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OPPORTUNITY #3 - WESTERN AVE. MEDIAN TREE PLANTING

Construction was completed for this Opportunity Summer 2017. The images on this page are taken from the Construction Documents that were used to guide the installation of 43—24 inch box size trees in raised medians between 1st Street in the north to 19th Street in the south along Western Ave.

The project was fully funded by Council District 15 for approximately $150,000 to remove 10 ft. x 10 ft. sections of asphalt paving within these raised median areas. Two (2) species of small stature trees were selected in coordination with CD 15, and planted in an alternating pattern approximately 30 ft. apart within these 10 ft. x 10 ft. areas, which were then covered with 3 inches of shredded cedar mulch to conserve moisture within the soil underneath.

Each tree will be watered from a water truck by Clean San Pedro 33 times per year for the first 3 years of establishment.

The two (2) species are:
1. Chinese Fringe tree
2. Crape Myrtle

Chinese Fringe Tree

Crape Myrtle
OPPORTUNITY #4 - HARBOR BLVD. MEDIANS TURF REPLACEMENT & BEAUTIFICATION

HARBOR BLVD. & GULCH RD. MEDIANS

Funded by an HCBF grant for approx. $75,000, this project involves rehabilitating the existing landscape medians along Harbor Blvd. The existing Mexican Fan Palms will remain, but the remaining landscape will be replaced with a drought tolerant landscape that will include:

- Large stature broadleaf trees planted between palms
- Flowering shrubs and groundcover that can provide year round color
- “Smart” irrigation system (matching funds from CalFire Grant (SEE OPPORTUNITY #1)
- Natural Wood Chip Mulch

“Smart” irrigation involves using irrigation control systems that control the timing of the watering cycles based on soil moisture content, weather conditions and breaks in the pipes that supply the water to the planting areas. It also means using low flow non-spray or micro-spray sprinkler heads instead of larger spray heads. The control systems can be programmed to irrigate the planting areas for specified lengths of time and on a calendar schedule that can be changed with the seasons, so the water cycle is appropriate for the time of year.

This project includes rehabilitating the landscape on the slopes along Gulch Rd. at Harbor Blvd. The adjacent photos show the area for this Project Opportunity. Project treatments/ elements would include:

- Prune existing palms
- Install “Smart” irrigation system
- Plant large stature drought tolerant trees
- Install drought tolerant shrubs & groundcover
- Install mulch
OPPORTUNITY #5 - SAMPSON WAY REALIGNMENT, PLAZA & CENTRAL PARKS

SAMPSON WAY

Construction began in Spring 2017 on this fully funded Project (POLA). The Project realigns Sampson Way and Harbor Blvd. to improve connectivity between the Port and Downtown San Pedro. Final design includes extensive opportunity for additional urban greening within the Port, within an expanded Plaza Park and along 6th & 7th Streets as they terminate into the Port. It will also facilitate introduction of active transportation alternative solutions for accessing downtown from the Port, including transit-use, walking and biking.

PLAZA PARK

This project would involve rehabilitating the landscape on the slopes below the recently completed Plaza Park Parkway along Beacon Street. The Sampson Way reconfiguration actually expands the hillside portion of the Park site area, and offers the opportunity to add walking trail connections from the Port to Beacon Street along the hillside. Project elements would include: 1) planting large stature drought tolerant trees; 2) planting drought tolerant shrubs & groundcover; 3) installation of Smart irrigation system. It is important to not rely solely on palm trees when selecting trees for the Park. Strategically placed broadleaf or coniferous tree species already used along the Waterfront would provide shade for rest and picnic areas while still enhancing the vistas.

This Plan recommends adding landscape “node” treatments where 8th, 9th, 10th, 11th, and 12th Streets dead end into upper Plaza Park along Beacon Street.

SAN PEDRO CENTRAL PARK

Existing underutilized vacant land south of Miner St. and north of Sampson Way would be converted to a total of 18 acres of open space park immediately adjacent to existing Bloch Field. This Project (not currently funded) is already proposed as part of the proposed San Pedro Waterfront Project, and, in fact, a portion of the acreage has already been converted to passive recreation open space.

As a portion of this land is an existing brownfield, coordination with Federal and State agencies responsible for assessment and clean-up of this land will be critical in the early stages of planning for this Park (SEE OPPORTUNITY #28 FOR ADDITIONAL INFORMATION ON BROWNFIELD OPPORTUNITY).
OPPORTUNITY #6 - NORTH GAFFEY PARKWAY PHASE II

This opportunity involves a 1/4 mile extension of North Gaffey Phase I Parkway and multi-use trail to West Channel Street. The elements include: 1) lighting (poles will match poles and lamps used in Phase I; 2) drought tolerant plants; 3) low flow irrigation system; 4) use of crushed rock mulch; 5) vines along fencing around parking lot; and 6) planter along inside length of fence around this parking lot.

This project when combined with Opportunity #7 will provide a multi-use pathway for walkers and cyclists connecting Westmont on the north to the Waterfront Promenade at the Vincent Thomas Bridge.

Funding for this Phase II has been earmarked by the Port of LA in the amount of $2.95 Million.

The construction plans and documents are completed. The Project is awaiting resolution of ownership issues with the Port of Long Beach. Resolution is expected by the time this Plan is published.

Additional recommendations will be made/developed for improving the connection from this Pathway/Parkway through the Gaffey St. – W. Channel intersection and on through the Gaffey St. – Miraflores intersection to the existing bike lane and on up into Leland Park West (SEE OPPORTUNITY #25).
OPPORTUNITY #7 - FRONT STREET BEAUTIFICATION

This project will beautify a stretch of Front St. on both sides of the street from Pacific Ave. east to Harbor Blvd.

Construction documents have been completed for this project and the project is fully funded by the Port of Los Angeles. Environmental remediation has been completed.

However, the project is on hold to resolve issues with existing rail. It is possible that by the time this San Pedro Urban Greening Plan is published that those issues will have been resolved and construction will have begun.

Once completed this project will provide a key green pedestrian link that will provide a continuous green parkway from the Promenade at Downtown at the north end of Harbor Blvd. all the way to Channel St. and then on up to N. Gaffey St. all the way to Westmont Dr.

Opportunity #20, once implemented will complete this green parkway along N. Gaffey all the way to Anaheim St.

Implementation of Opportunity #12—John S. Gibson Parkway Enhancement will complete a continuous parkway all the way to Harry Bridges Blvd.
OPPORTUNITIES - RESIDENTIAL TURF REPLACEMENT PROGRAM

Several major largely residential east-west streets in San Pedro have been identified as priority streets as part of the San Pedro Urban Greening Project. Several of these streets do not have sufficient sidewalk width or existing parkways in which to plant trees or install rain gardens. However, we have identified a couple of Los Angeles City-Wide existing “urban greening programs” that can be utilized by residents to “green” their front yards in a more water conserving manner if they so wish. They are the City of Los Angeles “City Plants Tree Adoption Program, which is discussed below, and the LA DWP “Turf Replacement Rebate Program”, which is the subject of Opportunity #9. The photo shown on this page is just a typical view from one of the streets that have been identified as RNPG (Residential No Parkway Green Streets) on the Regional Green Street Typology Plan.

LOS ANGELES “CITY PLANTS” PROGRAM - City Plants is a public-private partnership between the City of Los Angeles, local non-profit organizations, community groups, residents, and businesses. This is a continuation of the former Million Trees LA Program, though the program priorities have been changed to focus on getting trees planted in low canopy areas and to plant in a way that maximizes the benefits trees provide rather than on reaching a specific number of trees.

Trees Save Energy—Through this partnership City Plants is able to provide free shade trees for residents and property owners in the City of LA, along with important information on where to plant those trees to maximize energy efficiency in homes or businesses. If planted to the south and west of a building, trees will provide shade during the hottest parts of the day, cooling the building and lessening the need for air conditioning. Less a/c use saves energy and money on your electricity bill. Using less energy also helps reduce the need to generate energy, which helps combat climate change.

Plant Trees in Your Yard— Residents who live in the City of Los Angeles, are eligible to receive up to seven free trees to plant on their property if they agree to take proper care of them. Instructions on how to plant the trees and take care of them are provided as part of the tree “adoption” process. City Plants also has fruit tree adoption events, where residents can take home one fruit tree to plant on your property. Plant them on the south or west side of the building to maximize tree shading and energy savings.

Residential Green Streets -
This happens to be a section of 13th St., but this could be any similar section of any of the many residential streets within San Pedro that have been identified as priority Green Streets. Property owners on these types of streets can take advantage of existing City-wide urban greening programs to plant trees or replace their turf at no cost to themselves.
LA DWP first launched their turf replacement program in 2009, and it has gone through several incarnations. Currently called the “California Friendly Landscape Incentive Program”, it involves replacing turf grass with California Friendly plants, mulch, permeable pathways, and drip irrigation. Effective September 1, 2017, applicants are eligible to receive $2.00 per square foot for up to 1,500 square feet maximum for turf replacement. All applications must be submitted online through the SoCal WaterSmart website: http://socalwatersmart.com/?page_id=2967.

The LA DWP website, www.ladwp.com, has a link to the program page that also includes links to getting landscape design information on what type of California Friendly plant species can be used in turf replacement program type landscapes.
The Harbor Approach Environmental Enhancement & Mitigation Project is a multi-phased project opportunity to provide environmental enhancement, mitigation, and beautification of the primary freeway approach to the San Pedro Harbor Area along Interstate 110 Freeway/SR 47 State Highway from just north of the West Channel Street offramp all the way to Harbor Blvd. The goal is to create an iconic entryway into the Port of Los Angeles/San Pedro Community. Overall project elements would include iconic Port of Los Angeles/Maritime/Marine large scale custom thematic sculpture elements, water conserving landscape treatments, storm water/water supply treatment areas, large-stature tree planting, continuous litter abatement programming, and environmental education and training programs for local at-risk young adults.

