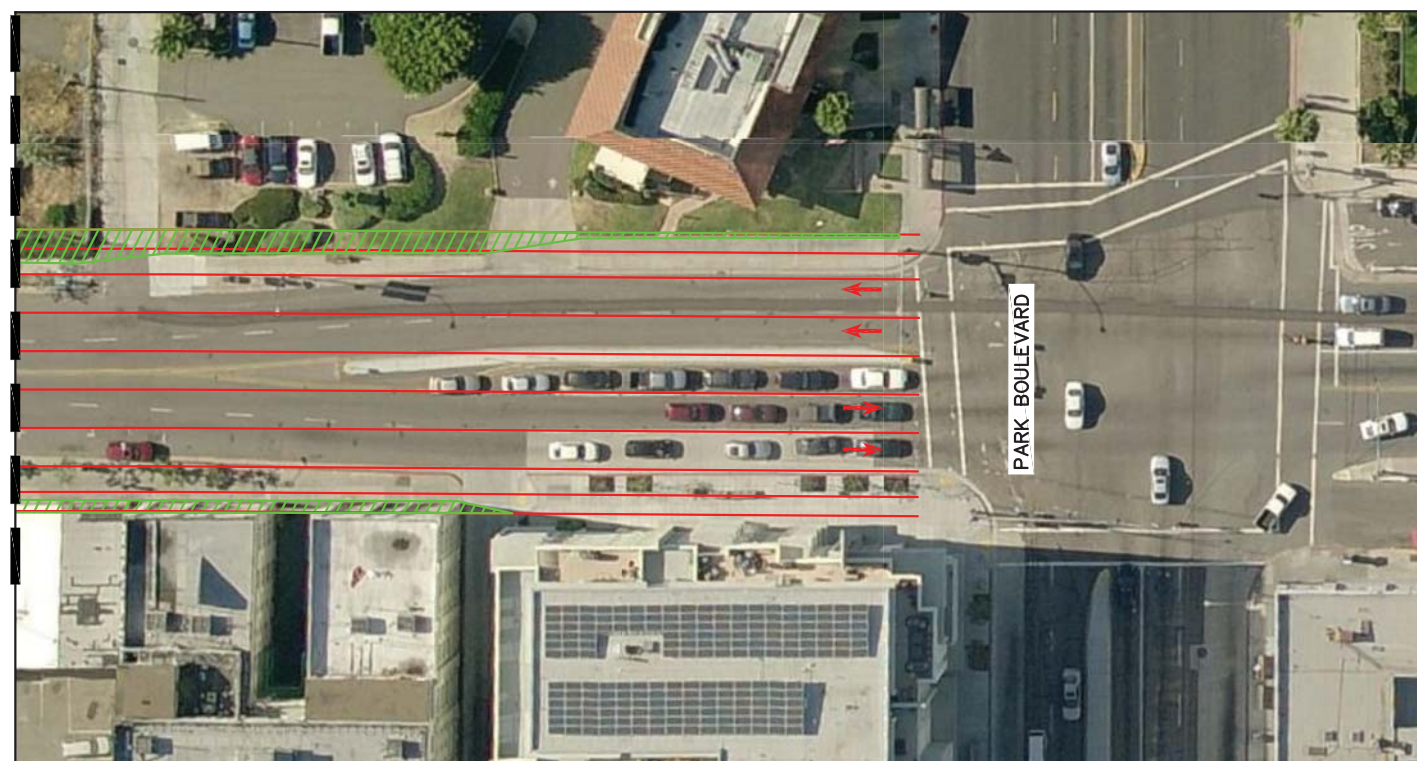


FIGURE 80



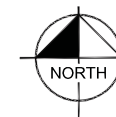
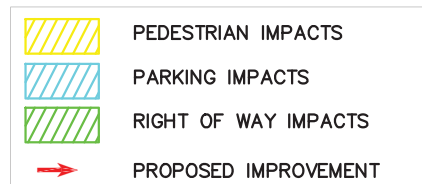
WASHINGTON STREET MATCHLINE -  
SEE BOTTOM LEFT

WASHINGTON STREET MATCHLINE -  
SEE TOP RIGHT



CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



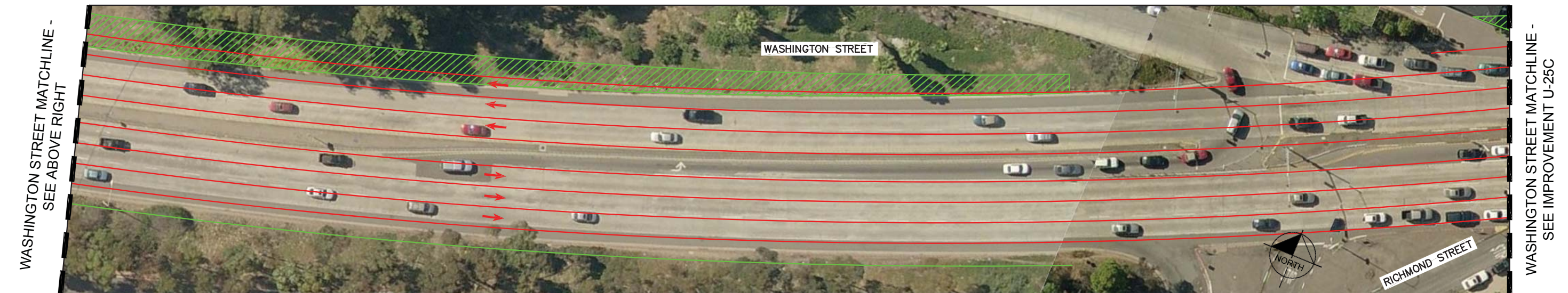
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT U-25D



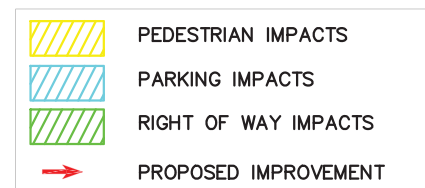




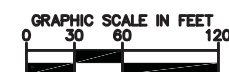


CONVERTING SEGMENTS OF WASHINGTON STREET INTO 6 LANE MAJOR ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND BRIDGE WIDENING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



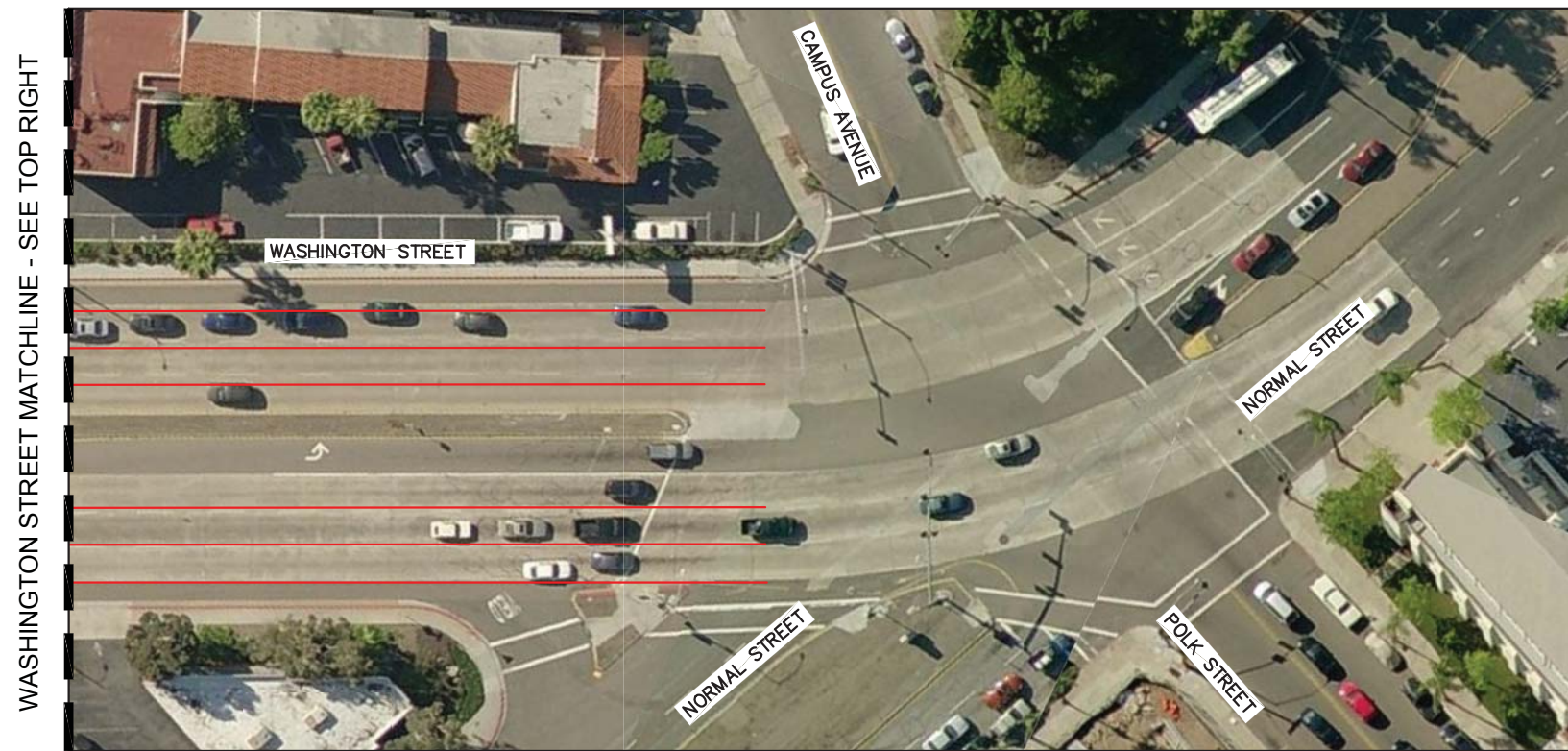
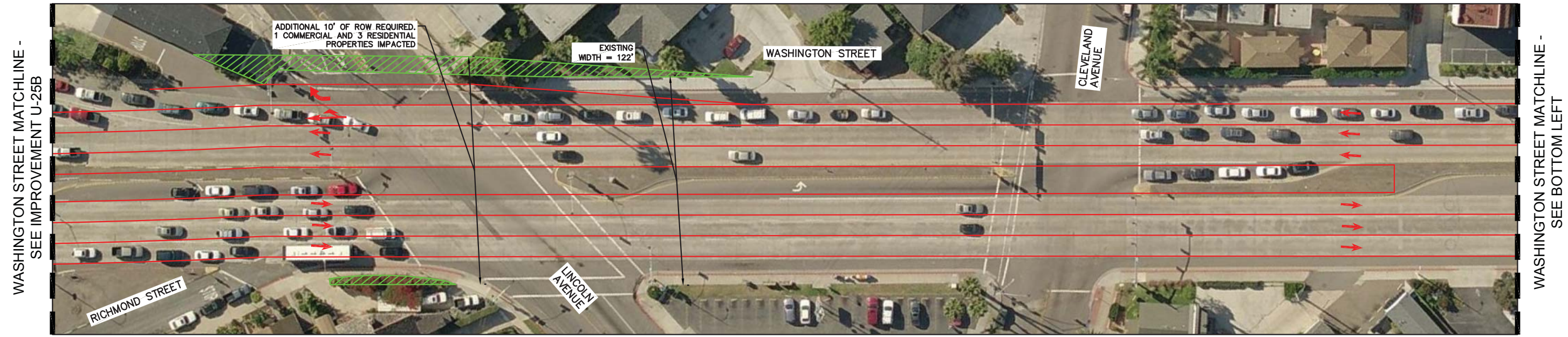
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-26B







FIGURE 83

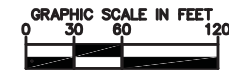


CONVERTING SEGMENTS OF WASHINGTON STREET INTO 6 LANE PRIME ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT U-26C



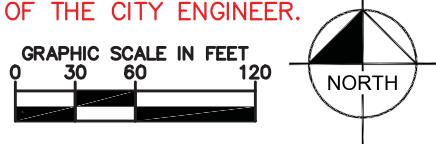


THE ADDITION OF A NORTHBOUND AND WESTBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF MADISON AVENUE AND TEXAS STREET TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, RESULT IN LOSS OF PARKING, AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

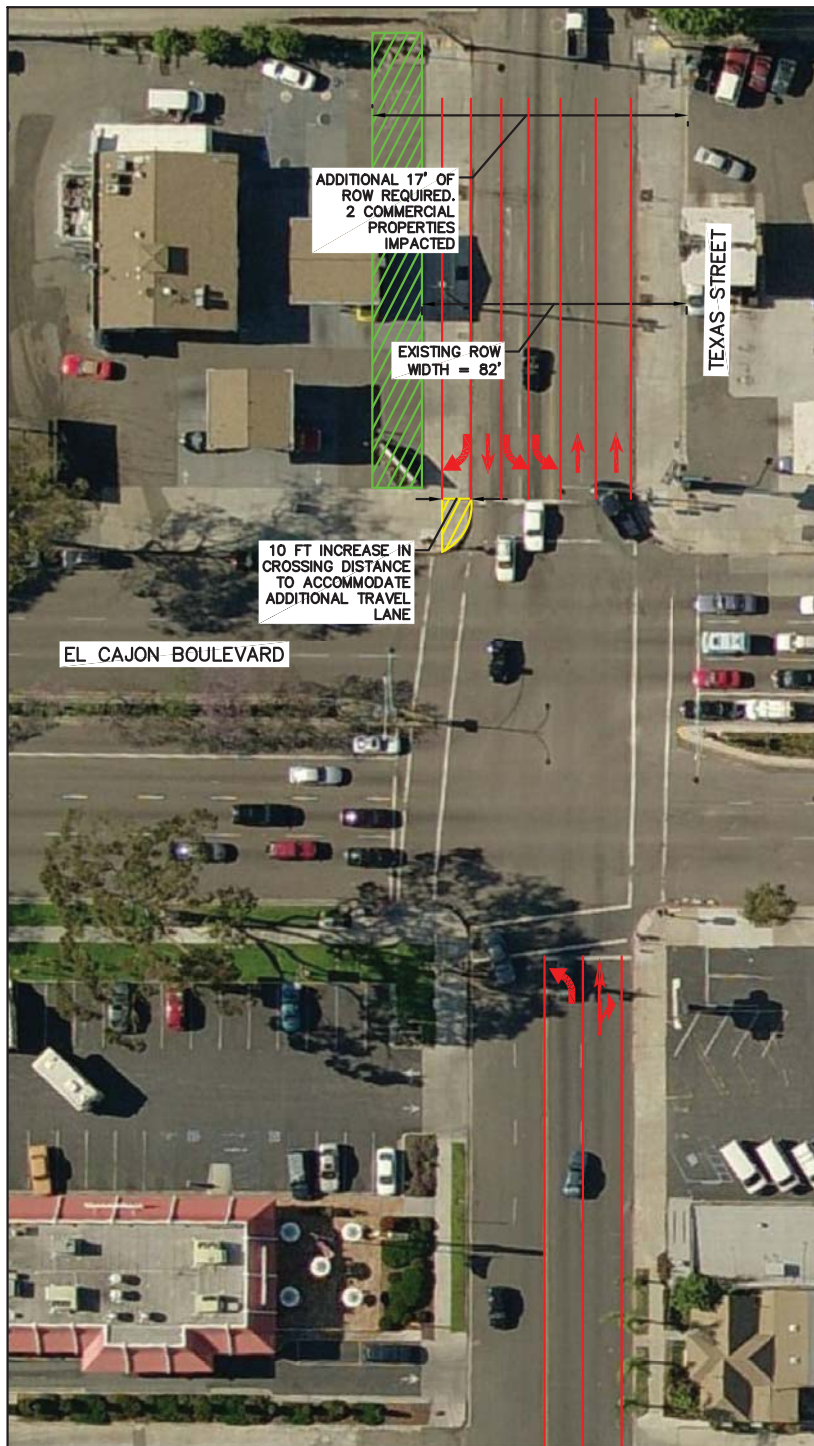
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

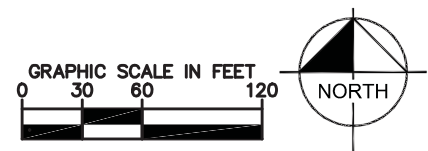






IMPROVEMENT NP-1



A RECONFIGURATION OF TEXAS STREET TO HAVE A NORTHBOUND LEFT AND SHARED THROUGH-RIGHT AND TWO SOUTHBOUND LEFTS, ONE THROUGH, AND ONE RIGHT WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF EL CAJON BOULEVARD AND TEXAS STREET TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THIS RECONFIGURATION WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, AND INCREASE THE PEDESTRIAN CROSSING DISTANCE.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

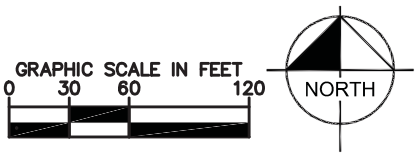
## IMPROVEMENT NP-2A









A RECONFIGURATION OF TEXAS STREET TO HAVE A NORTHBOUND LEFT AND SHARED THROUGH–RIGHT AND A SOUTHBOUND LEFT, ONE THROUGH, AND ONE RIGHT WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF EL CAJON BOULEVARD AND TEXAS STREET TO LOS D OR BETTER DURING THE AM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THIS RECONFIGURATION WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS.

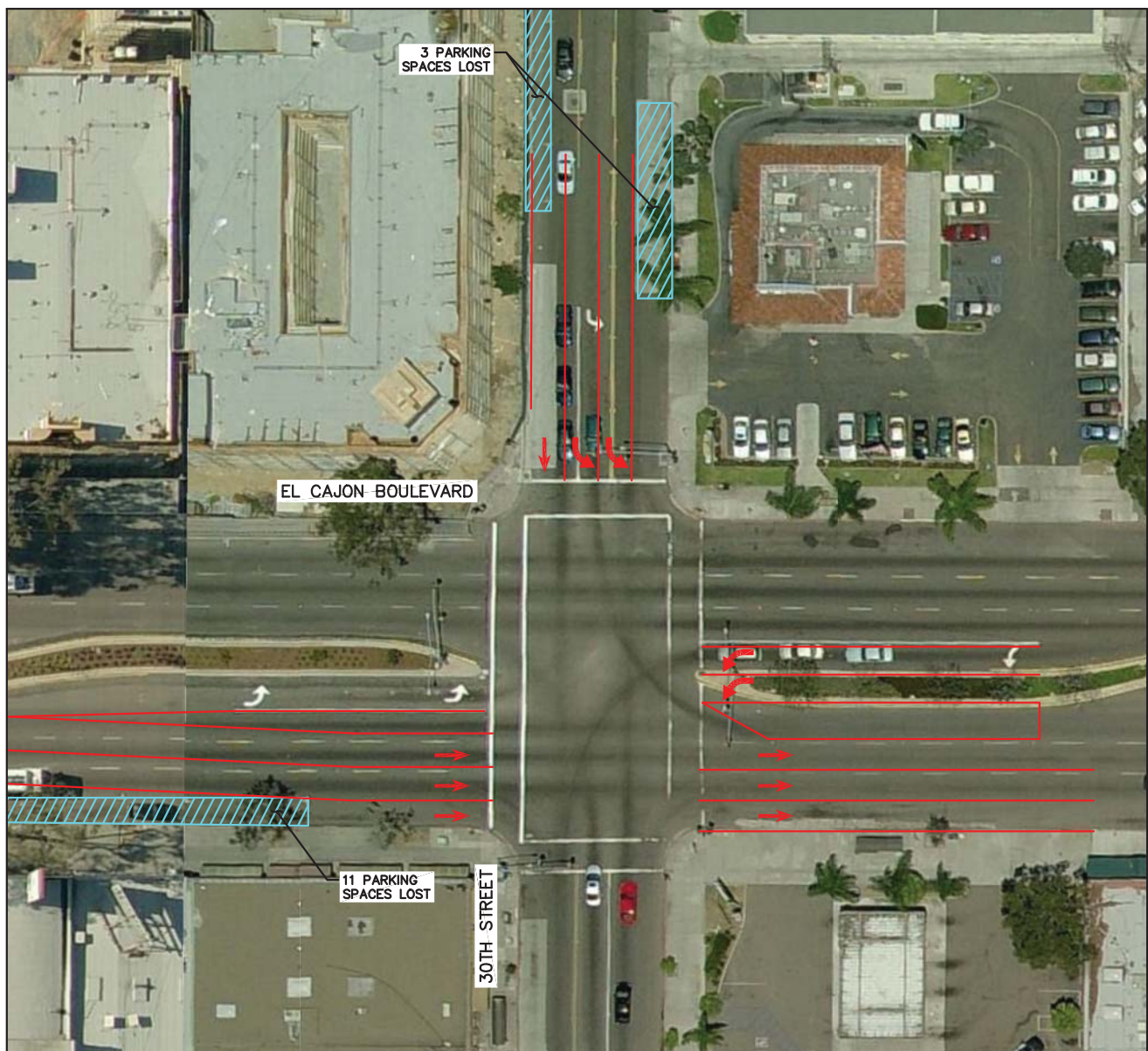
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

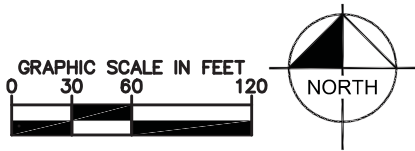
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

## IMPROVEMENT NP-2B



THE ADDITION OF A SOUTHBOUND AND WESTBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF EL CAJON BOULEVARD AND 30TH STREET TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING.

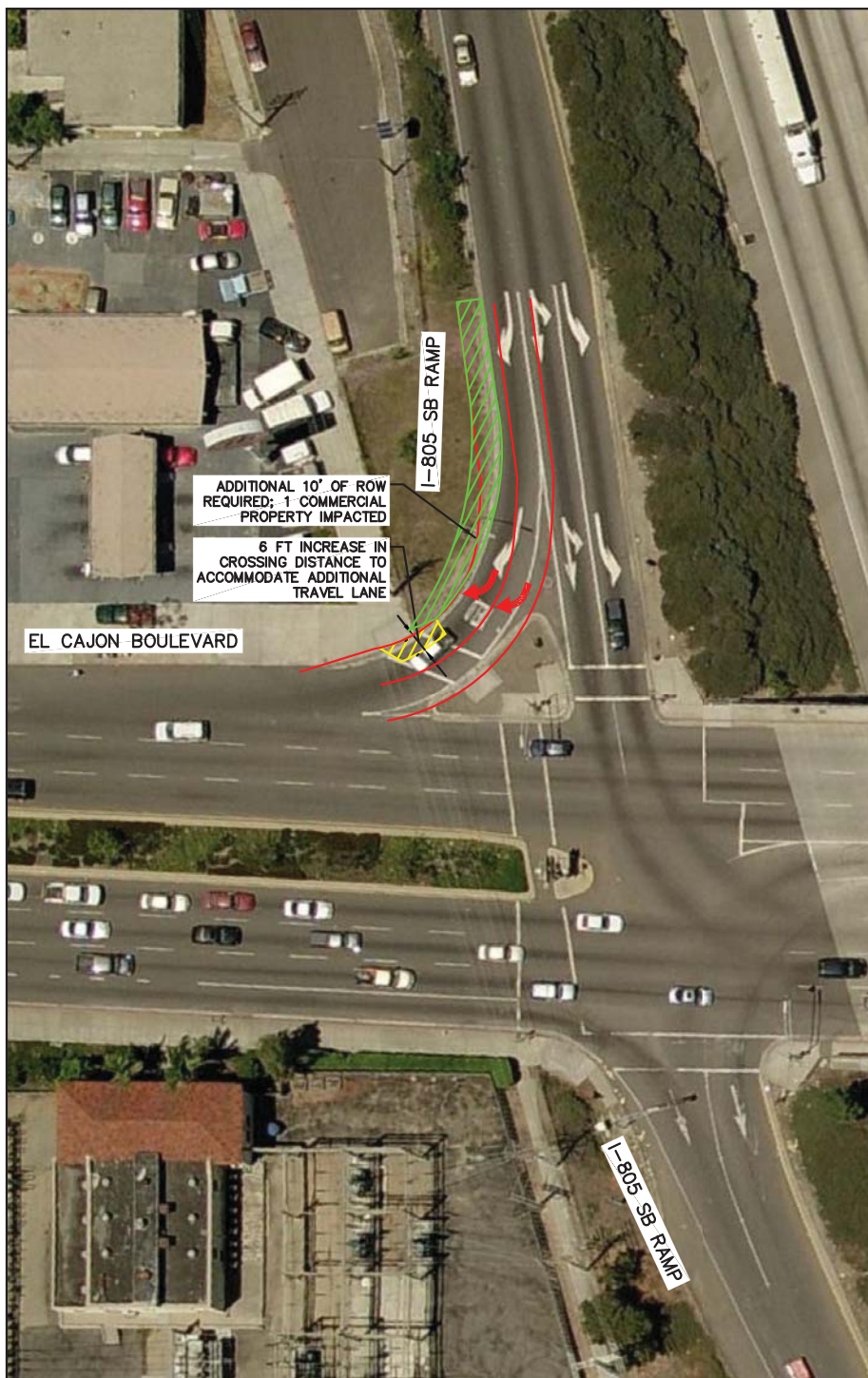
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

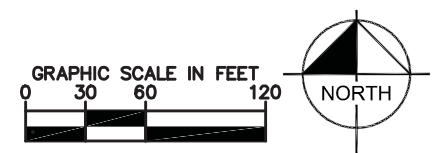
# IMPROVEMENT NP-3









THE ADDITION OF A SOUTHBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF EL CAJON BOULEVARD AND I-805 SOUTHBOUND RAMP TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD INCREASE THE PEDESTRIAN CROSSING DISTANCE

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

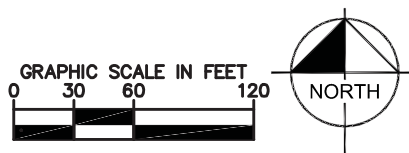
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS, LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.





## IMPROVEMENT NP-4



THE ADDITION OF A SOUTHBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF UNIVERSITY AVENUE AND 30TH STREET TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

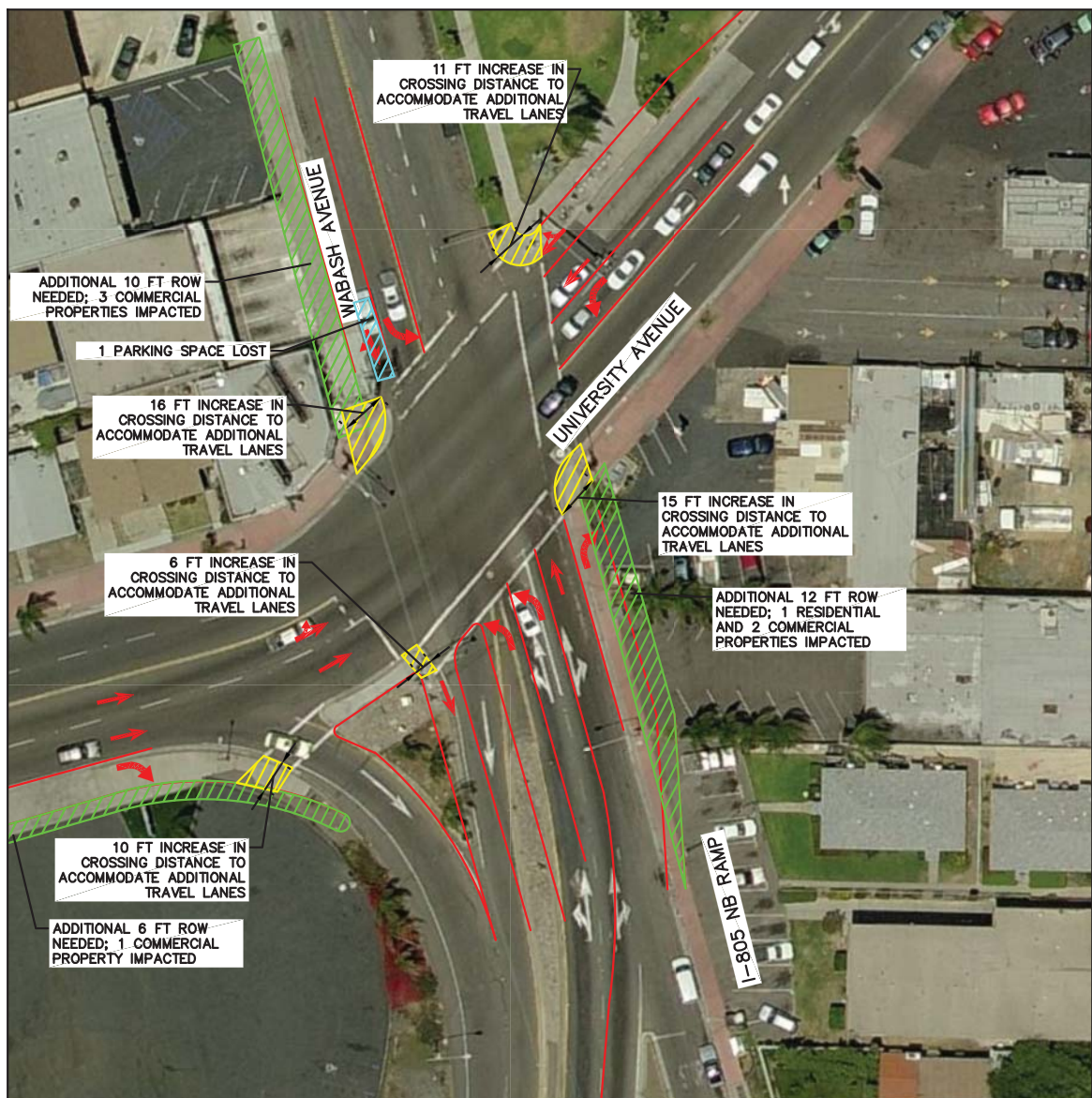


-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

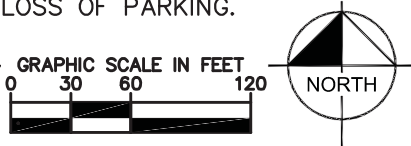
## IMPROVEMENT NP-5









RECONFIGURATION OF EACH APPROACH WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF UNIVERSITY AVENUE AND I-805 NORTHBOUND RAMP TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THESE IMPROVEMENTS WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTIES, INCREASE PEDESTRIAN CROSSING DISTANCE, AND RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

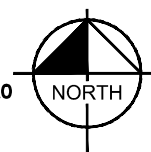
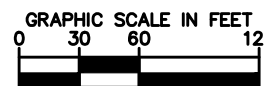
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



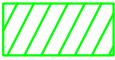

## IMPROVEMENT NP-6



ADDITION OF TRAFFIC SIGNAL CONTROL AND ADDITION OF A SECOND SOUTHBOUND LEFT TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF NORTH PARK WAY AND I-805 SOUTHBOUND RAMPS TO LOS D OR BETTER DURING THE PM PEAK HOUR. AS SHOWN IN THE GRAPHIC, THESE IMPROVEMENTS WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY.

THIS CHANGE IN GEOMETRY IS RECOMMENDED.



