



City of Santa Barbara California

PLANNING COMMISSION STAFF REPORT

REPORT DATE: December 12, 2013
AGENDA DATE: December 19, 2013
PROJECT ADDRESS: 520 E. Yanonali St (MST2013-00388)
 El Estero Wastewater Treatment Plant
 Tertiary Filtration Plant Replacement
TO: Planning Commission
FROM: Planning Division, (805) 564-5470, extension 4558
 Renee Brooke, AICP, Senior Planner *RB*
 Steven Greer, Project Planner/Environmental Analyst

I. PROJECT DESCRIPTION

The project consists of the replacement of the existing Tertiary Filtration Plant for the production of recycled water at the El Estero Wastewater Treatment Plant. The existing tertiary filtration plant and related facilities encompass approximately 10,000 square feet of area. The project will demolish the existing 2,200 square foot granular media filter complex, and ancillary equipment, then construct a new 5,300 square foot complex, including a 2,900 square foot canopy. Construction and installation of replacement facilities will occur within the current tertiary filtration plant operations footprint. The new tertiary system will utilize microfiltration / ultrafiltration technology. The project will also include upgrades to chemical containment areas, the electrical system and the reclaimed water chlorine contact basin..

II. REQUIRED APPLICATIONS

The discretionary application required for this project is a Coastal Development Permit (CDP2013-00010) to allow the proposed project in the Appealable Jurisdiction of the City's Coastal Zone (SBMC §28.45.009);

APPLICATION DEEMED COMPLETE: November 14, 2013
DATE ACTION REQUIRED: January 16, 2014

III. RECOMMENDATION

If approved as proposed, the project would conform to the City's Zoning and Building Ordinances and policies of the General Plan and Local Coastal Plan, as discussed in Section II of this report. In addition, the size and massing of the project are consistent with the surrounding built environment. Therefore, Staff recommends that the Planning Commission approve a Coastal Development Permit, allowing for the proposed project, making the findings outlined in Section X of this report, and subject to the conditions of approval in Exhibit A.



El Estero Wastewater Treatment Plant – Tertiary Plant Facilities

IV. BACKGROUND

El Estero is an 11 million gallons per day (mgd) wastewater treatment plant that was initially constructed in 1951. At that time it operated as a “screening plant” with ocean discharge, where mechanically operated screens removed solids and debris immediately before the untreated wastewater was discharged into the ocean. Since then, upgrades have occurred in 1973 (completed in 1979), which provided secondary treatment, and again in 1988 to include tertiary treatment. The plant has primary sedimentation, secondary treatment, tertiary filtration, and disinfection processes.

Recycled water production preserves potable water supplies, and is therefore a critical water supply source, especially during drought conditions. In recent years, the tertiary filter effluent has not reliably met regulatory turbidity limits. As a result, the City currently blends tertiary filter effluent with potable water to decrease turbidity and Total Dissolved Solids (TDS) in the recycled water. Therefore, it is essential to construct this Project in a timely manner, as the City currently blends tertiary effluent with up to 90% potable water. This is of great concern while the region is experiencing below average rainfall. In addition, the existing tertiary filter is experiencing a number of operational, maintenance and safety challenges.

V. SITE INFORMATION AND PROJECT STATISTICS

A. SITE INFORMATION

Applicant:	City of Santa Barbara Public Works Department		
Property Owner:	City of Santa Barbara		
Site Information			
Parcel Number:	017-113-016	Lot Area:	344,124 square feet
General Plan:	Institutional	Zoning:	OM-1/S-D-3
Local Coastal Plan: Major Public and Institutional			
Existing Use:	Wastewater treatment	Topography:	Minor slope, less than 1%
Adjacent Land Uses			
North - Industrial		East – Industrial/Commercial	
South – Railroad/Chase Palm Park		West – Laguna Creek Channel, Industrial	

VI. ISSUES

Staff recommends that the Planning Commission focus on the issues of Water Quality and Flooding, Aesthetics and Visual Resources, as well as Noise policies, which are described in detail in this Staff Report.

The site has been identified as being located within a FEMA designated Flood Zone. The proposed facility will be developed above the base flood elevation projected for a 100-year storm event, meeting the regulatory requirements for development within the floodplain. Potential storm water run-off impacts identified during review of the project will be addressed

by the implementation of a master drainage plan to be developed in conjunction with the proposed project as described in Section VIII of this report.