Phase I would be a 12-month program that would provide education and training for up to 60 at-risk adults. This Phase I Initiative would be a collaboration between Clean San Pedro (CSP), Atlas Green Works (AGW), Caltrans, LA County Supervisorial District 4, LA Conservation Corps (LACC), Beacon House, and Port of LA (POLA). The initiative involves delivering 400 hours of the “California Tree Academy” to at-risk adults from Beacon House and employed by Clean San Pedro. As part of this education and training, these same crews of at-risk adults would deliver 1600 hours of work performing tree planting and maintenance, and weed and trash abatement. This work would cover approximately 22 acres (SEE ABOVE GRAPHIC) of Caltrans right-of-way along the Interstate 110 and SR 47 approach to Harbor Blvd. from the W. Channel St. southbound exit down to Harbor Blvd.

This project would mitigate the following Port impacts: air quality, water quality, aesthetics, health risks, and
marine life. Air quality would be improved through the Greenhouse Gas (GHG) emission reduction and absorp-
tion of pollutant gases (nitrogen oxides, ammonia, sulfur dioxide and ozone), as well as filter particulates out of the air from the planting of large stature trees. Water quality would be improved through the removal of trash that would otherwise end up in the Harbor and through the construction of bioswales that filter storm water run-
off thereby removing pollutants before the water enters the Harbor. Aesthetics would be improved by removing weeds, trash, placing mulch and planting trees along a main gateway into the Port of L.A. Strategically placed trees can help to mitigate the harsh view of the cranes and stacked cargo containers within the Harbor.

The education and training element would be a modified version of the California Tree Academy curriculum, developed by Larry Smith on behalf of the LA Conservation Corps with funding from Cal Fire (2010-2012). Organized around the principle of “planting the right tree in the right place the right way”, the subject matter begins with basic tree biology, covers the carbon and water cycles and specifically the role of trees in both; then moves into the practice of arboriculture & urban forestry, including how to know which trees to plant, how to plant & maintain them; and then finally covers watershed and storm water management, and how proper management increases clean water storage and improves the water quality of storm water that ultimately ends up in the ocean, and how that ultimately improves the marine environment. Adult participants will also be introduced to the numerous career pathways that are possible within the urban forestry/watershed management world.

While it is expected that most of the 22 acres will be
“enhanced” in some fashion with the Phase I Project, the treatments for each of the designated areas (there area a total of 15 designated areas) will vary both in Phase I and in future phases. One primary example would be the introduction of large scale thematic sculpture/public art elements within some of these areas. Ideas to stimulate the discussion of the possibilities for such elements are presented on these pages. The photos are of actual elements that have been installed in public spaces around the world. These examples are by no means exhaustive. Of course, there are a number of issues that will need to be examined to introduce such elements within Caltrans or Port of Los Angeles open space properties along the Harbor Approach.

Since most, if not all, properties along this “approach” are Caltrans owned, their permit process guidelines and design and engineering standards for such elements will need to be adequately addressed.

In addition, this represents an excellent opportunity for community engagement and input. One idea would be to develop the ideas for the public art through some sort of public competition organized through the local San Pedro arts community.
It would be advisable to do this after first conducting the due diligence to determine the design standards and guidelines that would need to be used to construct this type of public art. Types of materials, treatments, safety elements, size and setback guidelines are just some of the examples. As these would be very highly visible elements that really would define this major portal into San Pedro, it would be advisable to create a very inclusive advisory committee that is representative of all community-based and public agency stakeholders.

Besides the public art elements just discussed, there are other environmental enhancement and beautification elements/treatments that could vary from across the various areas. While it would be ideal to create a plant palette that can be used across all areas to contribute to creating a very strong “sense of place” for this “Harbor Approach”, it will be important to make sure there is enough species diversity, especially in the selection of trees. These should be, as has been mentioned earlier, “large stature” tree species. They should also be vetted as to their known susceptibility to pests and disease. They should be water conserving and observed to perform well in the type of marine-influenced micro-climate found in the San Pedro Harbor area.

Similar considerations should be used to developed the
shrub and groundcover palette with the caveat that it may be advisable to limit the amount of plant groundcover to be used to the steeper slopes where rock mulch groundcover may not be technically possible without considerable engineering cost. Besides the capital cost consideration, utilizing rock mulch as groundcover can be very aesthetically pleasing, conserve water and be easier and of less cost to maintain. Given the typically low and inconsistent budget allocations for maintenance, and the long term need to limit water resources needed to maintain landscape treatments, the latter two (2) criteria are especially important.

Finally, the steepness of the slopes within some of these areas will preclude the type of rock mulch treatment that is possible in the flatter portions of these areas. The steeper hillsides will still be maintained to be free of litter and debris, but modifications to the existing landscape will need to ensure that removal and replacement of any existing plant material will not destabilize the slope. In addition, repair/ replacement of existing irrigation equipment will likely require more “above-ground” elements than would be required or necessary in flatter areas.

Determination of which existing trees would remain and need to be protected in place during construction would be determined through the design, engineering and permitting process. There are a number of palm trees within some of the areas that, if they are designated to remain, would need to be pruned to remove the dead fronds that can be seen in some of the photos on these pages.
This opportunity is designed to close the gaps between existing and/or planned bike/pedestrian pathways along N. Pacific Ave. from O’Farrell St. north to Front St. and then on to where N. Pacific Ave. becomes John S. Gibson Blvd. at W. Channel St. This would connect to existing bike lanes along N. Pacific Ave. at O’Farrell St. It would also connect to the existing pedestrian path that runs on the northeast side of N. Pacific Ave. from W. Channel Ave. to where it ends just north of the Front St.-N. Pacific Ave. intersection.

There is also ample opportunity to beautify the section of N. Pacific Ave. from O’Farrell St. to Front St. with street tree plantings. It would appear that the sidewalks along both sides of N. Pacific Ave. in this segment are wide enough to create large enough concrete cut-outs to accommodate large stature trees. Towards that end we would recommend creating at least 5 ft. x 10 ft. cut-outs and then plant these with Canary Island Pines. The photos on this page show some views of this pathway.
While John S. Gibson Blvd. has existing bike lanes on both sides of the street and a number of trees planted in sidewalk cut-outs, especially on the east side of the street, there remains ample opportunity for significant environmental and aesthetic improvement between W. Channel St. and Harry Bridges Blvd. This is especially true now that the various Interstate 110 ramp construction improvements have been completed.

This opportunity dovetails nicely with the proposed bike lane connections shown in Opportunity #11 that will provide the much needed bike lane connections to N. Pacific Ave. from the existing parkway/greenway improvement just north of where N. Pacific Ave. intersects Front St. The goal here should be to provide a “green screen” along the east side of John S. Gibson Blvd. that will also provide a “shaded parkway” for both bicyclists and pedestrians jogging or walking along this stretch of the Boulevard. As part of this enhancement, it is recommended that street trees along John S. Gibson receive regularly scheduled pruning utilizing local private community-based resources.

While some trees have been planted along the Caltrans right-of-way as part of the Interstate 110 ramp improvements there is still ample opportunity for additional tree planting, especially on the west side of John S. Gibson and within the median. This would include hillside areas that are on Port of Los Angeles property.

Finally, it is recommended that the remaining chain link fence at the northwest corner of Channel and John S. Gibson be removed and the area fully landscaped.

This project should be eligible for State Resources Agency Environmental Enhancement & Mitigation Program (EEMP) funding beginning with the 2018/19 grant cycle.
OPPORTUNITY #13 - BANDINI CANYON PARK TO PECK PARK GREENWAY

The opportunity here is to connect Bandini Canyon Trail & Park to Peck Park via an enhanced pedestrian pathway along Bandini Street to Elberon St. and the south entryway into Peck Park. This would also connect Bandini Street School to Peck Park. This would also involve completing a connection to another new opportunity—the Caltrans Greenway to the east via a trail that runs underneath the Gaffey St. Bridge. This pathway would also provide an alternative east-west route to connect to the N. Gaffey St. bike lane that runs north from Summerland Ave. up to W. Channel St., which connects to John S. Gibson Blvd.

Enhancements suggested for this Pathway include bike route signage along Bandini St., converting the Summerland Ave.—Bandini Street intersection from a two-way stop along Bandini Cyn. St. to a full four-way stop to improve the safety of pedestrians crossing Summerland Ave. either on foot or on bicycle. Additional small stature (there are overhead utilities along both sides of the street that preclude the use of large stature trees) flowering street trees along Bandini St. and some way-finding signage related to the Peck Park—Bandini Park connection. In addition, we recommend that the trail through Bandini Canyon Park be renovated to improve the stability of the path and to make it wide enough to accommodate both bicyclists and walkers/joggers.
OPPORTUNITY #14 - PECK PARK TO LELAND PARK PEDESTRIAN PATHWAYS

The opportunity here is to create a pedestrian pathway between Peck Park and Leland Park. Although the eastern boundary of Peck Park and western boundary of Leland Park are, in fact, very close, there currently is no continuous path connecting the two parks. Due to existing land ownership issues at other potential connection points, some closer linkages between the two parks do not appear feasible.

Therefore, the proposal is to link the south entrance of Peck Park at W. Elberon Ave. just west of N. Bandini St. to Leland Park at three (3) different locations (SEE NO. CALL-OUTS ON MAP TO RIGHT):

1. The first path would follow Elberon to Meyler St. and then proceed north to S. Herbert Ave where it will veer to the east straight to the west entrance of Leland Park at the active play area.

2. The second path would continue east on Elberon past Meyler St. to Cabrillo Ave. and then turn north to the currently unimproved portion of Leland Park south of the developed portion of the park. A new improved trail would need to be added in this portion of Leland Park to connect to the terraces downhill from the ballfield on the approach to Miraflores Ave.

3. The third path would continue east past Cabrillo Ave. across the W. Elberon Bridge over N. Gaffey St. to the unimproved portion of Leland Park on the east side of N. Gaffey St. This portion of the park is used by joggers and people wishing to walk their dogs; however, there is also ample opportunity to work with the existing Leland Park Advisory Board (PAB) to develop ideas for improvements to this section of Leland Park.