-  PEDESTRIAN IMPACTS
-  PARKING IMPACTS
-  RIGHT OF WAY IMPACTS
-  PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

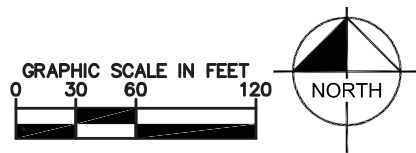
## IMPROVEMENT NP-7





THE ADDITION OF A WESTBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF UPAS STREET AND 30TH STREET TO LOS D OR BETTER DURING BOTH THE AM AND PM PEAK HOURS. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



PEDESTRIAN IMPACTS



PARKING IMPACTS



RIGHT OF WAY IMPACTS

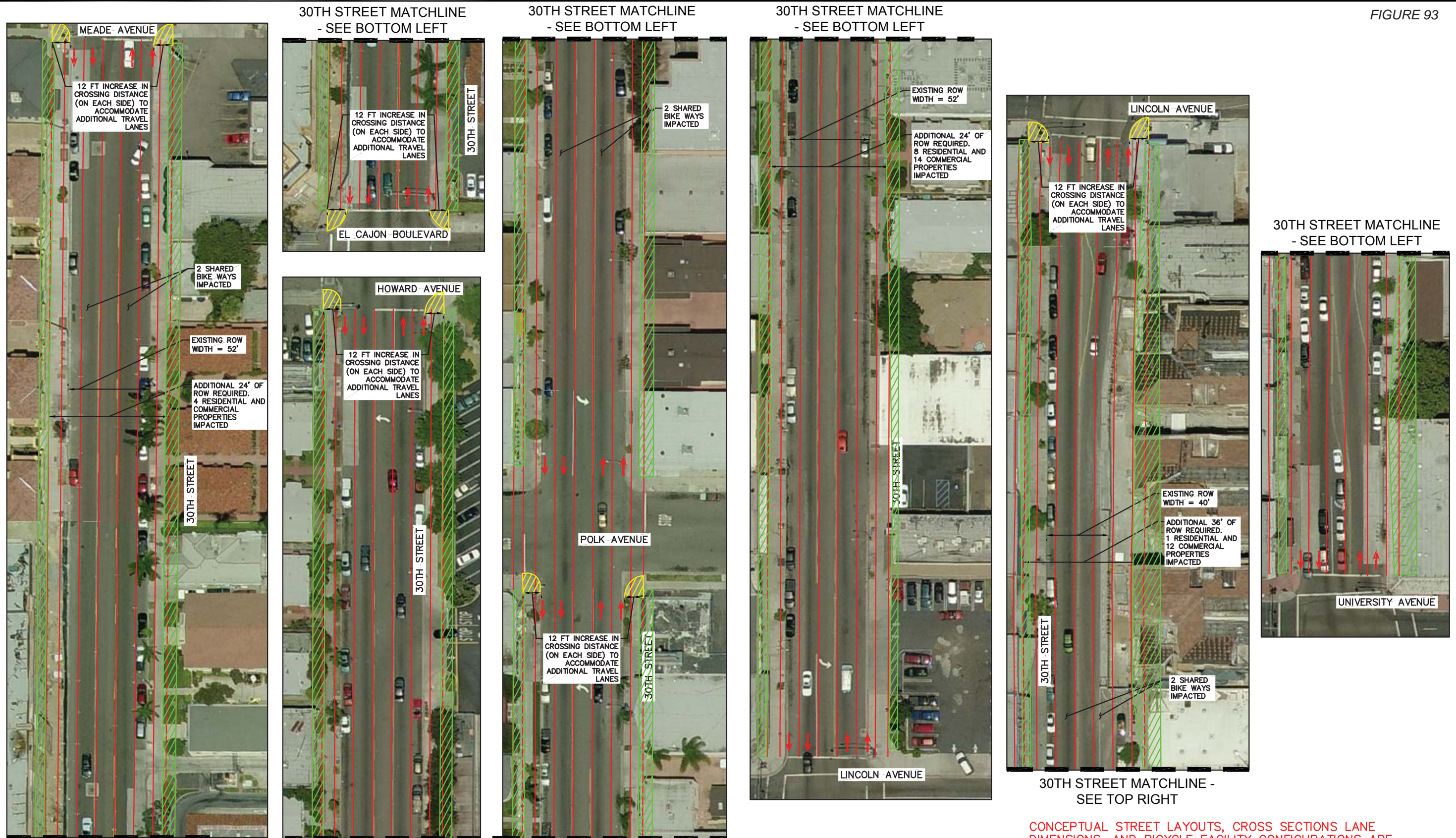


PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

## IMPROVEMENT NP-8





30TH STREET MATCHLINE - SEE TOP RIGHT

CONVERTING SEGMENTS OF 30TH STREET INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT OF WAY FROM ADJACENT PROPERTIES, INCREASE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

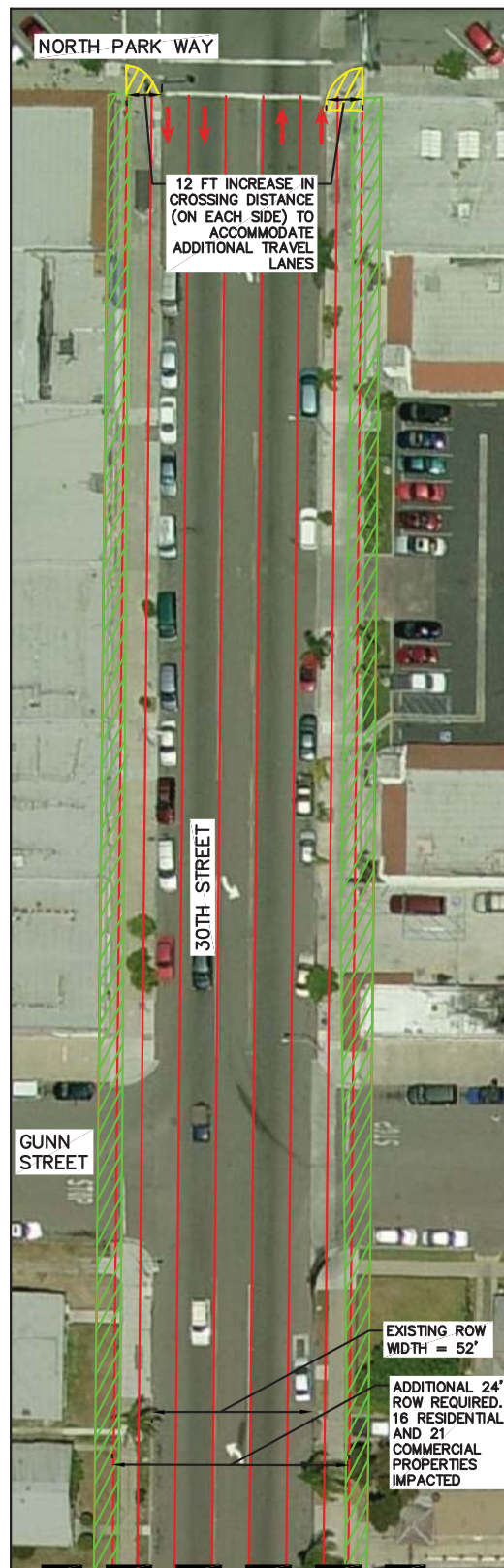
GRAPHIC SCALE IN FEET

0 30 60 120

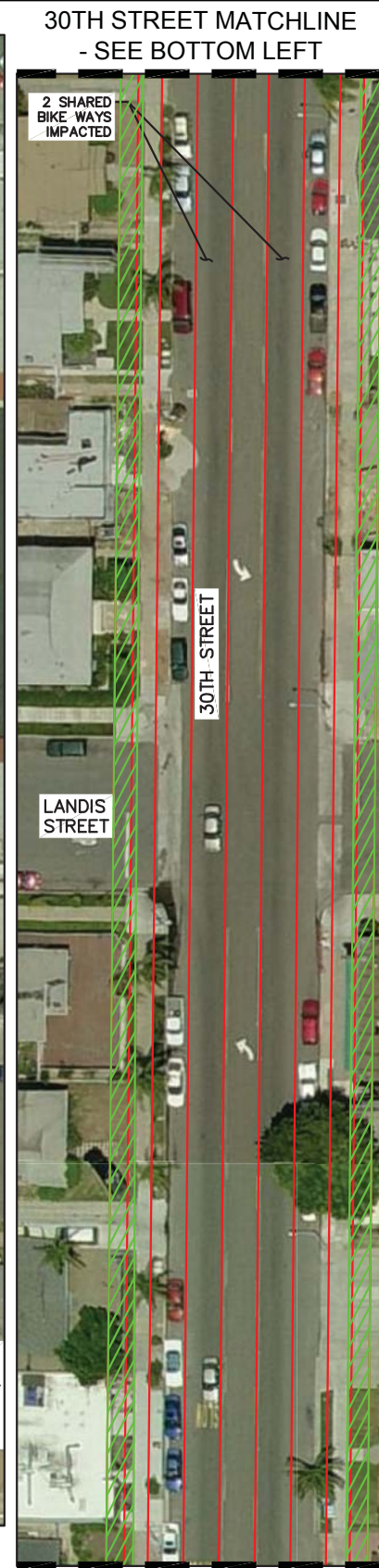
NORTH

## IMPROVEMENT NP-9A

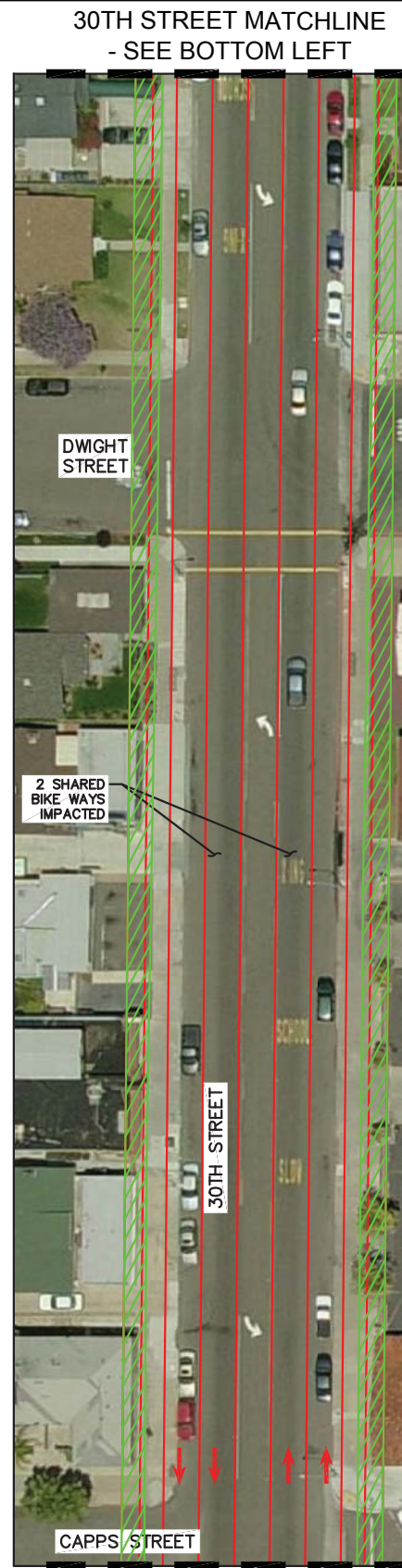




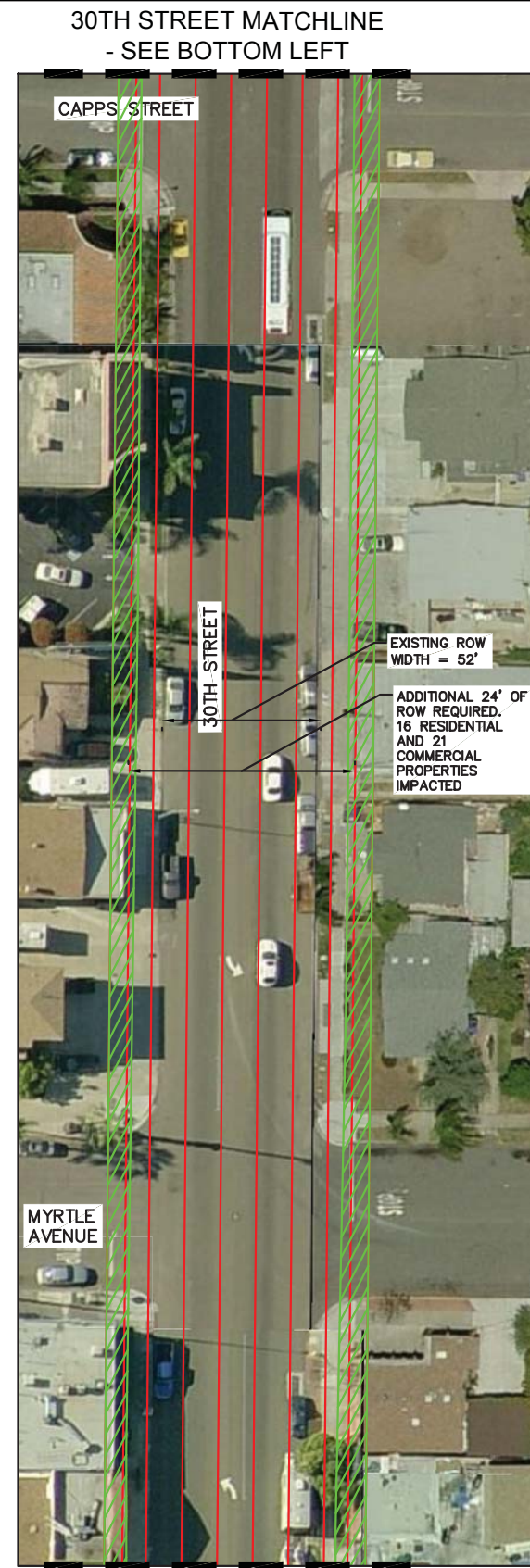
30TH STREET MATCHLINE -  
SEE TOP RIGHT



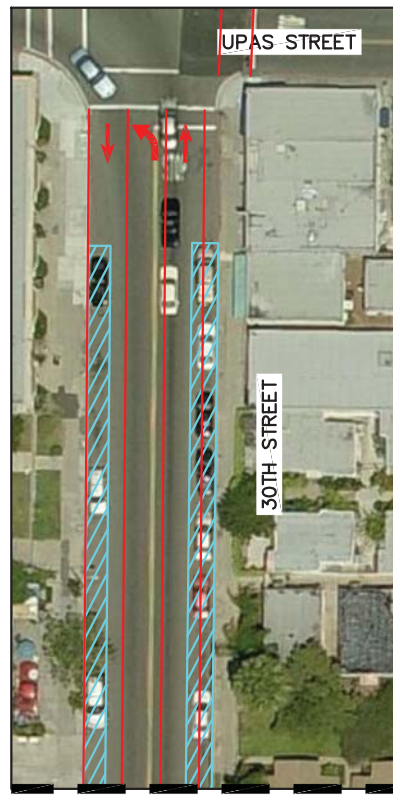
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SEE TOP RIGHT



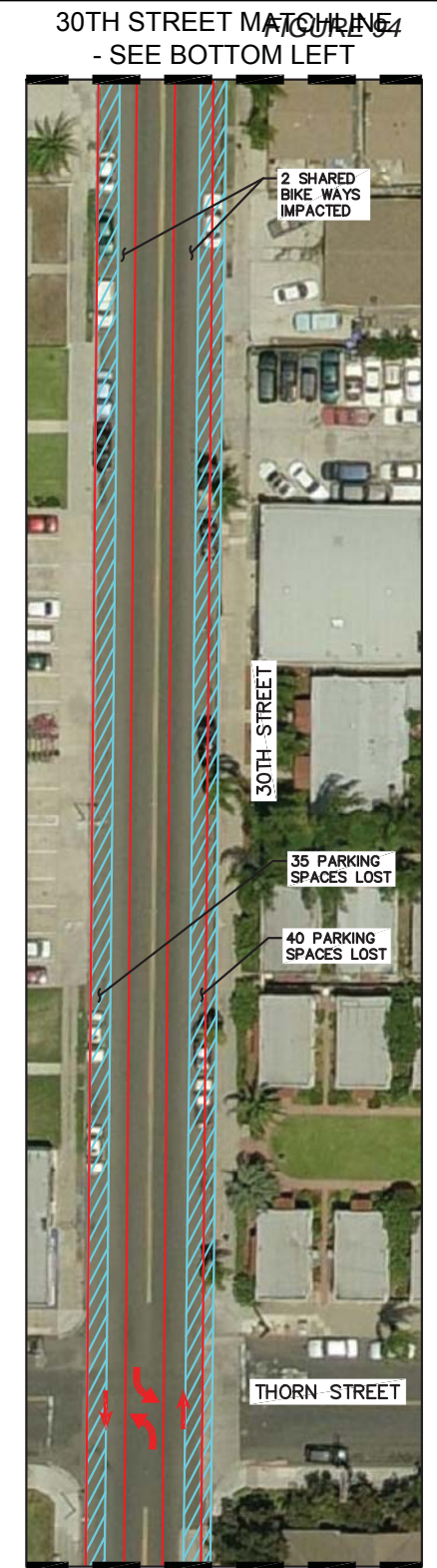
30TH STREET MATCHLINE -  
SEE TOP RIGHT



30TH STREET MATCHLINE -  
SEE TOP RIGHT

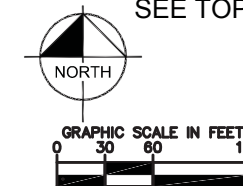


30TH STREET MATCHLINE -  
SEE TOP RIGHT



30TH STREET MATCHLINE -  
SEE IMPROVEMENT NP-9C

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



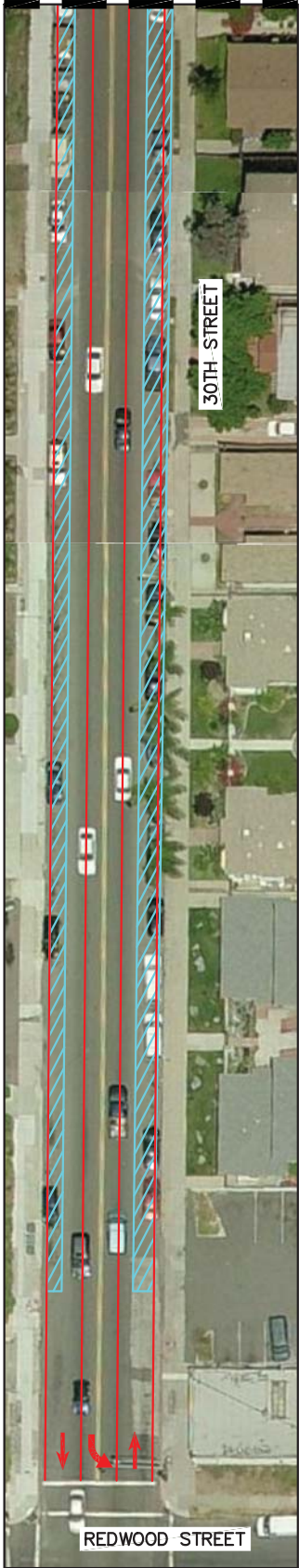
CONVERTING SEGMENTS OF 30TH STREET INTO 4 LANE COLLECTORS OR 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE ADDITIONAL RIGHT-OF-WAY FROM ADJACENT PROPERTIES, INCREASE PEDESTRIAN CROSSING DISTANCE, RESULT IN LOSS OF PARKING, AND IMPACT SHARED USE BICYCLE FACILITIES. THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

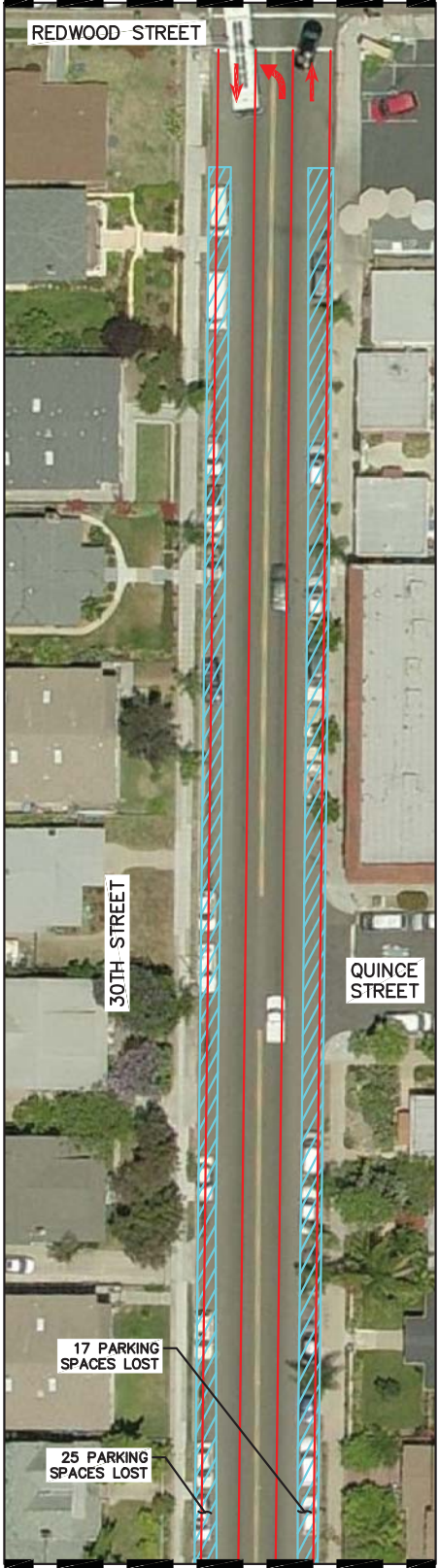
IMPROVEMENT NP-9B



30TH STREET MATCHLINE -  
SEE IMPROVEMENT NP-9B

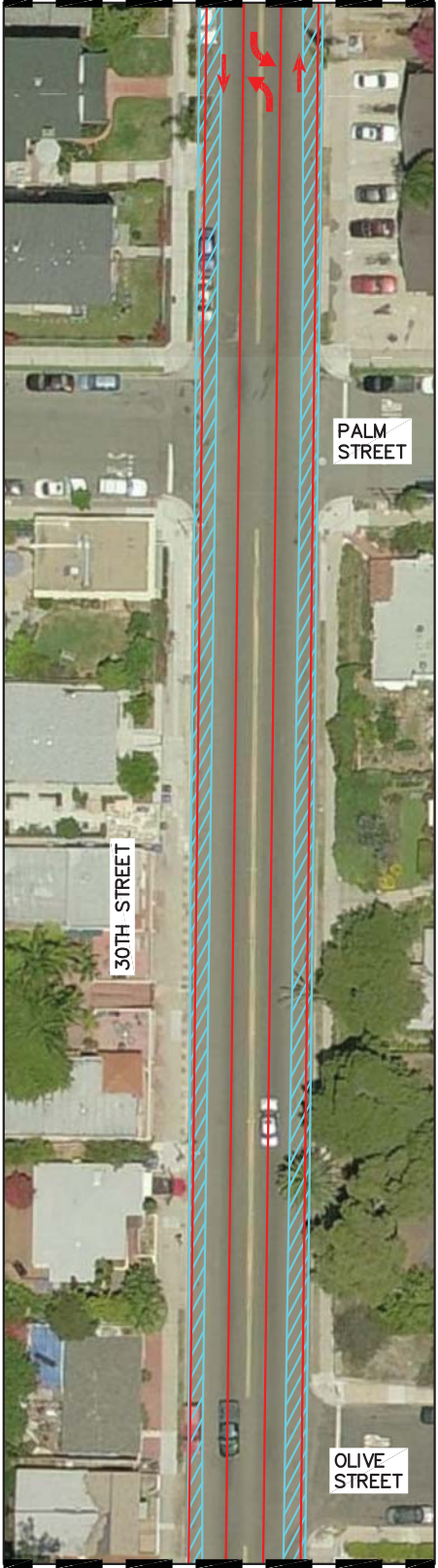


30TH STREET MATCHLINE  
- SEE BOTTOM LEFT



30TH STREET MATCHLINE -  
SEE TOP RIGHT

30TH STREET MATCHLINE  
- SEE BOTTOM LEFT



30TH STREET MATCHLINE -  
SEE TOP RIGHT

30TH STREET MATCHLINE  
- SEE BOTTOM LEFT



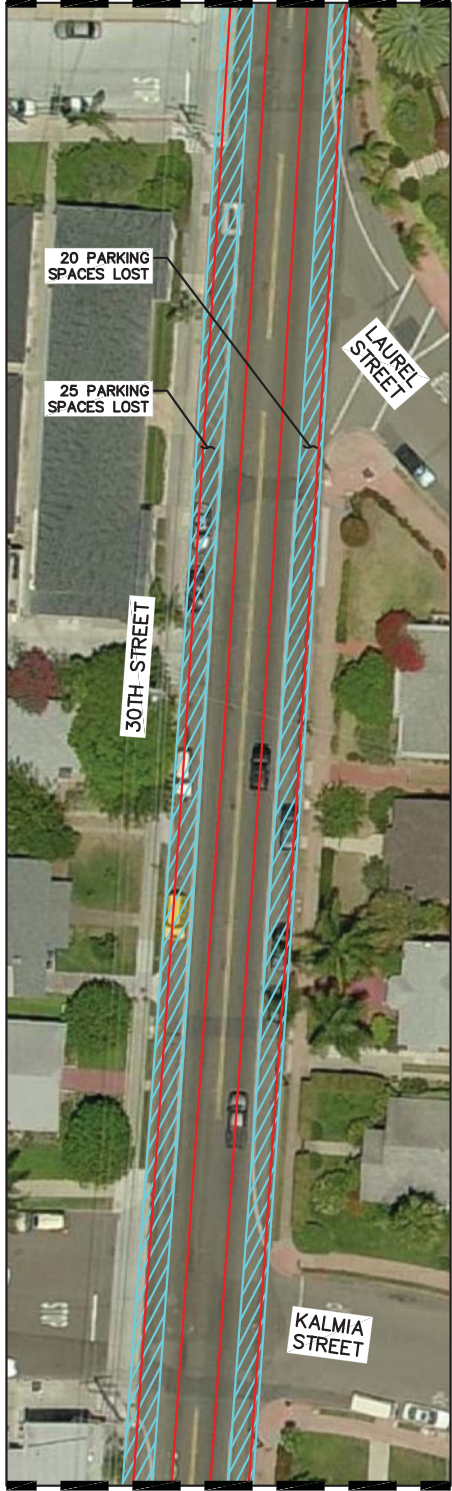
30TH STREET MATCHLINE -  
SEE TOP RIGHT

30TH STREET MATCHLINE  
- SEE BOTTOM LEFT

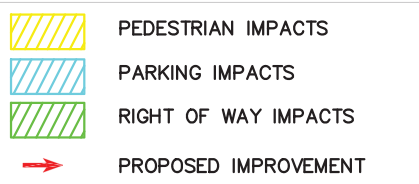


30TH STREET MATCHLINE -  
SEE TOP RIGHT

30TH STREET MATCHLINE  
- SEE BOTTOM LEFT



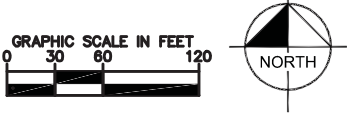
30TH STREET MATCHLINE -  
SEE IMPROVEMENT NP-9D



CONVERTING SEGMENTS OF 30TH STREET INTO 2 LANE COLLECTORS WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

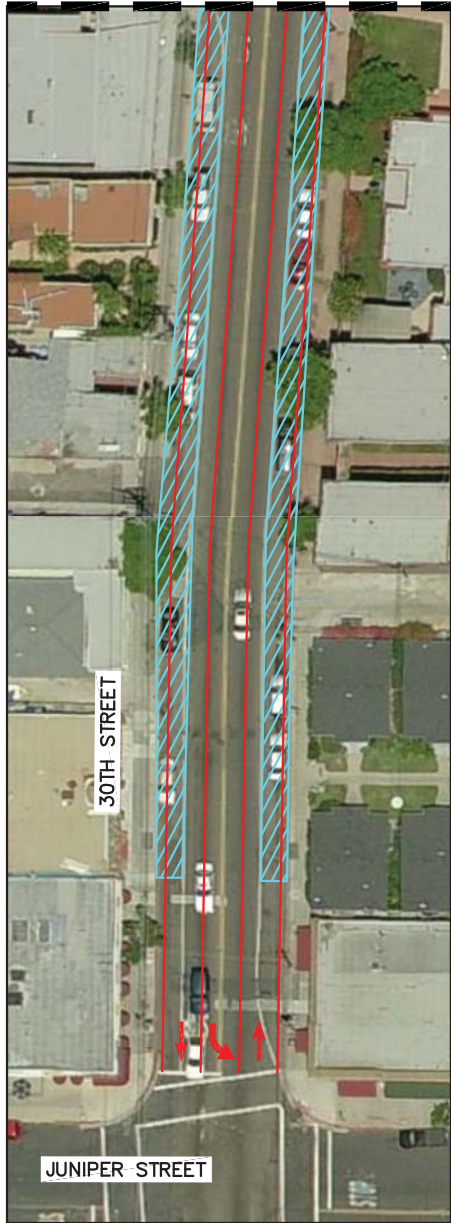
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-9C



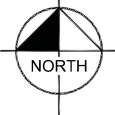
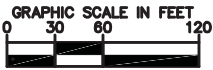
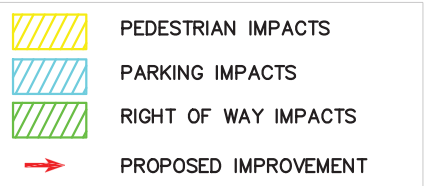
30TH STREET MATCHLINE -  
SEE IMPROVEMENT NP-9C



CONVERTING SEGMENTS OF 30TH STREET INTO 2 LANE COLLECTORS WITH A CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



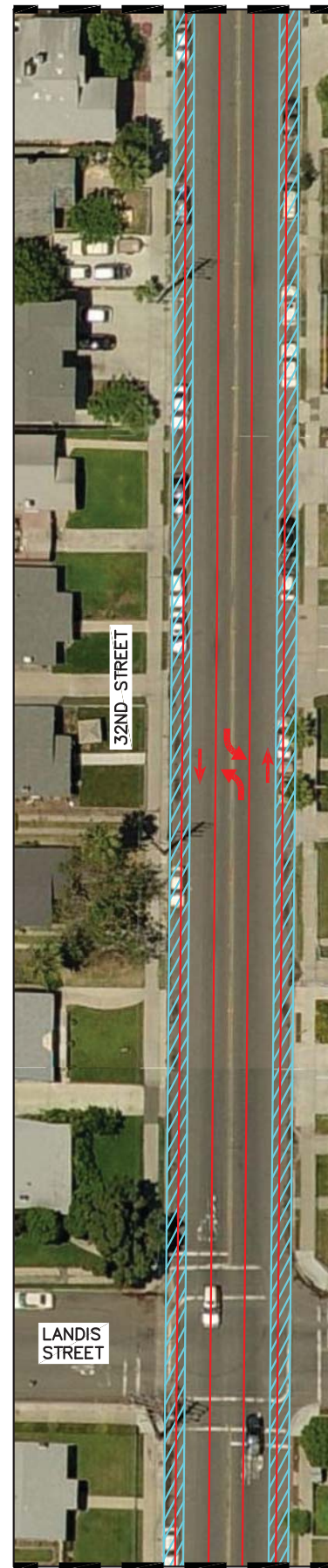
IMPROVEMENT NP-9D





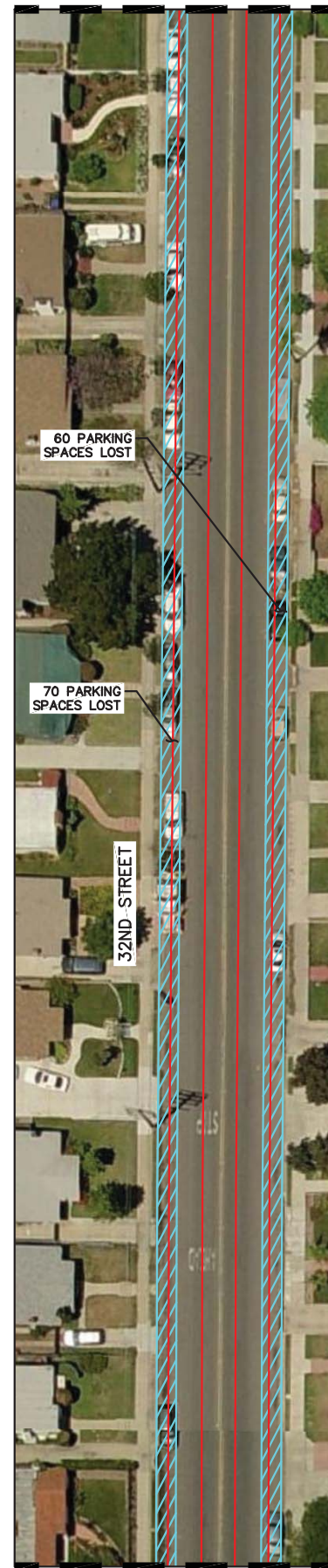
32ND STREET MATCHLINE -  
SEE TOP RIGHT

32ND STREET MATCHLINE -  
SEE BOTTOM LEFT



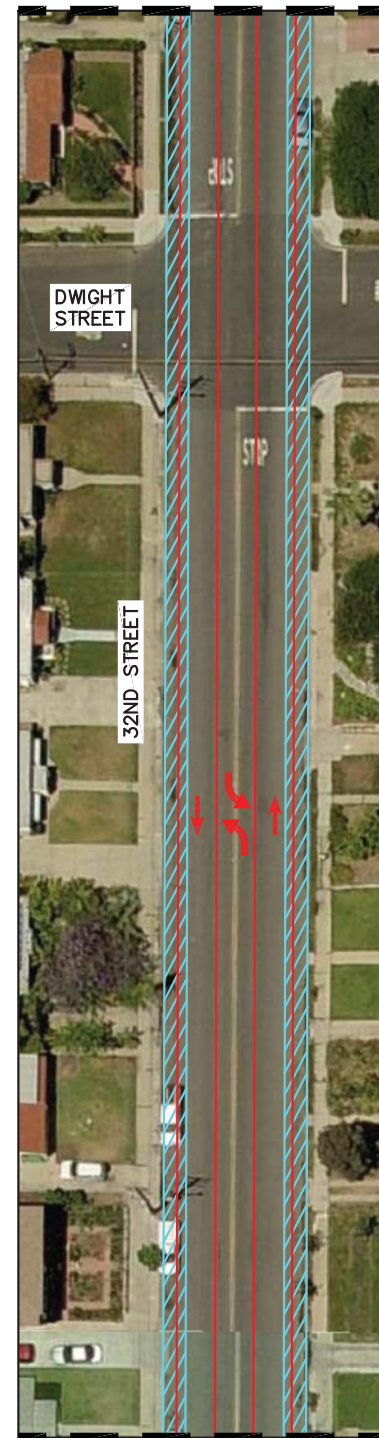
32ND STREET MATCHLINE -  
SEE TOP RIGHT

32ND STREET MATCHLINE -  
SEE BOTTOM LEFT



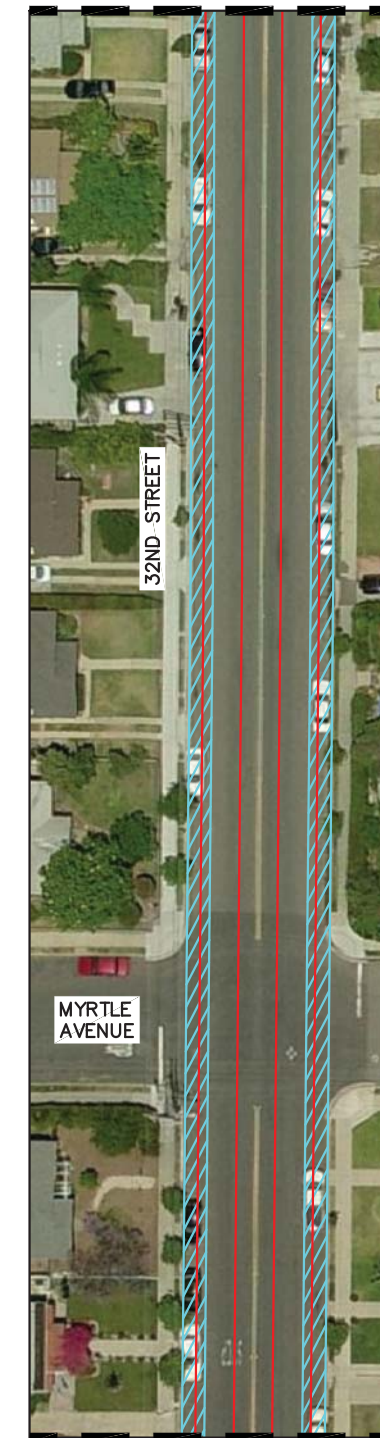
32ND STREET MATCHLINE -  
SEE TOP RIGHT

32ND STREET MATCHLINE -  
SEE BOTTOM LEFT



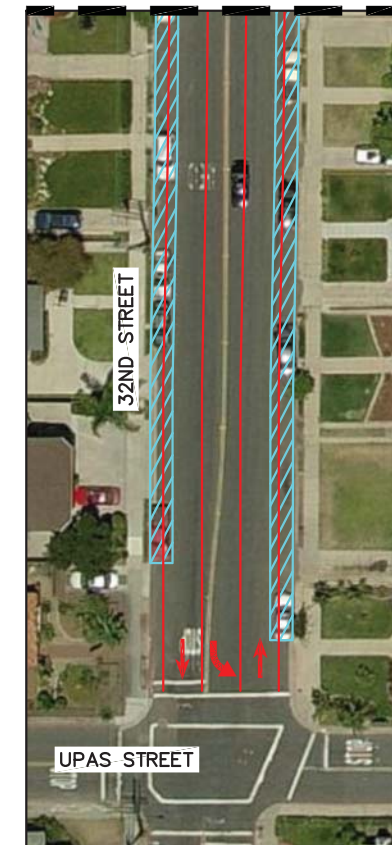
32ND STREET MATCHLINE -  
SEE TOP RIGHT

32ND STREET MATCHLINE -  
SEE BOTTOM LEFT



32ND STREET MATCHLINE -  
SEE TOP RIGHT

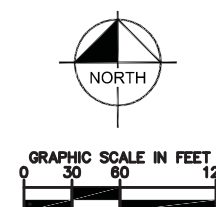
32ND STREET MATCHLINE -  
SEE BOTTOM LEFT