Concerns were expressed by members of the ABR regarding potential visual impacts to public views and neighboring properties created by the project. The project will reduce the height of the tertiary facilities from 31 feet (existing tertiary structure to be demolished) to approximately 25.5 feet. While the project will not be visible from public viewing areas, the proposed facility would be visible from one location on the adjacent OM-1 /S-D-3 zoned property through a gap in tree canopy along Laguna Channel.

As part of a just expired Streambed Alteration Agreement with the California Department of Fish and Wildlife to allow the City to maintain the channel, additional willows were recently planted that, when mature, should adequately screen the facility in the above described location. Due to operational and site constraints, Public Works staff has indicated that the facility cannot be constructed within an enclosed concrete structure, similar to the existing structure. Because of repair and maintenance operational characteristics of the new plant, the equipment must be accessible from all exterior sides. The new metal canopy structure would have an exterior color to match the existing structures on site.

A noise study conducted for the project concluded that the replacement pump turbines would not have a significant impact on the nearest adjacent property, and would not require mitigation measures.

VII. POLICY AND ZONING CONSISTENCY ANALYSIS

A. ZONING ORDINANCE CONSISTENCY

1. OM-1 OCEAN-ORIENTED LIGHT MANUFACTURING

Pursuant to SBMC Sections 28.73.030.A. and 28.73.030.D., El Estero is nonconforming to the requirement that wastewater/sanitation treatment facilities require a Conditional Use Permit in the OM-1 Zone. As allowed by SBMC §28.87.030.E., a nonconforming use may be maintained and continued, provided there is no increase or enlargement of the floor area of the buildings or structures on site, and no increase in the intensity of use. The upgrades will occur within the footprint of the existing tertiary filtration plant complex and ancillary facilities. The project does not propose an enlargement of building floor area, increase in capacity, or intensification of use and, therefore, is not subject to a conditional use permit at this time.

2. COASTAL OVERLAY ZONE – S-D-3 ZONE DESIGNATION

SBMC Section 28.44.060 states that any development, not subject to one of the exclusions or exemptions specified in the chapter, requires a coastal development permit. Due to its location, within 50 feet of the Laguna Creek Channel, the project does not qualify for either an exclusion or exemption. Hence, the subject coastal development permit (CDP2013-00010) is required prior to project development.

B. LOCAL COASTAL PLAN CONSISTENCY

The project site is located in Component Five of the Local Coastal Land Use Plan (LCP). Other existing uses in this component are primarily light industrial, limited commercial, and some scattered residential. The LCP designation of Major Public and Institutional provides for public facilities uses, including waste water treatment facilities.

The project would not reduce convenience of access to or along the coast during construction or after construction because the site does not currently provide any public access. Similarly, the availability of recreational or visitor-serving uses would not be affected by the project. LCP policies applicable to this project are discussed below and attached as Exhibit D.

Biological Resources

LCP Policies 6.8, 6.9 and 6.10 serve to protect biological productivity and water quality of the City's riparian resources. The biological resources adjacent to the project site (Laguna Creek Channel environ) would not be impacted with the implementation of standard minimization measures applied to projects in proximity of said resources. Redesign of the plant's on-site storm water drainage system, as described in Section VIII - Environmental Review, will further reduce potential impacts to these resources, consistent with policies of the LCP.

Additionally, the proposed project would improve the quality of water utilized for recycled water delivery, requiring less potable water to be mixed with tertiary treated water, prior to conveyance.

Visual Resources

LCP Policy 9.1 protects views to, from, and along the ocean and scenic coastal areas. The project would not alter any views available from public viewpoints because the new facilities would not be visible from a public viewpoint. Proposed facilities would be within the existing wastewater treatment plant and shielded from public views by existing facilities (i.e. sludge handling building, secondary sedimentation facility).

C. CALIFORNIA COASTAL ACT

The Coastal Act defines land within the Coastal Zone as part of a valuable natural resource of vital and enduring interest to all the people. The Coastal Act prescribes policies for protecting the Coast through environmental protection and land-use restrictions. The project as described would be consistent with the applicable policies of the California Coastal Act.

1. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

The California Coastal Act requires that environmentally sensitive habitat areas (ESHA) be protected (Public Resources Code [PRC] §30240). The project site is adjacent to the Laguna Creek Channel, which has previously been identified as ESHA. While no development is proposed within the identified ESHA, implementation of protective measures recommended in the Biological Survey report will further assure that the

project will have no direct or indirect impacts to the adjacent resource. Therefore, the proposed project is consistent with this policy.

2. FLOODING

California Coastal Act (PRC §30236) states that substantial alterations to rivers or streams are only allowed for flood control or water supply projects necessary to protect public safety and existing development. It further states that alterations must incorporate the best mitigation measures feasible. The proposed project would not alter the Laguna Creek Channel. Therefore, the project would be consistent with this policy.

3. PUBLIC WORKS PROJECTS

The Coastal Act states that new and expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of the Act (PRC §30254). The proposed project development would not preclude services to coastal-dependent land uses, essential public services and basic industries vital to the economic health of the region, state, or nation. Nor would it preclude public recreation, commercial recreation, or visitor-serving land uses. Therefore, the project would be consistent with this policy.

4. COASTAL VISUAL RESOURCES

California Coastal Act states that coastal scenic visual resources shall be protected (PRC §30251). The proposed project would not obstruct scenic views afforded to the waterfront or surrounding area. Therefore, the project would be consistent with this policy.

VIII. ENVIRONMENTAL REVIEW

The proposed project is subject to California Environmental Quality Act (CEQA) review and the Environmental Analyst has determined that the project would be categorically exempt pursuant to CEQA Guidelines §15302(c) (Replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity). Review of the Santa Barbara Master Environmental Assessment (MEA) identified the following categories for specific evaluation.

1. CULTURAL RESOURCES

The project site is within the boundaries of the American Period and the Early 20th Century Period. The archaeological survey report completed for the project concluded that due to the extensive ground disturbance that has previously occurred on the site (i.e. grading, excavation, construction, pile driving and imported fill) there was very low potential to impact cultural resources (Dudek, November 2013).

2. BIOLOGICAL RESOURCES

While the project footprint is not in a sensitive resource area, it is adjacent to the Laguna Creek Channel which is identified in the City's MEA as containing several biological resources. A biological survey conducted for the project indicated that, with implementation of recommended minimization measures as part of the project

description, potential impacts to these resources would be minimized to a less than significant level (Dudek, October 2013).

3. NOISE ANALYSIS

The Noise Study conducted for the proposed tertiary plant upgrades concluded that the project would have a less than significant impact on neighboring properties (Dudek, November 2013). This conclusion was based on analysis of both noise levels of the existing tertiary plant pump turbines and estimated noise levels for the proposed upgraded pump turbines. The analysis indicates that the tertiary filtration equipment noise levels at the nearest adjacent property boundaries would be approximately 49 dBA CNEL, well below the City's Noise Element normally acceptable exterior noise limit of 75 dBA CNEL for any commercial or industrial zoned property.

4. STORM WATER RUN-OFF

In conjunction with the proposed tertiary plant upgrade project, the Public Works Department will be required to develop a master drainage plan for the entire project parcel. The plan will include modifications to the existing drainage system that will direct conveyance of all storm water run-off to the "front end" of the plant as influent to be treated prior to discharge.

The Creeks Division supports the El Estero Tertiary Replacement Project approach of draining all storm water runoff from the project site to a self contained storm water drainage system, rather than maintaining the onsite storm drains that currently drain into the adjacent Laguna Creek Channel. The intent of the State/City storm water requirements is to appropriately manage storm water runoff volumes and rates and protect surface water quality by capturing and treating storm water runoff. The existing on site drainage system already conveys the majority of storm water run-off back through the plant to be treated. Eliminating direct conveyance of storm water run-off from this area of the site into the adjacent Laguna Creek Channel will further reduce potential impacts to biological resources identified within/along the channel corridor.

5. LIQUEFACTION POTENTIAL

A review of the City of Santa Barbara Master Environmental Assessment (MEA) indicates that the project is within an area susceptible to high liquefaction. A Geotechnical Study was prepared by CDM Smith, dated June 2013, which concludes that the subsurface conditions in the area will best be improved by the removal of uncertified fill and then replaced with soil compacted to 95%. The report also recommends additional piles be driven, outside the footprint of the existing tertiary facility foundation, to a depth of approximately 70 feet below ground surface (bgs). The report and proposal for site preparation has been reviewed and accepted by the City's Building and Safety Division.

