The revitalization and ongoing development of the Beach and Edinger Corridors will be supported by a program of community action and investment. Given the substantial length of the corridors and the multiplicity of needs represented, this program will be implemented in phases in accordance with the availability of city resources. The prioritization of public improvements will be guided by the goals and strategies of this Specific Plan. Complementing the Development Standards, the strategic investment of community resources planned in this section are intended to accelerate the revitalization process and to add to the appeal and success of the corridors as the central spines of the city. As opportunities arise that were not known at the time of the Plan's adoption, the city may consider alternative investment strategies to more effectively realize the community's vision for the Beach Boulevard and Edinger Avenue Corridors.

3.1 Circulation Plan

To stimulate and to support the envisioned growth and change along the Beach and Edinger Corridors, the City of Huntington Beach intends to invest capital improvement resources strategically as part of this document's circulation plan. This section describes the primary features of those anticipated investments.

3.1.1 Streetscape Improvements

The City plans to implement phased streetscape improvements that will contribute significantly to the enhancement of the visual appeal and identity of the corridors. Streetscape improvements have been designed to promote the type of change envisioned by the community by providing attractive and compatible environments for the desired types of new development, as well as for highly valued existing development

Implementation

Streetscape improvements will be installed and paid for by a combination of public and private investment. New private development along the corridors will include the installation of (or in-lieu payment for the future installation of) sidewalk and landscaping improvements between property line and curb. Private investors in corridor properties will also provide payment for the costs of installing public improvements to the centerline of the street, as specified in the Development Code portion of this Specific Plan (See Section 2.5 - Street Regulations). Improvements in the public right-of-way required in the Development Code match the improvements contained in this section.

Public implementation of streetscape improvements will be staged over time, and as financial resources allow. Public implementation of streetscape improvements in various segments of the corridors would provide improvements between curbs as well as improvements along public frontage areas of properties that have not yet been improved per the standards of this portion of the Specific Plan.

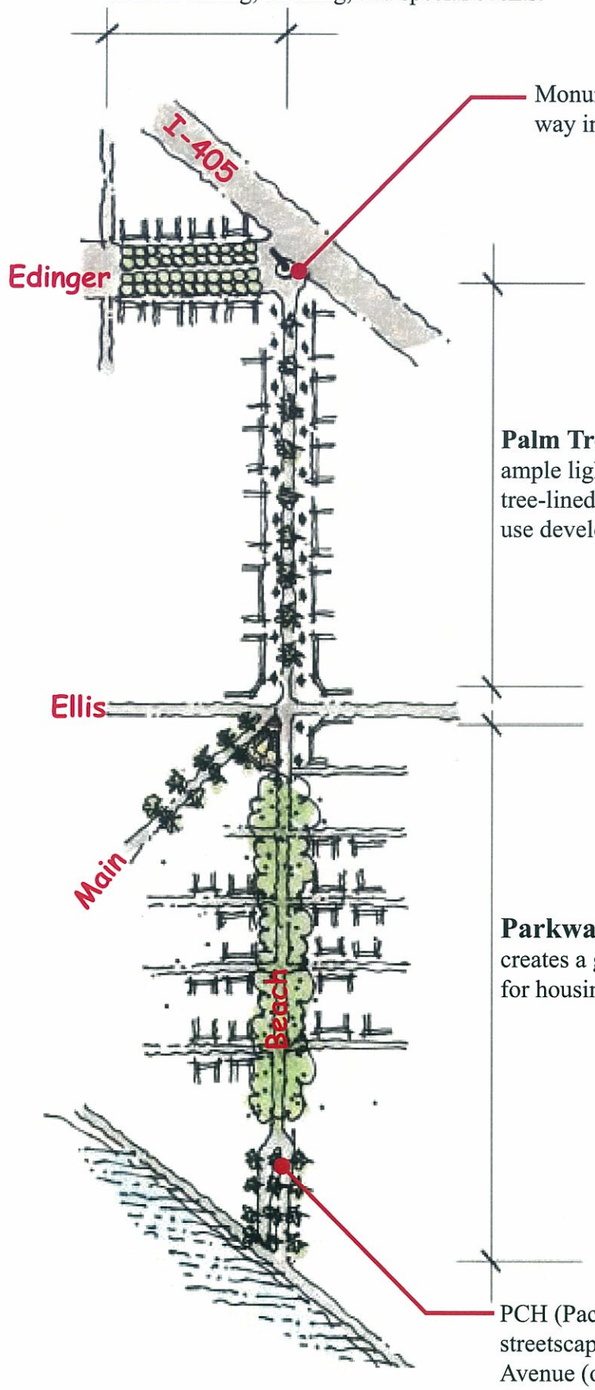
The Beach Boulevard right-of-way is owned by the State of California. Intended design improvements will need to be coordinated with Caltrans as part of the design development process.

Design

The design of specific streetscape improvements is integrated with the configuration of Center and Segment types that are the fundamental organizing principal of this Specific Plan. The integration of street design with building disposition and site improvements will result in the emergence of increasingly cohesive and iconic city corridors.

The coordination of street design with development design results in the organization of streetscape improvements into three discrete segment improvement types: "Classic Boulevard" improvements along Edinger Avenue, "Palm Tree Boulevard" improvements along Beach Boulevard north of Main Street and "Parkway" improvements along Beach Boulevard south of Main Street, as illustrated in the diagram to the right. Schematic design details intended for each of these three corridor segments are provided in the following sections.

Classic Boulevard: A formal, signature streetscape with multiple rows of trees, parking for retail shops, a broad promenade sidewalk with street trees for shopping, outdoor dining, strolling, and special events.



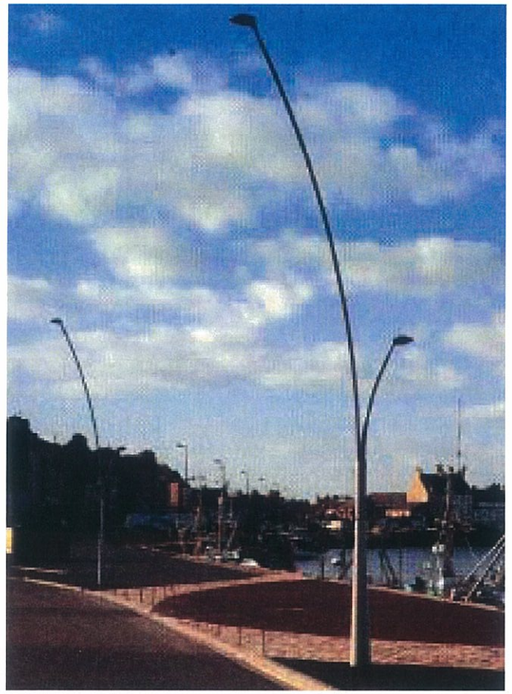
Monument Signage: Announces the gateway into Huntington Beach

Palm Tree Boulevard: Wide sidewalks, ample lighting, shopfront visibility, and a palm tree-lined median support business and mixed-use development.

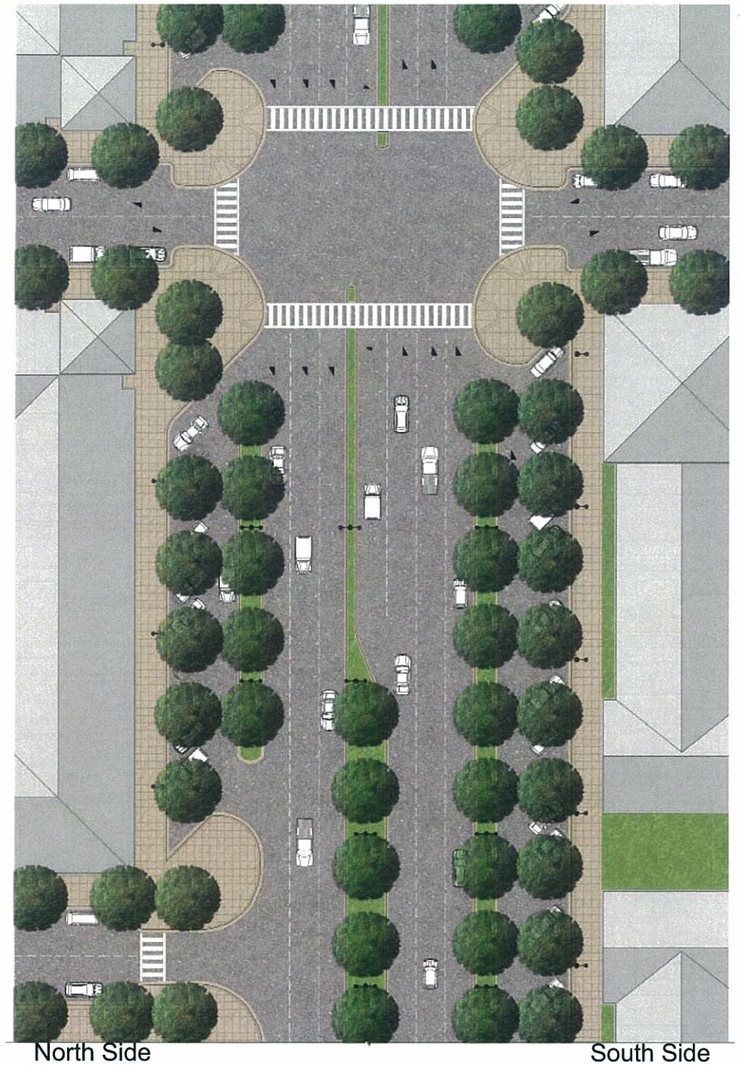
Parkway: Significant, informal landscaping creates a garden-like environment appropriate for housing.