As an added value these various pathways would connect to other proposed pathway opportunities—the Peck Park to Bandini Canyon Park pedestrian and bicycle pathway and the newly proposed sidewalk along N. Gaffey St. from the W. Elberon Bridge to Miraflores Ave. Both of these opportunities are discussed separately on pages 79 and 85 of this Plan.
OPPORTUNITY #15 - SUMMERLAND TO GAFFEY & PACIFIC BIKE CONNECTIONS

The opportunity here is to create bicycle (as well as enhanced pedestrian) path connections between the end of the bicycle lanes on W. Summerland Ave. just east of Meyler St. and the existing bicycle paths at N. Gaffey St. and the proposed new bicycle path extension at N. Pacific Ave. The blue lines on the adjacent map show the W. Summerland to N. Pacific pathway connection, while the red lines show the W. Summerland to N. Gaffey St. connection.

First, let’s look at the Summerland to N. Pacific pathway. There are actually two (2) different alternative routes proposed to accomplish this. The blue-lined path would direct cyclists to turn left at Meyler St., go north to W. Elberon Ave. and then head east along W. Elberon Ave. over the bridge to N. Gaffey Pl. Then the route would proceed north to W. McArthur Ave. over the bridge at the 110 Freeway, and then wind down the hill to W. Upland Ave. to N. Pacific Ave. At this point the cyclist could proceed south on the new (now proposed) southbound bicycle lane along N. Pacific Ave. and eventually turn at 6th or 7th Street into Downtown San Pedro and continue on to the Port of LA as desired (or, of course, continue south on Pacific Ave. beyond those streets towards the San Pedro Coastal Area. As the residential streets along this pathway are not wide enough to create a dedicated bike lane, this pathway would be designated a bicycle route with wayfinding signage to assist with directions.

Now let’s look at the red-lined pathway. This functions as both an alternative connector from the end of the W. Summerland bike lanes just east of Meyler to the blue-lined pathway that goes from N. Gaffey Pl. to N. Pacific Ave., and as a separate connector to the existing bike lanes at N. Gaffey St. As with the blue-lined pathway there is not enough room for a dedicated bike lane; however, this portion of the pathway could be designated a bike route with wayfinding signage to both the N. Pacific bike lanes and the N. Gaffey bike lanes.

As an added value, both of these alternative pathways connect to the proposed pedestrian pathways between Peck Park and Leland Park, as well as the proposed pedestrian pathway between Peck Park and Bandini Canyon Trail and Park.
OPPORTUNITY #16 - GAFFEY GREAT STREET

As was noted in the Community Outreach Section of this San Pedro Urban Greening Plan, Gaffey St., along with Pacific Avenue, were identified by community stakeholders as the top two (2) most important “pathways” in San Pedro. This dovetails nicely with a parallel development—Mayor Eric Garcetti’s 2013 Los Angeles Great Streets Initiative. Through the efforts of Council District 15 Councilman Joe Buscaino, a portion of Gaffey Street (from the pedestrian bridge at the Harbor Freeway terminus south to 13th Street) has been designated as one of the 15 Great Streets in the City of Los Angeles. The goals of the Great Streets Initiative are to:

- Increase economic activity
- Improve access and mobility
- Enhance neighborhood character
- Provide for greater community engagement
- Improve environmental resilience, and
- Create a safer and more secure community

Gaffey Street is the primary arterial that connects San Pedro via the Harbor Freeway to the Greater Los Angeles Area. In addition, Gaffey Street continues north beyond the Harbor Freeway terminus as an important pathway connecting Northwest San Pedro to Central San Pedro, including the Downtown and...
OPPORTUNITY #16 - GAFFEY GREAT STREET

Harbor areas. As such there is a tremendous amount of daily traffic that traversing this main thoroughfare.

The “San Pedro Gaffey Street Conceptual Plan” was funded by City of Los Angeles Council District 15 (CD 15) —utilizing AB1290 funds. The Los Angeles Neighborhood Initiative (LANI) was selected by CD 15 to administer the project, and the Consultant Team, under the direction of the Prime Consultant, RRM Design Group was selected through a competitive qualifications process by Steering Committee community members. Full acknowledgement of participants at all levels of the development of the Plan can be found within the Conceptual Plan document available for viewing online at the URL shown below on this page.

Within the Plan, there are a number of solutions proposed to address the aforementioned goals related to transforming Gaffey Street. These included:

- Redirecting traffic to/from the Harbor Freeway via alternative streets
- Way-finding signage coordinated with Port of LA format
- Pedestrian bulb-outs at corners
- Permeable paving under street-side parking
- Storm water infiltration and harvesting
- Enhancements to all bus stops (shelter, lighting, seating, and trash receptacles)
- Coordinated street furnishings (pedestrian lighting, benches, bike racks, trash receptacles, and bus shelters)
- Drought resistant plants to conserve water use
- Additional street trees (broad leaf and palm trees)
- Accent trees leading into neighborhoods
- Landscape medians (selected locations)
- Uniform sidewalk paving throughout
- Public/private partnership for a Transit Plaza at 13th and Gaffey Street

With the exception of “Implementing a Road Diet from 5th Street to the freeway”, which was deleted as a result of strong community opposition, the remaining solutions listed above are represented in the Final Concept Plan. The Plan can be viewed on the Issuu.com website at the following link: https://issuu.com/la15th/docs/gaffey_street_conceptual_plan_final

The Conceptual Plan is presented as five (5) distinct lengths or segments of Gaffey St. between Summerland and 13th St. as follows:

- Summerland to Sepulveda
- Sepulveda to 2nd St.
- 2nd to 6th Streets
- 6th to 10th Streets
- 10th to 13th Streets

The Plan includes recommendations for a “Landscape Tree Palette” as follows:

- Phoenix canariensis, Canary Island Palm
- Prunus cerasifera, Purple Leaf Plum
- Prunus serrulata, Japanese Cherry
- Syagrus romanzoffiana, Queen Palm
- Jacaranda mimosifolia, Jacaranda

The total estimated preliminary budget for the full project build-out is anticipated at just over $7,200,000 with the average cost of $1,200 per lineal foot, and the average cost for a typical intersection improvement estimated at just over $180,000 each.

These estimates are approximations only, and can vary based on the final designs as represented in final construction documents. However, these figures can be used for the purpose of funds procurement.
OPPORTUNITY #17 - LELAND PARK SLOPES ENVIRONMENTAL ENHANCEMENT

This opportunity will address several issues along the slopes and terraces at Leland Park along the west and east side of N. Gaffey Street. The specific improvements proposed for this opportunity include:

1. Planting approx. 200 - 15 gal. large stature trees and a “to be determined” number of drought tolerant shrubs
2. Installation of “smart irrigation” water conservation system to help establish the drought tolerant trees and shrubs
3. Spreading of approximately 3 acres of water conserving natural mulch

These improvements will:

1. Restore native habitat and increase species diversity
2. Provide enhanced hillside erosion protection
3. Protect resource lands that have fallen into derelict condition
4. Improve water quality
5. Improve air quality
6. Enhance the scenic vista along N. Gaffey St.

Blue areas in map above show both east & west slopes of Leland Park along N. Gaffey St. The areas in green represent the area covered by Opportunity #10, and are shown here for reference, and to show that the slope along the SR 47 On Ramp at the north edge of Leland Park East would be enhanced as part of the Opportunity #10 Project. The graphic below shows a Concept Plan for the Leland Park West slope.
OPPORTUNITY #18 - N. GAFFEY PEDESTRIAN PATH - ELBERON BRIDGE TO MIRAFLORES

This opportunity will remedy the fact that there is no pedestrian pathway along North Gaffey Street from the West Elberon Bridge along Leland Park West all the way to Miraflores. Pedestrians who wish to access Leland Park or traverse up to the animal shelter and commercial area that begins at Miraflores have no way to safely do so. Leland Park is a wonderful community resource that until recently had fallen into some disrepair. Recent actions by the City of Los Angeles Dept. of Recreation and Parks to restore a four (4) acre portion of the park with an enhanced baseball field, children’s playground, and adjacent pathways and community center have made the park very attractive as a community resource once again.

A new sidewalk to bridge the gap between W. Elberon Bridge and a proposed new pathway along enhanced terraces at Leland Park will create a safe and easy pedestrian access to the recreational resources at Leland Park.

There are two (2) options for installing a new sidewalk that would not require either the removal of the iconic palm trees or the construction of a very expensive retaining wall. One option is to meander the sidewalk around the palm trees. This option would likely still require retention of soil on the uphill side of each palm tree, but not a full length retaining wall the entire length of the path along the hillside. The second option would be to convert the existing bike lane into a dedicated protected (with bollards) pedestrian and bicycle pathway. Implementation of either option will require a B-Permit for the work within the street right-of-way. This project would also have two short pathway connector branches to connect the path to the terrace pathways within the park. These connectors will require approval by the Dept. of Recreation and Parks, and is covered by Opportunity #17.

The photos on this and the next page depict different locations along the proposed path with additional observations as applicable.
Slope drainage will need repair. Edge of hillside may allow sidewalk meander around palm trees with minimal retention.

Option 2 for new path could use this full avail. Width from base of hill to existing bike lane line up to 12 ft. for multi-use ped/cyclist path separated from traffic with bollards.

Maintenance driveway/road—proposed sidewalk should include branch up hill to connect to Leland Park terraces. New sidewalk along N. Gaffey could meander back to run behind palm from this point north

Location where new ped path will connect with existing sidewalk.
This opportunity addresses the “gap” between where the Gaffey Great Street Project begins at the Harbor Freeway terminus and where Phase II of the N. Gaffey Greenway Project will end at W. Channel St. It complements the proposed pedestrian pathway along the west side of Gaffey St. from the Elberon Bridge to Miraflores St., and it calls for traffic safety and beautification improvements at the Gaffey St./Summerland Ave. intersection.

Specifically, the improvements include:

1. Raised landscaped median on Gaffey St. from Elberon St. Bridge to Miraflores St.—given the additional retail shopping north of this project area and the High Park development coming on line, this section of Gaffey will see increasing traffic. More visitors will be exiting at W. Channel St. to reach north Gaffey Street. Ideally, this raise median beautification should be developed in conjunction with adding the pedestrian path along the west side of Gaffey St. between the Elberon Bridge and Miraflores St.