IX. DESIGN REVIEW

This project was reviewed by the Architectural Board of Review (ABR) on three separate occasions (meeting minutes are attached as Exhibit D).

On September 30, 2013, the ABR stated concerns with potential visual impacts to adjacent neighbors and public views. Some members of the Board were concerned that the demolition of the existing tertiary structure, which is architecturally consistent with the surrounding plant facilities. The concern was that the proposed open metal canopy roof structure, replacing the current structure, would not be in keeping with the overall architectural design characteristics of the treatment plant. The Board requested the project applicant provide elevations of the project from all four sides and to consider extending roof eave overhangs to provide additional weather and solar protection and to add more architectural character to the building. The Board also requested that Public works study the feasibility of adapting the building design to allow for future solar panels.

On October 14, 2013, the ABR reiterated their concerns with the project's proposed demolition of the existing concrete structure containing the tertiary plant facilities, followed by replacement with a metal canopy structure, which would be open on all four sides. The board requested that Public Works study adding additional landscaping in the buffer area between the access road and the west side property line at the creek to screen the view into the site. As described in Section VI – Issues, this has been accomplished as mitigation as part of previously issued permit with CDFW to maintain the Laguna Creek Channel for flood control purposes.

The Board requested detailed architectural elevation drawings of the project, as well as heights and dimensions of adjacent buildings showing the relationship between the proposed project and adjacent structures. The Board requested that exterior lighting details of dark sky compatible lighting fixtures also be provided.

The applicant has revised the design of the canopy structure to include extended eaves for weather protection and architectural enhancement as recommended. The canopy structural design has also been modified to allow for future installation of solar panels.

On November 25, 2013, the ABR, after review of the revised design, continued the project indefinitely to the Planning Commission to return to Full Board. The ABR commented the project was generally acceptable, provided proposed changes are incorporated, including exterior color modifications. The Board made Compatibility Analysis findings as required by SBMC §22.68.045.

X. FINDINGS

The Planning Commission finds the following:

A. COASTAL DEVELOPMENT PERMIT (SBMC §28.44.150)

1. The project is consistent with the policies of the California Coastal Act, as described in Section VII (D) of the Staff Report. This includes, but is not limited to, consistency with requirements that environmentally sensitive habitat areas (ESHA) be protected and that proposed development should neither preclude services to coastal-dependent land uses, essential public services and

basic industries vital to the economic health of the region, state, or nation, nor preclude public recreation, commercial recreation, or visitor-serving land uses. The project would be consistent with these policies.

2. The project is consistent with all applicable policies of the City's Local Coastal Plan, all applicable implementing guidelines, and all applicable provisions of the Code, as described in Section VII (C) of the Staff Report. This includes, but is not limited to, consistency with LCP Policies 6.8, 6.9 and 6.10 which serve to protect biological productivity and water quality of the City's riparian resources and LCP Policy 9, which protects views to, from, and along the ocean and scenic coastal areas.

Exhibits:

- A. Conditions of Approval
- B. Site Plan
- C. Applicant's letter, dated October 28, 2013
- D. ABR Minutes
- E. Applicable General Plan and Local Coastal Plan Policies

PLANNING COMMISSION CONDITIONS OF APPROVAL

520 E. YANONALI STREET
EL ESTERO WASTEWATER TREATMENT PLANT
COASTAL DEVELOPMENT PERMIT
DECEMBER 19, 2013

I. In consideration of the project approval granted by the Planning Commission and for the benefit of the El Estero Waste Water Treatment Plant and occupants of its property, the owners and occupants of adjacent real property and the public generally, the following terms and conditions are imposed on the use, possession, and enjoyment of the project site:

A. **Order of Development.** In order to accomplish the proposed development, the following steps shall occur in the order identified:

1. Obtain all required design review approvals.
2. Pay Land Development Team Recovery Fee.
3. Permits - Submit an application for and obtain a Building Permit (BLD) for construction of approved development and complete said development.
4. Submit an application for and obtain a Building Permit (BLD) to demolish any structures / improvements and/or perform rough grading. Comply with condition E "Construction Implementation Requirements."