PCH (Pacific Coast Highway) gateway streetscape treatment south of Pacific View Avenue (outside of Specific Plan Area)

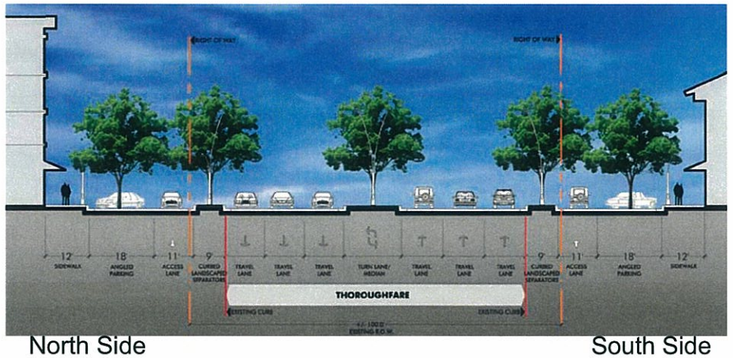
Classic & Palm Tree Boulevard
Street Light



Classic & Palm Tree Boulevard
Benches and Trash Receptacle



North Side South Side



North Side South Side

1) Classic Boulevard Improvements (Edinger Avenue, between Goldenwest and Parkside)

a) Configuration:

i) As illustrated in the plan and cross-section diagrams to the left, Classic Boulevard Improvements retain the three existing through-lanes in each direction along Edinger Avenue, and features a landscaped center median with left turn pockets at select intersections. New protected services lanes and curbside parking (parking may be angled or parallel; diagrams on this page illustrate the option of angle parking) run parallel to the through-lanes, and are separated from the through-lanes by curbed landscape separators. New sidewalks run along the building frontages.

ii) This schematic design assumes the maintenance of existing curb locations. The service lane, curbside parking, sidewalk and landscaped separator are constructed in part within the front setback zone of each property. That is, the new public frontage is constructed behind the existing curb.

b) Streetscape Elements:

i) Sidewalk: 12 foot wide, scored concrete.

ii) Curbed separator (between through-lanes and service lanes) – 9 foot wide.

iii) Street lighting

(1) Iconic Boulevard scale street-lighting (matches the Palm Tree Boulevard lighting on Beach Blvd). Selected model/design featured in photograph to the left labeled "Classic & Palm Tree Boulevard Street Light."

(2) Double arm boulevard-scale and pedestrian-scale street lighting located within the curbed landscaped separators with a spacing of approximately 90 feet on-center. Light source should be located 25-30 feet above finished grade for boulevard-scale street lighting and 12-14 feet above finished grade for pedestrian-scale street lighting.

(3) Double arm boulevard-scale street lighting located within the center planted median with a spacing of approximately 90 feet on-center. Light source should be located 25-30 feet above finished grade.

(4) Single arm, pedestrian-scale street lighting located on the sidewalk at back-of-curb and spaced approximately at 60 feet on-center.

iv) Other Furnishing: benches with wood or metal slats and metal trash receptacles with an aesthetic that evokes the beach and surf culture. All metalwork to be painted to match the street lighting. Selected models/designs featured in pictures to the left labeled "Classic & Palm Tree Boulevard Benches and Trash Receptacle."

v) Street Trees: Formal planting arrangement with street trees located in regularly spaced alee pattern.

(1) Street Tree Selection: Platanus x acerifolia 'Yarwood'

(2) Trees are located within the median, the curbed landscape separators, and in flush tree grates in the angled parking zone at approximately 30 feet on-center, and are planted as close to corner curb-returns as possible.

(3) Trees align across the street as much as possible.

vi) Other planting: median and curbed landscaped separators are planted with native, low roundcover, with green foliage, which does not require irrigation or extensive maintenance.

2) Palm Tree Boulevard Improvements (Beach Blvd. north of 5 Points intersection):

a) Configuration:

i) As illustrated in the plan and cross-section diagrams to the right, Palm Tree Boulevard Improvements retain the existing four through-lanes in each direction, and feature a landscaped center median with left turn pockets at select intersections.

ii) This schematic design assumes the maintenance of existing curb locations.

b) Streetscape Elements:

i) Sidewalk and Sidewalk Buffer: street improvements feature a 6 foot sidewalk separated from the back-of-curb by a 4 foot continuous planter strip.

ii) Street lighting:

(1) Iconic Boulevard scale street-lighting (matches the Classic Boulevard lighting on Edinger Ave). The finish color is to be determined.

(2) Double arm boulevard-scale and pedestrian-scale street lighting located within the planter strip with a spacing of approximately 90 feet on-center. Light source should be located 25-30 feet above finished grade for boulevard-scale street lighting and 12-14 feet above finished grade for pedestrian-scale street lighting.

(3) Double arm boulevard-scale street lighting located within the center planted median with a spacing of approximately 100-120 feet on-center (or every 3 clusters of palm trees). The street lighting will be the first vertical element at the ends of the median and the light source should be located 25-30 feet above finished grade.

iii) Other Furnishing: benches with wood or metal slats, and metal trash receptacles with an aesthetic that evokes the beach and surf culture. All metalwork to be painted white or fresh green.

iv) Street Trees

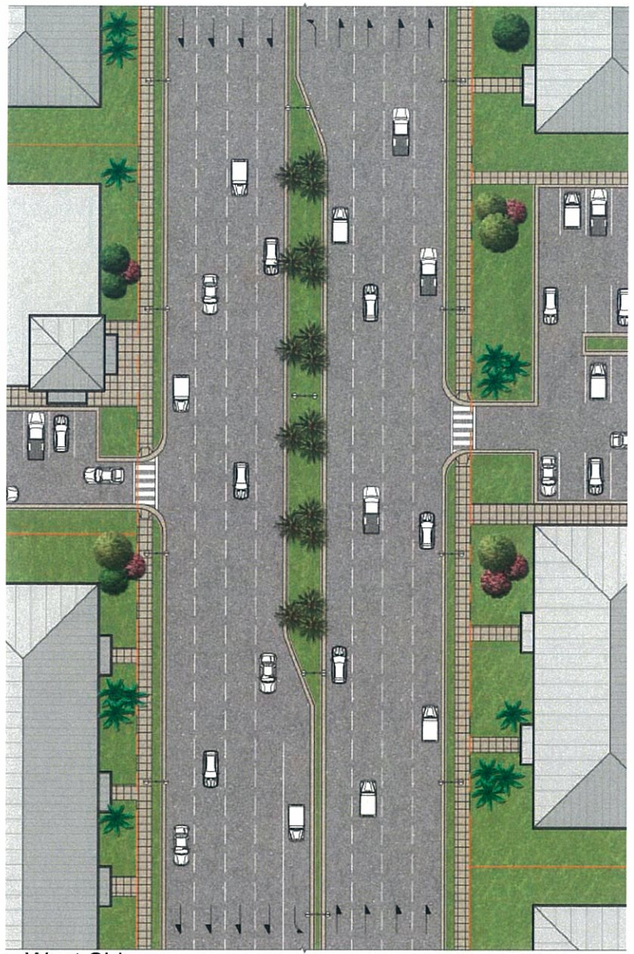
(1) Behind the curbs: Intermittent clusters of three, single-species, tall palm trees, with very slim trunks.

(2) Palm Tree Species Selection: Washingtonia robusta

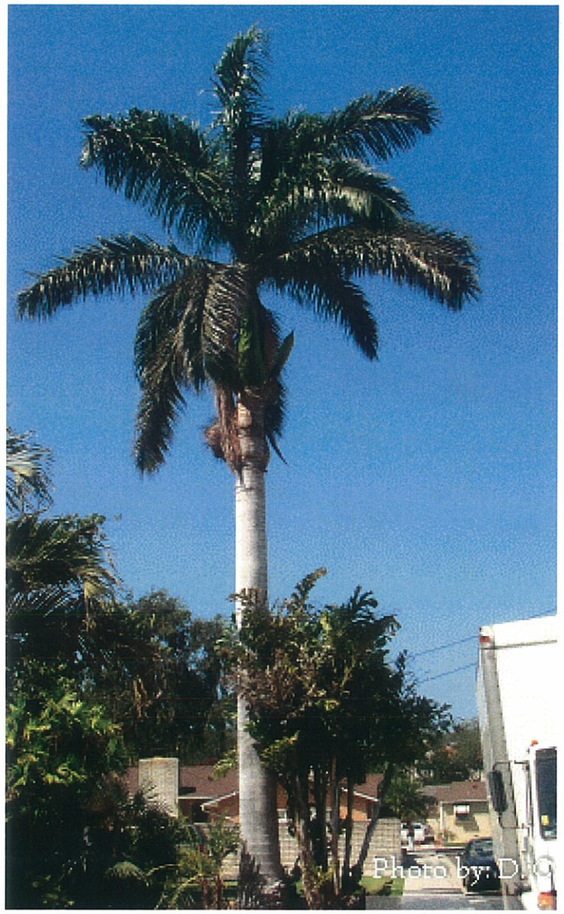
(3) Center Median Palm Tree Planting: Palm trees planted in an alee arrangements, approximately 30- 35 feet on center in two rows where possible.

(4) Street Tree Lighting: Trees to be up-lit at night, with one 150 watt up-light on the side closest to moving traffic lanes.

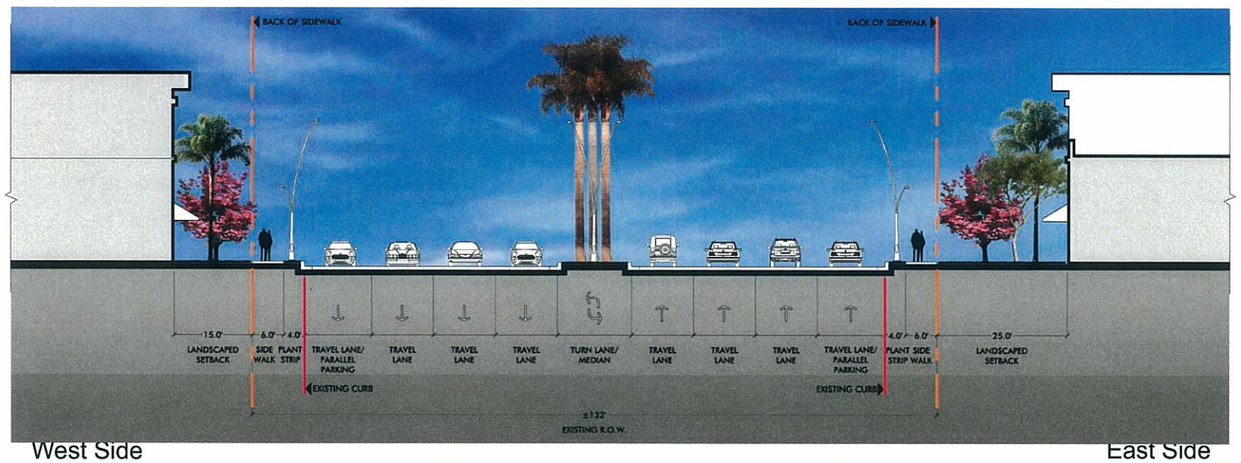
v) Other planting: planter strips and the center median are landscaped with native, low groundcover with green foliage, which does not require irrigation or high level of maintenance.