Specific improvements related to urban greening/active transportation at the Gaffey St./Summerland Intersection would include:

1. Landscaped medians along Summerland Ave. at the intersection approach
2. Bus stop improvements
3. Additional crosswalk at the east Summerland crossing
4. New sidewalk on the east side of N. Gaffey between Summerland and the staircase up to Leland Park East just north of the Elberon Bridge.
5. Landscape slope on the east side of N. Gaffey just north of Summerland up to the Elberon Bridge.
The photos on the left from top to bottom are looking north along N. Gaffey St. from just south of the Elberon St. bridge towards Miraflores St. In order to convert the center median lane to a raised landscape median while still being able to create a pedestrian path along the west side of the street without removing the iconic palm trees, the path will need to meander around the palm trees. In addition, there will need to be some level of retention of the hillside immediately adjacent to the path until the path reaches the maintenance road driveway about halfway up the block towards Miraflores. From that point forward, there is room to construct the path sans any hillside retention. Another option that was mentioned in Opportunity #18 would be to convert the existing bike lane on the west side of N. Gaffey into a protected (with bollards) combined pedestrian and bicycle bike path.

The bottom four (4) photos on this page show the Summerland Ave. median landscape opportunities along the SR 47 offramp as it merges into Summerland Ave. The larger open space area seen on the left side of the photos is an area that could be “enhanced” with a larger bioswale running down the middle from east to west and then landscape with large stature trees—a mix of Coast Live Oaks, Canary Island Pines and Western Cottonwoods. The ground plane can be landscaped with drought tolerant shrubs, boulders and mulch.

This project will require a B-Permit and will need to go through a thorough design/engineering and permitting process that will involve input and approval from Caltrans, LA City Department of Public Works., and LA DOT.
The opportunity here is to enhance the parkway environment along N. Gaffey St. between W. Channel St. and Anaheim St. There is an existing median lane of approximately 12 feet in width along most of the approximately 1.5 miles of N. Gaffey St. within this stretch. The median project would comprise two (2) separate lengths of N. Gaffey due to a section between the two (2) segments of medians that could be converted to a raised landscape median. The southern section runs from W. Channel St. to just north of the Home Depot at the southern edge of a tank farm. There the median narrows until for a while, and then widens again to the approx. 12 ft. width until it narrows again on the approach to Anaheim St.

The very southernmost section along the east side of N. Gaffey between W. Channel and Gatun is an opportunity to construct a new sidewalk and curb and gutter where none currently exists.

Besides the opportunity for a raised landscape median, there is also opportunity for an improved pedestrian parkway on the eastern side of the street from Westmont Dr. north all the way to Anaheim St. This would need to be a much narrower parkway improvement than the existing N. Gaffey St. Phase I Greenway, and the tree planting along that stretch would have to address the presence of underground oil and/or gas pipelines. Right now much of that length is covered in mulch.

There is also opportunity to plant trees along much of the west side of N. Gaffey from Westmont north, but these would need to be small stature trees due to the presence of overhead high voltage electrical distribution lines.

The newly proposed raised median itself could accommodate large stature trees, which would greatly improve the vista from both the north and south bound lanes of traffic.
The opportunity here is to identify and close the gaps that remain along the Pacific Coast Trail (See “2005 LA Harbor California Coast Trail Access Analysis Report”) after accounting for the other Opportunities already represented in this San Pedro Urban Greening Plan. Only those connections that fall within the “regional” geographic focus of this Plan are herein included. This is the area bounded by Paseo Del Mar to the south, Gaffey Street to the west, Anaheim St. north along Gaffey, and Harry Bridges to the north along John S. Gibson. The Master Map of the Pacific Coast Trail is shown on this page to show the overall context for the “LA Harbor Coastal Trail”.

The Pacific Coast Trail “gap” segment opportunities included in this Plan are grouped into three (3) categories that mirror the categories described in the 2005 Report. These are:

1. Lower Coast Trail San Pedro
2. Upper Coast Trail San Pedro
3. Spur Roads San Pedro
4. Connectors San Pedro
OPPORTUNITY #21 - PACIFIC COAST TRAIL CONNECTIONS

LOWER COAST TRAIL SAN PEDRO:

Most of these sections already have pedestrian and bicycle lanes/routes in pretty good condition. However, improvements needed include: additional access support facilities and signage—both directional and interpretive (NOTE—THE NUMBERING BELOW MATCHES THE MAP IN UPPER RIGHT CORNER OF PAGE):

11. “The Crescent” from 22nd to Miner/S. Harbor—this is a designated bike path that provides access to the coast, marinas, and Ports O’Call and Bloch Field with existing amenities, i.e., decorative lights, benches, water fountain and landscaping. Additional opportunities include:
   - Directional signage to northbound bike route
   - Directional signage to fishing marinas, Ports O’Call and Cabrillo Beach
   - Destination signage at Bloch Field or Bloch overlook
   - Increase native plants
   - Connection to southern Red Car Trolley terminus (once line becomes active again)

12. Gulch, from Miner/S. Harbor to Beacon
   - Normally, cyclists would come from Crescent to travel up Gulch to the Beacon bike route, but since this is a short steep uphill climb, the opportunity here is to create an alternative bike route/path north along Harbor
   - Other opportunity is directional signage from Crescent bike lane to alt. route/path above

13. Beacon, from Gulch/14th to 7th
   - Opportunity is to continue bike route from Beacon and 7th to Harbor and 5th

14. 7th, from Beacon to Harbor; Harbor, from 7th to 5th
   - This needs to be coordinated with Sampson Way Realignment Project

15. Harbor from 5th Street to Front Street— NOTE—MOST OF THIS STRETCH INCLUDED IN OPPORTUNITY #__
   - Improve directional bike signage

16. Front Street, from Harbor to John S. Gibson—COVERED WITHIN OPPORTUNITY #__ - FRONT STREET BEAUTIFICATION PROJECT

17. Knoll Hill, from N. Front to Harry Bridges—COVERED WITHIN OPPORTUNITIES #7, 11, 12

18. John Gibson, from N. Front to Harry Bridges Parkway/Wilmington Buffer—Covered within Opportunity #12

UPPER COAST TRAIL SAN PEDRO—GAFFEY:

These are sections along Gaffey St. However, “Green Street” type enhancements have been previously proposed for nearly the entire stretch of Gaffey St. shown in the map (SEE NEXT PAGE) except for south of 13th St. Those “other” opportunities are noted as appropriate in the descriptions below:

25-26. Gaffey from 13th St. to LA Harbor Waterfront Gateway Park – COVERED IN GAFFEY GREAT STREET OPPORTUNITY #16

28. Bandini Canyon Park Trail from Bandini Canyon to Gaffey St. and Harbor – SEE OPPORTUNITIES #13, 15
OPPORTUNITY #21 - PACIFIC COAST TRAIL CONNECTIONS

29. Gaffey from LA Harbor Waterfront Gateway Park to Channel – SEE OPPORTUNITIES #18, 19

30. Peck Park and Canyon to Leland Park and Waterfront Gateway – ALREADY ADDRESSED IN OPPORTUNITIES #14, 15

31-32. Gaffey from Channel to Anaheim Street – SEE OPPORTUNITY #20

UPPER COAST TRAIL SAN PEDRO—PACIFIC:

21—22. Pacific Ave. from 13th St. to O’Farrell—New bike lanes and median lanes were installed recently. SEE OPPORTUNITY #__ METROPOLITAN GREEN STREET for additional pedestrian oriented enhancements that have been proposed for the “Downtown” section of Pacific.

23. Pacific Ave. from O’Farrell to Front St.—SEE OPPORTUNITY #__ for the proposed bike lanes extension and additional tree planting enhancements

SPUR ROADS SAN PEDRO

These include connections from the base of Crescent and Miner to the working waterfront, marinas, fishing wharves and the harbor. ALTHOUGH THERE ARE RECOMMENDATIONS IN THE PCT REPORT, THESE WILL NEED TO BE COORDINATED WITH THE SAMPSON WAY REALIGNMENT ALREADY UNDERWAY AND FUTURE PORTS O’CALL REDEVELOPMENT.
OPPORTUNITY #21 - PACIFIC COAST TRAIL CONNECTIONS

CONNECTORS SAN PEDRO

These connect the Upper Coast Trail along Gaffey St. to the Lower Coast Trail along the Harbor, and include the following:

45. 22nd Street from Crescent to Gaffey—
   - Add bike oriented amenities at corner of Pacific and 22nd
   - Extend bike route/lane to Gaffey

46. 13th Street from Beacon to Gaffey
   - Designate as Bike Route from Beacon to Gaffey & repair sidewalks as needed

47. 9th Street from Beacon to Gaffey
   - Designate and add Bike Route signage between Pacific and 9th Street
   - Add directional signage between to Downtown San Pedro

48. 6th Street Downtown San Pedro
   - Incorporate bike lanes as per Downtown Core Green Streets Opportunity

49. 1st Street from Harbor to Gaffey
   - Add bike lanes to connect Pacific Ave. to Harbor Blvd.