Details on implementation of these steps are provided throughout the conditions of approval.

B. **Written Agreement.** The Applicant shall submit a letter to the Planning Division indicating the following:

1. **Approved Development.** The development approved by the Planning Commission on December 19, 2013 is limited to demolishing the existing 2,200 square foot granular media filter complex and ancillary equipment, and construction a new 5,300 square foot facility, including a 2,900 square foot canopy, and the related improvements shown on the plans signed by the chairman of the Planning Commission on said date and on file at the City of Santa Barbara.
2. **Use Limitations.** Due to the proximity to biological resources, uses other than those related to tertiary plant operations are not permitted at this location without further environmental and/or Planning Commission review and approval. Prior to initiating a change of use, the Applicant shall submit a letter to the Community Development Director detailing the proposal, and the Director shall determine the appropriate review procedure and notify the Applicant.
3. **Storm Water Pollution Control and Drainage System Maintenance.** The owner/applicant shall implement and maintain the drainage system and storm water pollution control devices in a functioning state. Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat water, or result in increased erosion, the Public Works Division shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the Owner shall submit a repair and restoration plan to the Community Development Director to

determine if an amendment or a new Coastal Development Permit is required to authorize such work. The Public Works Division is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to the Real Property or any adjoining property.

4. **BMP Training.** Training on the implementation of Best Management Practices (BMPs) shall be provided to every employee of the El Estero Waste Water Treatment Plant by the Applicant/management in order to prevent or reduce the discharge of pollutants to storm water from buildings and ground maintenance. The training shall include using good housekeeping practices, preventive maintenance and spill prevention and control at outdoor loading/unloading areas in order to keep debris from entering the storm water collection system.
- C. **Biological Resources Minimization Measures.** The following minimization measures, recommended in the Biological Resource Study prepared for the proposed project (Dudek, October 2013), shall be included as part of the project description:
1. **Pre-construction Nesting Bird Survey. (BIO-1)** A pre-construction survey for nesting birds shall be conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present in the construction zone or within 300 feet of the construction zone. The survey shall be conducted within one week prior to construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March 1 through August 30).
 2. **Nesting Bird Buffers and Requirements. (BIO-2)** If active nests are found, a no construction buffer shall be established at a minimum of 100-foot (this distance may be greater depending on the bird species and construction activity, as determined by the biologist) around the nest site where it overlaps with work areas. Clearing and construction within no-construction buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting. In addition, all active nests shall be mapped with a GPS unit and nest locations with 100-foot buffers overlain on aerial photographs to provide regular updated maps to inform the Project manager/engineer and construction crew of areas to avoid. The City approved biologist should also serve as a construction monitor during the breeding season to ensure that there are no inadvertent impacts to nesting birds.
 3. **Revised Chemical Delivery, Storage, and Usage Plan. (BIO-4)** Revise the *El Estero Wastewater Treatment Plant Hazmat Business Plan*, as appropriate. The plan shall identify all hazardous material transported, stored and used during wastewater treatment processing. The plan shall also identify designated access routes for delivery and transport of chemicals. Storage areas shall be identified and equipped with secondary containment, spill response measures, spill response kits, and notifications to authorities. Chemical usage shall be documented and usage areas shall be monitored for leaks and an emergency cleanup plan shall be

incorporated. Measures ensuring that spill will not enter tidewater goby and Pacific pond turtle habitat are essential. These include the aquatic habitats of Laguna Channel and El Estero Swale, which shall be addressed thoroughly and included in the Plan. Storm drains are the most direct route to aquatic habitats.

D. **Requirements Prior to Permit Issuance.** The Applicant shall submit the following, or evidence of completion of the following, for review and approval by the Department listed below prior to the issuance of any permit for the project. Some of these conditions may be waived for demolition or rough grading permits, at the discretion of the department listed. Please note that these conditions are in addition to the standard submittal requirements for each department.