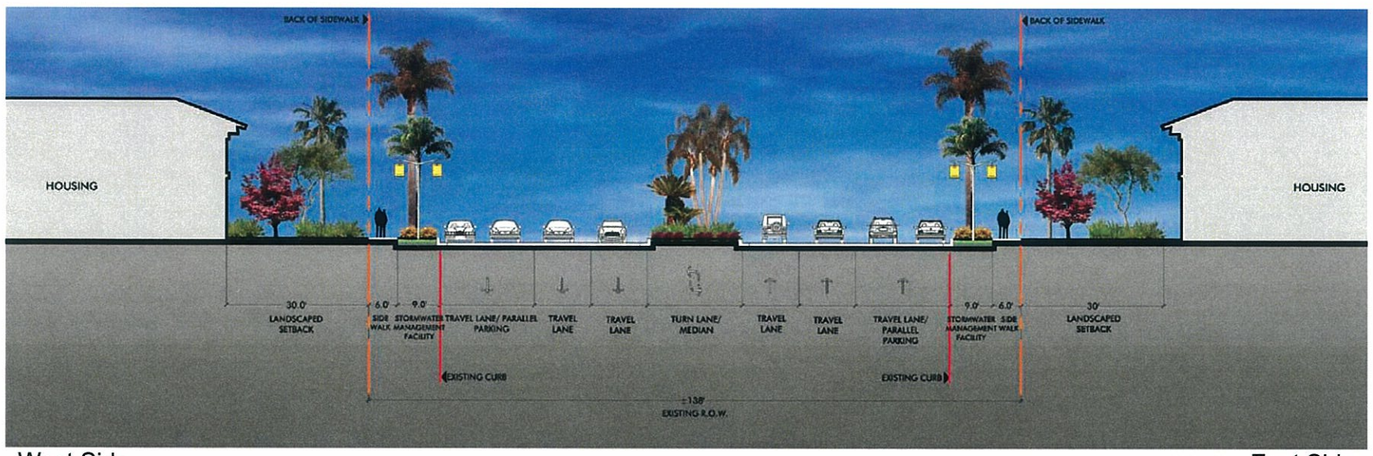
Palm Tree Boulevard Trees



Roystonea Regia - Royal Palm (Photo by: D. Comaggia)



West Side East Side



West Side East Side

3) Parkway Improvements (Beach Blvd. south of Main Street to Specific Plan Boundary):

a) Typical Configuration:

i) As illustrated in the plan and cross-section diagrams to the left, Parkway Improvements retain the existing three through-lanes in each direction, with occasional parallel parking along the sidewalk curb, and features a landscaped center median with left turn pockets at select intersections.

ii) This schematic design assumes the maintenance of existing curb locations and in many cases assumes the retention of the existing back-of-sidewalk location. In instances where public frontages feature narrow monolithic curb, gutter and sidewalk, it may not be possible to implement envisioned parkway strip and sidewalk improvements until and unless new development occurs.

b) Typical Streetscape Elements:

i) Sidewalk and Sidewalk Buffer: street improvements include a 6 foot sidewalk with a 9 foot continuous planter strip along the back-of-curb.

ii) Street lighting:

(1) Unique pedestrian-scale street lighting (reminiscent of colored Venetian lanterns, that express the romance and festive atmosphere of the beach in a modern way). Selected model/ design featured in photographs on the following page labeled "Parkway Street Light."

(2) Finish color: gun-metal

(3) Streetlights are to be positioned within the planting strip at approximately 80 feet on-center.

(4) The light source should be located at 14 feet from the finished grade and use filters within the luminaires to create colored effects through a wrap-around foliage mask.

iii) Other Furnishing: benches with wood or metal slats, and metal trash receptacles with an aesthetic that evokes the beach and surf culture. All metalwork to be painted white.

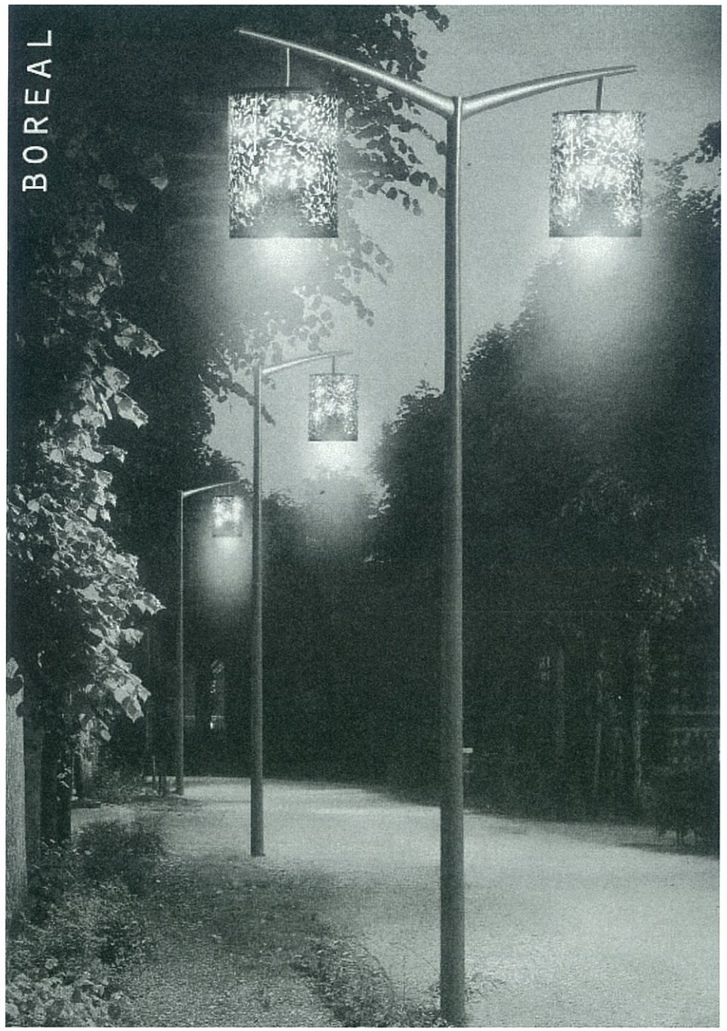
iv) Planting: Parkway Improvements feature an arrangement of alternating, informally shaped clusters of vegetation (Type A and Type B – described below) planted on the center median roughly every 50-60 feet on-center, and up-lit at night. Low, native groundcover with green foliage to alternate with the vegetation clusters.

(1) Type A cluster: a single multi-trunk palm tree - Phoenix reclinata or Chamaerops humilis, broad-leaf tall grasses and medium-height groundcover with small, showy flowers and native grasses.

(2) Type B cluster: a cluster of single-trunk, medium-height palm trees - Wodyetia bifurcata (trees selected from nurseries that seeded the trees in California), small accent palm-like trees - Cycas revolute, and low groundcover, preferably with flowers and native grasses.

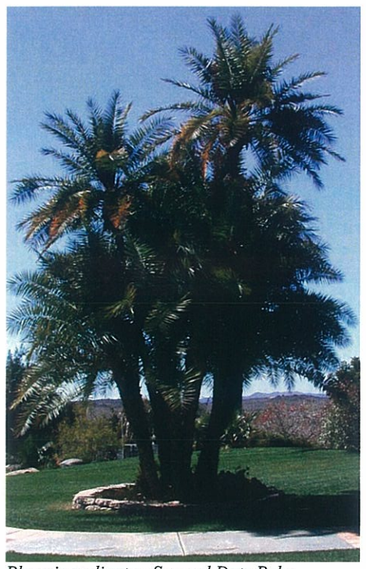
v) Other planting: Planter strips to be built as functional stormwater management facilities, landscaped with a mix of native, low groundcovers and native grasses. Arrangements of two tall palm trees with thick and very straight trunks (Phoenix dactylifera or Roystonea regia) with a street light in the middle at 15' from the light poles are intermittent with an informal composition of medium-height palm trees (Wodyetia bifurcata) and small accent palm-like trees (Cycas revoluta).

Parkway Street Light



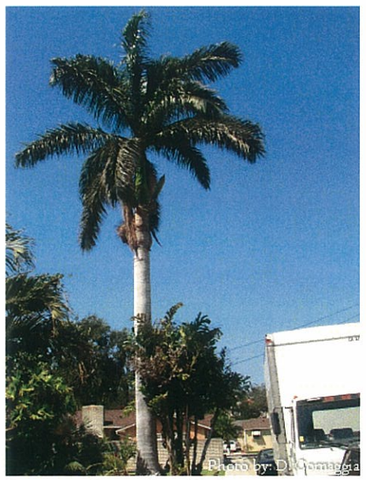
Parkway Palm Trees

Phoenix roebelenii - Pigmy Date Palm



Phoenix reclinata - Senegal Date Palm

Wodyetia bifurcata - Foxtail Palm



Roystonea Regia - Royal Palm

c) Special Conditions:

i) There are special conditions along the length of the Parkway Improvement segment that will require the streetscape treatment to be tailored for these areas. These special conditions include:

(1) Large canopies of existing trees at back of sidewalk that limit installation of sidewalk planter strip vegetation.

(a) A closer look at this condition will be required to determine if the existing tree canopies should be pruned to allow for the new streetscape treatment, or if the installation of low-medium height groundcover and streetlights is more appropriate.

(2) Narrow existing sidewalks that do not allow for a 9' wide planter strip.

(a) Trees will be located in a narrower continuous planter strip or in tree grates.

(3) A frontage road with curbed landscaped separators

(a) A closer study is required to determine if the proposed sidewalk planter strip treatment can be installed in the separator.

4) Gateway Monument - Beach Blvd. & Edinger Ave.

As part of the City's ongoing sign program, a new city entry sign will be built at the intersection of Beach Blvd. and Edinger Ave. to mark this major gateway into the City.

3.1.2 Traffic / Street Network Improvements

To accommodate ongoing growth and investment along the Corridors, the City intends to place the highest priority on the implementation of improvements to expand vehicular capacity. This section outlines an assessment of needed improvements based on Environmental Impact Report No. 08-008.

1) Beach Boulevard & Edinger Avenue Intersection

The intersection of Beach Boulevard and Edinger Avenue is the most critical intersection with respect to the corridors, particularly Edinger Avenue, since it will likely be impacted by short-term development. Improvements are intended to be implemented in stages allowing a linked program of land use development and traffic improvements.

The critical part of the circulation system to accommodate future growth is the northern part of Beach Boulevard. As of this Plan's adoption, the Beach Boulevard/ Edinger Avenue intersection is operating deficiently, a situation that is exacerbated by the I-405 interchange immediately to the north. Similarly the Beach Boulevard/ Talbert Avenue intersection is close to capacity. The following improvements for the Beach Boulevard/Edinger Avenue intersection address the operational issues and also increase the capacity:

i) Signal timing optimization along Edinger Avenue between Beach Boulevard and Goldenwest Avenue.

ii) Operational changes: allowing two lanes to enter the eastbound Edinger I-405 slip ramp (i.e., one dedicated lane and one optional lane).

iii) The addition of a third westbound through lane at the intersection.

iv) The addition of a fourth northbound through lane at the intersection (coupled with operational changes to the loop off-ramp just north of the intersection).