50. O’Farrell from Harbor to Bandini Canyon
   - Add bike lanes to connect LA Harbor Gateway Park to Harbor Blvd.

51. Harbor View Trail
   - Runs parallel to SR 47 freeway from Harbor Blvd. to LA Harbor Waterfront Gateway Park
   - Pedestrian only hiking path

52. Channel from John S. Gibson to Gaffey— ADRESSED IN OPPORTUNITY #____;
This opportunity applies to the segment of Pacific Ave. that acts as the western boundary of the Downtown San Pedro Area from 5th St. south to 9th St.. This is considered the most heavily used pedestrian section of Pacific Ave., and as such, should be enhanced with streetscape elements/improvements delineated for this street “typology”. Those elements and improvements are identified in a prototypical street cross-section shown in the above graphic and depicted in the drawing to the left. These types of enhancements are possible where you have building edges located immediately back of sidewalk and there are no surface parking lots or lots of driveways along the streets. The goal is to create a vibrant and cozy type pedestrian-oriented environment while also implementing water and energy conserving practices associated with “green streets” that have been described earlier in this Plan. The recent extension of bike lanes into these area is another one of those “practices”. Landscape medians with landscaped bulb-outs and parklets and pedestrian lighting are still other “practices”. All of these serve to also create a safer environment for pedestrians because vehicular traffic is slowed down through this stretch of Pacific Ave. These types of improvements are more easily implemented on a street like Pacific Ave. than on a street like Gaffey because the land use along Gaffey and its associated street configuration are more oriented to moving “regional” as well as local vehicular traffic.
This opportunity would best be implemented if 6th and 7th Streets could be configured as a one-way couplet—in this case, 6th Street would be one way towards Pacific Ave. from the Port and 7th Street would be one way towards the Port. In addition, this would likely work best if implemented along with the conversion of select existing alleys and surface parking lots into a series of interconnecting network of “green alleys/paseos” along with “green parking structures” in place of the existing surface parking lots (SEE “OPPORTUNITIES—DOWNTOWN PARKING & ALLEY PASEOS”). One reason is that the one-way couplet would involve eliminating curbside parking on one side of each street. The other reason is that additional retail opportunities would be created with the conversion of existing of alleys and parking lots into more vibrant pedestrian pathways and outlets.

The elements, enhancements and amenities with this Opportunity would include decorative sidewalk paving (perhaps an enhancement of the existing patterns on 6th Street), landscape bulb-outs, outdoor dining bulb-outs, bike lanes and racks (perhaps rent-a-bike racks), rain gardens (built into bulb-outs), pedestrian lighting, and new street trees. City regulations at the time of this Plan publication require that “parklets” be accessible to the general public rather than solely patrons of an adjacent business. A distinction will need to be made between “parklets” and privately accessible “outdoor dining bulb-outs”. SEE NEXT PAGE FOR FURTHER CLARIFICATION. As of this writing, it appears that there is greater community agreement to be able to utilize the “parklet” concept for “outdoor dining” opportunities.
6TH & 7TH STREET
While the images on this page are examples of “Parklets” in other communities, the community-preferred concept here in San Pedro would be to construct “bulb-outs” for outdoor dining and landscaping. These areas would be leased by the restaurants and subject to design guidelines. Such improvements will require both a B-Permit and R-Permit.

Such bulb-outs can be installed on two-way or one-way streets; on streets with transit, streets without transit.

They help create a more vibrant pedestrian experience that complements existing downtown businesses.

They can also be coordinated with landscape only “bulb-outs”.

This could be done with the current 6th Street roadway configuration, or as part of conversion of 6th Street and 7th Street into a one-way couplet. The adjacent sketch illustrates what 6th Street would look like if so configured. Other images illustrate different ways these could be utilized.

PACIFIC AVE.
Similar project to what is described for 6th Street. Project would be done in conjunction with adjustments to roadway configuration that is shown in the adjacent sketch.

This particular type of treatment is consistent with the treatments proposed for “Metropolitan Transition Green Street Typology” segment along Pacific Ave. between 6th Street and 9th Street. SEE OPPORTUNITY #22.

Exact locations would be determined through community and agency outreach process involving local merchants, local residents, and City of LA public agencies.
This particular opportunity involves converting existing surface parking lots and select alleys into enhanced active pedestrian pathway linkages to 6th and 7th Streets in Downtown San Pedro.

This “transformation” would entail conversion of existing retail establishments such that existing “backdoors” would become alternative “front doors”. Select parking lots could also be converted from existing surface only parking to multi-story “green” parking structures with rooftop garden areas.

Proposed elements would include pedestrian lighting, landscaped planters, enhanced permeable ground surface paving, rain gardens, outdoor seating opportunities, and public art.

The goal is to provide much needed additional parking with enhanced pedestrian access to help create a more economically vibrant downtown environmentally-friendly experience.
This opportunity (ORANGE PATHWAY) would greatly improve a pedestrian and bicycle connection from Park Western to W. Channel to the existing bike lanes along N. Gaffey (RED PATHWAYS), the N. Gaffey Phase II Greenway (NOT SHOWN), and the bike lanes on John S. Gibson (GREEN PATHWAY). The extension of the John S. Gibson Bike Lanes is also shown as a GREEN PATHWAY extension from W. Channel to Front St. and then south on N. Pacific to connect to the existing bike lanes at O’Farrell.

The map below shows all of these connections plus the Peck Park to Leland Park Pedestrian Connection (YELLOW PATHWAYS), the Peck Park to Bandini Canyon Trail Park Connection (GREEN PATHWAY), the Summerland to N. Gaffey Bike Connection (RED PATHWAY), and the Summerland to N. Pacific Pedestrian and Bike Connection (BLUE PATHWAY). The PURPLE PATHWAY represents Opportunity #____ - N. Gaffey Median Landscape Enhancement (there are existing bike lanes along this stretch of N. Gaffey.

The photos below depict portions of this new pathway along W. Channel and along portions of Park Western. The primary improvements would include converting the unimproved parkway portions of W. Channel and Park Western to improved parkways with pedestrian pathways (sidewalks) and green parkways that can be planted with trees and rain gardens as technically feasible.
OPPORTUNITY #26 - 22ND AVE. BROWNFIELD RECLAMATION

There are actually two (2) opportunities depicted in the map to the left. Both of these properties are owned by POLA, and any development discussed here will need to be approved by POLA. The first, shown shaded in orange is the conversion of an existing brownfield on 22nd Ave. that is situated between the Red Trolley terminus storage yard to the west and an overflow parking lot to the east. Owned by POLA, this property is across the street and northwest of the Alta Sea development area.

The second opportunity, shown in green, is an undeveloped portion of the parking lot associated with the Crafted development on Miner St. Converting this land to some sort of rain garden or nature area will likely also require the approval of the Leasee.

Also shown on this map but not colored in is the 22nd Avenue Park to the west of the Crafted development area. 22nd Street Park is an 18-acre park on the site of a former tank farm in San Pedro across from 22nd Street Landing at the Port of Los Angeles. It offers walking and biking trails, shade trees, a bocce ball court, restrooms, ample parking and more than four-acres of flat grassy area for recreation — all with a water view.

Completed several years ago, the new park, bounded by 22nd Street, Crescent Avenue and Miner Street in San Pedro, has 500 trees, 1,700 shrubs and 4.5 acres of sod. The park includes a sloped area near Crescent Avenue and 22nd Street, that had been rehabilitated to preserve and enhance the freshwater marsh and native plants while creating the new park. In addition, a pedestrian path was created from the elevated Crescent Avenue area down into the park flatlands to provide an up-close view of this native habitat. Other environmental features of the park include use of recycled water for landscaping maintenance (“purple pipe”) and bioswales for stormwater management.

The idea is to re-create a similar type environmental remediation and enhancement at both the existing brownfield and open space opportunities depicted here. While the land at the Crafted parking lot location could be converted relatively quickly, the brownfield will need to go through at least one level of environmental site assessment, and then an approved clean-up program before any kind of landscape development plan could be formulated and implemented.
Alma Park presents a unique water conservation and stormwater management opportunity for San Pedro. Located in the southern reaches of the community the park cascades down a hillside with a spectacular view of the Port of Los Angeles. The upper reach starts at W. 22nd St. and flows down towards W. 21st St. which bisects the park. The lower half of the park is a deep grotto that was once a pond. Like many similar stretches of the hills of San Pedro on the east side of the Palos Verde Peninsula, this was once a natural creek with a series of cascading ponds on its way to the Pacific Ocean at what is now the Port of Los Angeles.

The concept embodied by this opportunity is to restore a portion of the natural “watershed functionality” that once existed at Alma Park while also restoring such historically constructed design elements as the cut stone retaining walls and seat walls in both the upper and lower “grotto” areas of the Park.

Restoration of the natural “watershed functionality” would involve re-designing and reconstructing how stormwater and dry-weather runoff from 22nd St., 21st St., and Alma St., and from within the Park itself is managed. Currently, stormwater and any irrigation runoff is directed to storm drains and flushed out to the Pacific Ocean. This opportunity would “restore nature’s services” by intercepting this water and infiltrating it into the local groundwater. The infiltration/percolation of this water through the soil and underlying rocks will clean the water and replenishment the local water supply.
This opportunity would restore the south side hillside area along N. Pacific between Front St. and W. Channel. This restoration would include the re-purposing of the current land use along this segment, and the designation of the land as open space. The lower portion along N. Pacific would be converted into a parkway similar to what exists across the street, and would include a pedestrian walkway all the way to Front St., and a bike lane that would connect to the existing bike lanes along John S. Gibson, and the proposed bike lanes along W. Channel, and N. Pacific south of Front St.

The photos below show views along this stretch of N. Pacific depicting the existing conditions.
OPPORTUNITY #29—SAN PEDRO CANYON RESTORATION AND 1ST & 6TH STREET GREEN STREET BIOSWALES AND RAIN GARDENS

This opportunity involves restoring “nature’s services” along 6th Street following the natural drainage pattern of San Pedro Canyon prior to the installation of storm drains, and providing viable pedestrian connections between the remnants of San Pedro Canyon, and existing streets/sidewalks. There are several components to this opportunity. The first would restore native habitat within the semi-natural remnants of San Pedro Canyon that lie within the San Pedro Community to the east of Miraleste Dr. There are several trails and parks to the west of these areas within the Rancho Palos Verdes that are outlined in light green, and fall into the Rancho Palos Verdes jurisdiction. Therefore, this Opportunity is to both connect to these existing “natural” areas with the remnants of natural areas within San Pedro and to extend and enhance these connections all the way into Downtown San Pedro, along both 1st & 6th Streets. The sections of this Opportunity are as follows:

1. Section of the Canyon that flows from Miraleste Dr. to Western Ave. and that is sandwiched between Santa Cruz St. and 1st St.
2. Southern remnant of this Canyon that lies south of Miraleste Canyon Estates and north of El Rey Rd. that also flows between Miraleste Dr. and Western Ave.
3. Connection along 1st St. from Section #1 to Harbor View Dr.
4. 1st Street from Harbor View Dr. to Harbor Blvd.
5. Connection along Harbor View Dr. from 1st St. to 3rd St.
6. Small section of the Canyon that runs from the intersection of Harbor View Dr. and 3rd St to 4th St.
7. Short connection along 4th St.
8. Remnant of San Pedro Canyon from 4th St. down to 6th St.
9. Small section of the Canyon between Western Ave. and Weymouth Ave. that stops at the western terminus of 6th St.
10. 6th St. from Weymouth to Pacific where 6th St. becomes a Downtown Core Green Street to the Harbor
The maps on this page show two (2) different topographic views of the Los Angeles County Storm Drain System in San Pedro. The key to both maps is shown above. The point of these maps is to show the primary natural drainage patterns from the hills/canyons on the Palos Verdes hillsides into the plains of San Pedro and the harbor. Upon examination therefore, one can see that starting from the north, Peck Canyon, San Pedro Canyon and then Averill Canyon are the primary drainage networks into San Pedro.