CONVERTING SEGMENTS OF 32ND STREET INTO 2 LANE COLLECTORS WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

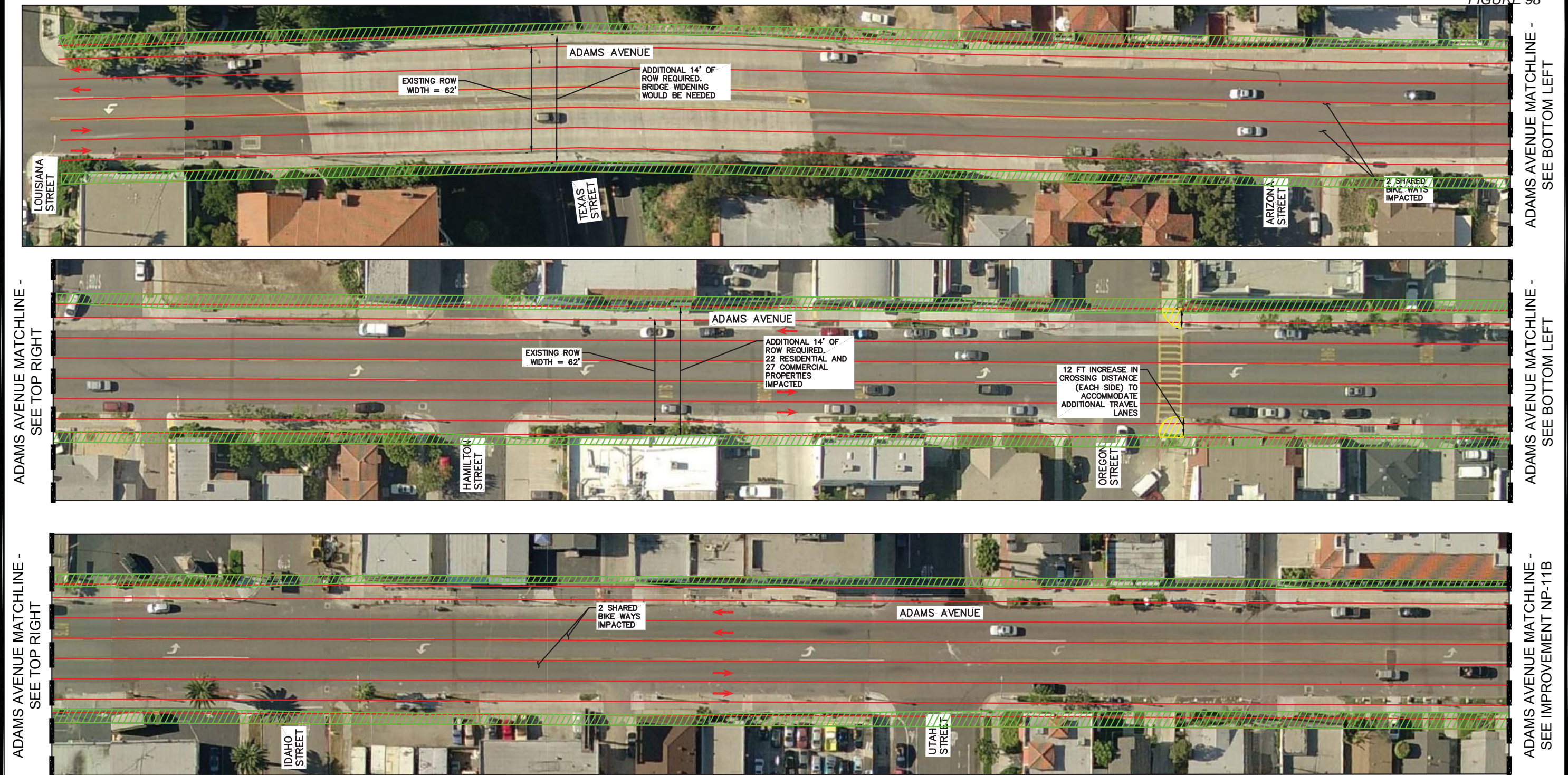


	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT

IMPROVEMENT NP-10



FIGURE 98

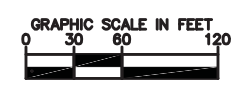


CONVERTING SEGMENTS OF ADAMS AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE ADDITIONAL RIGHT-OF-WAY FROM ADJACENT PROPERTIES, REQUIRE BRIDGE WIDENING, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

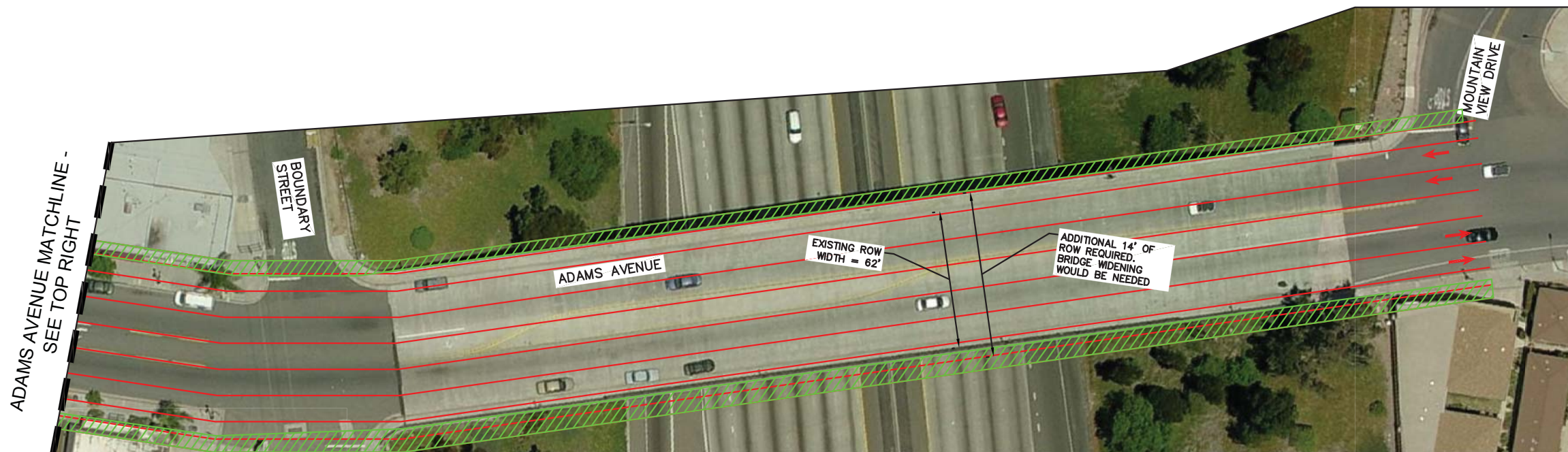
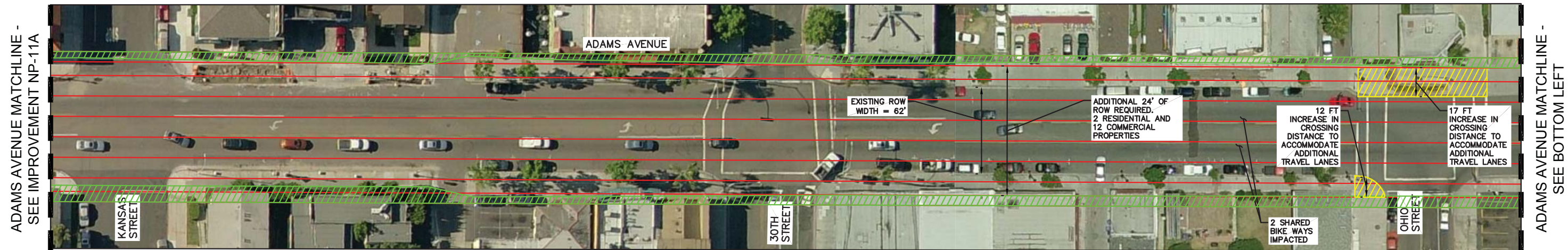
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



IMPROVEMENT NP-11A

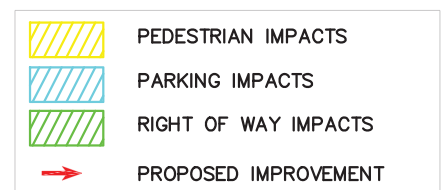




CONVERTING SEGMENTS OF ADAMS AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE ADDITIONAL RIGHT-OF-WAY FROM ADJACENT PROPERTIES, REQUIRE BRIDGE WIDENING, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITE.

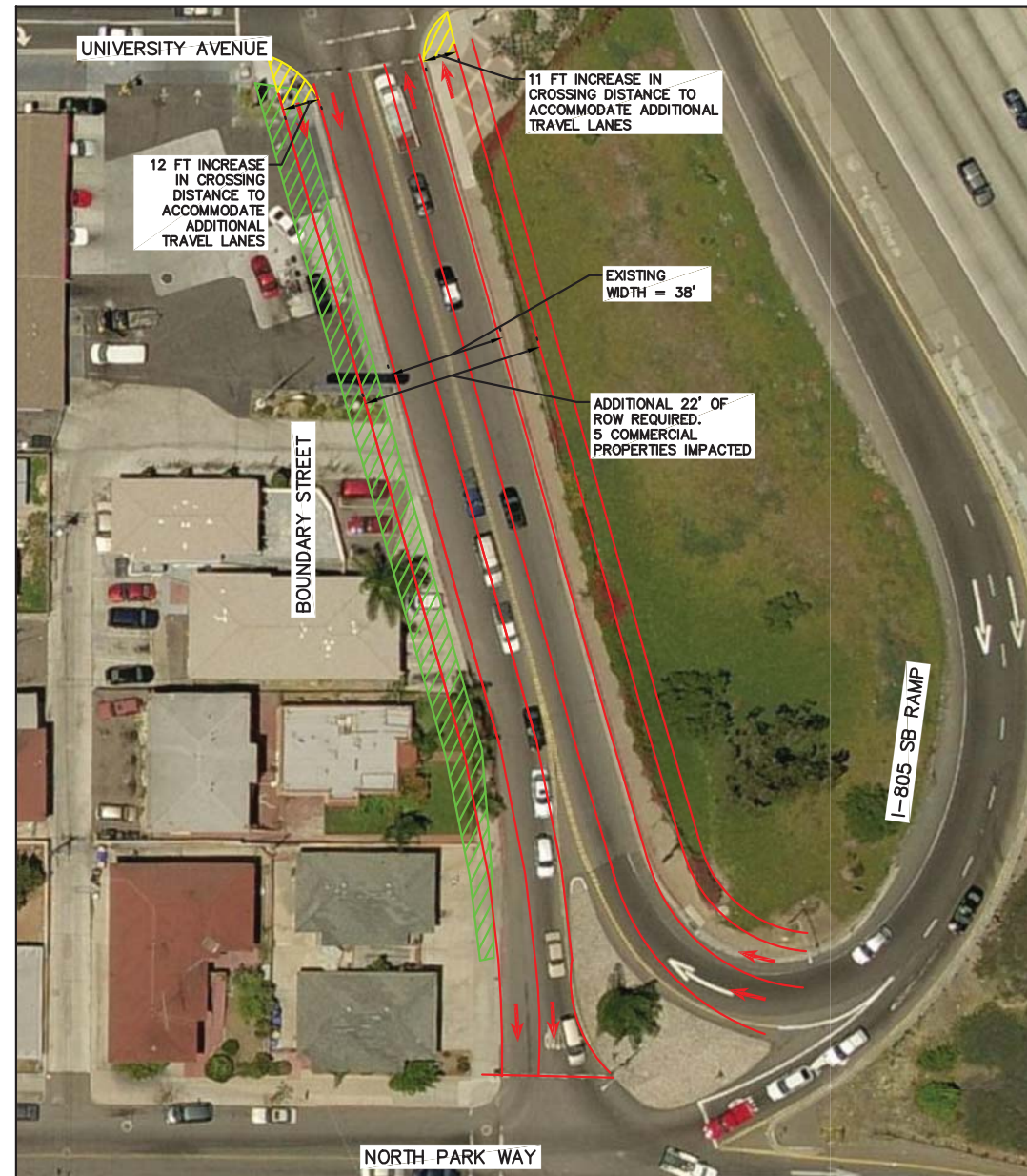
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-11B

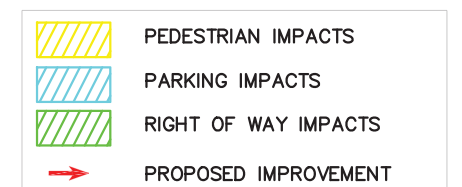




CONVERTING SEGMENTS OF BOUNDARY STREET INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND WILL IMPACT SHARED USE BICYCLE FACILITIES.

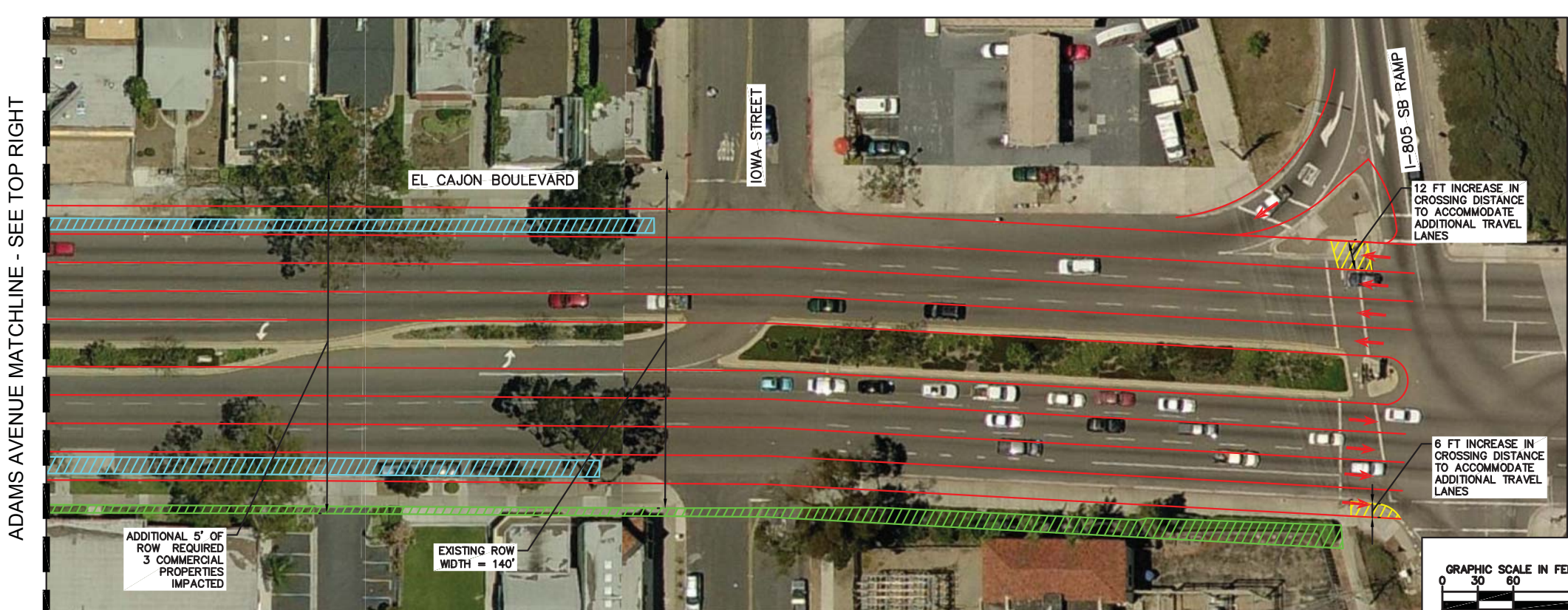
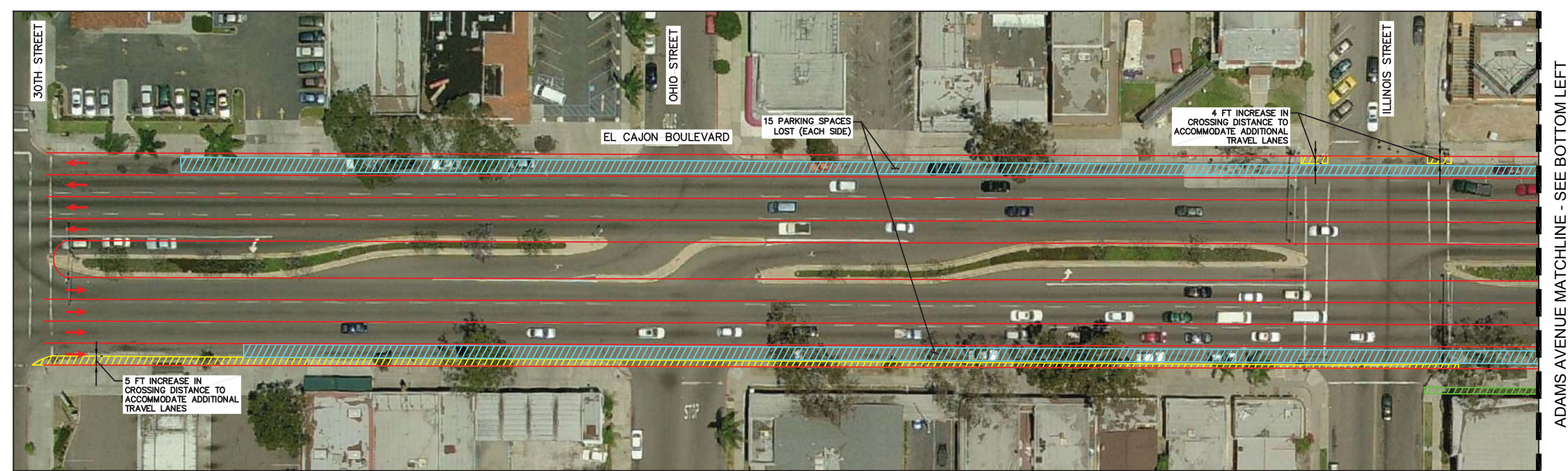
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-12



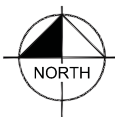
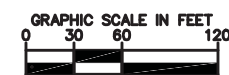


CONVERTING SEGMENTS OF EL CAJON BOULEVARD INTO 8 LANE MAJOR ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND RESULT IN LOSS OF PARKING

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



# IMPROVEMENT NP-13





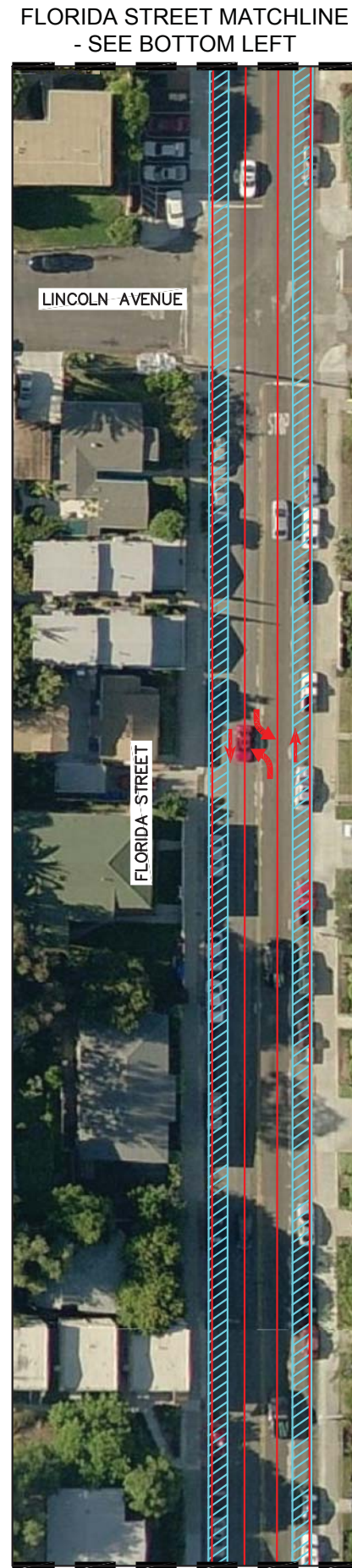
FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT



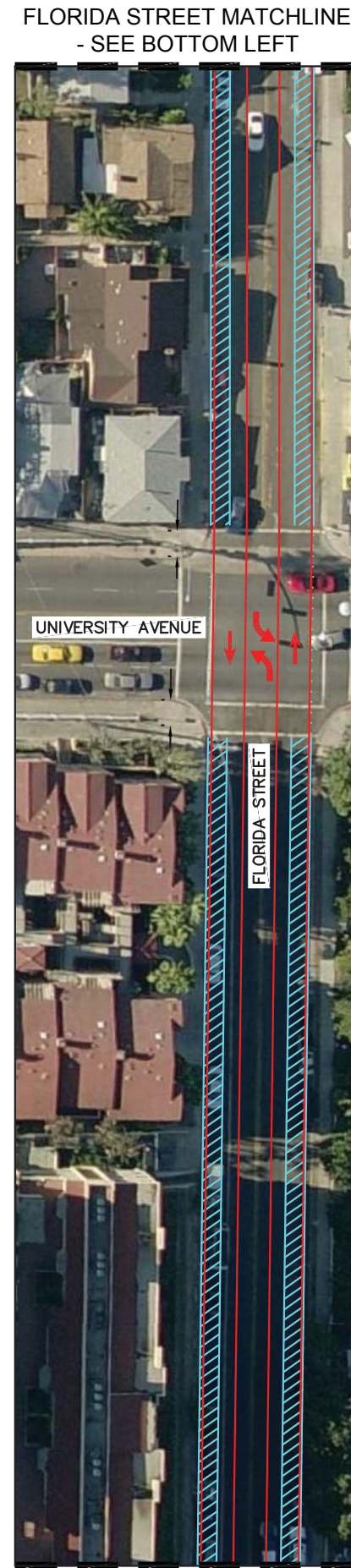
FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT



FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT



FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT



FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT

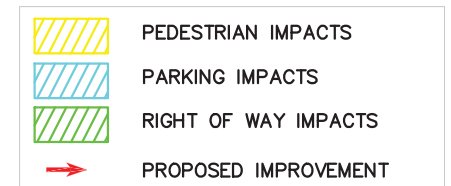


FLORIDA STREET MATCHLINE  
- SEE IMPROVEMENT NP-14B

CONVERTING SEGMENTS OF FLORIDA STREET INTO 2 LANE COLLECTORS WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT NP-14A

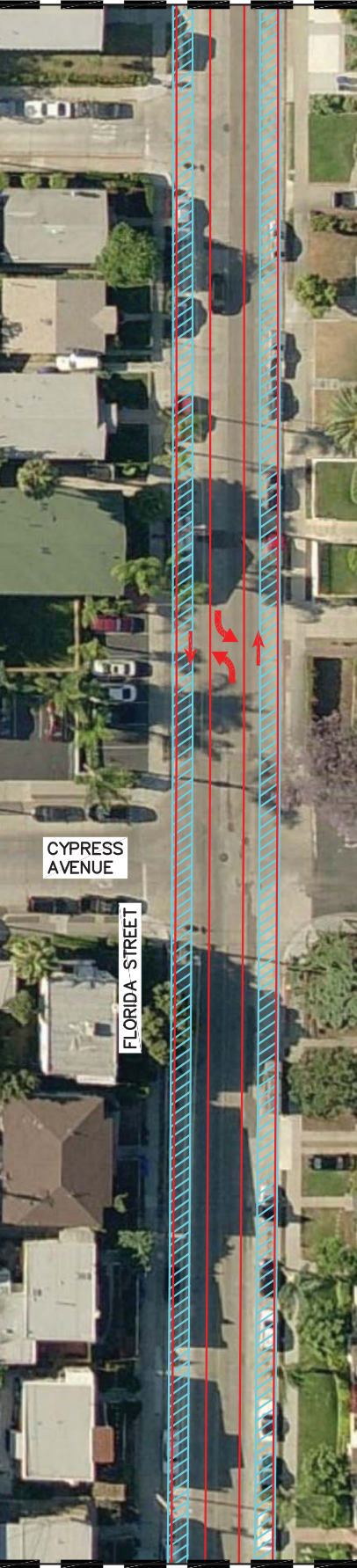


FLORIDA STREET MATCHLINE  
- SEE IMPROVEMENT NP-14A



FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT

FLORIDA STREET MATCHLINE  
- SEE BOTTOM LEFT



FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT

FLORIDA STREET MATCHLINE  
- SEE BOTTOM LEFT



FLORIDA STREET MATCHLINE  
- SEE TOP RIGHT

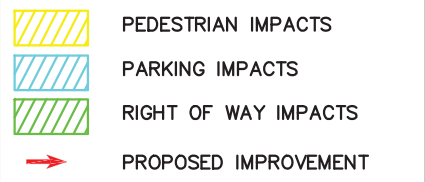
FLORIDA STREET MATCHLINE  
- SEE BOTTOM LEFT



CONVERTING SEGMENTS OF FLORIDA STREET INTO 2 LANE COLLECTORS WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

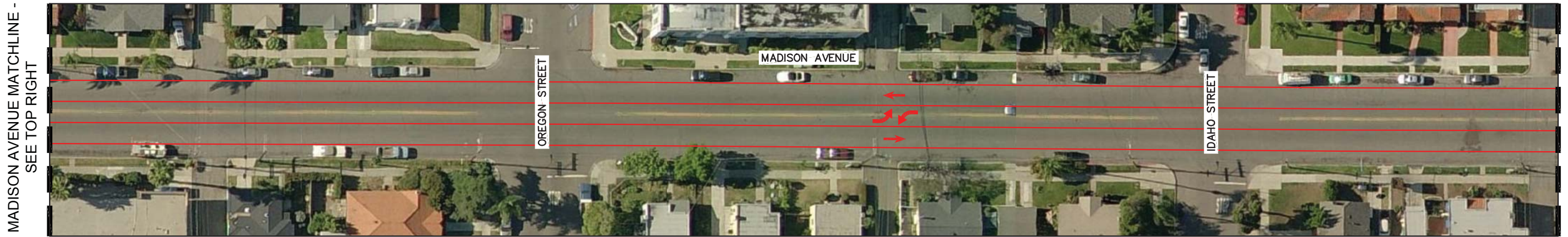


IMPROVEMENT NP-14B





FIGURE 104  
MADISON AVENUE MATCHLINE -  
SEE BOTTOM LEFT



MADISON AVENUE MATCHLINE -  
SEE TOP RIGHT

MADISON AVENUE MATCHLINE -  
SEE BOTTOM LEFT



MADISON AVENUE MATCHLINE -  
SEE TOP RIGHT

MADISON AVENUE MATCHLINE -  
SEE BOTTOM LEFT

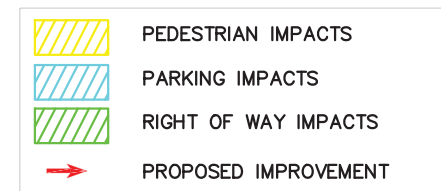


MADISON AVENUE MATCHLINE -  
SEE TOP RIGHT

CONVERTING SEGMENTS OF MADISON AVENUE INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS

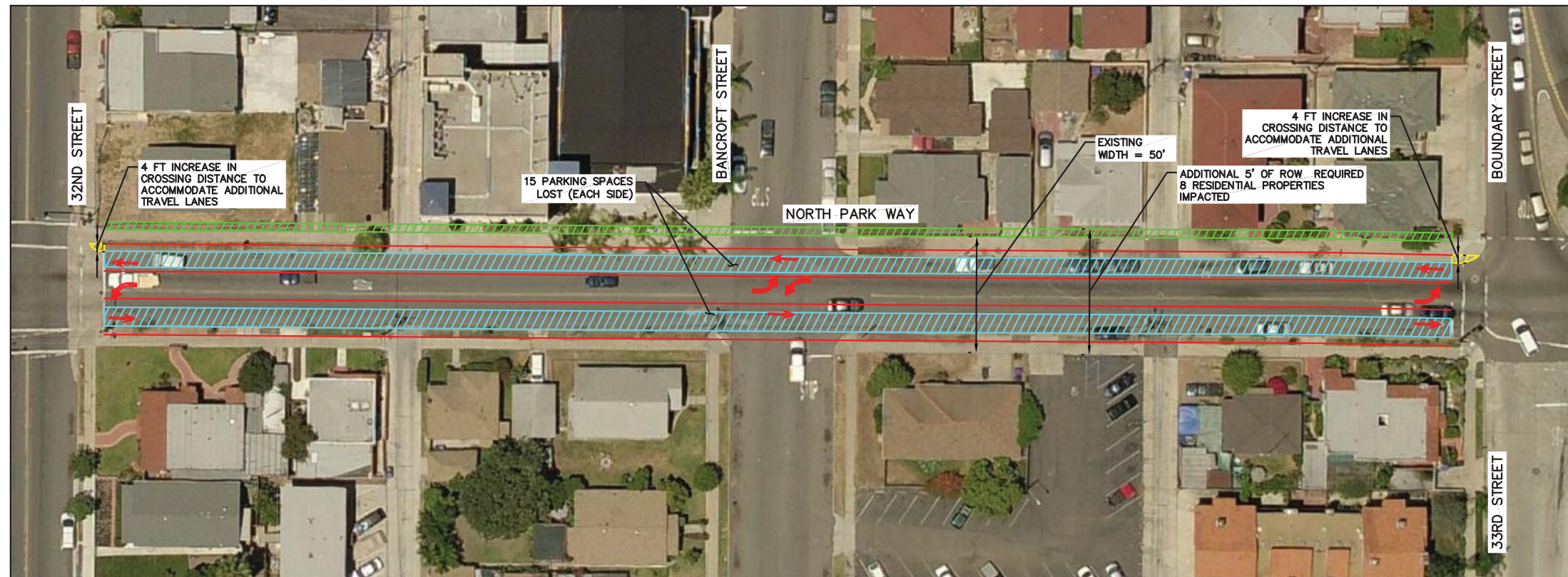
THIS CHANGE IN GEOMETRY IS RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT NP-16