These improvements will require coordination with Caltrans. Implementation of all four will address the operational problems and increase capacity by as much as 20 percent.

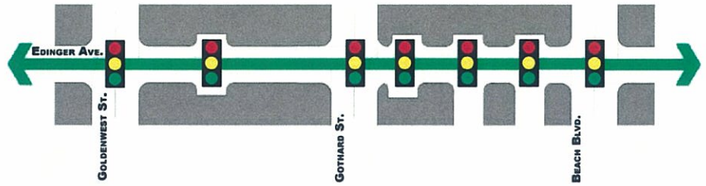


Fig 3.1 Edinger Ave. Signal Timing

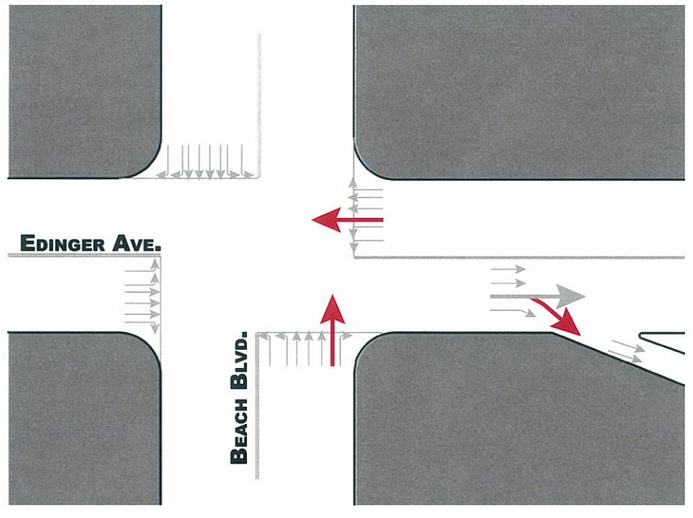


Fig 3.2 Beach Blvd. & Edinger Ave. Intersection Area Traffic Improvements

2) Beach Boulevard & Talbert Avenue Intersection

The Beach Boulevard/Talbert Avenue intersection appears to be less likely to be impacted by short-term changes in land use, allowing some time to assess the most effective long-term improvement strategies for this intersection. Based on current land use in the area, potential redevelopment and traffic volumes, the most feasible improvements that provide acceptable intersection operations are the addition of an unmarked westbound right turn lane and a second westbound left turn lane. Implementation of these improvements would require acquisition of right-of-way, impacting some of the properties near the intersection. Alternative improvement strategies may prove to be more viable if developed in conjunction with redevelopment of parcels adjacent to the intersection.

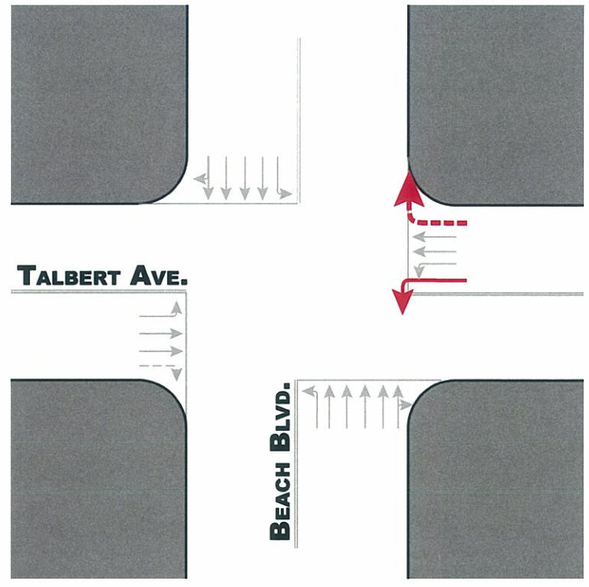


Fig 3.3 Beach Blvd. & Talbert Ave. Intersection Improvements

3) Beach Boulevard & Warner Avenue

Several potential strategies for improving operations at the intersection of Beach Boulevard & Warner Avenue are available. In general, relatively modest additions to traffic capacity are needed at the intersection in the long-term. The addition of a separate right turn lane for the eastbound, westbound and northbound approaches to the intersection would each provide an incremental improvement to capacity/efficiency in intersection operations. All would have some degree of property impacts to the adjacent parcels. At this time, it appears that the addition of the westbound right turn lane, by itself would be sufficient to ensure acceptable long-term operations with the least impact to adjacent parcels. However, alternative improvement strategies may prove to be more viable if developed in conjunction with redevelopment of parcels adjacent to the intersection.

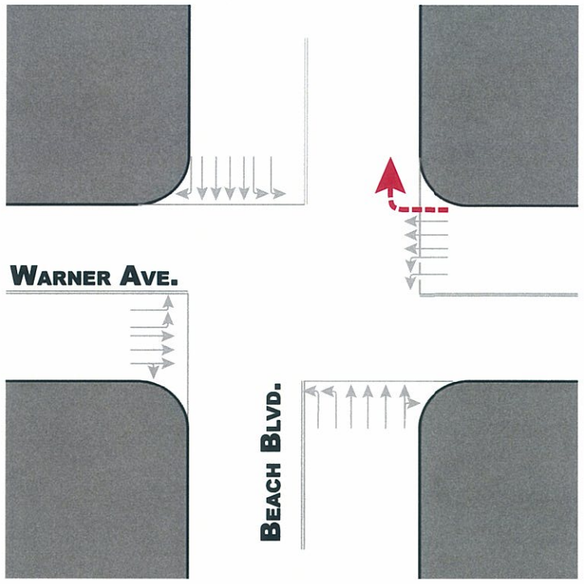


Fig 3.4 Beach Blvd. & Warner Ave. Intersection Improvements

4) Beach Boulevard & Heil Avenue

Traffic projections for the intersection of Beach Boulevard and Heil Avenue indicate that there will be a need for capacity improvements to meet both City and Caltrans operational requirements. In general, significant capacity improvements at the intersection are likely to be challenging due to the presence of a drainage channel that passes under the intersection diagonally from the northeast to the southwest. An effective improvement that appears to be most feasible at this time is the addition of a second northbound left turn lane.

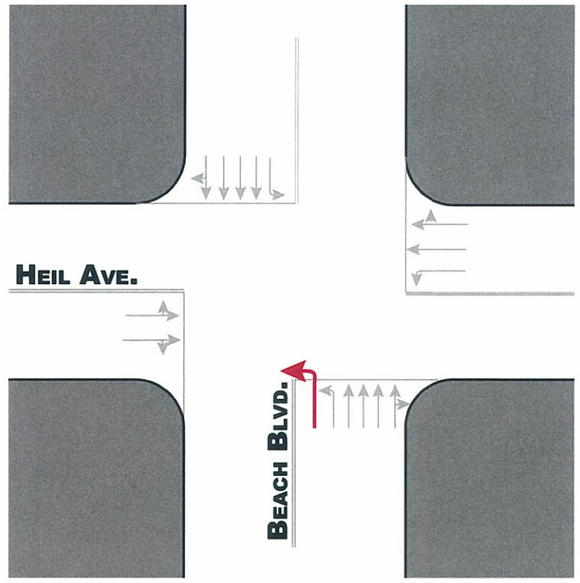


Fig 3.5 Beach Blvd. & Heil Ave. Intersection Improvements

5) Beach Boulevard & Garfield Avenue

Significant capacity improvements are needed to maintain acceptable long-term traffic operations at the intersection of Beach Boulevard and Garfield Avenue. Second northbound and southbound left turn lanes are needed. The existing right-of-way and pavement width appear to be adequate to provide the additional lanes. However, removal of on-street parking near the intersection would be needed along with narrowing of the median adjacent to the existing left turn lanes.

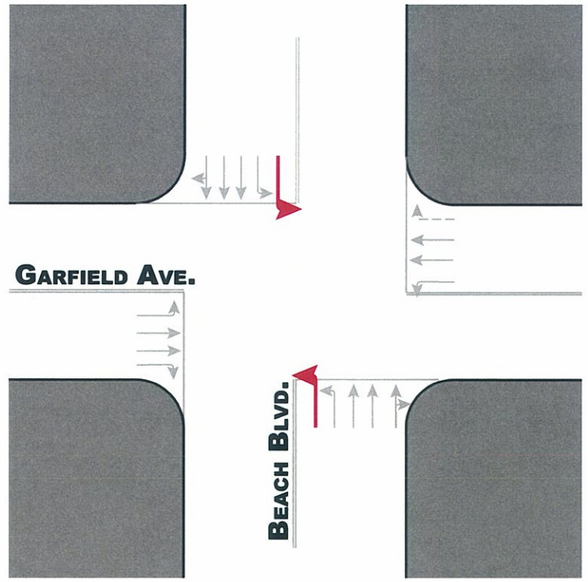


Fig 3.6 Beach Blvd. & Garfield Ave. Intersection Improvements

6) Beach Boulevard, Main Street & Ellis Avenue

An operational deficiency is noted at the Beach Boulevard/Main Street intersection and at the immediately adjacent Main Street/Ellis Avenue intersection. This is related to the close spacing between the intersections and the resulting queue interference.

A number of improvement options at this intersection are available, mostly dealing with the role of Ellis Avenue west of Main Street in the circulation system for this area. Such options range from lane configuration changes, possibly with some individual movement prohibitions, to full closure of Ellis Avenue at this location and conversion to pedestrian use. These improvements require further evaluation and development of a circulation plan to achieve both planning and traffic operations objectives.

3.1.3 IMPROVEMENTS SUPPORTING FUTURE TRANSIT SERVICES

Planning for future transit services on the Beach and Edinger Corridors requires an understanding of existing services, those that are planned and other services that could be developed, and integrating those services with the anticipated land use pattern changes. While the Specific Plan includes many details for developing along each of the corridor segments, it is virtually impossible to include a detailed plan for transit services since the implementation of transit services are beyond the scope of what the plan can accomplish. Identifying appropriate goals and strategies for encouraging transit use and mandating the considering or inclusion of significant elements is appropriate for the Specific Plan and can help regional service providers maximize service potential within the corridors.

One of the key transportation benefits of mixed use development with increased residential density is the decrease in the propensity of residents to be reliant upon the automobile for daily activities. In addition to walking to area businesses and services, a higher percentage of residents of this type of development are interested in using public transportation. The increased density also makes service options with fewer stops more viable.

The following sections provide guidance in developing services that integrate existing and new transit services with redevelopment of the corridors. The sections are intended to be guides that allow for substantial flexibility in implementation in order to adapt to changes in potential services and development scenarios.

Goal:

Provide greater opportunity and convenience for residents and visitors to the corridor to use public transit options, by incorporating appropriate infrastructure to support transit in development plans and amenities to make these options appealing to users.