As Peck Canyon lies within Peck Park, and has been the subject of a recent Prop. O improvement project, and Averill Canyon flows into an already improved park with a remnant of natural drainage, that leaves San Pedro Canyon as the main remaining opportunity. As it turns out this Canyon drains into a storm drain network that runs down 6th Street, which is the center of Downtown San Pedro.
Specific enhancements envisioned with this Opportunity include:

1. Restoration of native habitat within the remnant portions of San Pedro Canyon
2. Restoration of natural water flow as can be done safely, and that does not already exist within the remnant portions
3. Connecting these remnant portions with pedestrian paths/hiking trails
4. Install as many bioswales and rain gardens within parkways along both 1st Street and 6th Street as feasible and possible

There are a number of steps that will be needed before such enhancements can be implemented. They are:

1. Determine agency and/or private ownership of the targeted remnant segments
2. Conduct geotechnical investigation of each of the areas, including the parkway along both target streets to determine the geological substrate, distance to groundwater, condition of groundwater and percolation rates of the substrate
3. Determine the CEQA documentation required for the project
4. Complete CEQA for the project
5. Develop design & engineering documents as needed—this would include prototypes for bioswale/rain garden segments that can be used along 1st and 6th Streets
6. Identify and secure adequate funding—this could mean dividing the project into some logical sequencing to expedite implementation with partial funding
7. Secure necessary permits

Some recommended guidelines should include:

1. Using a native plant palette
2. Using “smart irrigation” practices where irrigation is needed to establish plants
3. Use recycled/reclaimed water for supplemental irrigation as feasible
4. Utilize City of Los Angeles “Green Streets and Alleys Design Guidelines” as starting point of design of the prototype parkway bioswales/rain gardens
OPPORTUNITY #30— S. PACIFIC AVE. TRAFFIC CALMING GREEN STREET ENHANCEMENTS

This opportunity focuses on creating traffic calming and other green street enhancements on S. Pacific Ave. south of 26th Street to Shepard. This section of Pacific was identified as a “Residential with Parkways Green Street” because of a high frequency of wide landscape parkways. Besides providing for the streetscape enhancements appropriate for this type of Green Street, this “Opportunity” addresses a concern for pedestrian safety along a stretch of Pacific that is a key link from South San Pedro to Downtown San Pedro and beyond. The traffic calming would be achieved through the construction of landscape bulb-outs at key intersections with textured paving crosswalks. These landscape bulb-outs, as well as intervening sections of parkways would be designed as bioswales and/or rain gardens.

Implementation will require a B-Permit for the landscape bulb-outs, an A-Permit for bioswales and/or rain gardens within the existing parkways, and a Tree Planting Permit for any tree planting. Unless there are overhead high voltage wires most of the parkways along this segment could be planted with large stature trees.

There are a number of steps that will be needed before such enhancements can be implemented. They are:

1. Conduct geotechnical investigation of each of the areas, including the parkway along both target streets to determine the geological substrate, distance to groundwater, condition of groundwater and percolation rates of the substrate
2. Develop prototypical design & engineering documents as needed—this would be primarily prototypes for the landscape/bioswales bulb-outs
3. Identify and secure adequate funding—this could mean dividing the project into some logical sequencing to expedite implementation with partial funding
4. Secure necessary permits

Some recommended guidelines should include:

1. Using a native plant palette for the bioswales and trees as practical
2. Using “smart irrigation” design where irrigation is needed to establish plants
3. Use recycled/reclaimed water for supplemental irrigation as feasible
4. Utilize City of Los Angeles “Green Streets and Alleys Design Guidelines” as starting point of design of the prototype parkway bioswales/rain gardens
OPPORTUNITY #31– SAN PEDRO RECYCLED WATER CONNECTION FROM MACHADO LAKE/TERMINAL ISLAND

This opportunity would leverage the recycled water supply line that connects Terminal Island Recycled Water Plant to Machado Lake by installing a new recycled water distribution line that runs south down N. Gaffey St. into San Pedro. This water would be used for irrigation of open space and street trees, and possibly other public landscape treatments. The final distribution layout will require coordination between multiple City of Los Angeles agencies responsible for design & engineering, construction and operations and maintenance. This is a very long term project due to its cost and the amount of interagency coordination that will be required for environmental clearance, design, permitting and operations and maintenance. Perhaps the biggest challenge will be determining appropriate mechanisms to pay for this water supply. Nevertheless, the potential benefits warrant including this Opportunity in this San Pedro Urban Greening Plan.

The map above shows the extent of both the existing recycled water line from Terminal Island to Machado Lake at the intersection of Anaheim and N. Gaffey and the proposed extension from that location south to the Caltrans Triangle under the Gaffey Street Bridge at Summerland Place.
OPPORTUNITY #32– BANDINI CANYON/CALTRANS/LELAND EAST SUB-WATERSHEDS STORM WATER CAPTURE & RE-USE

This opportunity involves capturing the water that drains down Bandini Canyon and surrounding streets in that sub-watershed into an underground storage facility at or near the convergence of Oliver St., Summerland Pl. and Marshall Ct., and to the storm drain that is located in the Caltrans Triangle. This storm water would be infiltrated and treated naturally within the substrate of the bioswale that will be constructed in the Caltrans Triangle. Phase I of that bioswale facility is part of Opportunity #1—Greater Downtown Urban Forest Restoration.

There are a number of steps that will be needed before this project can be implemented. They are:

1. Conduct geotechnical investigation of each of the sub-watershed determine the geological substrate, distance to groundwater, condition of groundwater and percolation rates of the substrate
2. Determine the CEQA documentation required for the project
3. Complete CEQA for the project
4. Develop design & engineering documents as needed
5. Identify and secure adequate funding—this could mean dividing the project into some logical sequencing to expedite implementation with partial funding
6. Secure necessary permits

The map to the left shows the approximate extent of the sub-watershed that would drain into the area of the intersection of Summerland Pl., Marshall Ct. and the Caltrans Triangle.
APPENDIX A—PLANT SPECIES LIST

The following pages contain a plant species list that can be used when selecting plants for specific landscape project opportunities and elements included in this Plan. Most of the non-tree plants on this list are native to Southern California. All are well-adapted for the use indicated in the Plant List Chart.

The Chart includes quite a number of tree species, including those that have been discussed in Opportunity #2—Priority Green Streets Tree Planting Strategies. It is highly recommended that whenever possible all tree species selected for planting in parks and open space be native trees. The Chart includes a column that identifies which of these trees are considered “large stature”. As such trees provide considerable “Greenhouse Gas Reduction” (GHG) benefits, we strongly recommend that they be used whenever possible in your tree planting projects. Site suitability for large stature trees can be determined using the Street Tree Selection Flow Chart in Appendix B. While a number of the large stature trees are not considered native to Southern California, they, and some other non-large stature trees are listed because they are well-adapted to the micro-climates, considered drought tolerant and can handle the harsh street conditions found in San Pedro.
### APPENDIX A—PLANT SPECIES LIST

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Woodlands</th>
<th>Bioswales/Rain Gardens</th>
<th>Riparian</th>
<th>Meadows</th>
<th>Open Space Trees</th>
<th>Street Trees</th>
<th>Large Stature Tree?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer macrophyllum</td>
<td>Big leaf maple</td>
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<td>Layia platyglossa</td>
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<td>Lupinus bicolor</td>
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<td>Melica imperfecta</td>
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<td>Metrosideros excelsa</td>
<td>New Zealand Christmas Tree</td>
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# APPENDIX A—PLANT SPECIES LIST

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<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Woodlands</th>
<th>Bio swales/Rain Gardens</th>
<th>Riparian</th>
<th>Meadows</th>
<th>Open Space Trees</th>
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<td>Pinus canariensis</td>
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<td>Platanus racemosa</td>
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<td>Podocarpus gracilicu</td>
<td>Fern Pine</td>
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<tr>
<td>Populus fremontii</td>
<td>Western Cottonwood</td>
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<td>Prunus ilicifolia, subsp. Lyoni</td>
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<td>Quercus tomentella</td>
<td>Island Oak</td>
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<td>Rhus trilobata</td>
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<tr>
<td>Ribes indecorum</td>
<td>White-flowering currant</td>
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<tr>
<td>Ribes speciosum</td>
<td>Fuschia-flowered gooseberry</td>
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<tr>
<td>Romneya coulteri</td>
<td>Matilija poppy</td>
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<tr>
<td>Rubus ursinus</td>
<td>California blackberry</td>
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<tr>
<td>Salvia apiana</td>
<td>White sage</td>
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<tr>
<td>Salvia clevelandii</td>
<td>Fragrant sage</td>
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<tr>
<td>Salvia dornii</td>
<td>Don’s sage</td>
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<tr>
<td>Salvia leucophylla</td>
<td>Purple sage</td>
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<tr>
<td>Salvia mellifera</td>
<td>Black sage</td>
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<tr>
<td>Syagrus romanzoffiana</td>
<td>Queen Palm</td>
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<tr>
<td>Washingtonia filifera</td>
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<td>Woodwardia fimbriata</td>
<td>Giant chain fern</td>
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</tbody>
</table>
When selecting tree species to use on a Project, use the “principle” of “Right Tree Right Place”. Basically, this means select a tree that works for the space after considering all applicable selection criteria. The reason this is so critical is that most of the tree “conflicts” with other infrastructure can be traced back to having selected and planted a tree that was ill-suited for the space in which it was planted. At the same time, it is highly recommended to “alter” the space whenever possible. A good example of this is cutting out existing concrete to create a larger grow space for trees. This, in fact, is precisely what was recommended and has/is being done during the implementation of Opportunity #1.