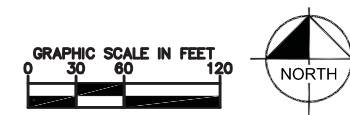
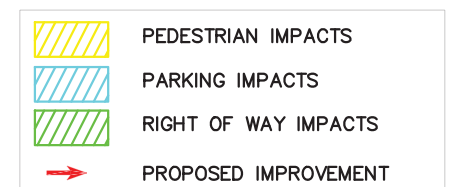




CONVERTING SEGMENTS OF NORTH PARK WAY INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD INCREASE THE PEDESTRIAN CROSSING DISTANCE, RESULT IN LOSS OF PARKING, AND WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-18



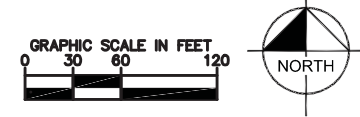


CONVERTING SEGMENTS OF REDWOOD STREET INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

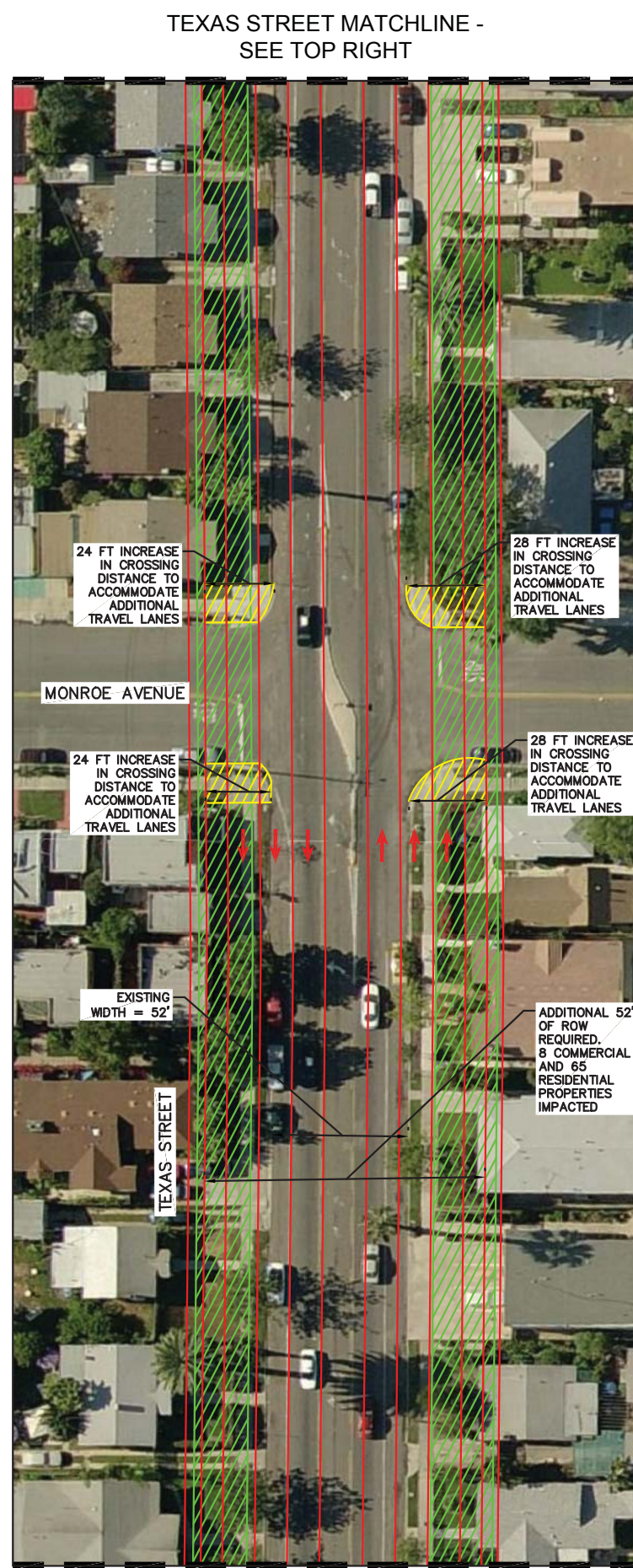
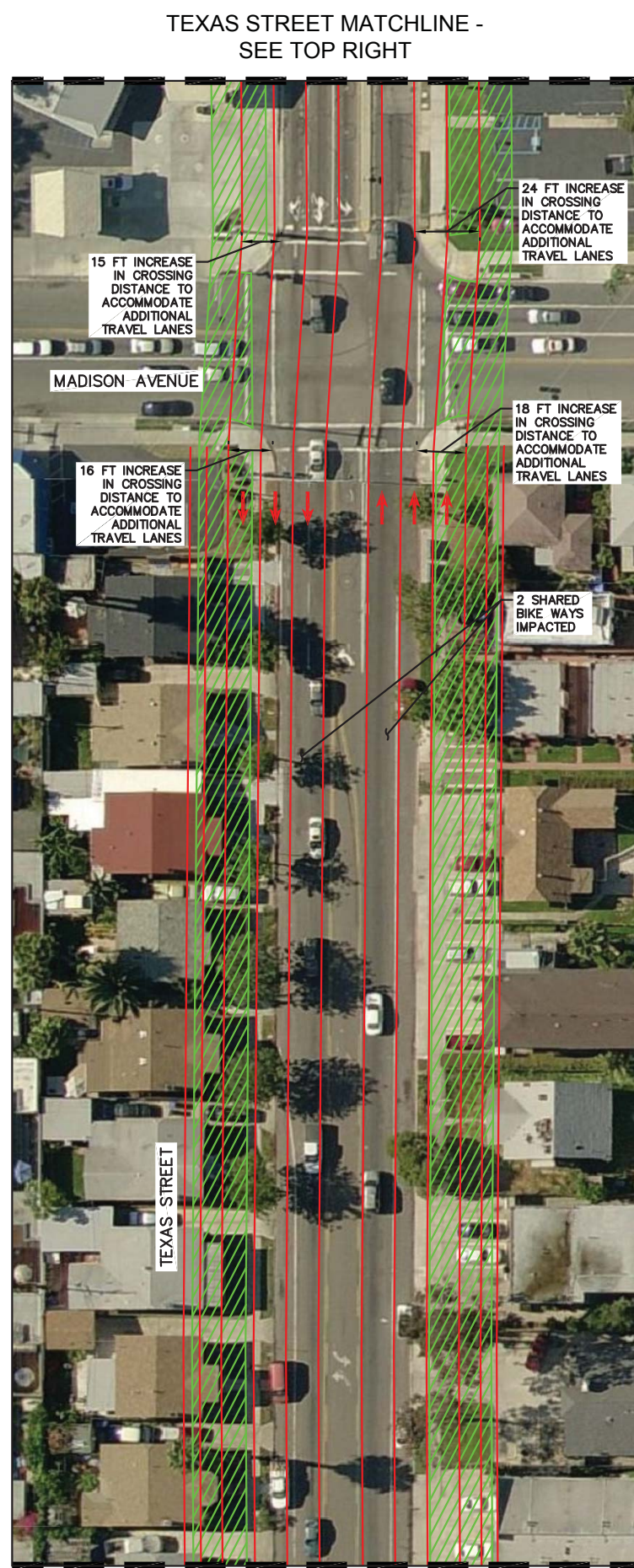
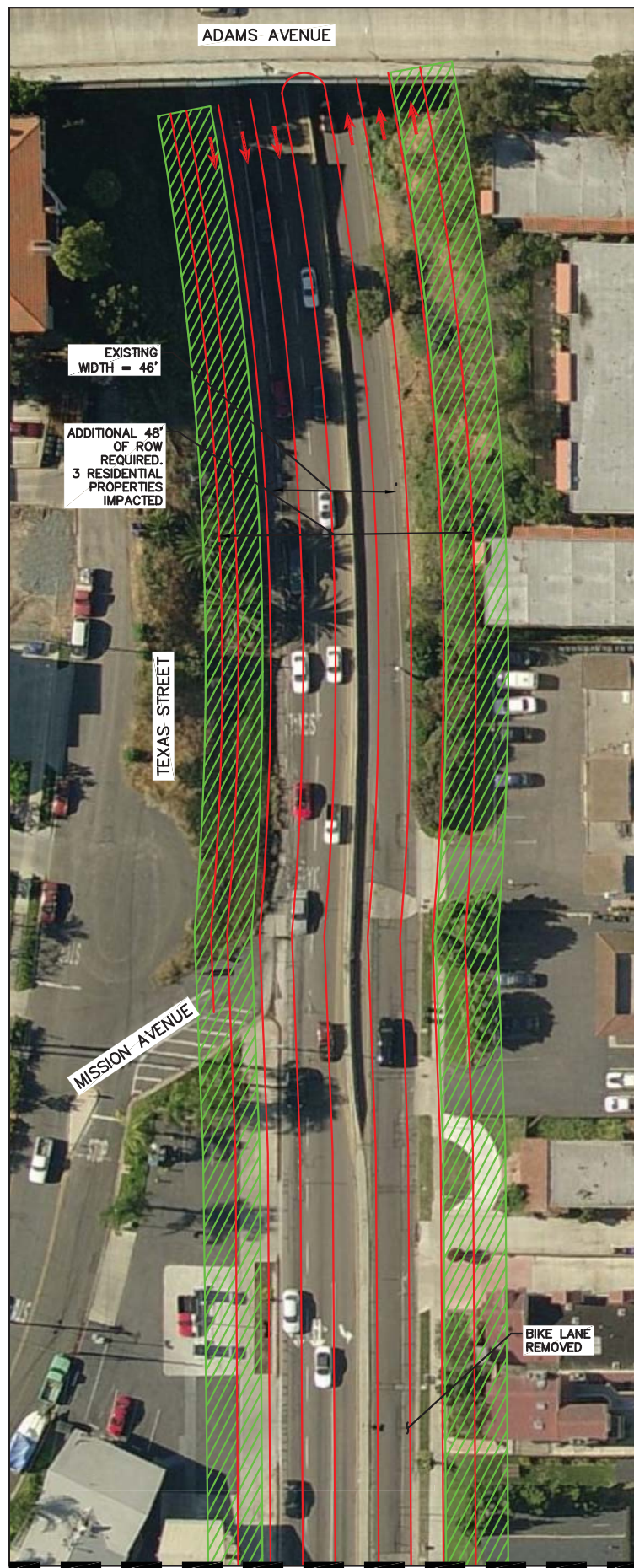
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT



IMPROVEMENT NP-19

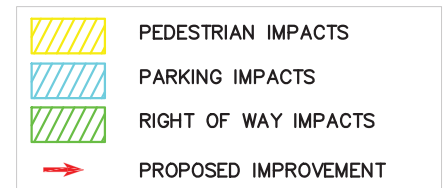




CONVERTING SEGMENTS OF TEXAS STREET INTO 6 LANE MAJOR ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

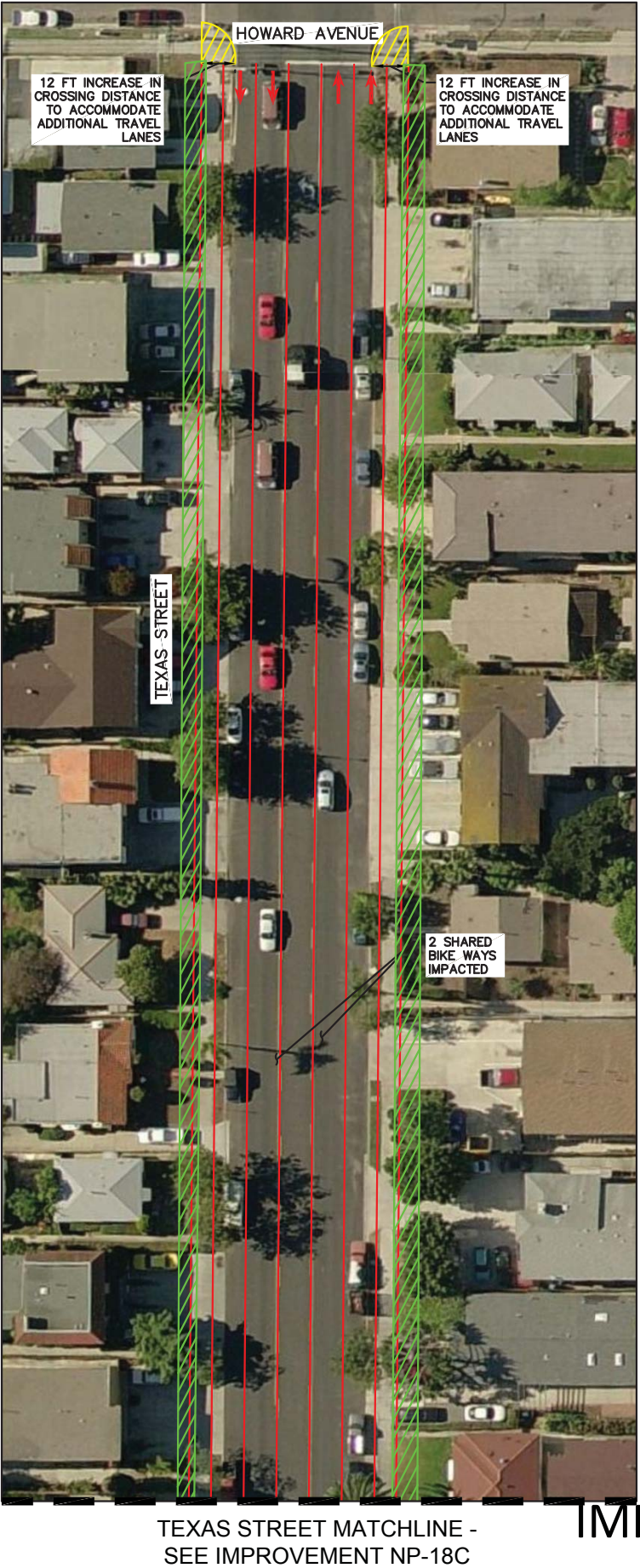
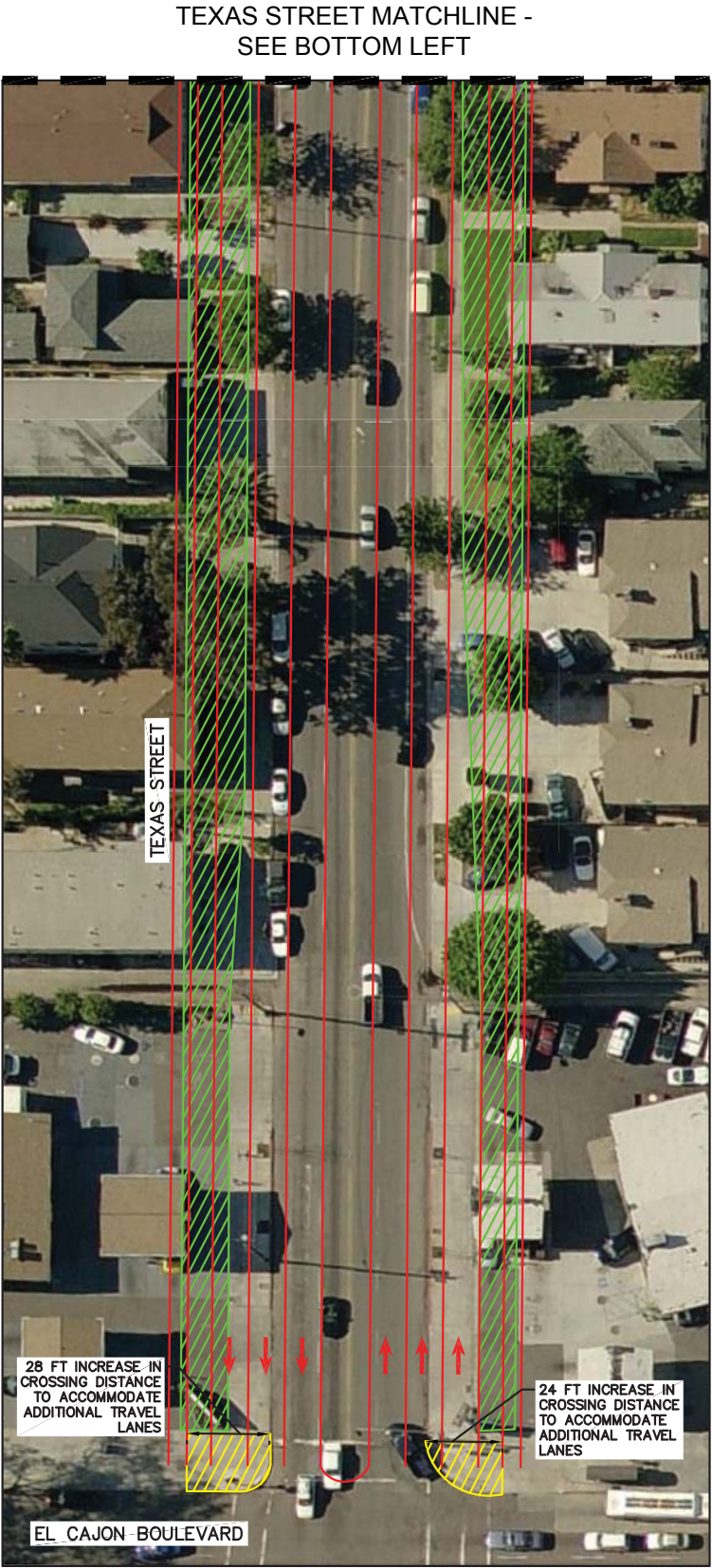
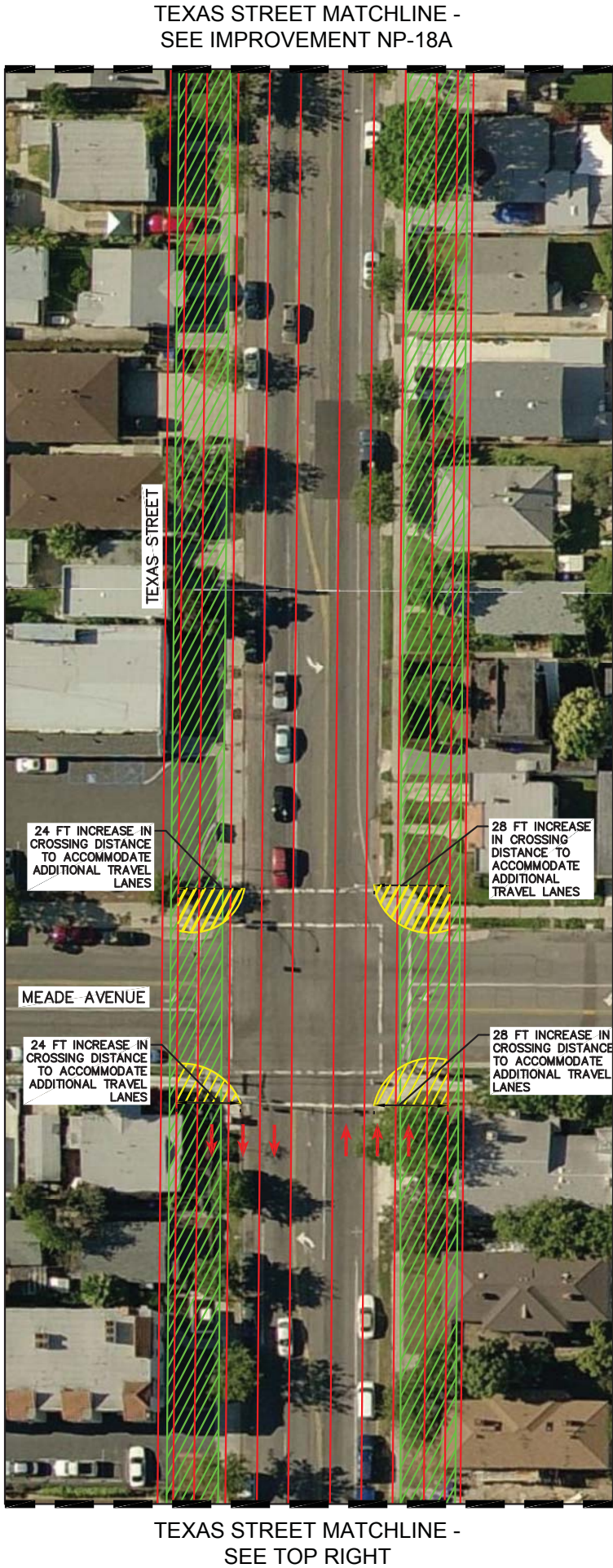
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT NP-20A

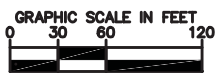
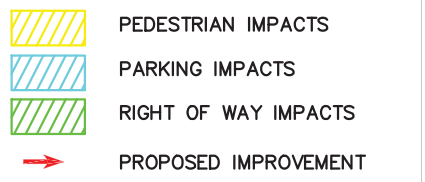




CONVERTING SEGMENTS OF TEXAS STREET INTO 6 LANE MAJOR ARTERIALS OR 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

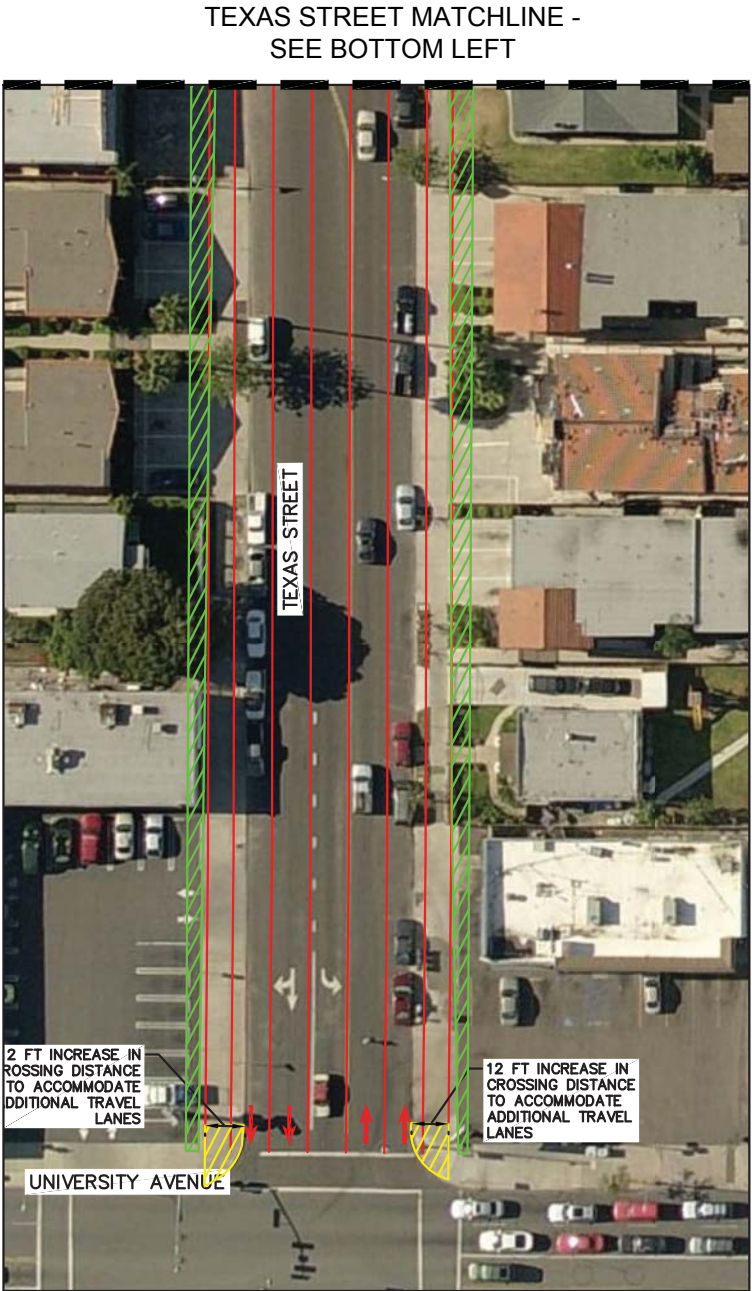
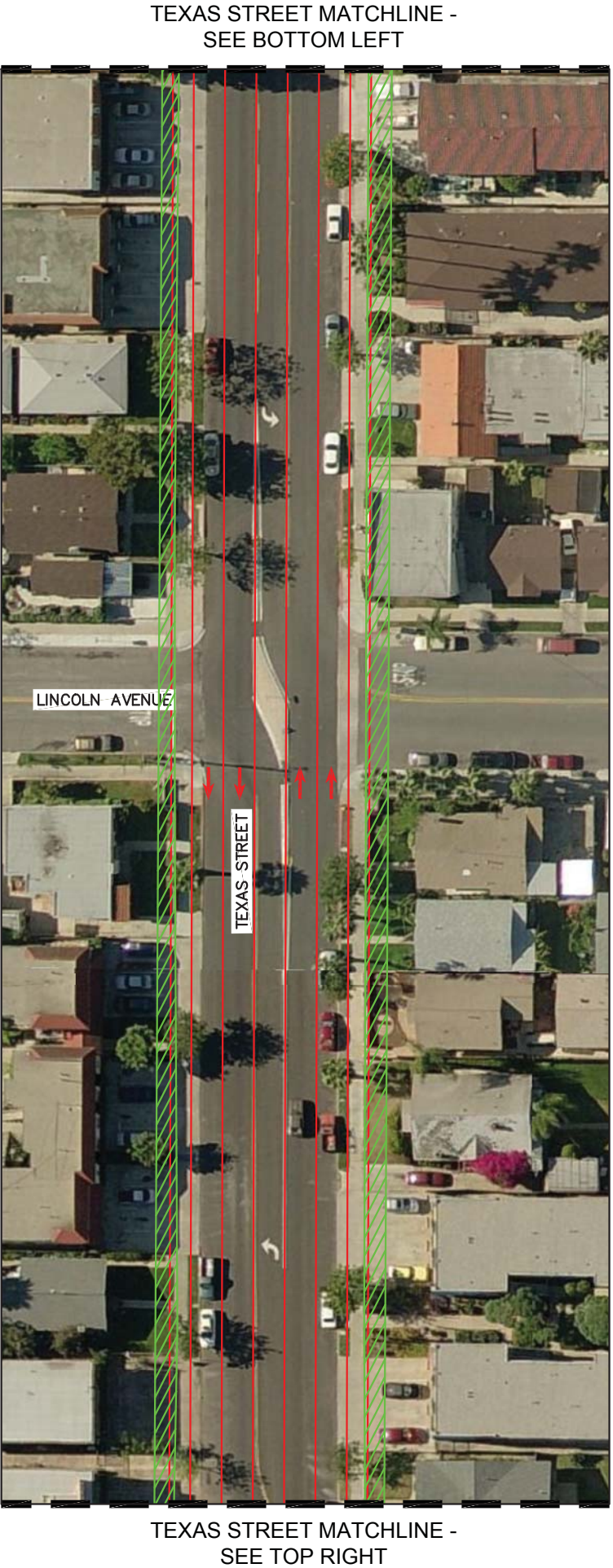
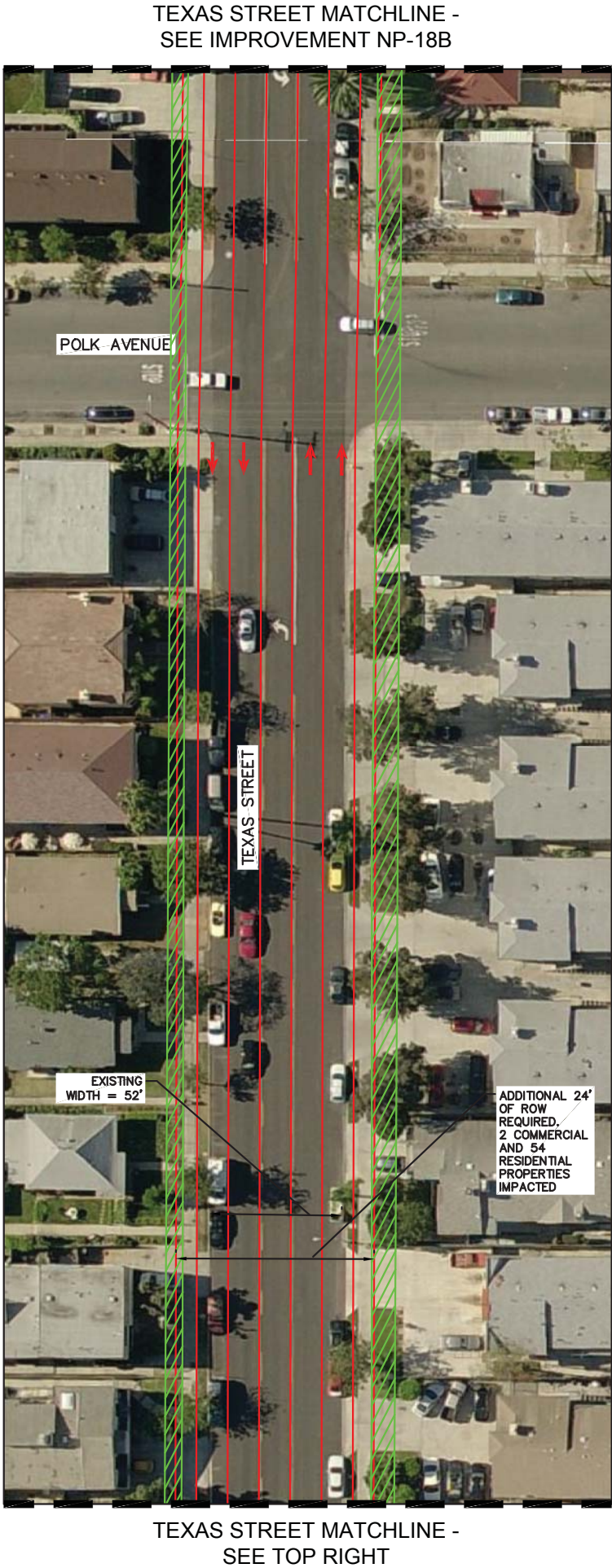
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-20B

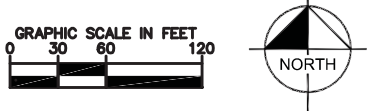
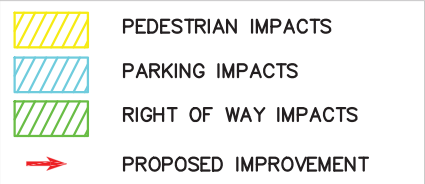




CONVERTING SEGMENTS OF TEXAS STREET INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

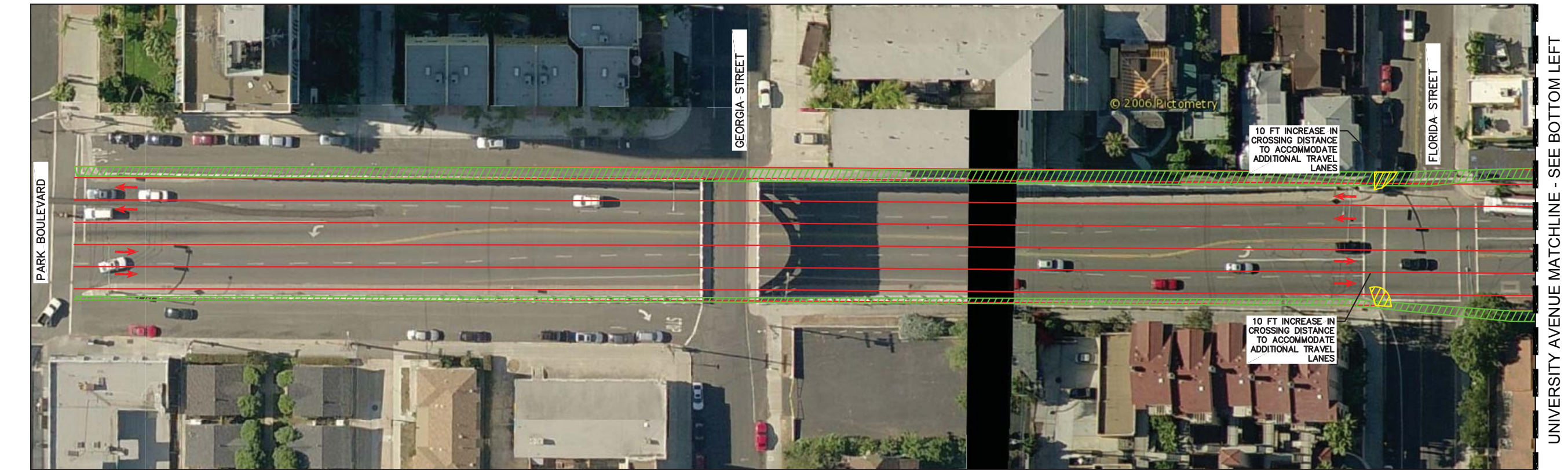
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-20C