1) Residential Parkway Segment

Very few changes are expected to occur within Residential Parkway Segment that would necessitate significant changes in transit service needs. There may be limited opportunities to integrate expanded amenities for future transit services that might include Bus Rapid Transit or local circulator services within the segment. Based on current projections for street capacity, it would appear that sufficient right-of-way is available throughout this segment to meet future transit amenity needs. As future service programs develop, additional facilities may be required and should be reviewed as new development occurs.

2) Neighborhood Parkway Segment

Anticipated land use scenarios within this segment are generally characterized as being lower in density with most commercial development serving local needs. As such, the need for expanded local transit service alternatives along Beach Boulevard may require the development of special facilities to expedite transit vehicle flow and service. Areas near major intersections could provide opportunities for transit bypass lanes/queue jumping facilities and modification of traffic signal operations to facilitate transit flow. The most likely areas within this segment where this approach could be used are at Adams, Garfield and Ellis. Detailed evaluation of development proposals on approaches to these intersections should be undertaken in the context of developing new transit services to ensure that appropriate public infrastructure can be provided to support the service.

3) Neighborhood Centers/5 Points

In addition to the potential improvements identified in the Neighborhood Parkway Segment, the Neighborhood Centers may be prime areas for providing future local transit services. Depending on the types of services available, on-site and on-street infrastructure may be needed to maximize the effectiveness of the services. Incorporating on-site transit stops in new development plans should be considered for local circulator services. Roadside bust stops and turnouts should be considered to facilitate regional transit services.

4) Neighborhood Boulevard

As with the Neighborhood Parkway Segment, development within the Neighborhood Boulevard Segment is generally lower in density with a few possible pockets of higher density development. Expanding local transit service in this area is expected to be confined to facilitating express regional services and incorporating local circulator options into development. Expanding local transit service in this area is expected to be confined to facilitating express regional services and incorporating local circulator options into development. Development of new transit service alternatives along Beach Boulevard may require the development of special facilities to expedite transit vehicle flow and service. Areas near major intersections could provide opportunities for transit bypass lanes/queue jumping facilities and modification of traffic signal operations to facilitate transit flow. The most likely areas within this segment where this approach could be used are at each of the major intersections of Ellis, Talbert, Slater and Warner. Detailed evaluation of development proposals on approaches to these intersections should be undertaken in the context of developing new transit service to ensure that appropriate public infrastructure can be provided to support the service. The areas near Warner Avenue and Ellis/Main present the greatest potential for higher density development and inclusion of transit facilities with new development. Special attention should be given to enhancing transit services at these key nodes.

5) Town Center Boulevard - Beach Boulevard

The Beach Boulevard portion of the Town Center Boulevard segment is expected to include greater concentrations of commercial development. Transit needs within this segment will be greatly dependent on the type of development that occurs. At the transition point near Warner Avenue, integration of transit service facilities supporting various transit options should be considered with any new development. Further north, key facilities should be planned at approximately 1/2 mile intervals, integrated with appropriate development proposals and existing traffic signals for pedestrian circulation. Local circulator options may require additional stops while express commuter services may have fewer, more limited stops.

6) Town Center Boulevard/Town Center Neighborhood - Edinger Avenue

The Edinger Avenue Corridor is comprised of Town Center Boulevard, Town Center Neighborhood and the Town Center Core. The development standards for this area encourage greater residential and mixed use densities that would suggest a greater opportunity for effective transit service options. The creation of smaller blocks within each development along with the development of the Classic Boulevard street section, provide many options for servicing transit in the area. Transit service points should be located outside of the main line of Edinger Avenue as much as possible. Transit stops and amenities should be incorporated into the public frontage areas, within developments and along secondary arterials such as Center Avenue and Gothard Street. Certain transit services, such as bus rapid transit may necessitate including a very limited number of stops within the mainline section of Edinger Avenue to meet performance specifications for the individual service. Transit service within this district will also take full advantage of the existing transit service point at the OCTA transit center at the corner of Gothard Street and Center Avenue.

3.2 Public Facilities

The Public Facilities plans identify proposed infrastructure, wastewater, water and storm drain facility improvements to serve development within the Specific Plan area. An analysis of infrastructure requirements can be found in Environmental Impact Report No 08-008, a program level environmental analysis for the Beach and Edinger Corridors Specific Plan.

Note: There is no pg. 109 in this Draft.

3.2.1 Wastewater Facilities

The City of Huntington Beach is responsible for the review and approval of the collection of wastewater within the Specific Plan area, and the Orange County Sanitation District (OCSD) is responsible for the treatment of wastewater.

The land use changes and increases in development intensity proposed with the Beach and Edinger Corridors Specific Plan would result in additional growth within each of the Specific Plan segments. In order to estimate the additional wastewater generated from the buildout of the proposed Specific Plan and to identify potential capacity constraints within the City's sewer system, a "Sewer Analysis Report" was prepared by PBS&J and is presented in Appendix H, Volume II of the Specific Plan EIR. Assumptions were made on where development would most likely occur and wastewater flow generation calculations were performed on each of these development areas that would discharge to the various City sewer systems. The resulting wastewater flow calculations were used to perform hydraulic calculations for each pipe segment in the affected sewer system, and based on City sewer design criteria, recommendations were made on pipe segments needing to be upsized as a result of the Specific Plan buildout. The results of the analysis are presented in Figure 3.7. Note that the portion of the necessary upsizing on Beach Blvd. between Talbert Ave. and Slater Ave. was identified by the City's Citywide Sewer Master Plan (SMP) and was completed in 2003.

It is important to note that the sewer pipe upgrades recommended here are based on the best available data, including existing flow data, calculated flow data, and future land use assumptions. Future development may vary substantially from those assumed here, varying the location and amount of sewer flows generated, which would in turn require a different pipe size upgrade than those shown here. For each individual project that may be developed under the proposed Specific Plan, a Sewer Analysis Report shall be prepared and submitted for review and approval, and shall identify constraints, requirements for new connections or upgrades associated with development of the individual project.

Sewer lines within the Specific Plan area will be contained in public or private roads or in easements that will ultimately be dedicated to the City of Huntington Beach. Sewer improvements will be designed to the City of Huntington Beach standards. Developers will be responsible for the construction or funding of sewer facilities within their project and/or off-site facilities necessarry to serve the development.