The following is a list of criteria that should be used when selecting tree species for any project, including those “opportunities” that include tree planting of any kind as described in this Plan:

1. Street trees vs. Open Space trees—what is the land use of the land on which you are planting the tree(s)? This will have an important bearing on the functions or “services” you expect the tree to perform. It will also point you to the requisite design criteria and permitting requirements to plant your trees.

2. Grow Space—this refers to the ground area in which you are planning to plant your trees, and correlates with the amount of soil that will be available for tree roots to grow into. The larger and better quality spaces can accommodate larger stature (refers to the maximum height the tree will reach at maturity) trees. Larger trees generally provide more environmental benefits, so this is important.

3. Infrastructure—this refers to the overhead, at ground level and underground infrastructure, i.e., wires, light, power, and traffic signals & signage, pipes, concrete and other hardscape, utility vaults & boxes, buildings and building signage. It also refers to the need to maintain certain height clearances for pedestrians, bicyclists and vehicles. All public spaces have design criteria that must be met related to clearances of trees—canopy, roots and trunks—from this infrastructure.

4. Safety, Wind, Fire—Safety considerations are linked to maintaining the required clearances from existing infrastructure, but also addresses the presence of people around and under trees, e.g., playgrounds, picnic areas. The most important characteristic in those instances is to select trees with strong branch attachments. In other words, the trees selected should not be prone to branches falling in moderate to high winds expected in the area. Wind refers to the ability of tree species to function well as a windbreak. Fire refers to evaluating the risk of the tree species to burn in a fire and where the trees are located on fire prone property relative to buildings and land use.

5. Climate Zone—This refers to the “Sunset Western Garden” Climate Zones. See http://www.sunset.com/garden/climate-zones/. There are three (3) climate zones within the San Pedro area. They are: Zones 22, 23, 24. It is recommended to select tree species that are adapted to grow well in these Zones.

6. Invasive tree species—The rule here is: DO NOT SELECT KNOWN INVASIVE TREE SPECIES.

7. Species Diversity—This refers to the number of different tree species that are planted/present in a given community. The greater number the better. This is because too much dependence on one or a few species in an area makes the urban forest population vulnerable to catastrophic loss if hit by a pest or disease. Therefore, it is always best to have a diverse tree species palette. As can be seen in Appendix A, the recommendations in this Plan do provide for that.

8. Pest and Disease Issues—The basic principle to apply here is to avoid selecting tree species that have known serious pest and/or disease problems. However, this needs to be handled judiciously through consultation with local tree experts, such as Certified Arborists or Consulting Arborists. This is because it is important to consider the latest scientific information available with the Arboriculture profession before categorically eliminating use of particular tree species—SEE DISCUSSION IN OPPORTUNITY #2 SECTION OF THIS PLAN FOR MORE INFO.
APPENDIX B—SPECIES SELECTION CRITERIA

9. Availability at nurseries— This is here to make sure that tree species you wish to use on a given project are actually available at tree nurseries in the quantities you need when you need them. This can be tricky for projects with a long lead time from concept design to construction documents to construction because it can be several years from the time you select trees in a design before they will be planted at the end of a construction project. Nevertheless, it is highly recommended to check in with several nurseries about whether they are and will continue to grow the species you want to use on your project.

10. Water Needs— This is pretty obvious, and is especially important in that Southern California, and San Pedro, in particular has recently gone through a prolonged drought period, and because the region is generally considered to be semi-arid to begin with. This is where selecting species that are native or indigenous to the region is highly advisable. However, there are nuances to application of this criteria. As an example, tree planted on south or west facing slopes in a more inland area will experience a different micro-climate than those planted in riverine or riparian areas on north and east facing areas. It is also important to consider whether there will be a supplemental “smart” irrigation system to support the trees, and what kind of water source will be used. For example, recycled water is likely to become more available in the future (SEE OPPORTUNITIES #31 & 32). As this water often has a higher salt content relative to potable water, you will need to select tree species that are more salt tolerant when using such water.

11. Tree Function— This refers to the function(s) you expect the trees to provide for you project. This commonly is shade, but can include “greenhouse gas reduction” (GHG)/energy conservation, erosion control, habitat restoration, water conservation/storm water flow mitigation, and/or fruit production.

12. Leaf, Seed, & Fruit Drop— All trees, even evergreen trees, drop something(s). These can be leaves, fruit, or flowers. It is important to UNDERSTAND YOUR PROJECT LOCATION. If you are planting trees someplace where flower or fruit drop could be considered a nuisance, you need to either adequately provide for timely removal and, hopefully, recycling of this material, or select a species with less of this material drop. As this material is often a good source of natural mulch we recommend allowing this material to remain on the ground in either “unimproved (wild) or passive recreation open space applications.

13. Beautification— This is the most visually compelling reason to plant trees. Seasonal flower displays, size and shape of the tree canopy, leaf color, evergreen vs. deciduous and fall leaf color displays are all important considerations. The tree size relative to the scale of the street environment is another one. Using trees to screen unsightly views is another important consideration.

The following pages illustrate some tree selection flow charts that apply some of the selection criteria described above. This is not meant to be all inclusive, but rather just some examples of how to apply the criteria while selecting tree species for you projects.
APPENDIX B—SPECIES SELECTION CRITERIA

The flowchart on this page just shows the possible decision trees that can be created to facilitate the selection of tree species for different types of land use situations. The two (2) shown in red are shown in greater detail on the next two pages.
This is the flowchart “decision tree” created for street trees in San Pedro. The primary decision point is the size of the grow space, which determines whether the locations are suitable for small vs. medium vs. large stature trees. The species list in Appendix A contains trees that fall into all of those categories. The remaining criteria to use to finalize your selection can be found in the preceding pages of this Appendix B. UFEI refers to the “Urban Forest Ecosystems Institute SelecTree Tree Selection Guide” website, https://selectree.calpoly.edu. The criteria shown on the preceding pages can be used to refine your search for suitable trees for street tree locations, as well as the other types of locations shown on the flowchart on the preceding page and the following page.
APPENDIX B—SPECIES SELECTION CRITERIA

The flowchart on this page can be used for selecting suitable trees for parks or open space type sites, and illustrates the kind of distinctions that can be made when choosing trees for picnic areas vs. walking trails vs. bicycle trails vs. equestrian trails vs. parking lots. In all such locations large stature trees can be considered suitable because the grow space available is more than adequate for the placement of such trees. Once again the other criteria shown earlier in this Appendix should be used in conjunction with the UFEI website to refine your search.
APPENDIX C—STREET TREE LOCATION SELECTION FOR LARGE STATURE TREES

Appendix B showed a decision tree flowchart for identifying suitable sites for different size trees at maturity (large, medium, or small). However, when actually doing site surveys along city streets to identify sites suitable for large stature trees, we often find that the existing available grow space is not adequate. This Appendix illustrates how such a constraint can be overcome by identifying the POTENTIAL for available tree planting sites to be transformed into suitable sites by removing additional concrete. This is the focus of the tree planting effort within Opportunity #1.

The map on this page shows the DAC (Disadvantaged Communities) census tracts outlined by percentile ranges, with those illustrated with the red overlay as being in the 85% or greater percentile of DAC criteria. This was the initial focus of the tree planting portion of Opportunity #1. The following pages show how available tree planting sites suitable for large stature trees were determined and/or created within this area.
The chart below shows how “block sides” of Centre Street West, was analyzed from Amar to 14th Street for suitability for planting large stature street trees. The objective was to determine whether there were either existing suitable locations or the POTENTIAL to create suitable locations by removing concrete. The block sides highlighted in red were not suitable. There were two (2) criteria used to determine the potential. One was the presence of overhead powerlines. If yes, then the sites along that block did not have potential regardless of whether the sidewalk was wide enough to cut out a larger grow space area.

If no overhead powerlines then the “Potential Grow Width” column became the determining factor. The minimum grow space width to accommodate large stature trees was 5 ft. Blocks with that potential are highlighted in green.

### APPENDIX C—STREET TREE LOCATION SELECTION FOR LARGE STATURE TREES

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</table>

**KEY:** Enter one value only for each cell. Enter "N" only if there is no block "growth" does not exist. Grow Space Width is the POTENTIAL width based on the width of the existing sidewalk.

- P = Peak
- RP = Recede
- TW = True Wall
- B = Bisection
- N = None
- F = Fisheye
- RTW = True Wall
- FRP = Fisheye
- RTW = True Wall
- FRP = Fisheye

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APPENDIX C—STREET TREE LOCATION SELECTION FOR LARGE STATURE TREES

The chart below shows how “block sides” of Centre Street East, was analyzed from Amar to 14th Street for suitability for planting large stature street trees. As with Centre Street West shown on the previous page, the objective was to determine whether there were either existing suitable locations or the POTENTIAL to create suitable locations by removing concrete. As can be seen there were significantly more suitable blocks (highlighted in green) on this side of Centre Street. That was primarily because of the ABSENCE of overhead powerlines. The minimum grow space width to accommodate large stature trees was 5 ft. Blocks with that potential are highlighted in green. The last column shows the maximum size of the tree planting sites that can be created within a given block. Those shown as 4 ft. x 8 ft. are highlighted in yellow because they can only accommodate medium stature trees. The “Distance to Structure” and “Azimuth” columns are used as part of the calculations to determine the amount of “Greenhouse Gas Reduction” (GHG) that can be achieved once trees are planted. Those determinations are required for the CalFire Grant that funded Opportunity #1.