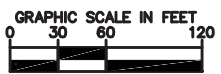
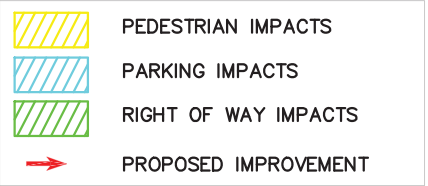
FIGURE 110



CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE TUNNEL WIDENING AND INCREASE PEDESTRIAN CROSSING DISTANCES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

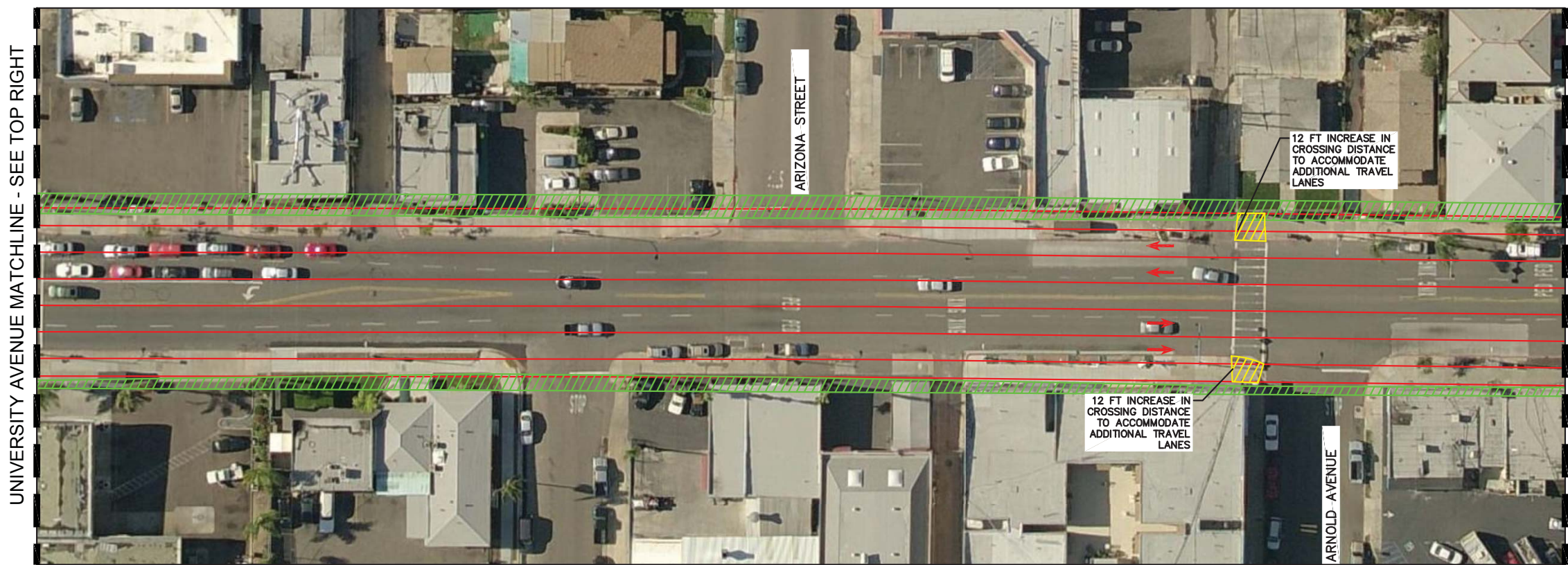
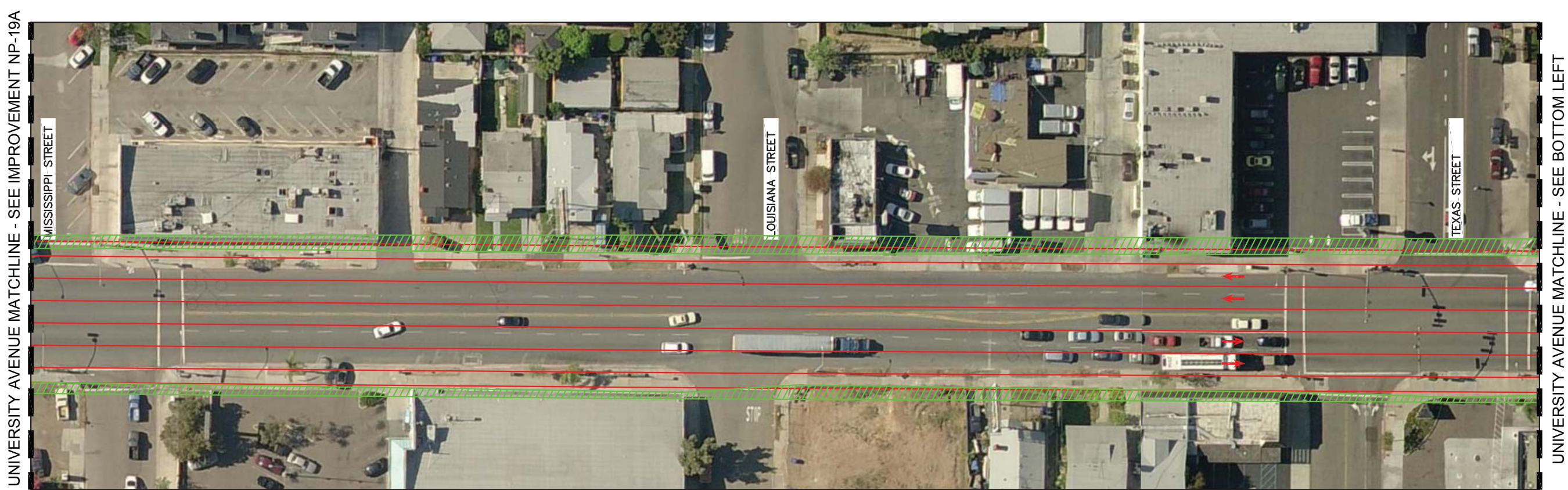
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



# IMPROVEMENT NP-21A



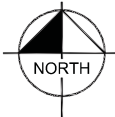
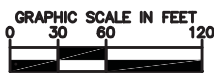
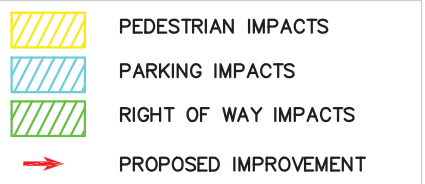
FIGURE 111



CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTIES AND INCREASE PEDESTRIAN CROSSING DISTANCES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

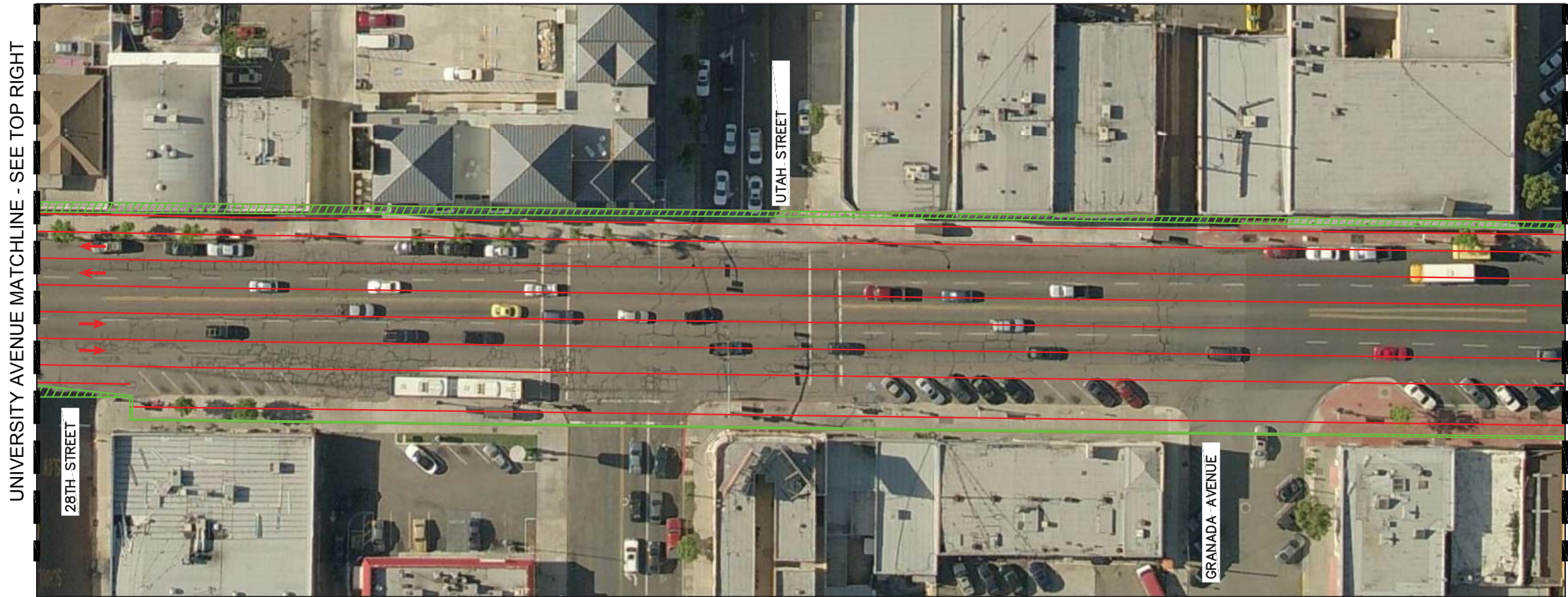
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT NP-21B



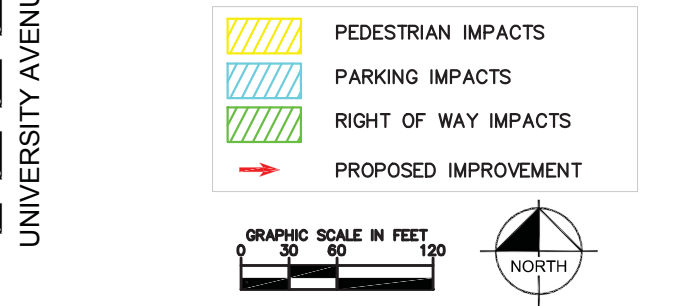
FIGURE 112



CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTIES AND INCREASE PEDESTRIAN CROSSING DISTANCES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

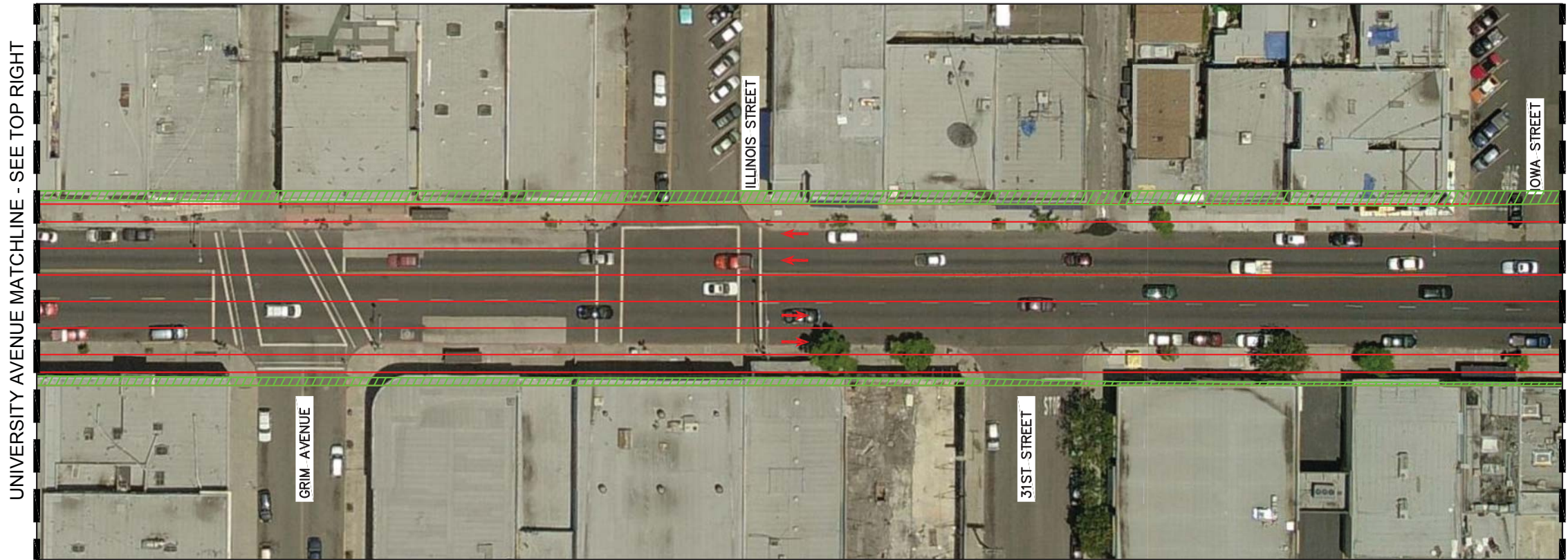
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-21C



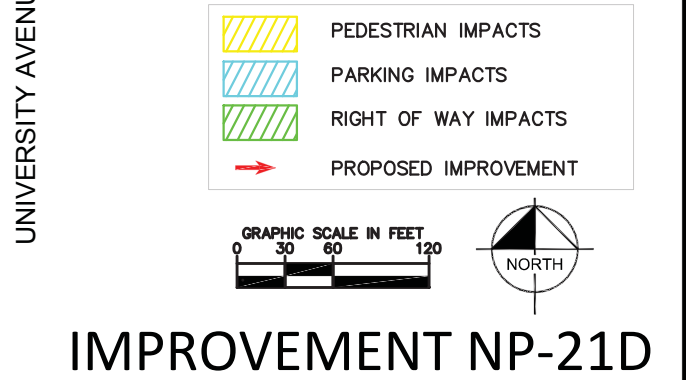
FIGURE 113



CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE PEDESTRIAN CROSSING DISTANCES.

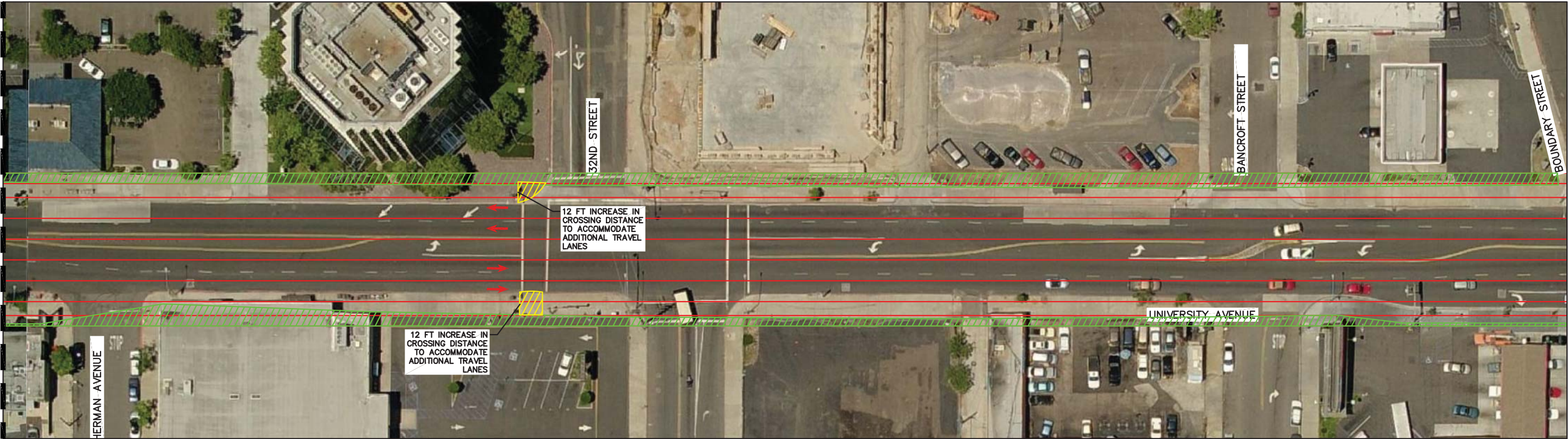
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.





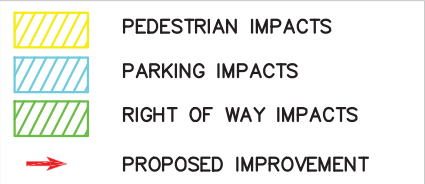
UNIVERSITY AVENUE MATCHLINE - SEE IMPROVEMENT NP-19D



CONVERTING SEGMENTS OF UNIVERSITY AVENUE INTO 4 LANE COLLECTORS OR 4 LANE MAJOR ARTERIALS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY AND INCREASE PEDESTRIAN CROSSING DISTANCES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-21E

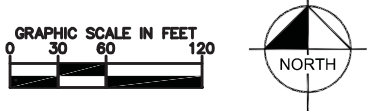
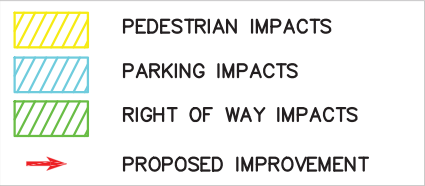




CONVERTING SEGMENTS OF UPAS STREET INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



# IMPROVEMENT NP-22A



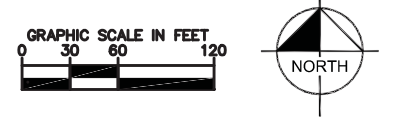


CONVERTING SEGMENTS OF UPAS STREET INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE OR A 4 LANE COLLECTOR WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING, REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTIES, INCREASE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

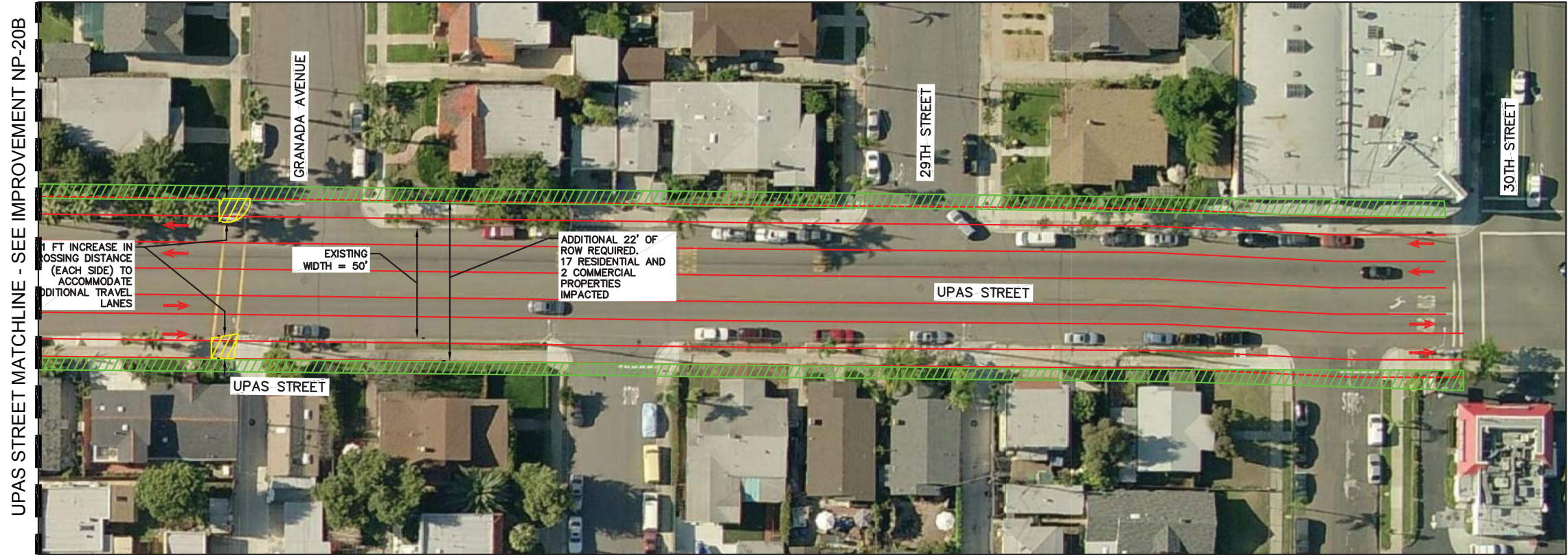
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

- PEDESTRIAN IMPACTS
- PARKING IMPACTS
- RIGHT OF WAY IMPACTS
- PROPOSED IMPROVEMENT



IMPROVEMENT NP-22B





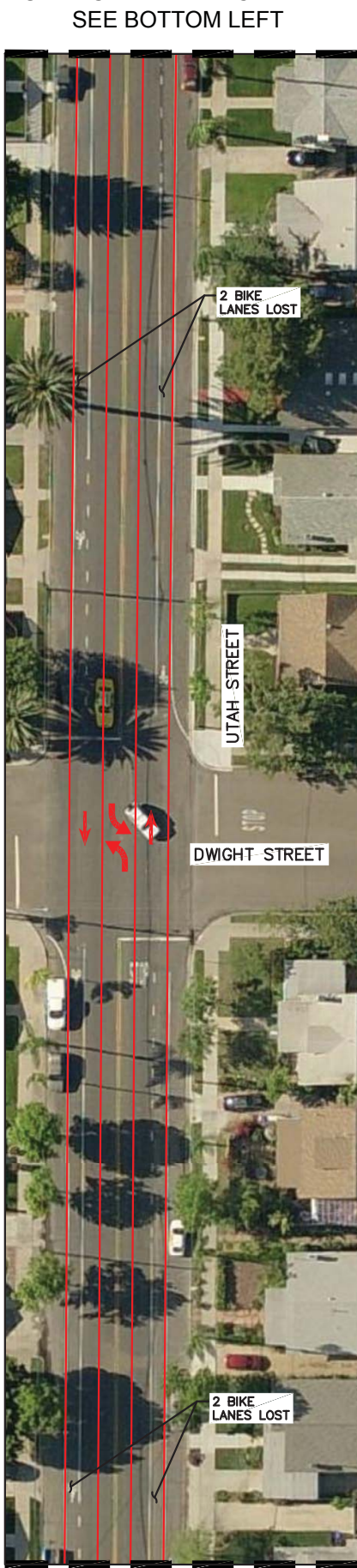
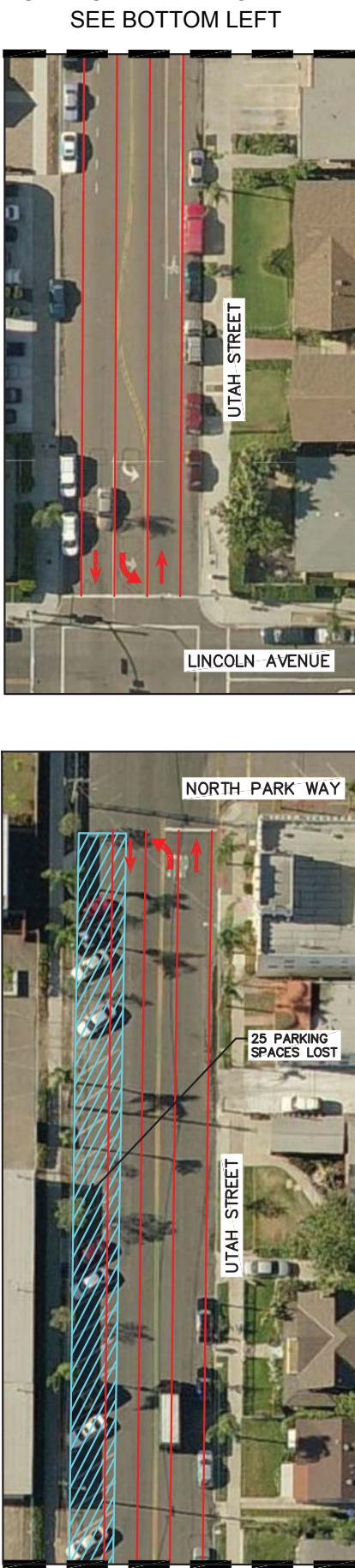
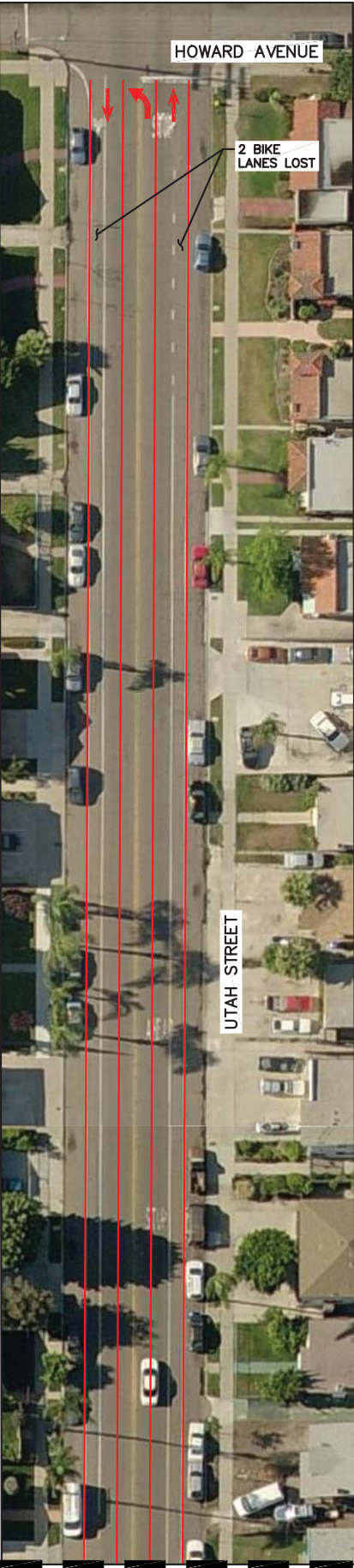
CONVERTING SEGMENTS OF UPAS STREET INTO A 4 LANE COLLECTOR WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTIES, INCREASE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

IMPROVEMENT NP-22C

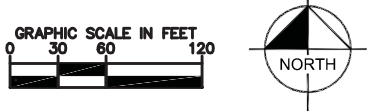
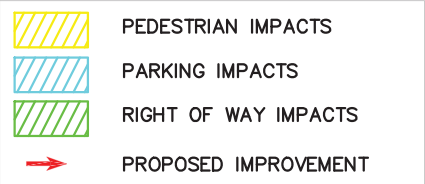




CONVERTING SEGMENTS OF UTAH STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING AND IMPACT BICYCLE LANES.

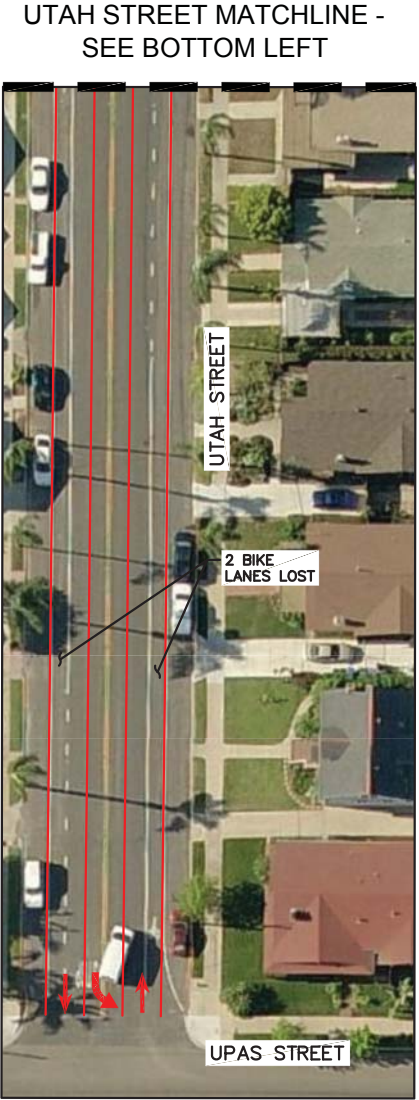
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-23A

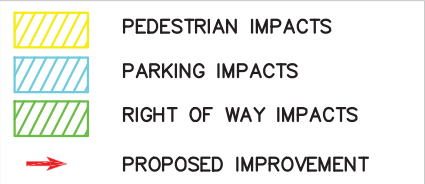




CONVERTING SEGMENTS OF UTAH STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING, AND IMPACT BICYCLE LANES.

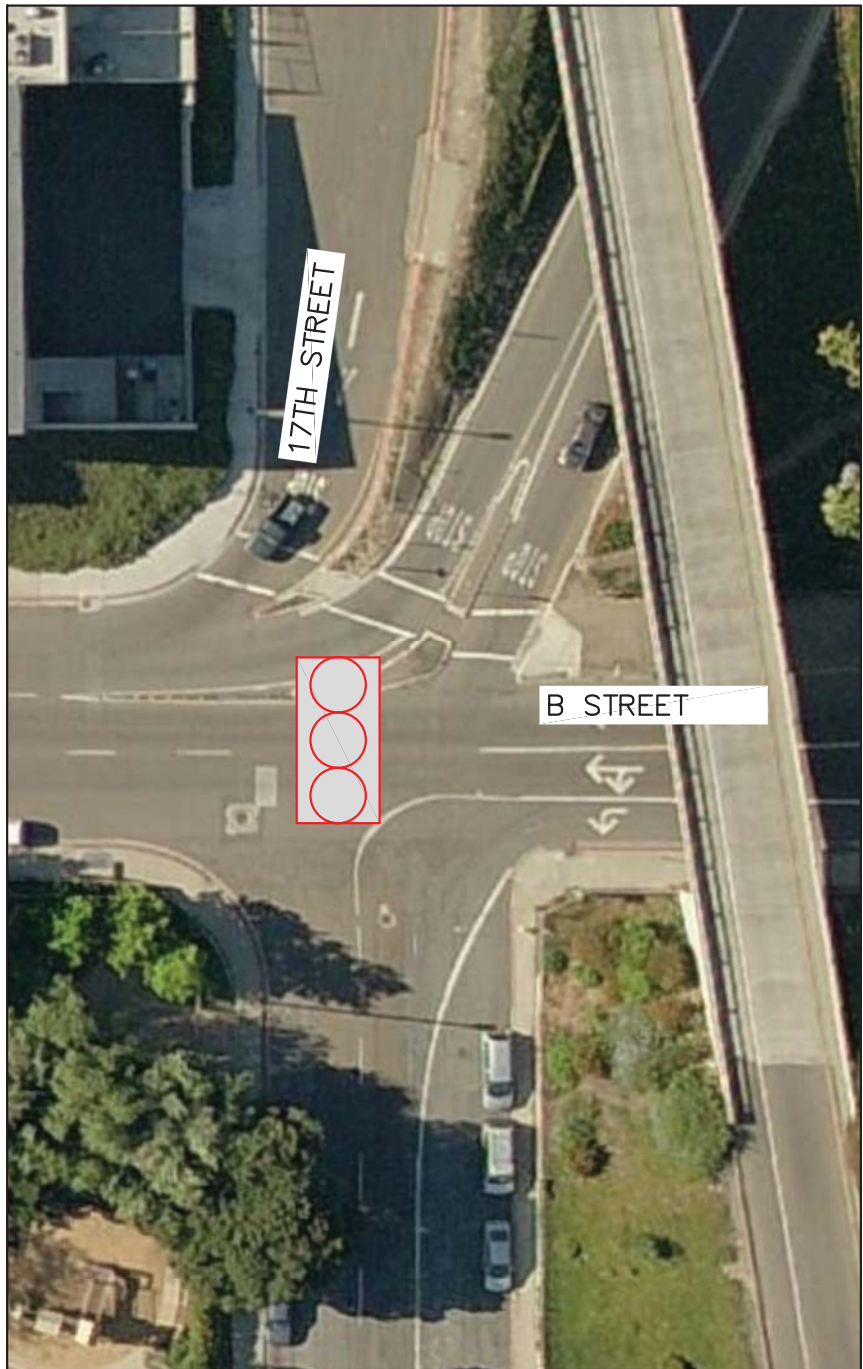
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT NP-23B





THE ADDITION OF A TRAFFIC SIGNAL WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF STATE ROUTE 94 WESTBOUND RAMPS AND BROADWAY TO LOS D OR BETTER DURING BOTH THE AM AND PM PEAK HOURS. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS.

THIS CHANGE IN GEOMETRY IS RECOMMENDED.