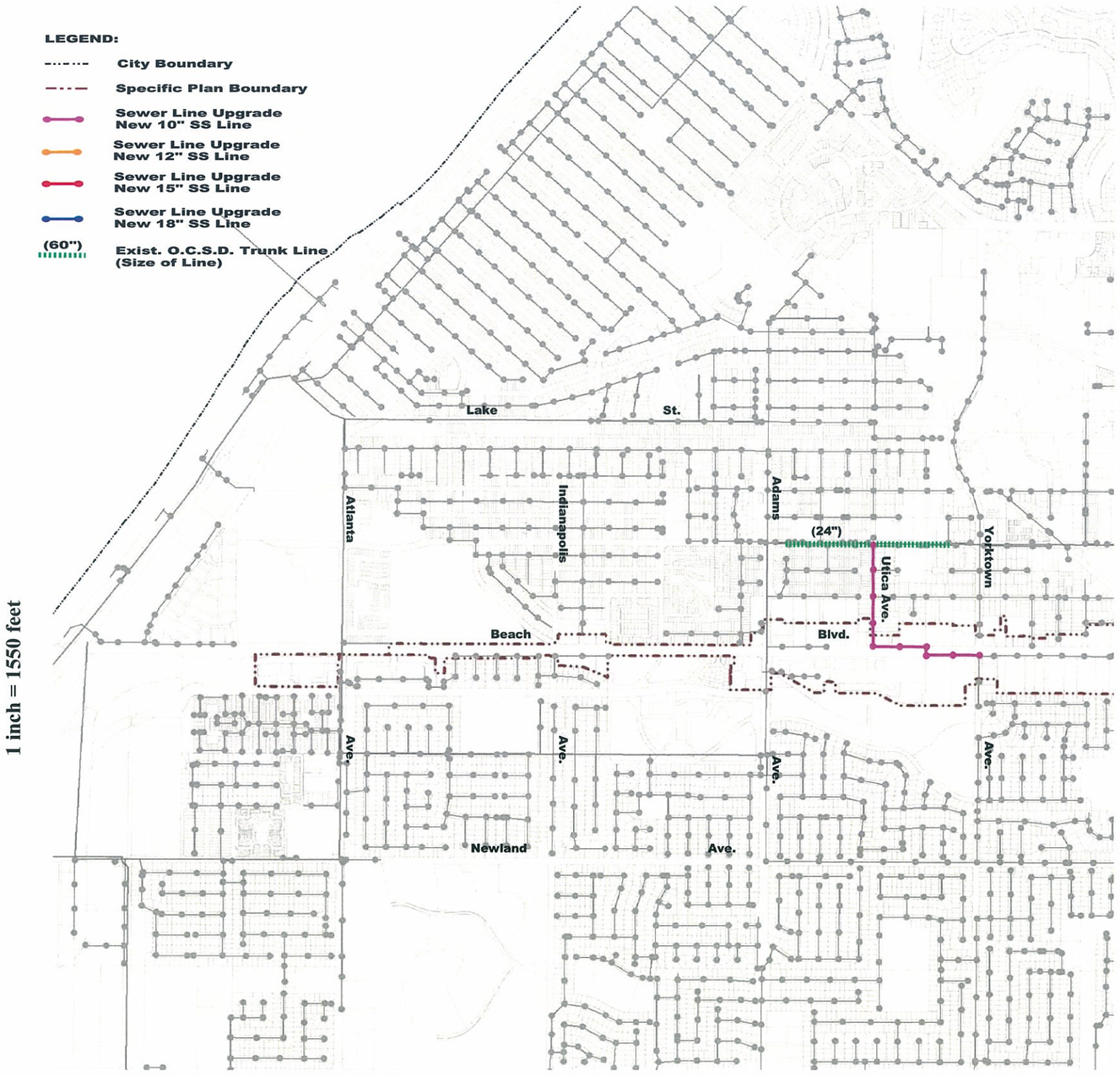


Fig 3.7 Wastewater Facilities

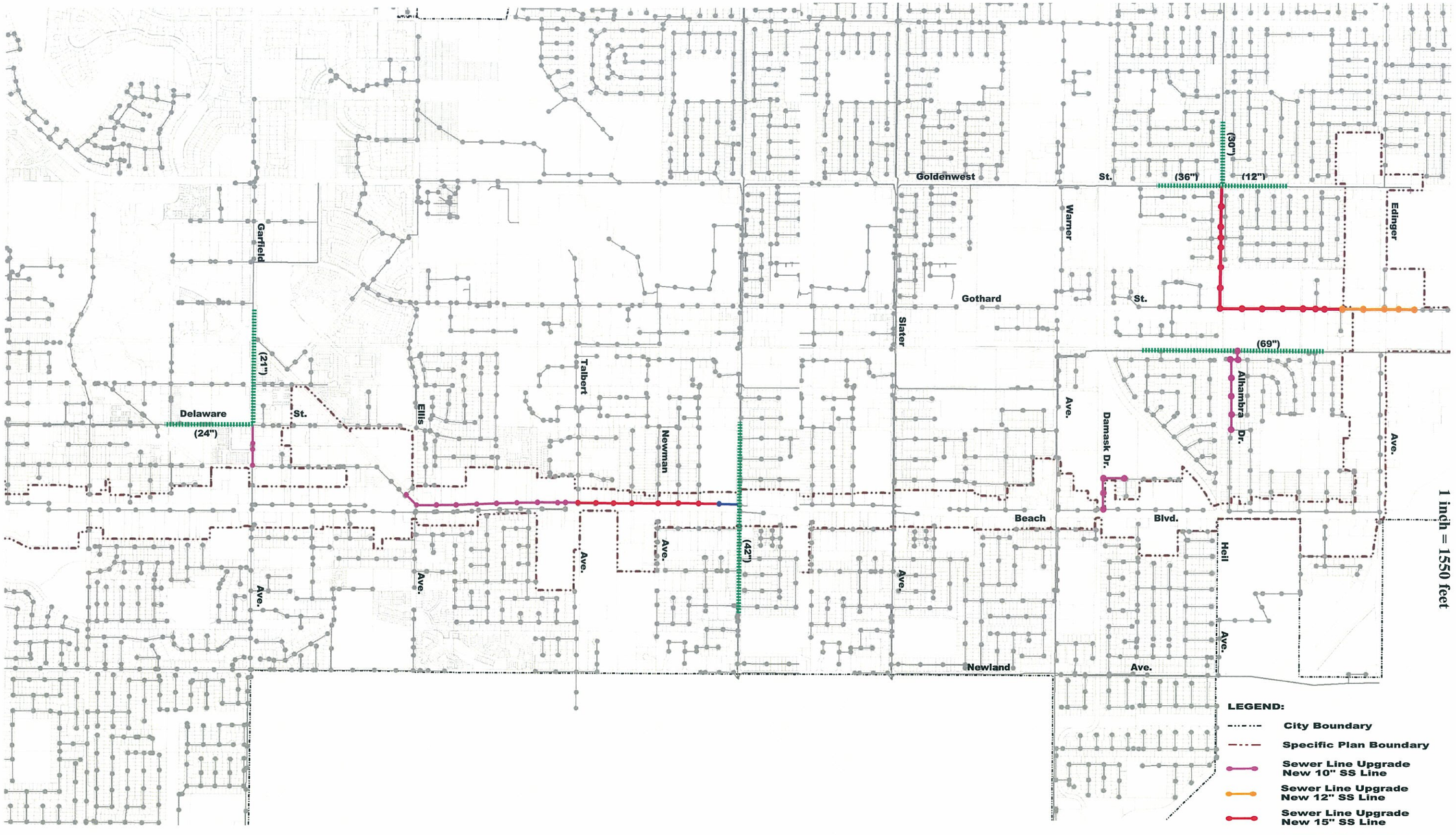


Fig 3.7 Wastewater Facilities

3.2.2 Domestic Water Facilities

The City of Huntington Beach provides the domestic water for the Specific Plan area and all of the customers within the City of Huntington Beach.

The land use changes and increases in development intensity proposed with the Beach and Edinger Corridors Specific Plan would likely result in increased fire flow protection within each of the Specific Plan segments and water facilities. Existing water pipes throughout the project site provide some of the infrastructure necessary to provide water service to future users under buildout of the Specific Plan. However, it is likely that new on-site and off-site improvements (both public and private) may be required to provide adequate service for the increase in water demand. Based on City requirements, it is expected that 12-inch diameter lines will be required to serve much of the Specific Plan area. Due to the width and character of Beach Boulevard, installation of water lines on both sides will typically be required. Figure 3.8 Domestic Water Facilities illustrates what is anticipated to be needed at full buildout.

It is important to note that the water pipe upgrades recommended here are based on the best available data, current Public Works Department standards, including hydraulic modeling data, and future land use assumptions. Future development may vary substantially from those assumed here, varying the location and amount of necessary fire flow, which may in turn require a different pipe size upgrade than those shown here. For each individual project that may be developed under the proposed Specific Plan, a hydraulic capacity analysis shall be prepared and submitted for review and approval, and shall identify constraints, requirements for new connections or upgrades associated with development of the individual project.

All water improvements will be designed to the City of Huntington Beach water standards. Locations of fire hydrants and apparatuses will be reviewed for each development by the City of Huntington Beach to ensure adequate fire flow and pressure. Developers will be responsible for the construction or funding of water facilities within their project and/or off-site facilities necessary to serve the development.