<table>
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<th>Blocks</th>
<th>Grow Type</th>
<th>Actual Grow Width</th>
<th>Potential Grow Width</th>
<th>SW Width</th>
<th>OH UUL</th>
<th>Dist. Street</th>
<th>Azimuth</th>
<th>Noted/Noted Analysis - Pot. Large Stature/Street Trees Not</th>
<th>Grow Space Characterization</th>
<th>Distant to Structure</th>
<th>Azimuth</th>
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APPENDIX D— LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES

The “Green Streets & Green Alleys Design Guidelines Standards 1st Edition” is the primary guide to use for any of the bioswale or rain garden type opportunities within public streets or alleys identified in this Plan. This can also be used for design guidelines on such projects on private property, though such projects will not require an R, A or B-Permit. The guidelines for doing such projects on private property can be found in Appendix E, and within the LADWP’s Residential Turf Replacement Program website pages that are referenced in Opportunity #9. The following pages in this Appendix show the flowchart/decision tree that should be used to determine what type(s) of permit will be required and the checklist to use for obtaining such permits. This full document can be downloaded from the following web link:

https://nacto.org/docs/usdg/green_streets_and_green_alleys_la.pdf
APPENDIX D—LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES

Below are checklist items designed to assist the applicant in the implementation of Green Infrastructure Projects:

R-Permit

☐ Applicant obtains copy of Green Infrastructure BMP Design Guidelines from any public counter or at www.lafirmwater.org
☐ Applicant submits R-Permit application and pays fees
☐ Applicant submits outreachment plan
☐ Applicant obtains plan check & approval from BOS
☐ City staff checks R-Permit application and determines appropriate permit type and fees. If work is minor, applicant is also directed to obtain A-Permit. If work involves major street improvements, applicant to obtain B-Permit in lieu of A-Permit (please see respective permit sections below).
☐ Applicant pays fees
☐ BOE staff conducts field investigation if required
☐ BOE staff reviews R-Permit application and determines conditions of approval.
☐ Other city agencies review R-Permit application & determine conditions of approval, if necessary (ESE, DOT, BSL, etc)
☐ BOE prepares full Board Report, if necessary
☐ Board of Public Works conducts public hearing and approves R-Permit, if necessary
☐ Applicant completes Waiver of Damages Agreement and provides liability insurance including covenant and agreement for the BMPs with G&G
☐ Applicant completes other required permit processes, if necessary
☐ BOE issues R-Permit

A-Permit (minor repair/replacement work)

☐ Applicant applies for A-Permit
☐ Applicant pays fees
☐ City staff checks & approves A-Permit
☐ City staff issues A-Permit
☐ Applicant & City staff sign permit
☐ Applicant calls BCA prior to start of construction
☐ Applicant completes construction
☐ Applicant calls BCA for final inspection
☐ BCA inspection signs off permit

B-Permit (major street improvement work)

☐ Applicant hires Licensed Private Engineer to prepare B-Permit Plans and application
☐ Applicant’s Private Engineer applies for B-Permit
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APPENDIX D—LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES
The document referenced on this page contains guidelines and requirements for designing and constructing what are called “Low Impact Development (LID)” improvements to private property. These improvements convert impervious surfaces, e.g. concrete, to pervious surfaces such as landscape and permeable paving that are used to capture/harvest rainwater for infiltration or re-use on the property to reduce storm water runoff from the site. It is available at the following link for download:


As stated in the publications introduction: “The purpose of this handbook is to assist developers in complying with the requirements of the Development Planning Program regulations of the City’s Stormwater Program. This handbook summarizes the City’s project review and permitting process, identifies stormwater mitigation measures, and references source and treatment control BMP information. It provides guidance for individuals involved in new development and redevelopment projects. The target audience for this handbook includes developers, designers, contractors, homeowners, and City staffs that are engaged in plan-checking, permitting, and inspections related to land development activities. This handbook also contains the necessary forms and worksheets required to be completed by the developer for approval.”

This generally does not apply to those homeowners who wish to take advantage of Opportunity #9—[LADWP’s] Residential Turf Replacement Program if they are simply removing and replacing landscaped areas currently covered in turf with a drought tolerant landscape that may include simple infiltration bioswales and/or rain gardens. However, it may apply if such conversions would include re-use of the harvested rainwater within a piped irrigation system.

PLEASE USE THE STANDARDS AND GUIDELINES FOUND IN APPENDIX D—LOS ANGELES GREEN STREETS & ALLEYS DESIGN GUIDELINES.
APPENDIX F—LOS ANGELES COMPLETE STREETS DESIGN GUIDE

The document shown on this page is a very comprehensive guide that should be used when developing designs for traffic calming measures, pedestrian and bicyclists oriented improvements, transit-oriented improvements, and landscape and outdoor dining opportunity bulb-outs.

This document can be found and downloaded at the following link:

APPENDIX G—ENVIRONMENTAL CLEARANCE PROCESS/GUIDELINES

The chart on the following page shows how to decide what type of CEQA (California Environmental Quality Act) filing is required for a given project. Most of the “Opportunities” identified in this Plan would be considered “Categorically Exempt” for one of the reasons listed in this chart. However, there are a few that will require more extensive environmental assessment documentation. We recommend that project proponents work with their local jurisdictional agency representatives to determine what is required and how best to complete that documentation. It is very important to complete this process or have the process well in hand before applying for any type of grant funding, as most government grant programs will require completion of the environmental assessment/documentation process before awarding grant funds.
APPENDIX F—ENVIRONMENTAL CLEARANCE PROCESS/GUIDELINES

CEQA Process Flow Chart

1. **Public Agency determines whether the activity is a "project"**
   - **Project**
     - Project is ministerial
     - No possible significant effect
     - Statutory exemption
     - Categorical exemption
   - **Not Exempt**
     - Public agency evaluates project to determine if there is a possibility that the project may have a significant effect on environment
     - **Possible significant effect**
       - Determination of lead agency where more than one public agency is involved
         - **RESponsible Agency**
           - Respond to informal consultation
           - Consultation
         - **LEAD AGENCY**
           - Lead agency prepares initial study
           - Lead agency decision to prepare EIR or Negative Declaration
             - **EIR**
               - Lead agency sends Notice of Preparation to responsible agency
               - Lead agency prepares draft EIR
               - Lead agency files Notice of Completion and gives public notice of availability of draft EIR
                 - Public Review Period
                   - Lead agency prepares final EIR including responses to comments on draft EIR
                   - Consideration and approval of final EIR by decision-making body
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
                 - Consideration and approval of Negative Declaration by decision-making body
                   - Final EIR
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
             - **Negative Declaration**
               - Lead Agency gives public notice of availability of Negative Declaration
                 - Public Review Period
                   - Lead agency prepares final Negative Declaration
                   - Consideration and approval of Negative Declaration by decision-making body
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
         - **No further action required under CEQA**
       - **Notice of Exemption may be filed**

2. **Not a project**
   - Project is ministerial
   - No possible significant effect
   - Statutory exemption
   - Categorical exemption

3. **Public Agency determines if the project is exempt**
   - **Not Exempt**
     - Public agency evaluates project to determine if there is a possibility that the project may have a significant effect on environment
     - **Possible significant effect**
       - Determination of lead agency where more than one public agency is involved
         - **RESponsible Agency**
           - Respond to informal consultation
           - Consultation
         - **LEAD AGENCY**
           - Lead agency prepares initial study
           - Lead agency decision to prepare EIR or Negative Declaration
             - **EIR**
               - Lead agency sends Notice of Preparation to responsible agency
               - Lead agency prepares draft EIR
               - Lead agency files Notice of Completion and gives public notice of availability of draft EIR
                 - Public Review Period
                   - Lead agency prepares final EIR including responses to comments on draft EIR
                   - Consideration and approval of final EIR by decision-making body
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
                 - Consideration and approval of Negative Declaration by decision-making body
                   - Final EIR
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
             - **Negative Declaration**
               - Lead Agency gives public notice of availability of Negative Declaration
                 - Public Review Period
                   - Lead agency prepares final Negative Declaration
                   - Consideration and approval of Negative Declaration by decision-making body
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
       - **No further action required under CEQA**
       - **Notice of Exemption may be filed**

4. **Public Agency determines if the project is exempt**
   - **Not Exempt**
     - Public agency evaluates project to determine if there is a possibility that the project may have a significant effect on environment
     - **Possible significant effect**
       - Determination of lead agency where more than one public agency is involved
         - **RESponsible Agency**
           - Respond to informal consultation
           - Consultation
         - **LEAD AGENCY**
           - Lead agency prepares initial study
           - Lead agency decision to prepare EIR or Negative Declaration
             - **EIR**
               - Lead agency sends Notice of Preparation to responsible agency
               - Lead agency prepares draft EIR
               - Lead agency files Notice of Completion and gives public notice of availability of draft EIR
                 - Public Review Period
                   - Lead agency prepares final EIR including responses to comments on draft EIR
                   - Consideration and approval of final EIR by decision-making body
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
                 - Consideration and approval of Negative Declaration by decision-making body
                   - Final EIR
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
             - **Negative Declaration**
               - Lead Agency gives public notice of availability of Negative Declaration
                 - Public Review Period
                   - Lead agency prepares final Negative Declaration
                   - Consideration and approval of Negative Declaration by decision-making body
                     - Findings on feasibility of reducing or avoiding significant environmental effects
                       - Decision on project
                         - State Agencies
                           - File Notice of Determination with Office of Planning & Research
                         - Local Agencies
                           - File Notice of Determination with County Clerk
       - **No further action required under CEQA**
       - **Notice of Exemption may be filed**
Brownfield redevelopment has more stringent environmental assessment, clean-up and documentation requirements than any other type of land use development project. A good resource for what is required for such development can be found in EPA’s publication, “Anatomy of Brownfields Redevelopment”. This publication is available for download at: https://www.epa.gov/sites/production/files/2015-09/documents/anatbf_redev_101106.pdf

This applies specifically to Opportunity #6—22nd St. Brownfield Reclamation. In this particular case the brownfield redevelopment would be for creating a park.