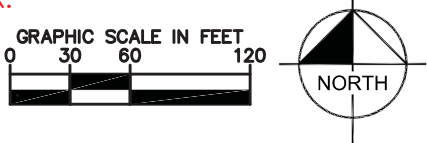
PEDESTRIAN IMPACTS

PARKING IMPACTS

RIGHT OF WAY IMPACTS

PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-1



THE ADDITION OF A TRAFFIC SIGNAL WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF STATE ROUTE 94 WESTBOUND RAMPS AND BROADWAY TO LOS D OR BETTER DURING BOTH THE AM AND PM PEAK HOURS. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS. PEAK-HOUR SIGNAL WARRANTS ARE NOT MET.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



PEDESTRIAN IMPACTS



PARKING IMPACTS

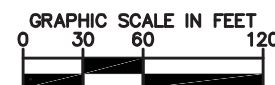


RIGHT OF WAY IMPACTS



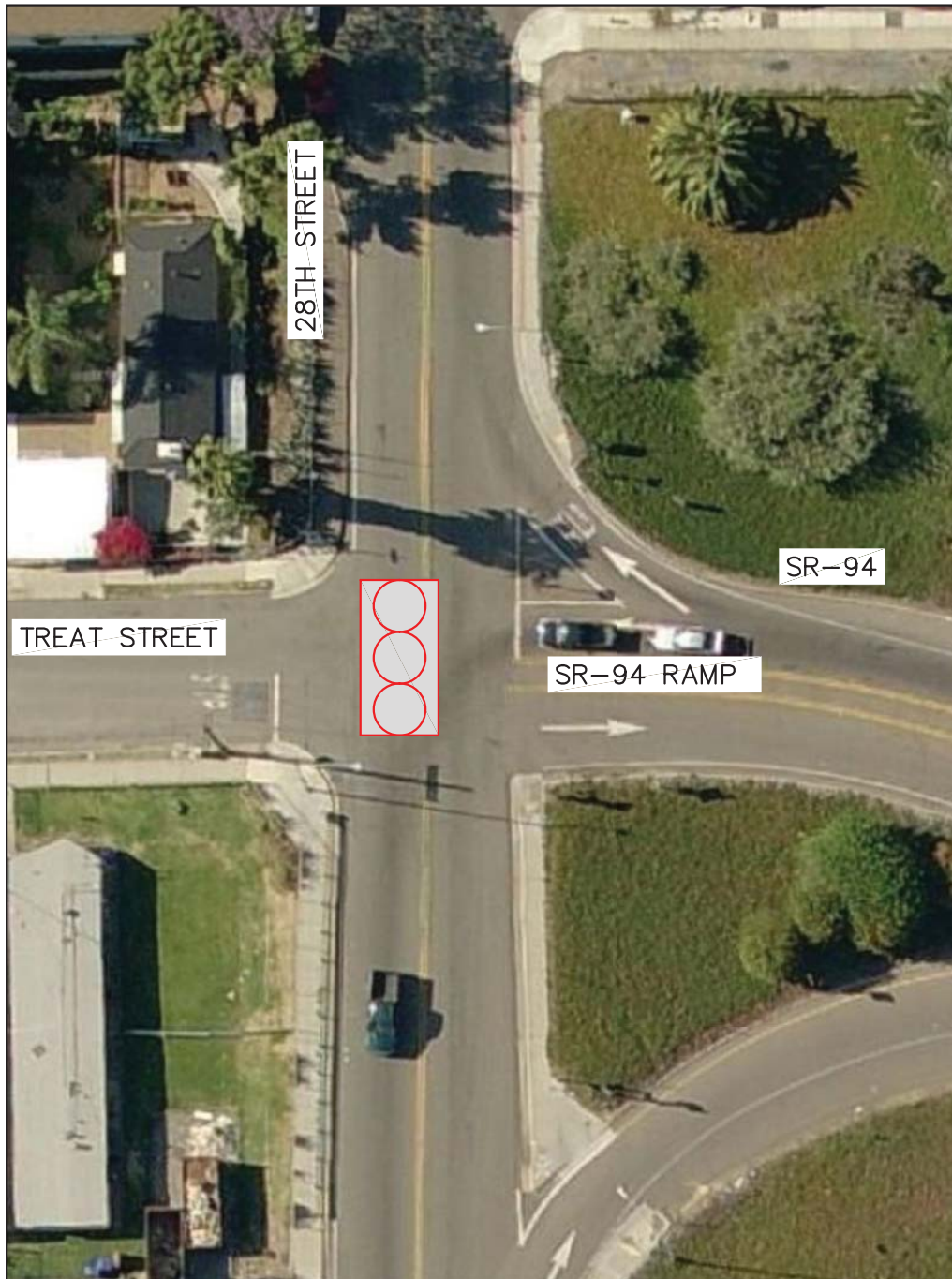
PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-2





THE ADDITION OF A TRAFFIC SIGNAL WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF STATE ROUTE 94 WESTBOUND RAMP AND 28TH STREET TO LOS D OR BETTER DURING BOTH THE AM AND PM PEAK HOURS. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS

THIS CHANGE IN GEOMETRY IS RECOMMENDED.



PEDESTRIAN IMPACTS



PARKING IMPACTS

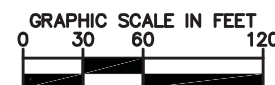


RIGHT OF WAY IMPACTS



PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-3



THE ADDITION OF A TRAFFIC SIGNAL AND A SOUTHBOUND LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF STATE ROUTE 94 EASTBOUND RAMP AND 28TH STREET TO LOS D OR BETTER DURING BOTH THE AM AND PM PEAK HOURS. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD CAUSE NO SIGNIFICANT IMPACTS TO EXISTING CONDITIONS

THIS CHANGE IN GEOMETRY IS RECOMMENDED.

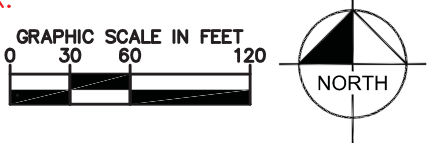
PEDESTRIAN IMPACTS

PARKING IMPACTS

RIGHT OF WAY IMPACTS

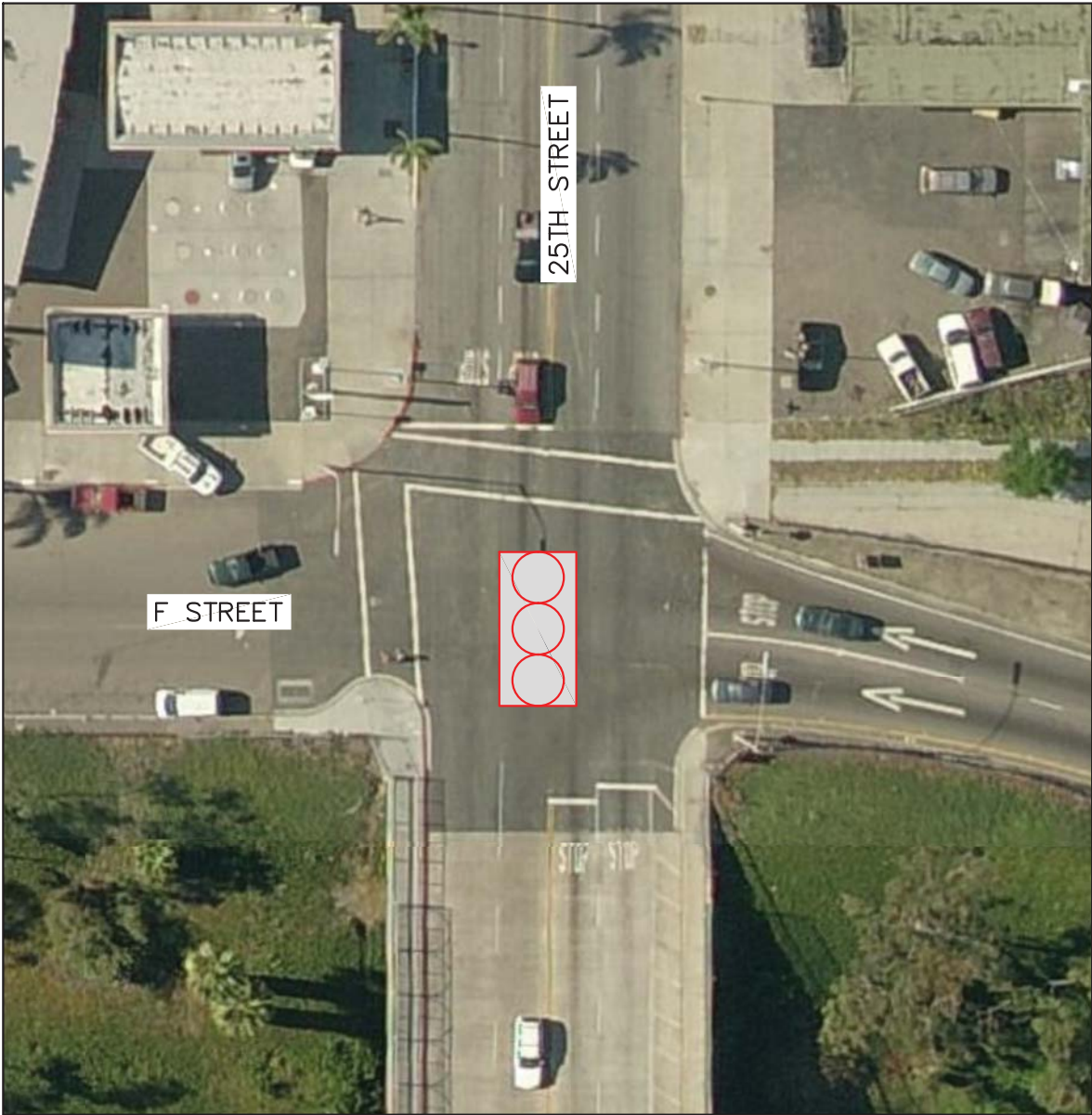
PROPOSED IMPROVEMENT

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-4



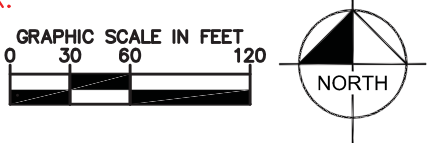


THE ADDITION OF A TRAFFIC SIGNAL WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF F STREET AND 25TH STREET TO LOS D OR BETTER DURING BOTH PEAK HOURS. PEAK-HOUR SIGNAL WARRANTS ARE NOT MET.

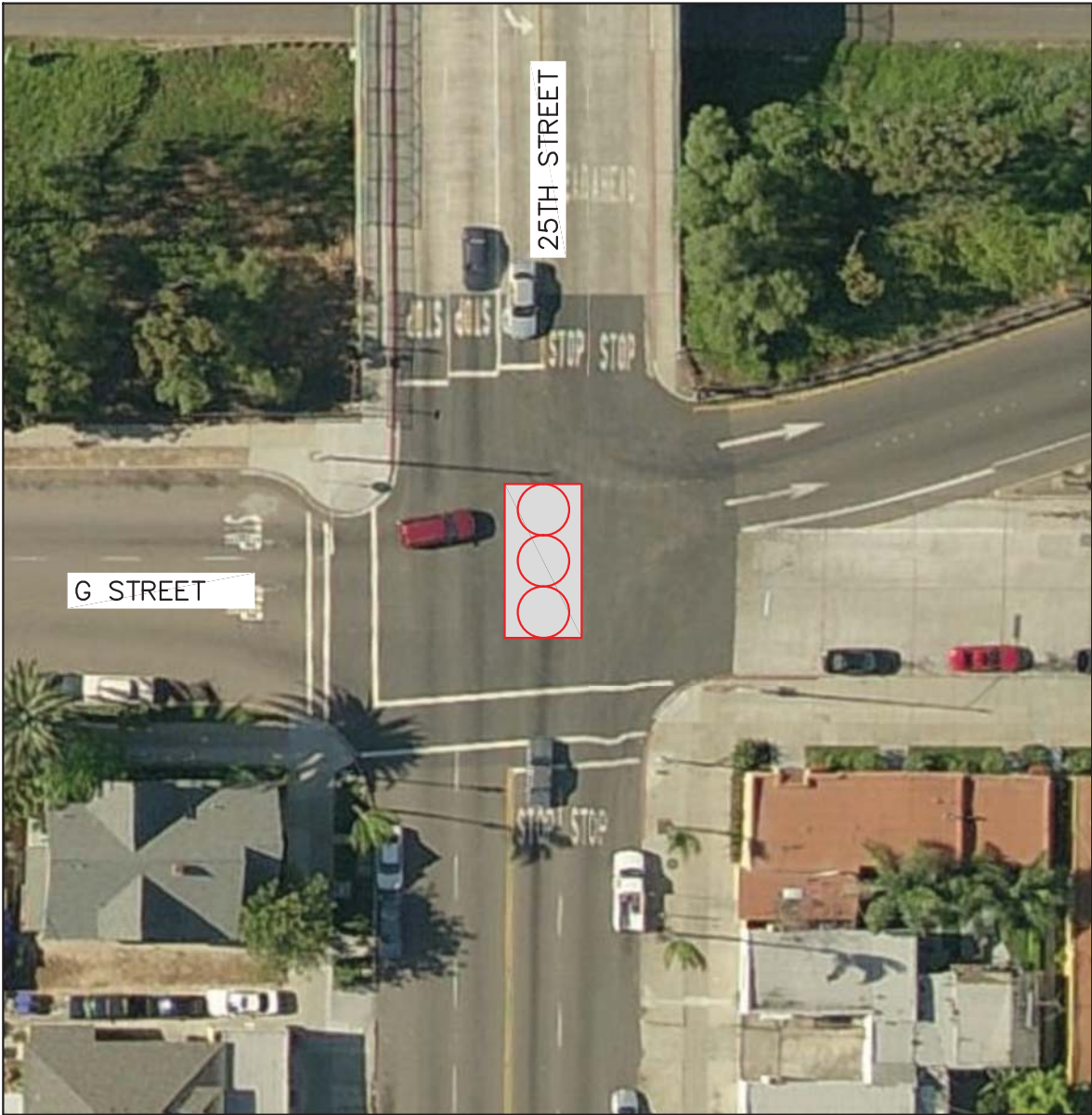
THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.



CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



# IMPROVEMENT GH-5

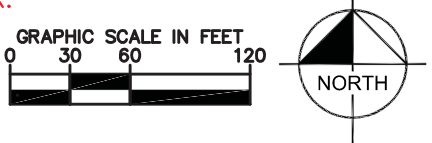


THE ADDITION OF A TRAFFIC SIGNAL WOULD BE REQUIRED TO IMPROVE OPERATIONS AT THE INTERSECTION OF G STREET AND 25TH STREET TO LOS D OR BETTER DURING BOTH PEAK HOURS. PEAK-HOUR SIGNAL WARRANTS ARE NOT MET.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

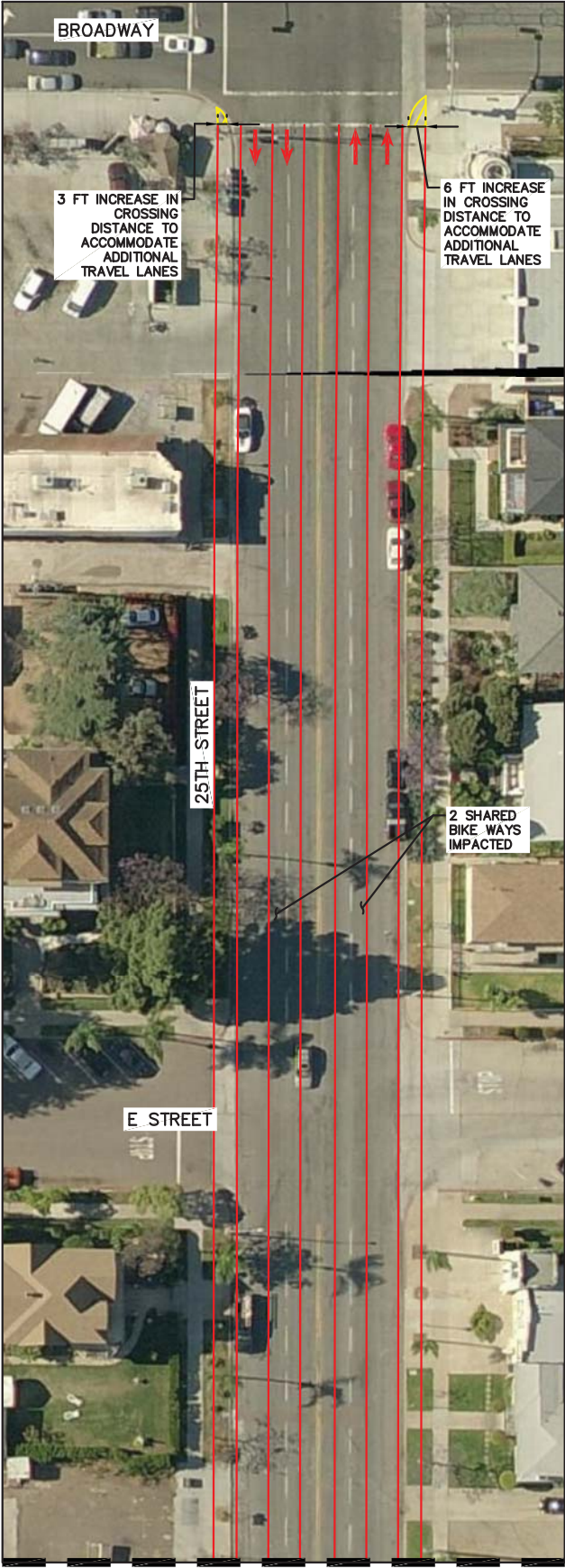


CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

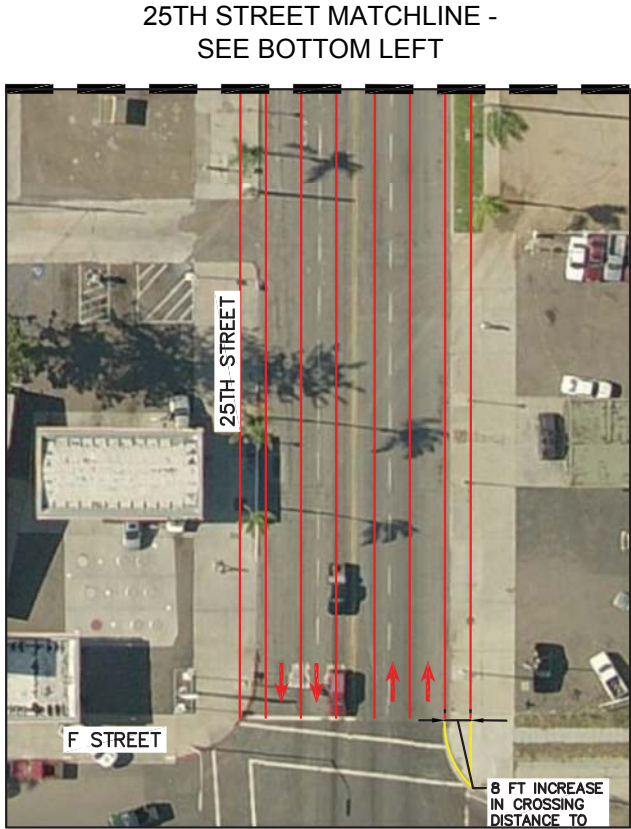


## IMPROVEMENT GH-6





25TH STREET MATCHLINE -  
SEE TOP RIGHT

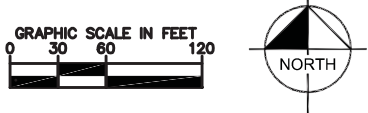
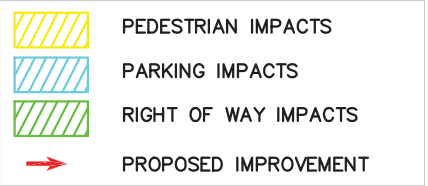


CONVERTING SEGMENTS OF 25TH STREET INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD INCREASE PEDESTRIAN CROSSING DISTANCE AND IMPACT SHARED USE BICYCLE FACILITIES.

THE 25TH STREET RENAISSANCE PROJECT IS NARROWING THE ROADWAY TO ONE LANE IN EACH DIRECTION WITH BICYCLE LANES.

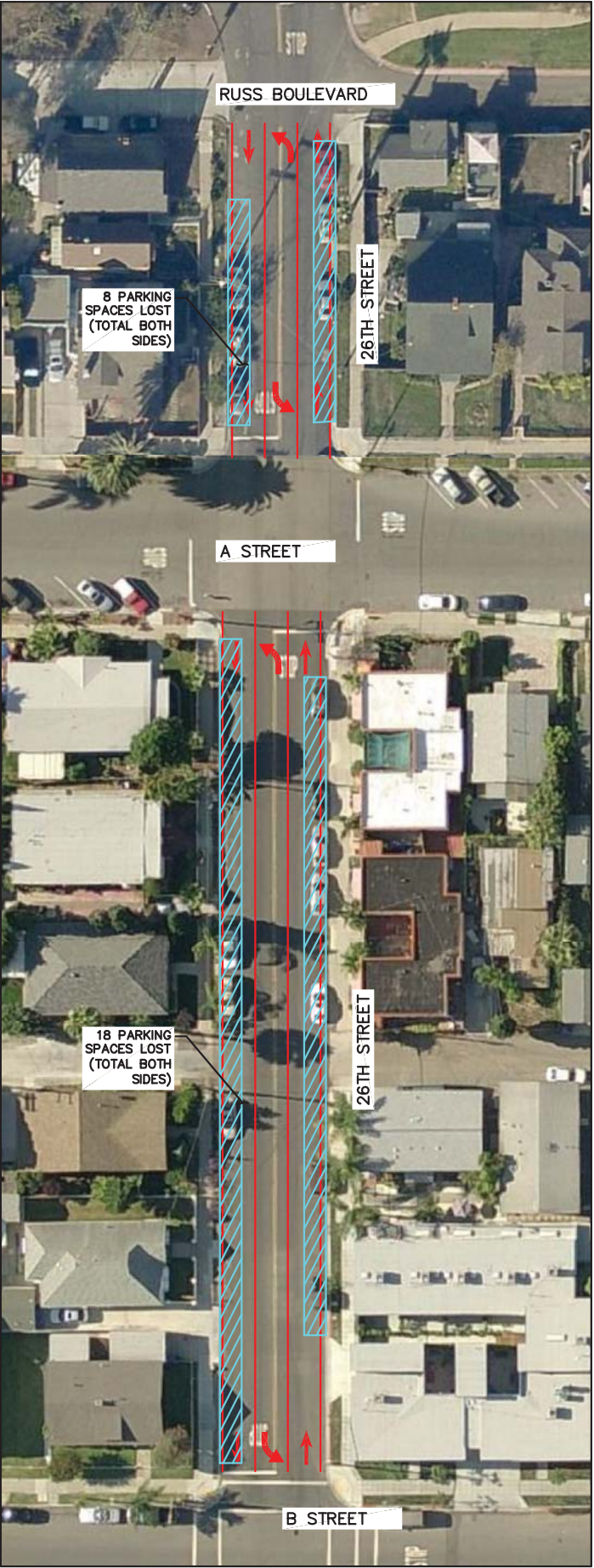
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-7

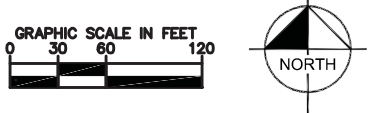
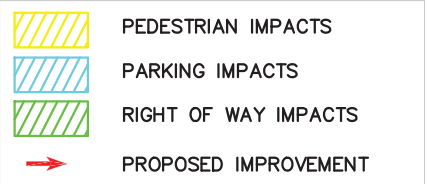




CONVERTING SEGMENTS OF 26TH STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

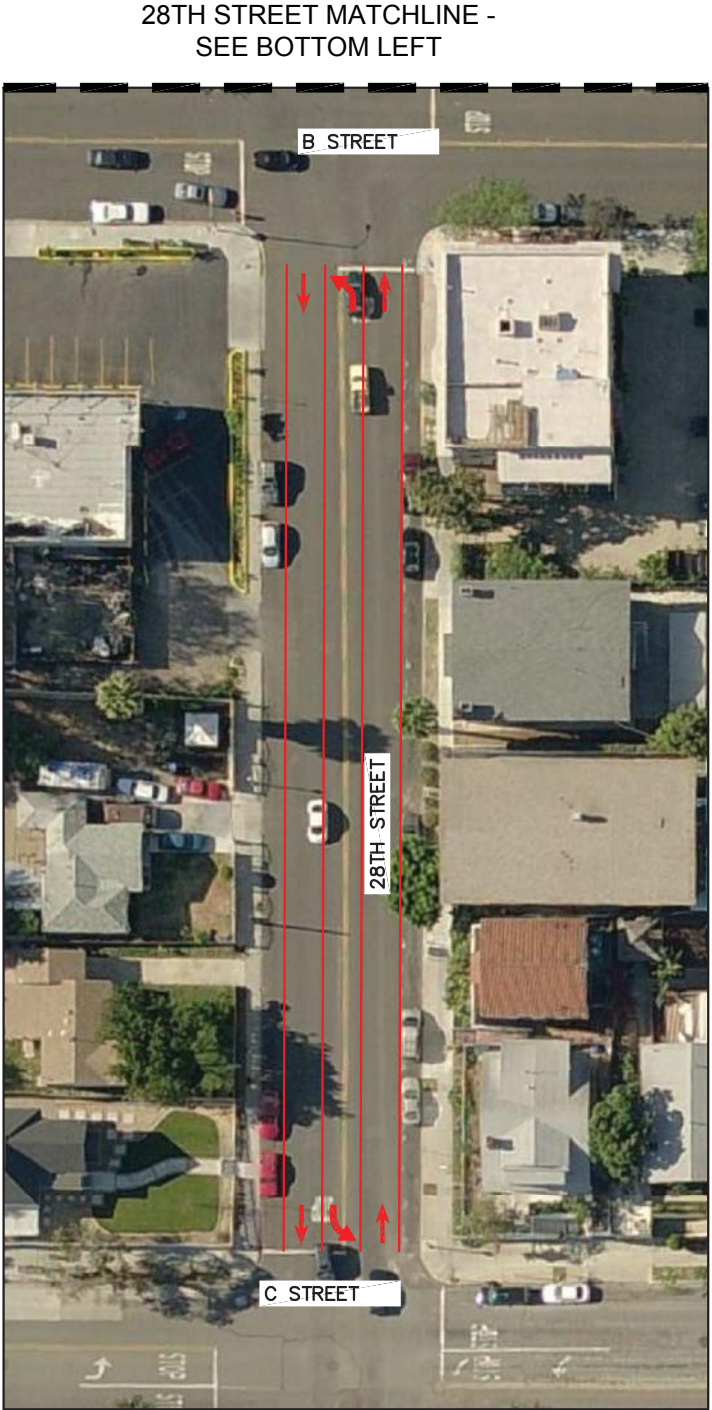


IMPROVEMENT GH-8





28TH STREET MATCHLINE -  
SEE TOP RIGHT

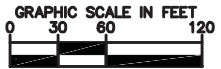
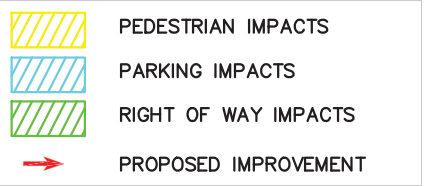


28TH STREET MATCHLINE -  
SEE BOTTOM LEFT

CONVERTING SEGMENTS OF 28TH STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING.

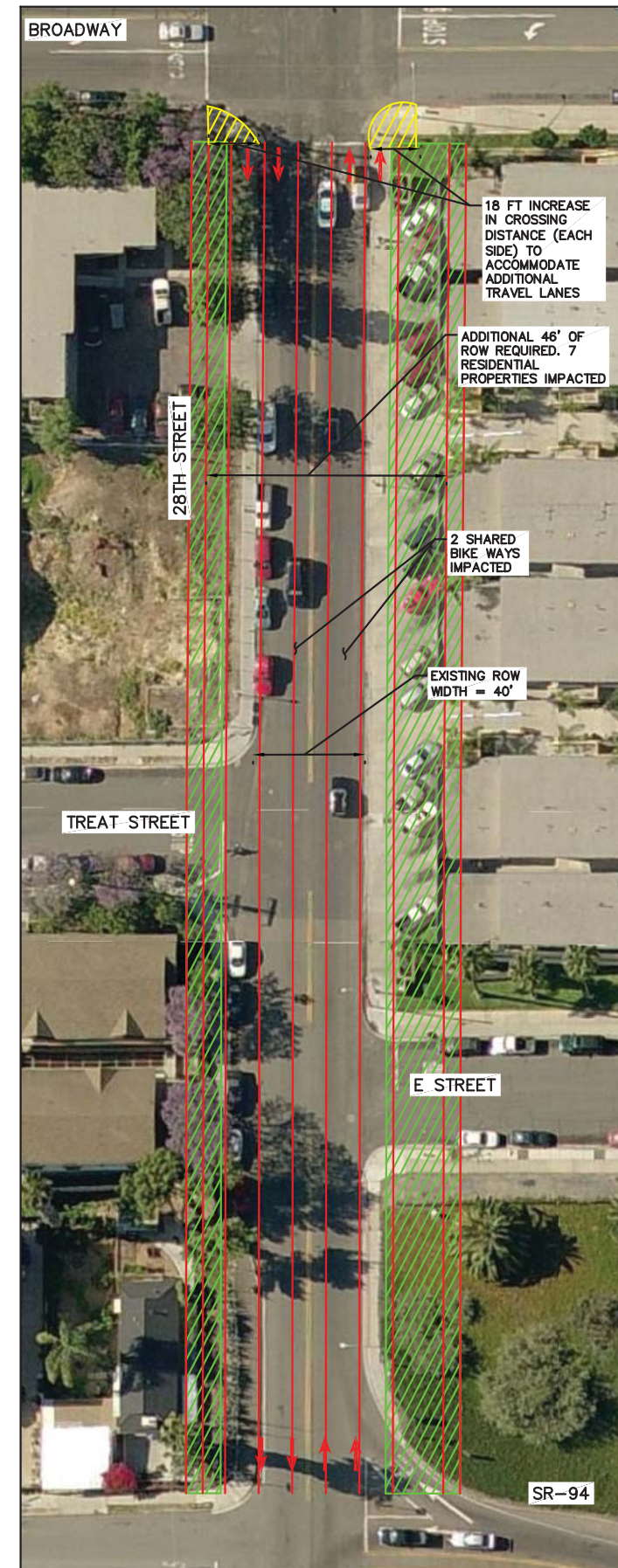
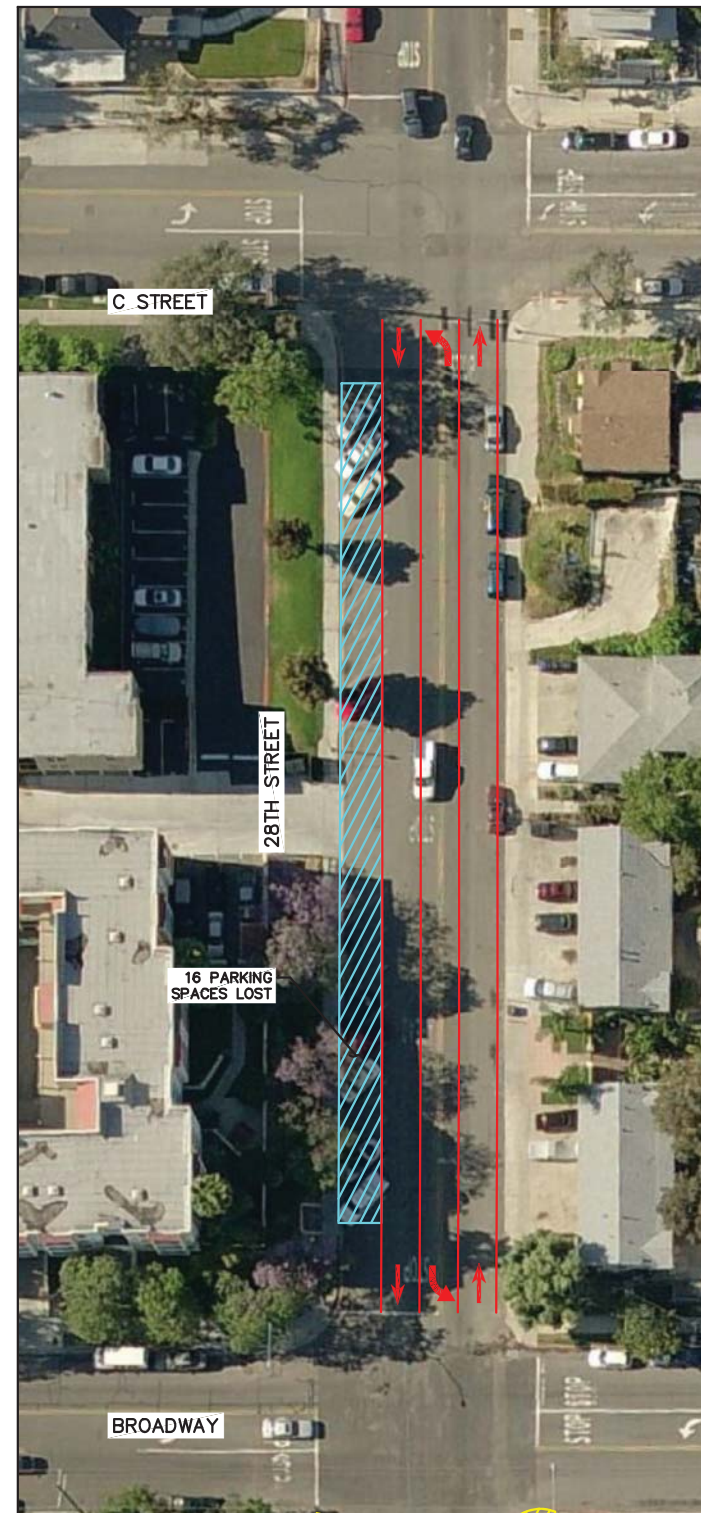
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-9A