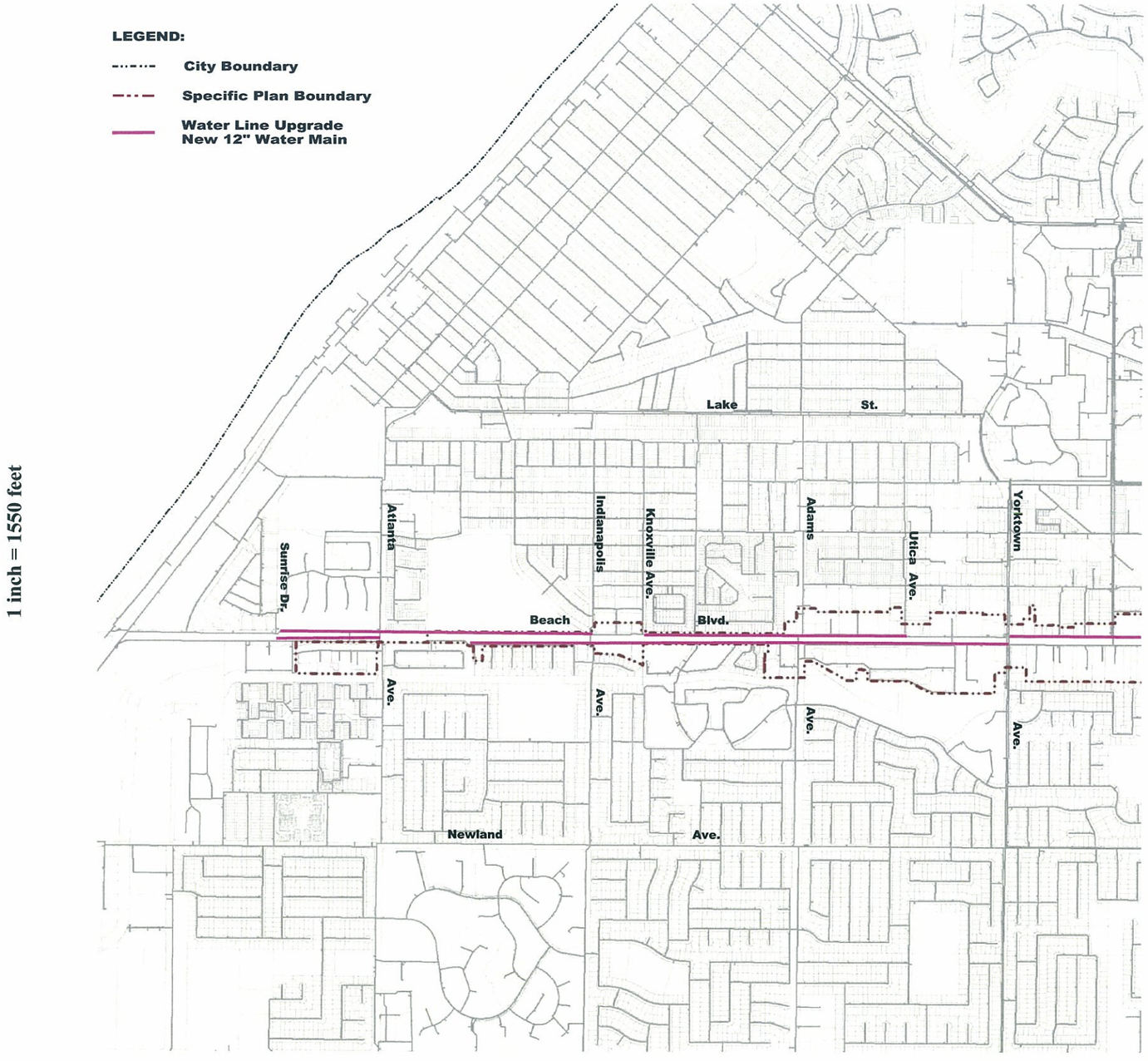


Fig 3.8 Water Facilities

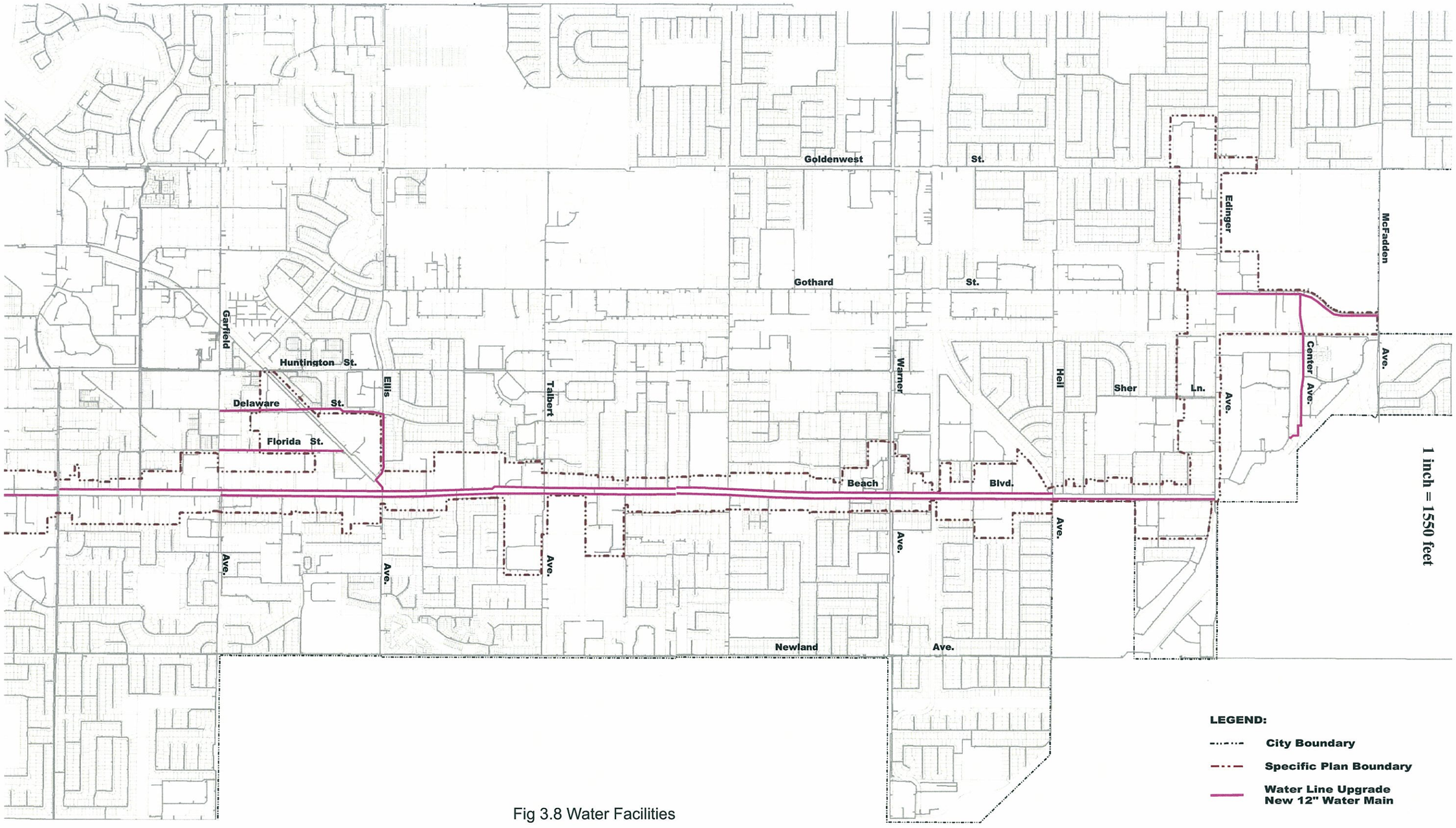


Fig 3.8 Water Facilities

3.2.3 Storm Drain Facilities

Existing storm drain facilities are maintained by the City of Huntington Beach. Currently, the City has in place a Master Plan of Drainage (MPD), which is a comprehensive drainage study of the community that identifies and creates an inventory of existing storm drain facilities and identifies where system elements would be deficient in a General Plan buildout scenario. The MPD ranks the severity of the difference between existing capacity and the capacity needed to support the buildout of the General Plan and recommends system improvements to initiate the corrections.

As analyzed in Environmental Impact Report No. 08-008, the majority of the land within the Specific Plan Area is currently developed and in comparison to existing conditions, the proposed land use changes and increases in development intensity would not result in a significant increase in impervious surfaces and storm runoff. Therefore, the recommendations here mirror those deficient storm drain pipes identified in the MPD that fall within the Specific Plan area. While the majority of the drainage facilities identified are those that are deficient and in need of upgrade improvements, some facilities are new and are proposed for areas where no storm drain currently exists.

It is important to note that the storm drain pipe upgrades recommended here are based on the best available data. Future development may vary substantially from those assumed here. For each individual project that may be developed under the proposed Specific Plan, a Hydrology and Hydraulics Report shall be prepared and submitted for review and approval, and shall identify system constraints, requirements for new connections or upgrades associated with development of the individual project.

Storm drain lines will be designed to the City of Huntington Beach standards. Developers will be responsible for construction or funding of storm drain facilities within their project and/or off-site facilities necessary to serve the development.

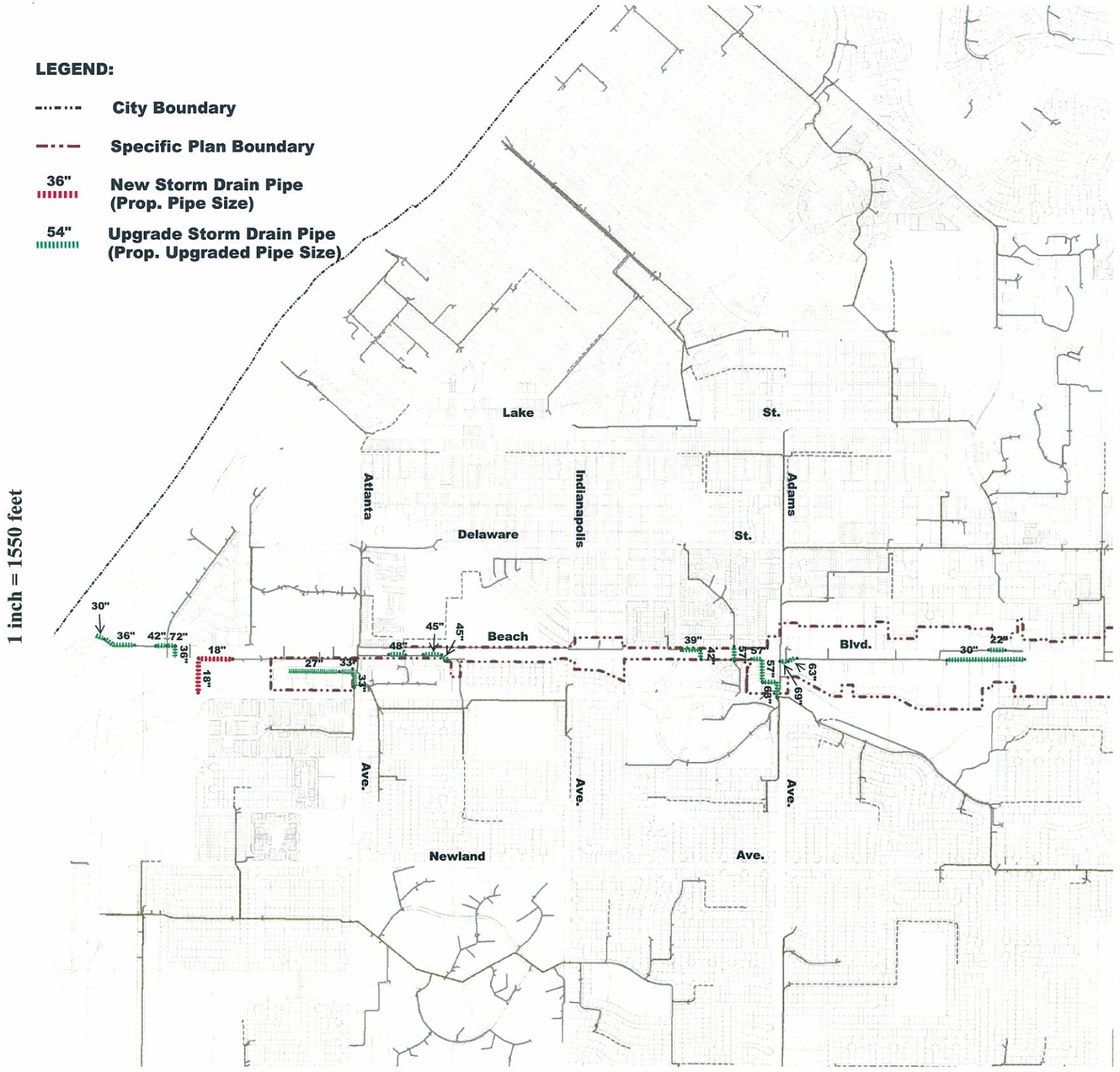


Fig 3.9 Storm Drain Facilities

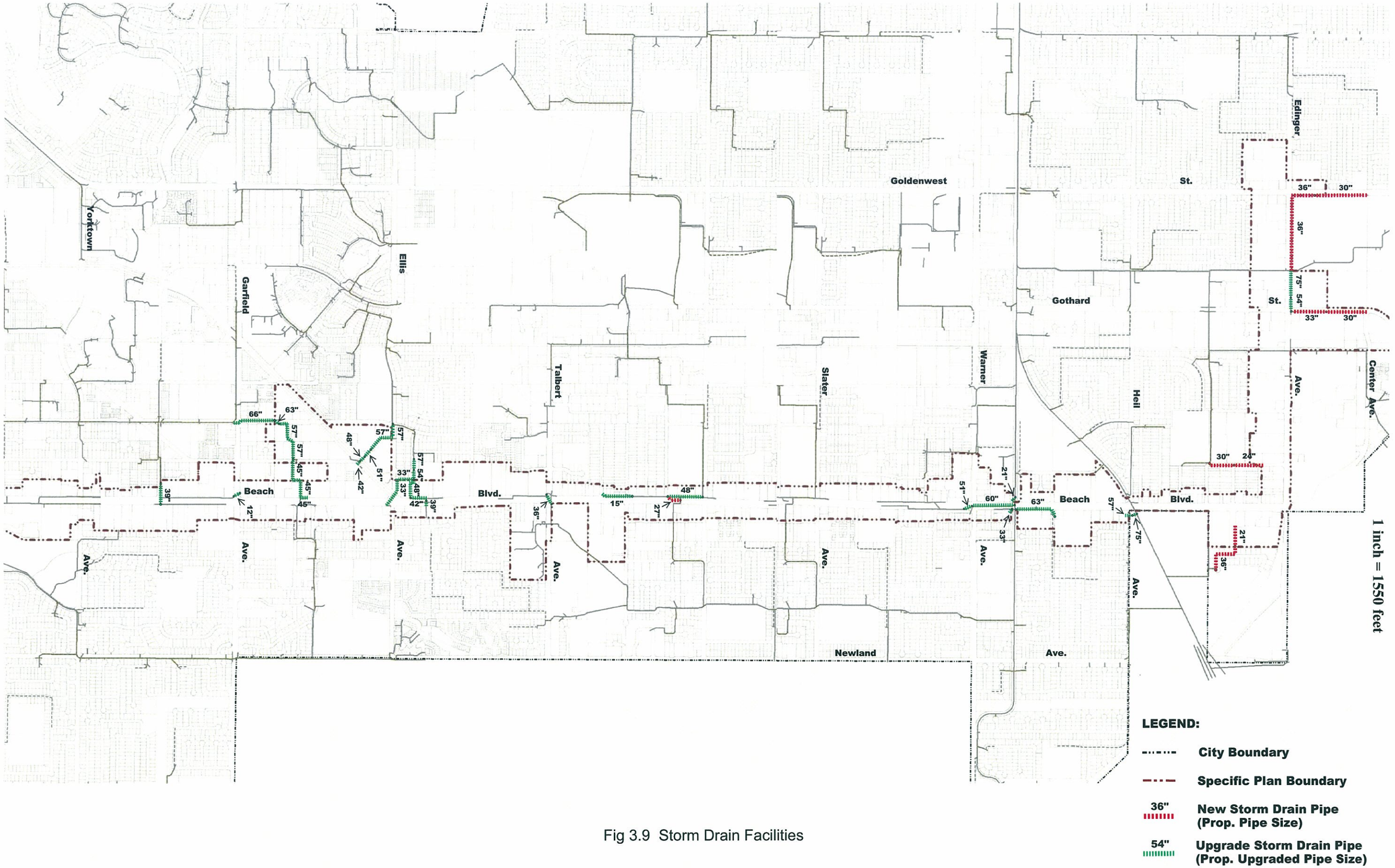


Fig 3.9 Storm Drain Facilities

3.2.4 PARKS

The City of Huntington Beach's Community Services Department operates seventy parks, two beaches and a golf course. The General Plan sets a standard of five acres of park space per 1,000 people. Based on the current inventory of recreational space and the City's population, the City is approximately 4.2 acres below the park standard.