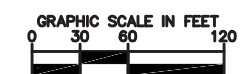
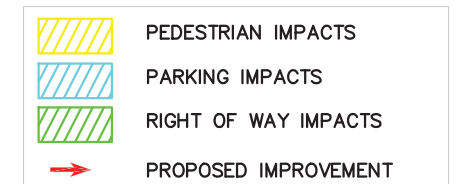




CONVERTING SEGMENTS OF 28TH STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES OR 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING, REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, AND IMPACT SHARED USE BICYCLE FACILITIES.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT GH-9B





CONVERTING SEGMENTS OF 30TH STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD NOT HAVE A SIGNIFICANT IMPACT TO THE ROADWAY.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

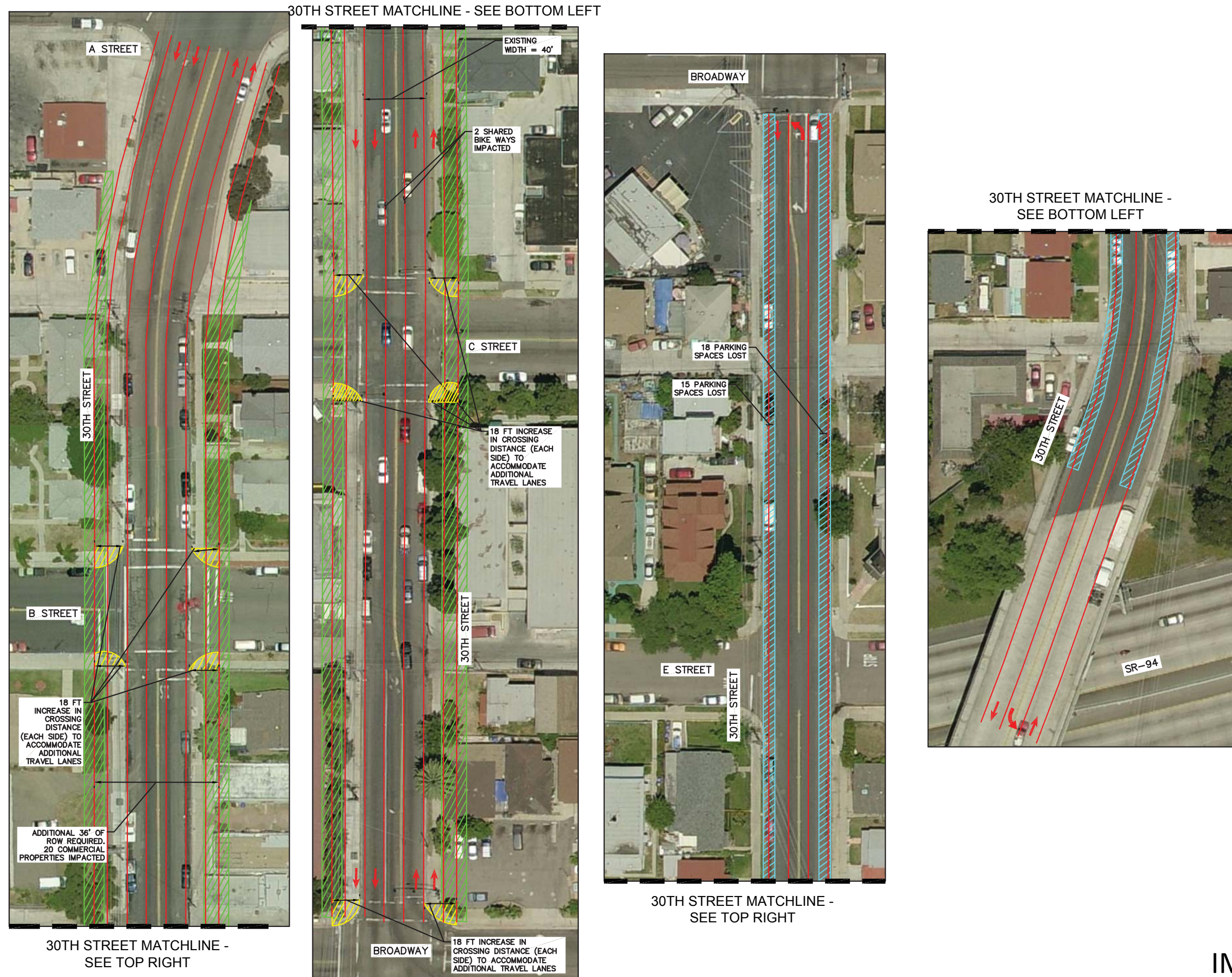
	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT

GRAPHIC SCALE IN FEET  
0 30 60 120

NORTH

## IMPROVEMENT GH-10A

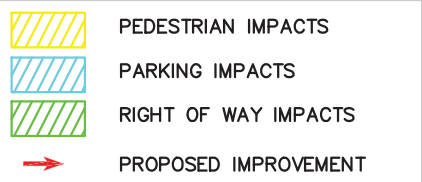




CONVERTING SEGMENTS OF 30TH STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES OR 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, IMPACT SHARED USE BICYCLE FACILITIES, AND RESULT IN LOSS OF PARKING.

THESE CHANGES IN GEOMETRY ARE RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-10B









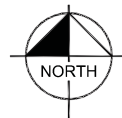
CONVERTING SEGMENTS OF B STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE CHANGES WOULD NOT HAVE A SIGNIFICANT IMPACT ON EXISTING CONDITIONS.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.

	PEDESTRIAN IMPACTS
	PARKING IMPACTS
	RIGHT OF WAY IMPACTS
	PROPOSED IMPROVEMENT

GRAPHIC SCALE IN FEET  
0 30 60 120



## IMPROVEMENT GH-11



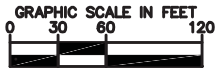
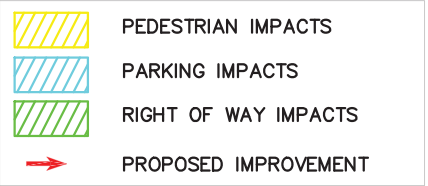
FIGURE 133



CONVERTING A SEGMENT OF BROADWAY INTO A 2 LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENT TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE CHANGES WOULD NOT HAVE A SIGNIFICANT IMPACT ON EXISTING CONDITIONS.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

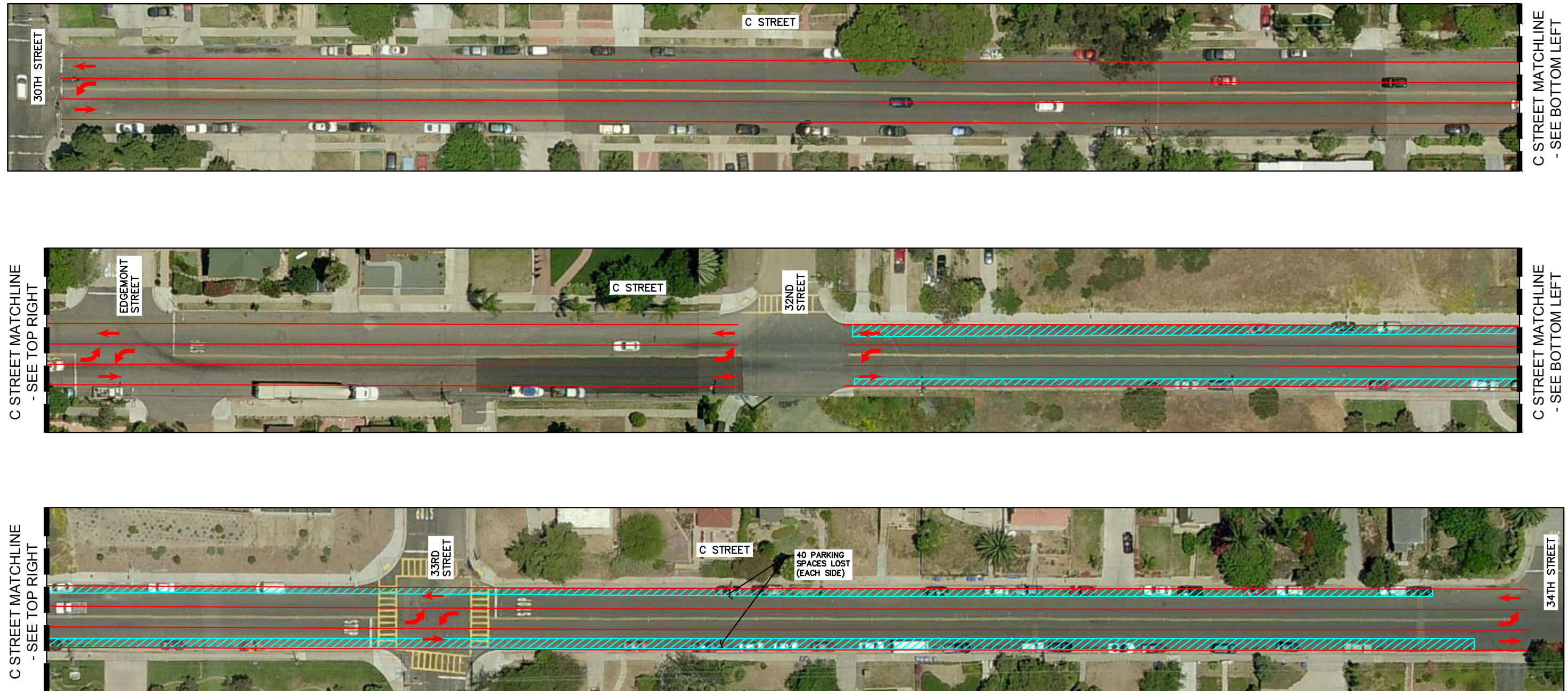
CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-12



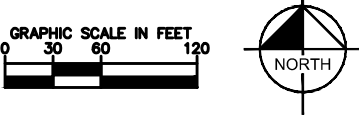
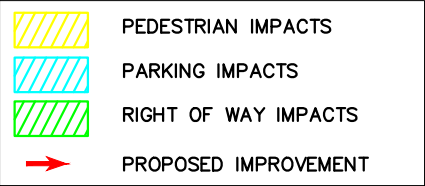
FIGURE 134



CONVERTING SEGMENTS OF C STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD RESULT IN LOSS OF PARKING EAST OF 32ND STREET.

THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT GH-13

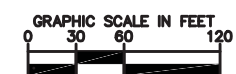
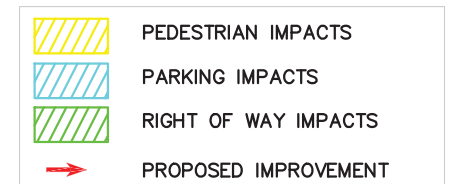




CONVERTING SEGMENTS OF FERN STREET INTO 2 LANE COLLECTORS WITH CONTINUOUS LEFT-TURN LANES OR 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, IMPACT SHARED USE BICYCLE FACILITIES, AND RESULT IN LOSS OF PARKING.

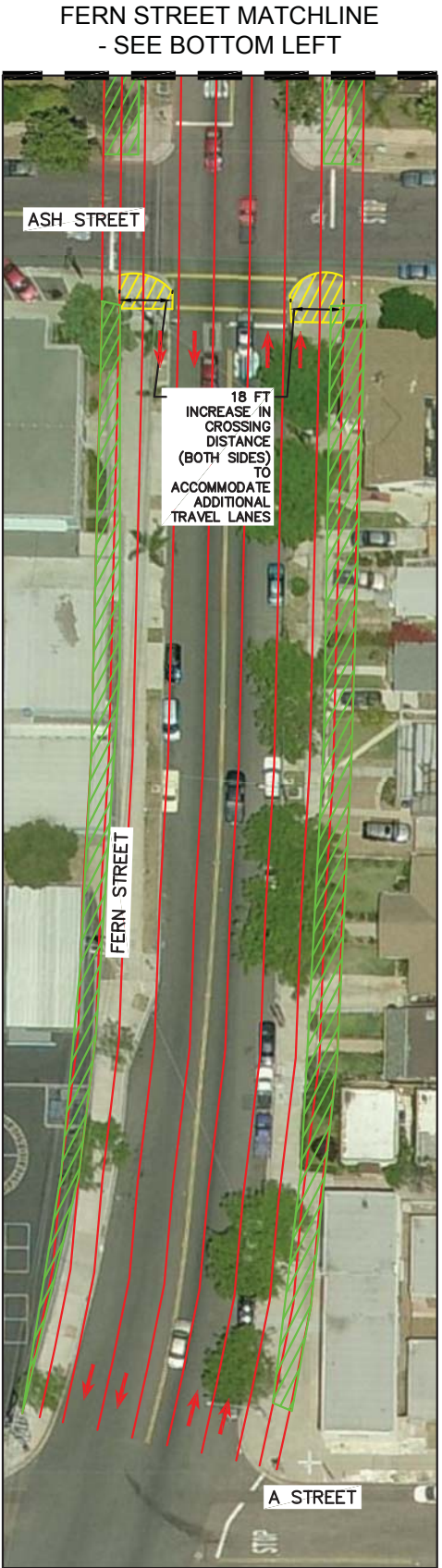
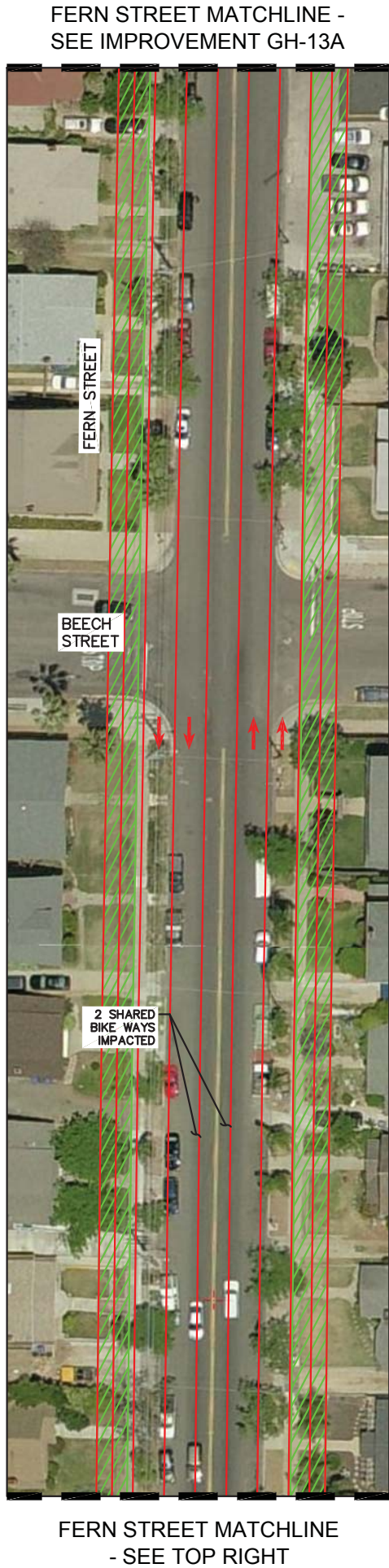
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



## IMPROVEMENT GH-14A

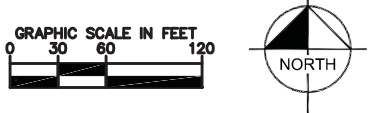
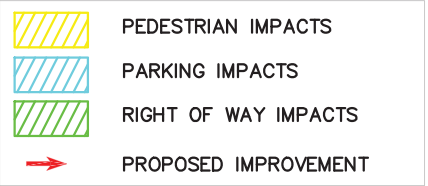




CONVERTING SEGMENTS OF FERN STREET INTO 4 LANE COLLECTORS WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THESE ADDITIONAL LANES WOULD REQUIRE RIGHT-OF-WAY FROM ADJACENT PROPERTY, INCREASE THE PEDESTRIAN CROSSING DISTANCE, AND IMPACT SHARED USE BICYCLE FACILITIES.

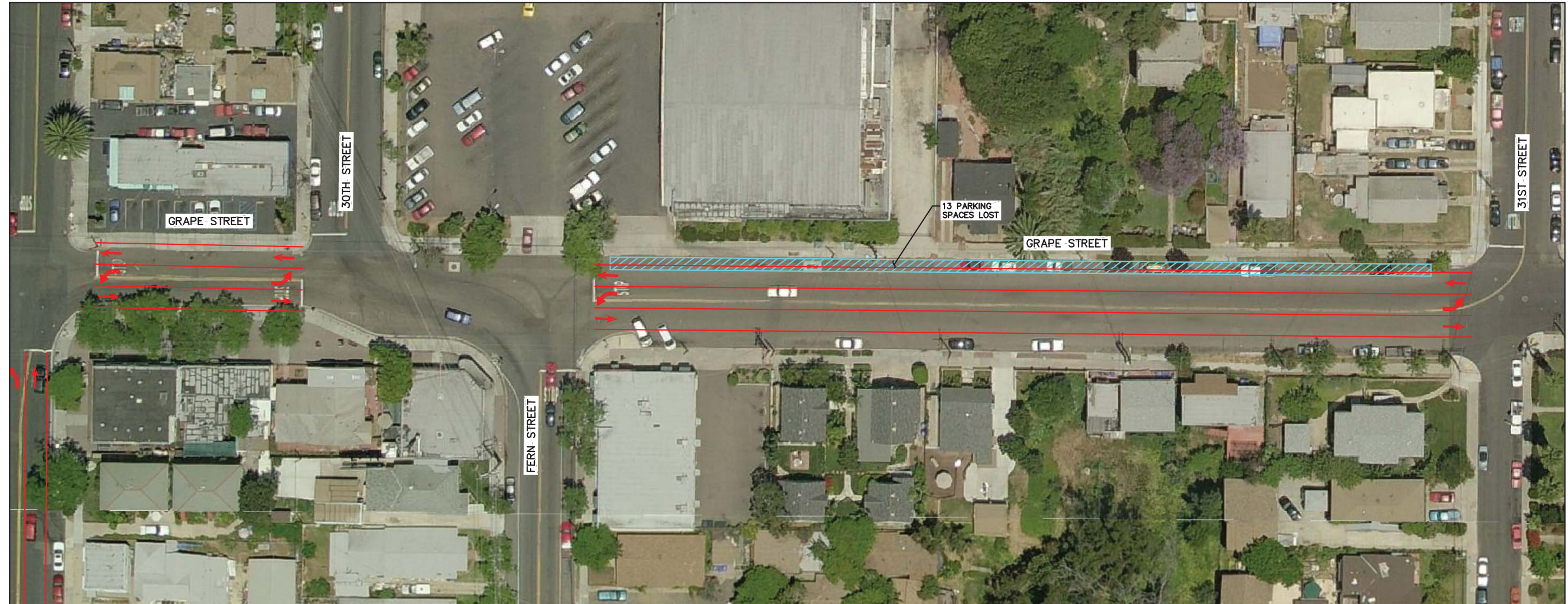
THESE CHANGES IN GEOMETRY ARE NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-14B

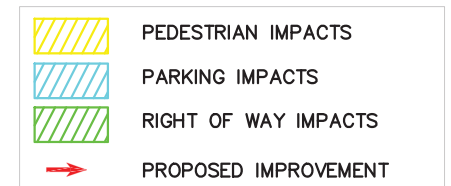




CONVERTING A SEGMENT OF GRAPE STREET INTO A TWO LANE COLLECTOR WITH A CONTINUOUS LEFT-TURN LANE WOULD BE REQUIRED TO IMPROVE OPERATIONS OF THE ROADWAY SEGMENTS TO LOS D OR BETTER. AS SHOWN IN THE GRAPHIC, THIS ADDITIONAL LANE WOULD RESULT IN LOSS OF PARKING.

THIS CHANGE IN GEOMETRY IS NOT RECOMMENDED.

CONCEPTUAL STREET LAYOUTS, CROSS SECTIONS LANE DIMENSIONS, AND BICYCLE FACILITY CONFIGURATIONS ARE PROVIDED TO DEMONSTRATE GENERAL FEASIBILITY OF PROPOSALS ONLY. ACTUAL IMPROVEMENTS WILL REQUIRE ADDITIONAL ENGINEERING STUDIES AND DESIGN WORK AND SHALL BE TO THE SATISFACTION OF THE CITY ENGINEER.



IMPROVEMENT GH-15



## RECOMMENDED IMPROVEMENTS

Recommended roadway and intersection improvements should be limited to modifications within the current public right of way. This strategy facilitates implementation of the recommendations and maintains community character. Using that guidance and the findings of the analysis and the improvement feasibility evaluation, improvements have been identified for inclusion in the Mobility Element. These improvements are recommended to improve roadway and intersection vehicle LOS without impacting private properties or sacrificing pedestrian, bicycle and transit connectivity through the community. The following are the recommended improvements for each community:

### Uptown

**Figure 138** illustrates the locations of the recommended improvements in the Uptown community.

#### Roadway Segments

- **First Avenue (Laurel Street to Hawthorn Street)** – Add continuous left-turn lane.
- **Richmond Street (Cleveland Avenue to Robinson Avenue)** – Add continuous left-turn lane.
- **State Street (Laurel Street to Juniper Street)** – Add continuous left-turn lane.

#### Freeway Facilities

- ~~The 2050~~SANDAG's RTP has identified the following freeway capacity improvements for implementation, however they are not planned to be in place prior to Year 2035:
  - Operational improvements to I-5 between SR-15 and I-8 (estimated Year 2050)
  - Operational improvements to I-8 between I-5 and SR-125 (estimated Year 2050)

### North Park

**Figure 139** illustrates the locations of the recommended improvements in the North Park community.

#### Study Intersections

- **North Park Way/ I-805 SB Ramps & Boundary Street/33rd Street** – Signalize intersection and add a second left-turn lane in the southbound direction on Boundary Street. Widen the I-805 southbound on-ramp to add an additional receiving lane. [Perform Intersection Control Evaluation \(ICE\) per Caltrans Traffic Operations Policy Directive #13-02 to verify mitigation.](#)

#### Roadway Segments

- **Boundary Street (University Avenue to North Park Way)** – Widen to a 4-lane collector.
- **Madison Avenue (Texas Street to Boundary Street)** – Add continuous left-turn lane.

#### Freeway Facilities

- ~~The 2050~~SANDAG's RTP has identified the following freeway capacity improvements for implementation. Some are planned to be in place prior to Year 2035 and others are not:
  - Addition of managed lanes on I-805 from ~~Carroll Canyon Road to I-5~~SR-15 to SR-163 (estimated Year ~~2048~~2050). Additionally, Caltrans is studying buses on shoulder options along the I-805 corridor on an interim basis.



- North to North and South to South HOV Connectors between SR-15 and I-805 (estimated Year 202035)
- Addition of managed lanes on SR-15 from [SR-94 to I-8I-8 to SR-163](#) (estimated Year 2035), [from SR-94 to I-805 \(estimated Year 2035\) and from I-5 to SR-94 \(estimated Year 2050\).](#)

## Golden Hill

**Figure 140** illustrates the locations of the recommended improvements in the Golden Hill community.

### Study Intersections

- **B Street and 17th Street/I-5 Southbound Off-ramp** – Signalize intersection; peak-hour signal warrants met during AM peak.
- **State Route 94 Westbound ramps at 28<sup>th</sup> Street** – Signalize intersection; peak-hour signal warrant met during PM peak.
- **State Route 94 Eastbound ramps at 28<sup>th</sup> Street** – Signalize intersection and add exclusive southbound left-turn; peak-hour signal warrant met during PM peak.

Peak-hour signal warrant calculations are provided in **Appendix C**.

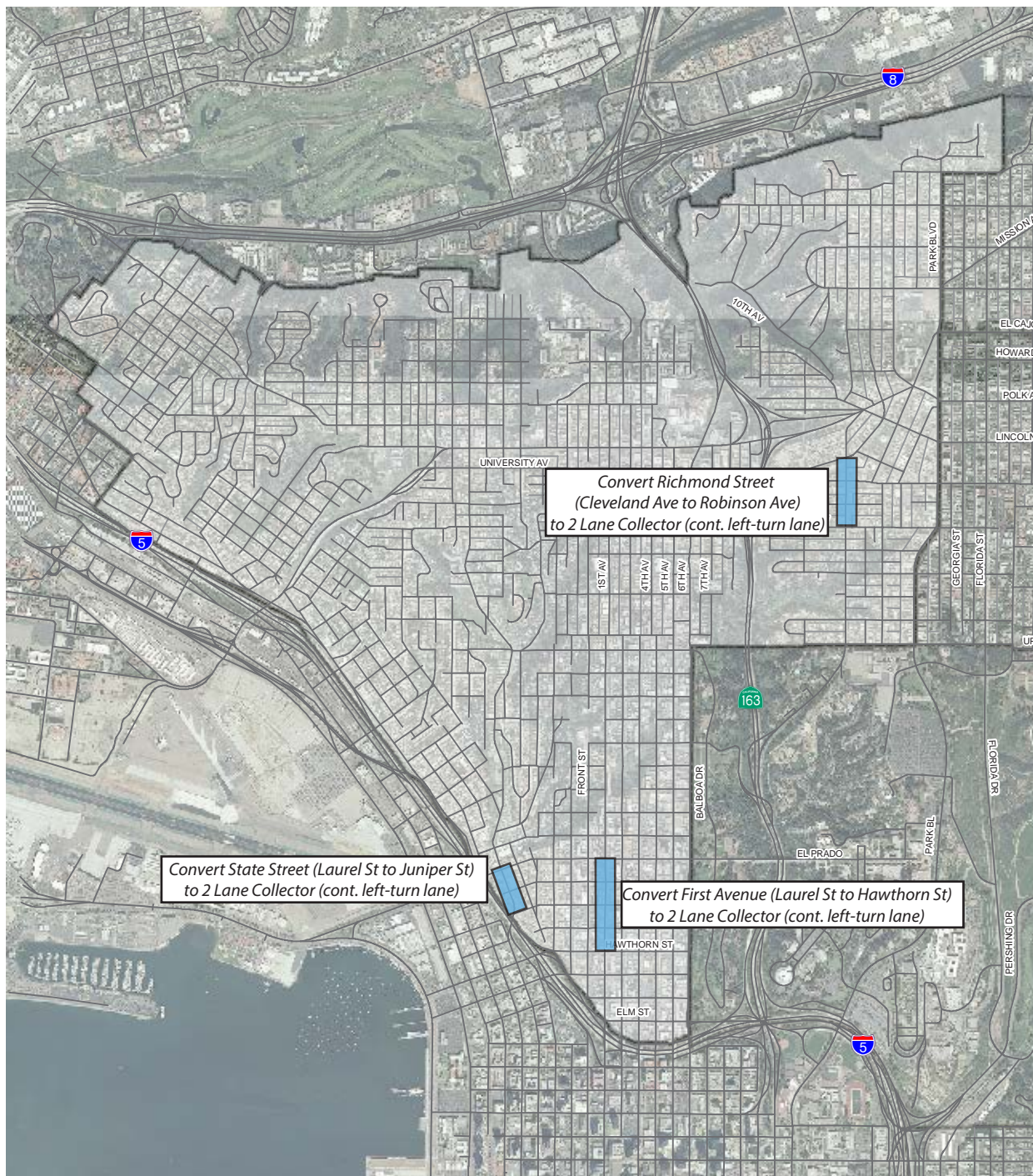
### Roadway Segments

- **28th Street (Broadway to SR-94)** – Widen to a 4-lane collector.
- **30th Street (A Street to SR-94)** – Add continuous left-turn lane.

### Freeway Facilities

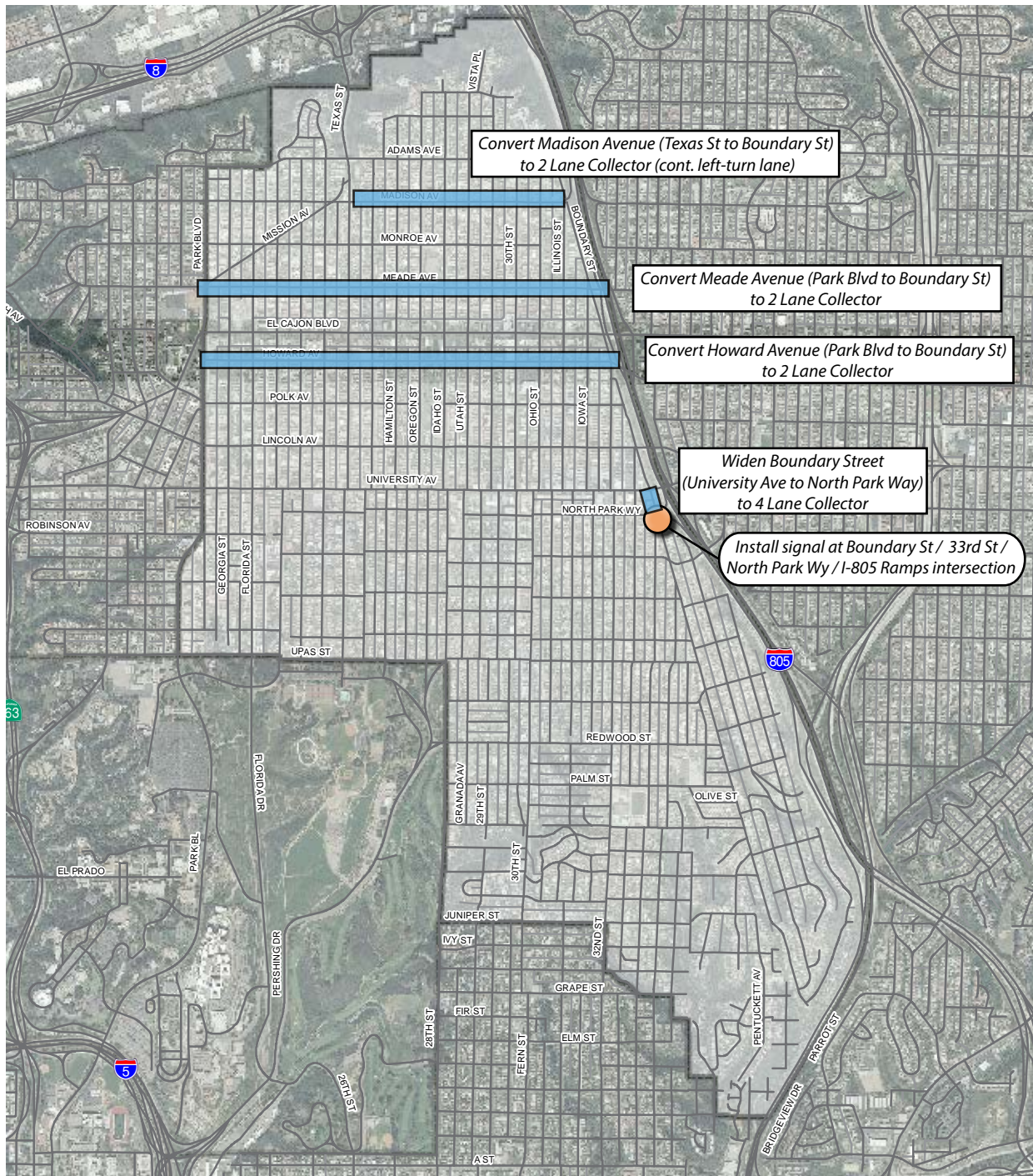
- ~~The 2050~~[SANDAG's](#) RTP has identified the following freeway capacity improvements for implementation. [Some are planned to be in place](#) prior to Year 2035 [and others are not](#):
  - Addition of managed lanes on SR-94 from [SR-15I-5](#) to I-805 (estimated Year 202035) [and from I-805 to SR-125 \(estimated Year 2050\).](#) [Caltrans is evaluating alternatives to this measure as part of the environmental analysis for the SR 94 Express Lanes Project. Additionally, Caltrans is studying buses on shoulder options, general purpose lane conversions and access to transit from local communities along SR-94.](#)
  - Addition of managed lanes on SR-15 from [SR-94 to I-8I-8 to SR-163](#) (estimated Year 2035), [from SR-94 to I-805 \(estimated Year 2035\) and from I-5 to SR-94 \(estimated Year 2050\).](#)
  - South to West and East to North HOV connectors between SR-15 and SR-94 (estimated Year 2035)





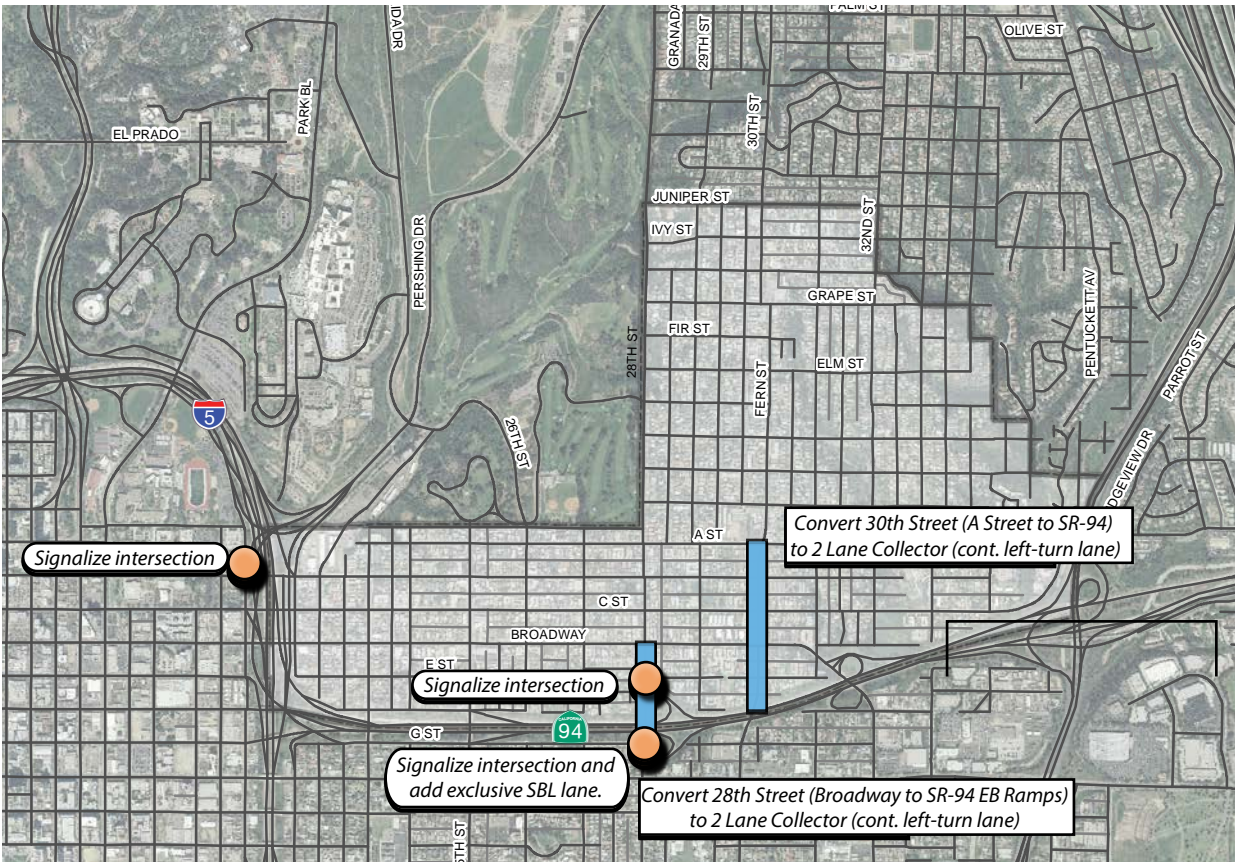
*Recommended Improvements: Uptown*





Recommended Improvements: North Park





Recommended Improvements: Golden Hill



## **FUTURE NETWORK**

The resulting street network that is recommended for the communities are summarized in the following figures:

### **Uptown**

**Figures 141 and 142** illustrate the recommended roadway segment classifications and intersection geometry for the Uptown community, respectively.

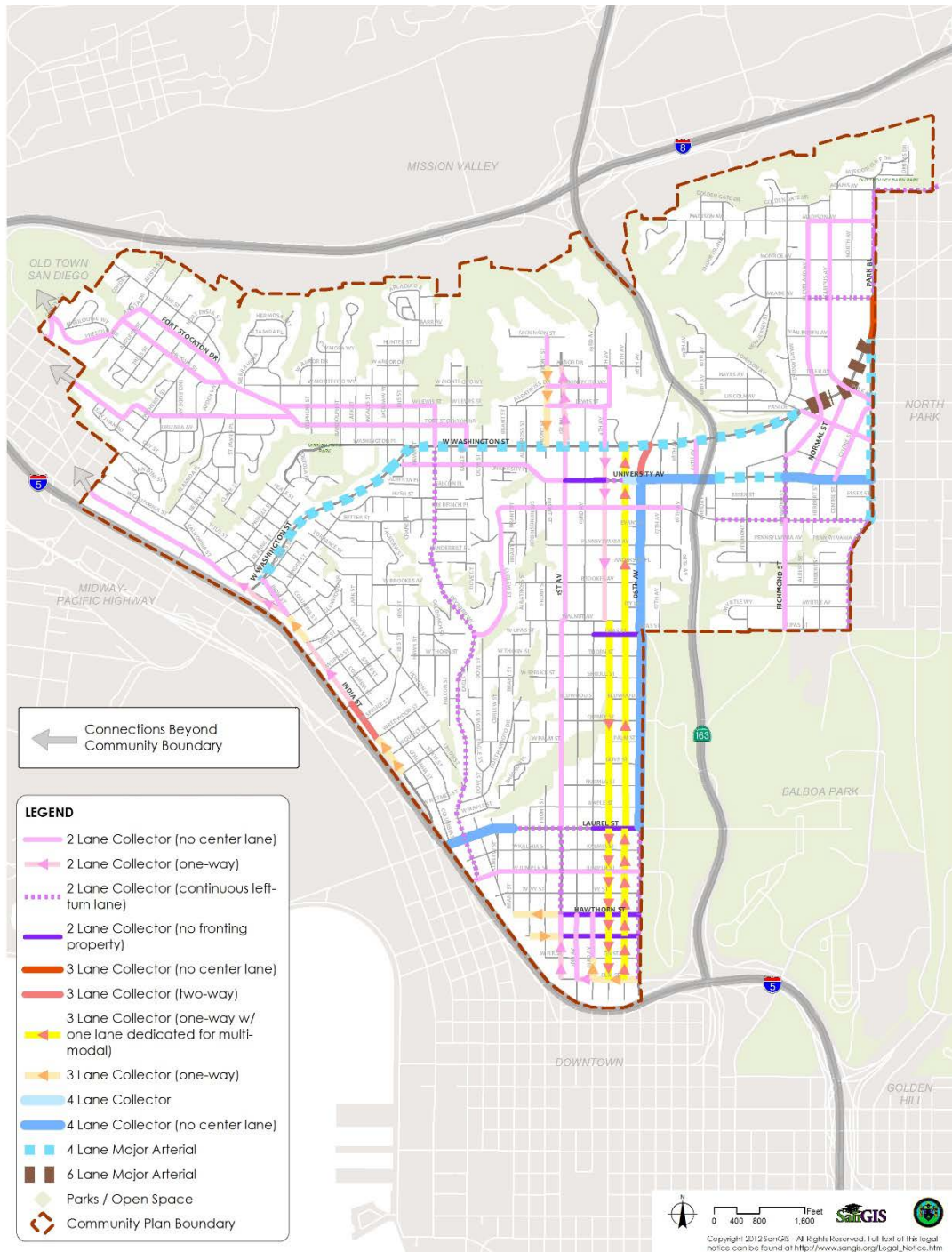
### **North Park**

**Figures 143 and 144** illustrate the recommended roadway segment classifications and intersection geometry for the North Park community, respectively.

### **Golden Hill**

**Figures 145 and 146** illustrate the recommended roadway segment classifications and intersection geometry for the Golden Hill community, respectively.





Planned Street Classifications: Uptown  
Revised September 7, 2016



Washington St/ Hancock St	Washington St/ San Diego Ave	Washington St/ India St	Washington St/ Fourth Ave
Washington St/ Fifth Ave	Washington St/ Eighth Ave/SR-163	Washington St/ Richmond St/SR-163	Washington St/Normal St Campus Ave/Polk Ave
Normal St/El Cajon Blvd Park Blvd	University Ave/ Fourth Ave	University Ave/ Fifth Ave	University Ave/ Sixth Ave
University Ave/ Tenth Ave	University Ave/ Normal St	University Ave/ Park Blvd	Robinson Ave/ Fourth Ave

Legend:



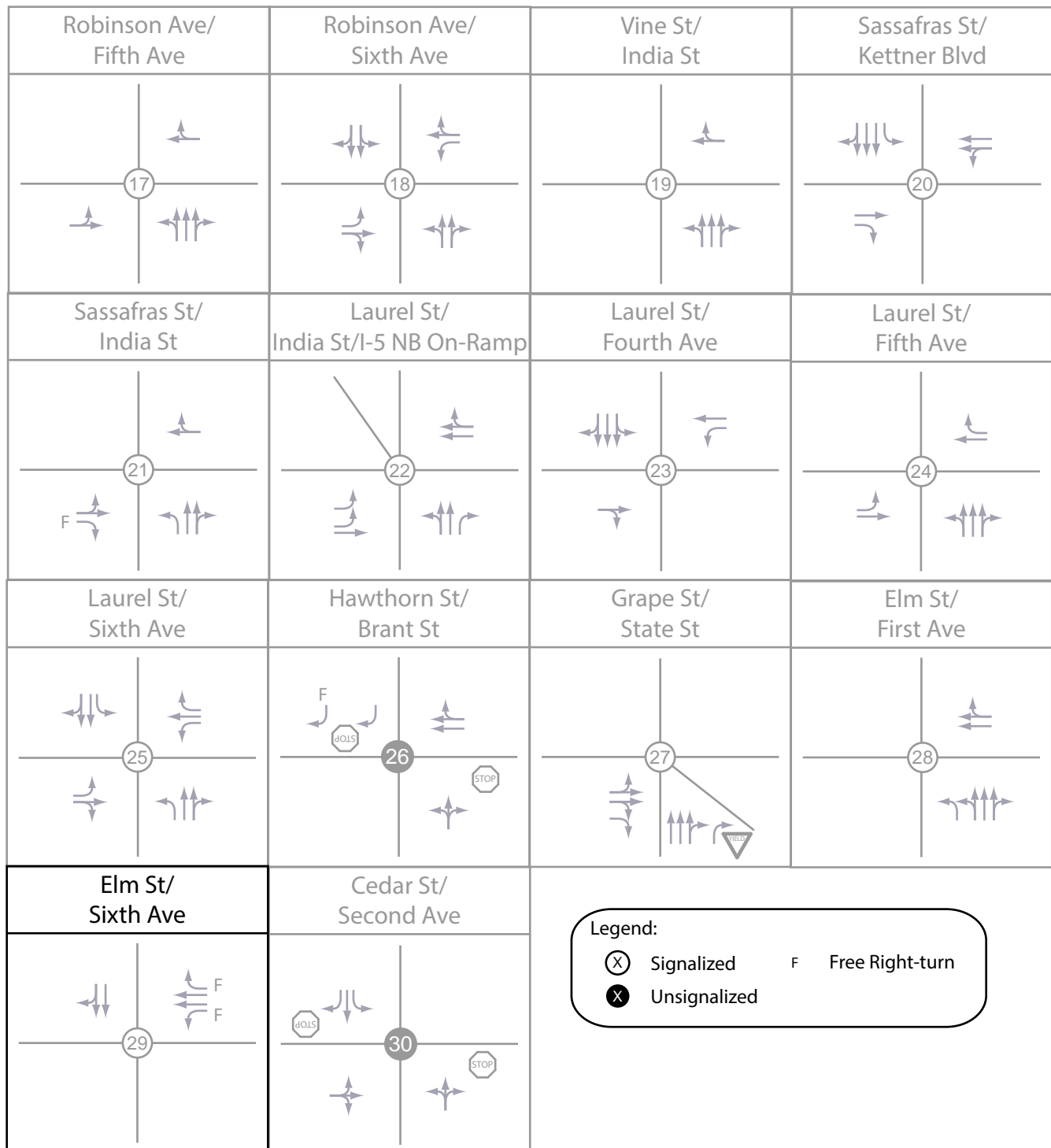
Signalized

F

Free Right-turn

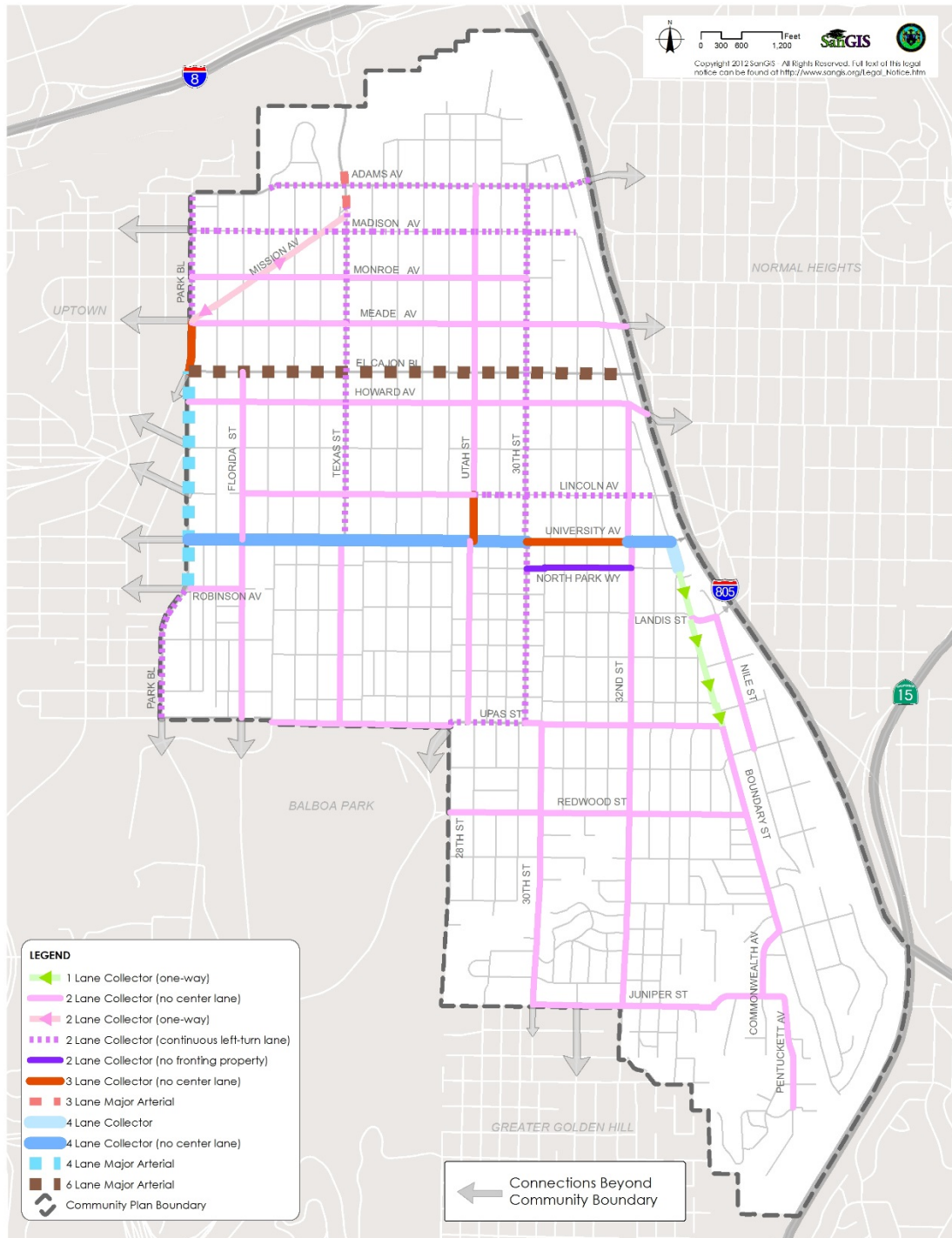
Proposed Future Intersection Geometry: Uptown





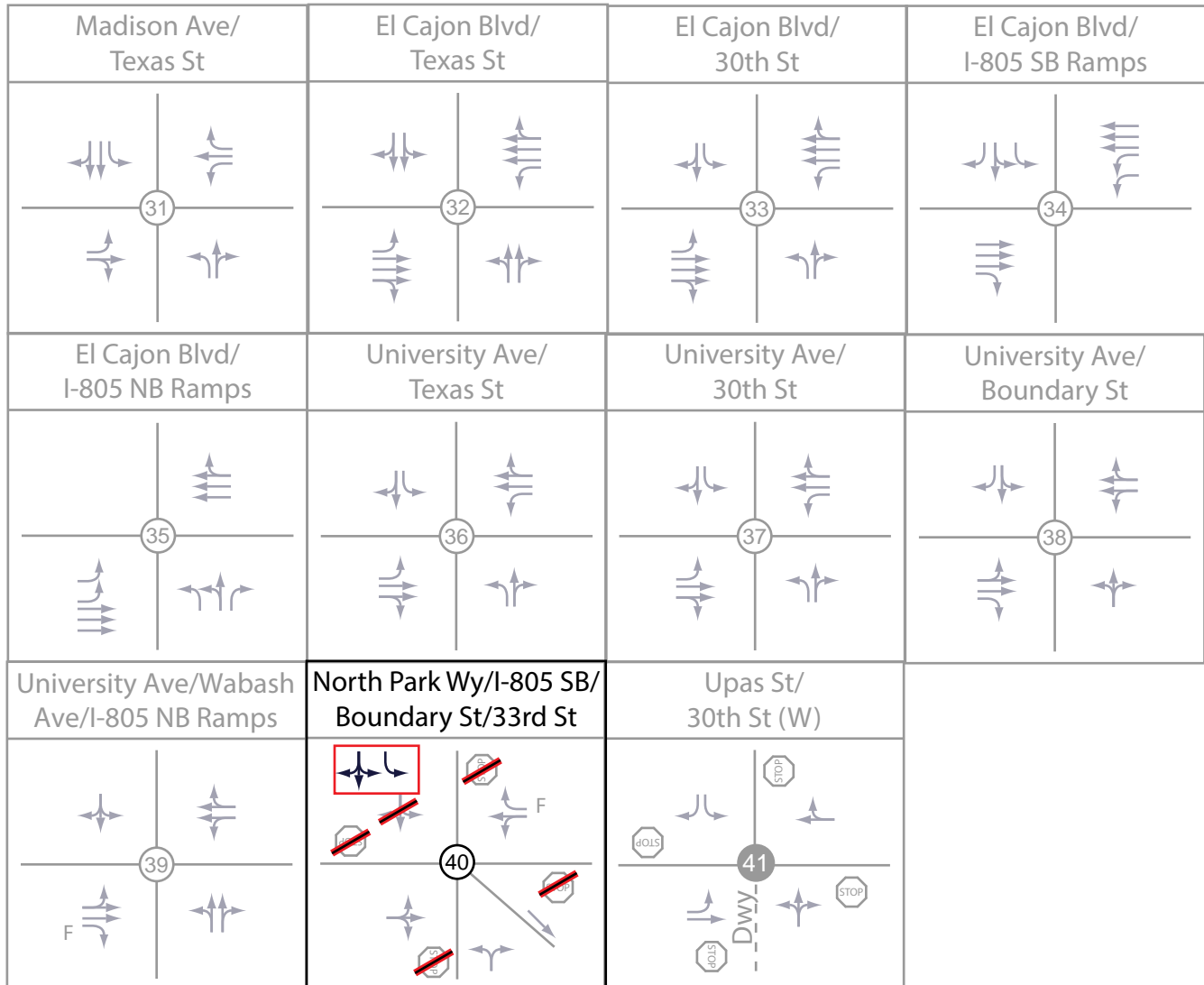
Proposed Future Intersection Geometry: Uptown





Planned Street Classifications: North Park

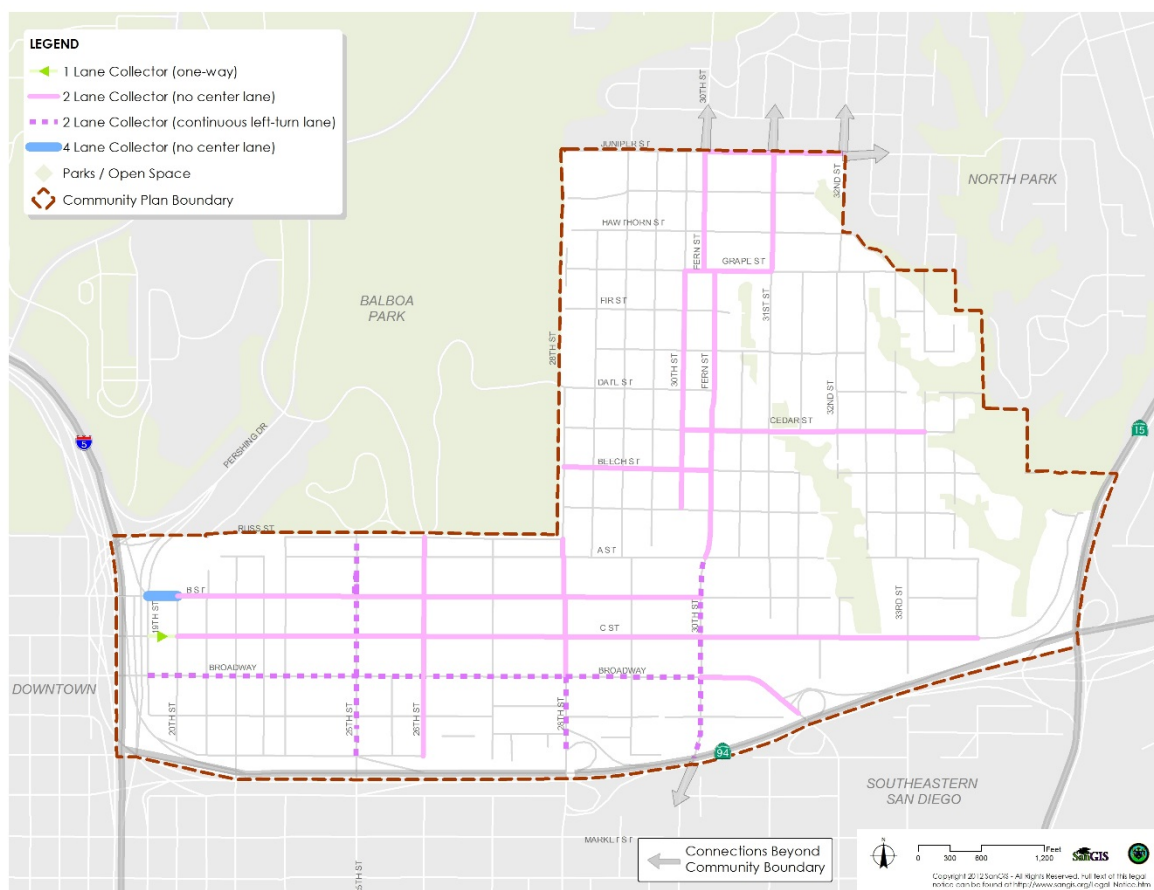




Legend:

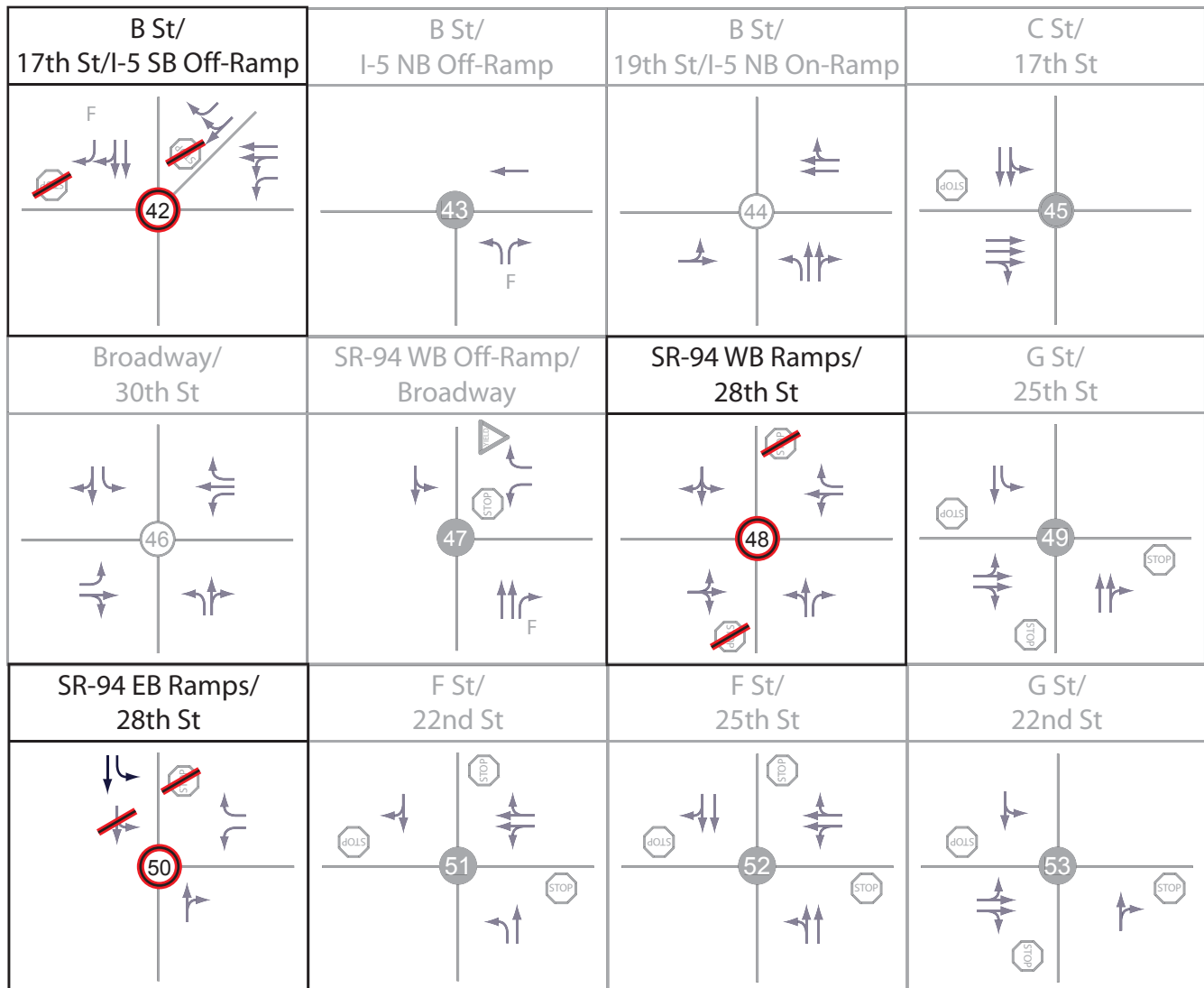
- Signalized
- Unsignalized
- F Free Right-turn

Proposed Future Intersection Geometry: North Park



Planned Street Classifications: Golden Hill





Legend:

- (X) Signalized
- (X) Unsignalized
- F Free Right-turn

## Parking

Each of the three communities faces challenges with providing adequate parking. The core commercial areas are the most challenged with parking supply, while some residential areas are challenged by absorbing overflow commercial parking or having limited on-street parking options available. As there is not a single solution that fits each community, or even each street within a community, it is important that the City and the respective Parking Districts continue to explore options for improving parking throughout the communities. Curb usage, alternative modes of transportation, community shuttles, meter payment types, and new development requirements all play a role in the community-wide parking struggle. An information paper on best practices for implementing parking was prepared as part of this community plan update and is included in **Appendix B** to assist in parking discussions and planning activities. Proposed changes to the street system that reduce the number of on-street parking spaces should consider the effect of reducing the parking supply and whether it can be replaced or supplemented through other modes.

## Intelligent Transportation System (ITS)

Intelligent Transportation Systems (ITS) uses technology to better manage traffic flows and is often an alternative to widening roadways or intersections. There are many ways that ITS can be applied to help a transportation network, but most often it is used in a community setting to improve traffic signal operations, provide wayfinding information to community attractions and/or parking options, or provide updates on real-time transit schedules.

### Uptown

The Uptown community relies on several main roadways to serve the community. Fourth Avenue, Fifth Avenue, Sixth Avenue, India Street, Laurel Street, University Avenue, and Washington Street are all main roadways that include frequent traffic signals, serve a large amount of traffic, and have constraints to do any roadway widening. Inefficiencies from traffic signal operations can create unwarranted congestion and increase travel times. Using ITS technology to coordinate the traffic signal systems along these roadways would provide benefit to the throughput of the transportation network.

As the transit network expands within the Uptown community, it will rely more heavily on ITS technology. The Uptown community would benefit the most from integrating real-time transit schedule updates at the transit stops. This allows the user to be informed of when the next vehicle will be coming to the stop so that they can manage their time accordingly. There are also opportunities to develop internet-based applications that can provide this information remotely. Other transit-based ITS applications include the planned LRT and Streetcar systems, which will require ITS implementation at the traffic signals to give the transit vehicle priority or exclusive phases.

Parking continues to be a struggle in the Uptown community, but many of the unused parking alternatives are not publicly owned. As such, the City cannot use wayfinding technology to guide vehicles to these parking areas.



**North Park**

The core retail areas of the North Park community along El Cajon Boulevard, University Avenue, and 30th Street include frequent traffic signals, serve a large amount of traffic, and have constraints to do any roadway widening. Inefficiencies from traffic signal operations can create unwarranted congestion and increase travel times in these areas. Using ITS technology to coordinate the traffic signal systems along these roadways would provide benefit to the throughput of the transportation network.

The implementation of ITS will become more important as the transit network develops further and LRT and Streetcar systems are implemented. The shared use of a street between personal vehicles and transit vehicles can be managed efficiently with ITS technology. The North Park community would also benefit from integrating real-time transit schedule updates at the transit stops. This allows the user to be informed of when the next vehicle will be coming to the stop so that they can manage their time accordingly. There are also opportunities to develop internet-based applications that can provide this information remotely.

Parking continues to be struggle in the North Park community, but many of the unused parking alternatives are not publicly owned. As such, the City cannot use wayfinding technology to guide vehicles to these parking areas.

**Golden Hill**

As the Golden Hill community experiences an increase in traffic over the upcoming years, additional traffic signals may be required. The use of ITS technology to coordinate timings between signals will be helpful to maximize the benefits of these new signals. Additional ITS technology will be needed as new transit options are implemented. Streetcar systems may require signal priority or exclusive phasing at certain locations in order to operate safely and effectively.

**Transportation Demand Management (TDM) Strategies**

Transportation Demand Management (TDM) strategies help reduce the number of vehicles on the transportation network, converting potential vehicle trips to alternative modes of transportation or reducing the need for the trip altogether. Common TDM strategies include encouraging mixed-use land use choices, providing adequate transit and bicycle facilities, promoting carpooling/ridesharing, and limiting parking options. Implementing TDM strategies also reduces parking demand within the communities.

**Uptown**

The Uptown community currently provides a good mix of residential and commercial land uses which factors into reducing the overall vehicle demand on the community. The proposed land use plan further builds on this synergy, providing a higher density of residential and commercial in core areas. However, the community also draws visitors from outside of the community which encourages vehicle travel. Providing transit and bicycle connections to the adjacent communities will be important for maintaining the commercial attractiveness of the Uptown community and adequate vehicle circulation. One example is the community's desire to create a new transit connection to downtown, which may be accomplished via a new gondola system or the currently planned streetcar system. This will allow people to get between Uptown and downtown without the need for a personal vehicle. The Uptown

community should continue to invest in the transit and bicycle network connections to adjacent communities to help minimize congestion and parking issues.

**North Park**

The North Park community currently provides a large amount of residential land use with some commercial areas. The proposed land use plan continues this trend, but with some more focus on creating a mixed-use core area which will help with the vehicle demand. The physical constraints of portions of the community and distance between heavy residential areas and heavy commercial areas make it difficult to get between different places in the community without a vehicle. The community's current investments in transit and bicycle facilities will be a huge benefit in providing alternative connection options and reducing vehicle demand and should be carried forward as priority.

**Golden Hill**

The Golden Hill community currently provides a mix of residential and commercial land uses. The commercial areas are primarily neighborhood-oriented commercial and do not draw regional trips which helps minimize vehicle demand in the community. Since the Golden Hill community is relatively small in size, there seems to be a stronger desire to walk or bike to destinations rather than drive. Investing in bicycle facilities will further strengthen the non-vehicle travel in the community.

**Conclusion**

The findings in this mobility study for the Uptown, North Park, and Golden Hill will be used to create the mobility element and traffic study for the respective community plan updates. Please contact me at (619) 744-0161 or [mychal.loomis@kimley-horn.com](mailto:mychal.loomis@kimley-horn.com) should you have any questions or comments on this letter report.

Sincerely,



Mychal Loomis, P.E.  
Project Manager  
RCE 76101



## APPENDIX A

### FUTURE YEAR PREFERRED ALTERNATIVE SUPPORT INFORMATION

## APPENDIX B

### WHITE PAPERS:

- TRANSIT
- PEDESRIAN FACILITIES
- PARKING



## APPENDIX C

### SIGNAL WARRANT CALCULATIONS