The projected development within the Specific Plan area is estimated to require up to 85 acres of additional park space within the city. Due to the linear and built-out nature of the majority of the Specific Plan area, it is not expected that much, if any, of the park space would be located within its boundaries. Figure 3.10 depicts the locations of parks within 1.5 miles of the Specific Plan area. It is expected that Specific Plan residents will utilize these facilities as well as others that may be developed. In addition, the Specific Plan requires that projects provide on-site public and private open space and specifically calls for a half-acre public open space area on the existing Levitz site, north of Edinger Ave.

Due to the 20 year timeframe over which development within the Specific Plan area is expected to occur and the inherent challenges in acquiring land in a predominantly built-out city, Environmental Impact Report No. 08-008 did not identify specific properties that may be converted to parks. However, the following areas have been identified as options for expanding the City's park inventory.

Location	Acres
Future Parks within the Specific Plan Area	
Levitz site	0.50
Pacifica area	0.50
Subtotal	1.00
Future Parks – already approved by the City	
Bauer Park	2.00
Pacific City	2.00
Parkside Estates	1.67
Subtotal	5.67
Potential Parks- in planning stages or requires acquisition	
Community Garden	2.52
Magnolia/Banning	1.14
Current Closed School Sites Open Space Only	53.50
Nesi/Ascon Site	10-20.00
Subtotal	67.16-77.16
Total	73.83-83.83

The City's regulations provide that non-subdivided residential development pay a park-in lieu fee. Projects with subdivisions, e.g. condominiums, may either dedicate land or pay an in-lieu fee. It is expected that much of the development that occurs in the Specific Plan area will pay in-lieu fees. These monies can be used to implement the parks projects identified that are not already approved.

Payment of the in-lieu fee may also be used to improve existing unimproved park space as follows:

Existing, Unimproved Park	
Bartlett Park	25.13

Note: 2.0 acres of the park is improved.

Bartlett Park's total 27.13 acres is already counted as part of the City's park inventory. However, because it is largely unimproved, it will effectively be new park space.

Finally, there are existing parks, e.g. Murdy Community Park, which has a proposed phase II project to reconfigure the park to provide additional sports amenities for youth and adults, and Huntington Central Park, which has the undeveloped former Gun Range. Similar to Bartlett Park, these areas are already counted in the City's park inventory. However, improving the use of the facilities increases recreational opportunities for the community.

Developers will be responsible for complying with Chapters 230 and 254 of the Huntington Beach Zoning and Subdivision Ordinance as applicable.

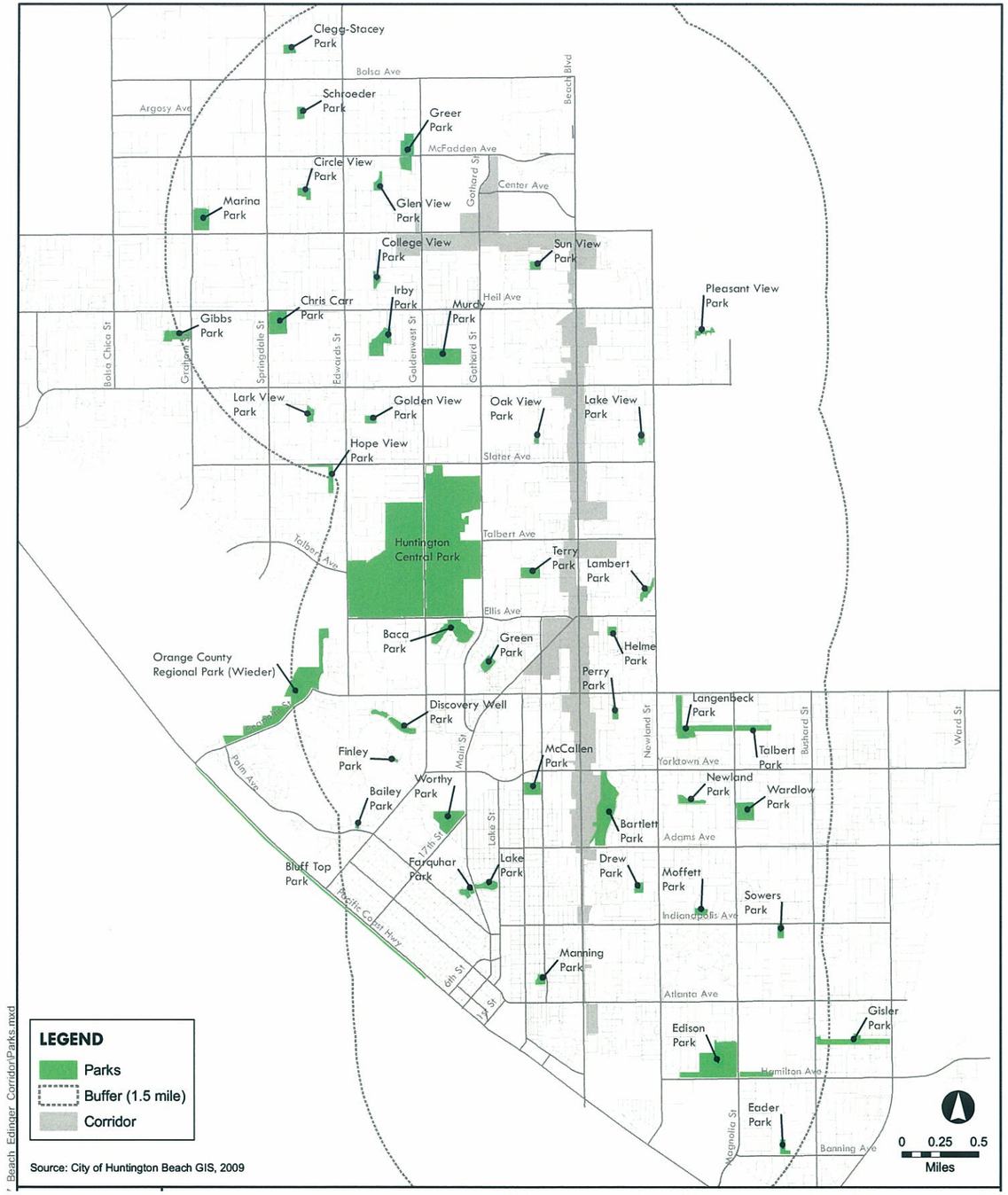


Fig 3.10 Parks Within a 1.5 Mile Radius of Project Site

3.2.5 Water Quality

Water quality in California is regulated by the U.S. Environmental Protection Agency's (EPA) National Pollution Discharge Elimination System (NPDES), which controls the discharge of pollutants to water bodies from point and non-point sources. Compliance with water quality regulations will be required for individual construction projects.

Through the NPDES Permit process, the City currently requires contributors to non-point runoff pollution to establish Best Management Practices (BMPs) to minimize the potential for pollution. Under this program, the developer is responsible for identification and implementation of a program of BMPs, which can include special scheduling of project activities, prohibition of certain practices, establishment of certain maintenance procedures, and other management practices to prevent or reduce the pollution of downstream waters. Typical elements of such a BMP program would include addressing the use of oil and grease traps, detention basins, vegetation filter strips, and common techniques in order to preclude discharge of pollutants into local storm drains and channels. Post construction BMPs will be identified with a Water Quality Management Plan (WQMP). The WQMP will also address continued maintenance requirements. The continued maintenance will be performed by the home owners association, property owner, and/or property management company.

Pursuant to the analysis in Environmental Impact Report No. 08-008, new development and significant redevelopment projects within the Specific Plan area will be required to prepare a project WQMP in accordance with the Orange County Drainage Area Management Plan (DAMP) and the City of Huntington Beach requirements. Section 2.6.6 of this Specific Plan further addresses water quality requirements. In summary, Developer shall comply with the latest NPDES requirements at the time of development.

3.2.6 Utilities

There are several public utility providers in the Specific Plan area. Adequate facilities exist for the current service needs of the area, however, additional facilities may be required as additional development occurs.

3.2.7 Electricity

Electrical service to the area is provided by the Southern California Edison Company. Existing transmission and distribution lines are adequate to service current and potential future needs. Any new or

3.2.8 Natural Gas

Natural gas service in the Specific Plan area is provided by the Southern California Gas Company. Adequate facilities exist for current and projected future needs. Relocation of existing facilities shall be concurrent with project development.

3.2.9 Communications

Telephone service in the Specific Plan area is provided by General Telephone (GTE). Relocation of existing facilities and new installation shall be concurrent with project development.

Cable television service within Huntington Beach is provided by Time Warner Communications. Installation of new services shall be concurrent with project development.

3.2.10 Solid Waste Disposal

Rainbow Disposal Company currently provides solid waste disposal services for the area. Based on service projections and anticipated demand increase, an adequate level of service will be maintained. No solid waste disposal facilities are planned to be located in the Specific Plan area.

3.3 Infrastructure and Public Facilities Improvement Responsibilities

In order to provide for public facilities improvements necessary to serve all future development within the Specific Plan Area, developers will have a fair-share responsibility for either (1) constructing the necessary improvements required as described in the Specific Plan Environmental Impact Report 08-008 or other subsequent project-level environmental document concurrent with project development, or (2) funding such necessary improvements if constructed by other developers.

The City will determine and administer the fair-share responsibility for the public facilities improvements, including sewer, water, drainage, roads and traffic controls as described in the Specific Plan. If a developer provides the necessary facilities beyond their fair-share responsibility, that developer shall be reimbursed for costs beyond their fair-share contribution from funds collected from other developers that use said facilities. If that developer is required to pay fees, those fees will be based on a development's proportional use of the public facilities improvements necessary to serve the development utilizing assessment on a dwelling unit, acreage, building square footage or front footage basis.

Note: There is no pg. 119 in this Draft.