1. **Creeks Division.**

- a. **Master Drainage System Plan.** The Applicant shall submit a master drainage system plan to the Creeks Division and the Building and Safety Division. The plan shall include modifications to the existing drainage system that will convey all storm water run-off to the “front end” of the plant as influent to be treated prior to discharge.
- b. As a component of implementation of the Master Drainage System Plan, rerouting of the two existing drain inlets adjacent to the Laguna Creek Channel to the “front end” of the plant shall occur prior to final inspection for the project.
- c. **Stormwater Pollution Prevention Plan (SWPPP).** (BIO-3) The Applicant shall retain a Qualified SWPPP Developer (QSD) to prepare and submit a SWPPP to minimize the potential for discharge of pollutants from the project during construction and operational activities. The SWPPP shall be designed to meet the requirements of the City and RWQCB’s General Construction Permit (GCP). The SWPPP shall include both structural and non-structural best management practices (BMPs) including straw wattles around storm drains, silt fencing and or other physical controls to diver flows from exposed soil, spill prevention methods, and clean housekeeping methods for storing and refueling machinery.

2. **Community Development Department.**

- a. **Written Agreement.** Provide the written instrument that includes all of the conditions identified in Condition B “Written Agreement” to the Community Development Department prior to issuance of any building permits.
- b. **Contract with Biologist.** Submit a contract with a City approved qualified biologist for monitoring and reporting during all ground-disturbing activities associated with the project, including, but not limited to, grading, excavation, trenching, vegetation or paving removal, and ground clearance in the areas identified in the Biological Assessment Report prepared for this site by Dudek, dated October 28, 2013. The contract shall be subject to the review and approval of the Environmental Analyst.

- c. The scope of the biologist’s monitoring and reporting contract shall include the provisions identified in “Conclusions and Recommendations” from the Biological Assessment Report referenced above.
- d. **No-Rise Certificate.** The Applicant shall provide a Base Flood Elevation and show compliance with applicable flood proofing as required by SBMC §22.24.160 prior to issuance of a Building Permit.
- e. **Contractor and Subcontractor Notification.** The Applicant shall notify in writing all contractors and subcontractors of the site rules, restrictions, and Conditions of Approval. Submit a draft copy of the notice to the Planning Division for review and approval.
- f. **Conditions on Plans/Signatures.** The final Resolution shall be provided on a full size drawing sheet as part of the drawing sets. Each condition shall have a sheet and/or note reference to verify condition compliance. If the condition relates to a document submittal, indicate the status of the submittal (e.g., Master Drainage System Plan submitted to Creeks Division for review). A statement shall also be placed on the sheet as follows: The undersigned have read and understand the required conditions, and agree to abide by any and all conditions which are their usual and customary responsibility to perform, and which are within their authority to perform.
- g. Signed:

Applicant		Date
Contractor	Date	License No.
Architect	Date	License No.
Engineer	Date	License No.

E. Construction Implementation Requirements. All of these construction requirements shall be carried out in the field by the Applicant and/or Contractor for the duration of the project construction, including demolition and grading.

- 1. **Riparian Protection. (BIO-5)** All construction-related activities, including, but not limited to demolition, construction, staging area, and access routes shall be located a minimum of 50-feet from riparian habitat associated with Laguna Channel and El Estero Swale, when possible. In locations where the construction activities encroach within this buffer, it is important to provide further protection to riparian vegetation and the wetland and aquatic habitats of Laguna Channel to the greatest extent possible. Specifically, these protection measures shall include the following:
 - a. The Contractor shall establish a temporary barrier between riparian habitat using highly visible construction fencing to ensure that trees and other

vegetation are visible during construction. It is recommended that the fencing be placed along the access road, just to the west of the curb.

- b. The Contractor shall install road signs along the western access route that notify drivers of sizeable vehicles/construction equipment (cranes, drilling rigs, water and concrete trucks, etc.) that sensitive riparian trees and vegetation occur adjacent to the road and work site.
- c. When sizeable construction equipment is working near riparian vegetation, it is highly encouraged that flaggers are utilized to assist in equipment positioning to avoid riparian impacts during construction activities.
- d. If direct impacts to riparian vegetation cannot be avoided, a CDFW Streambed Alteration Agreement (SAA) pursuant to Section 1600 et seq. of the California Fish and Game Code should be acquired before initiation of construction.

2. **Best Management Practices (BMPs). (BIO-6)** The Contractor shall install appropriate BMPs to control sediment, coarse particles, concrete, and other materials exposed during demolition and drilling to protect aquatic, wetland, and riparian habitats adjacent to construction site. Erosion control measures should be implemented to prevent runoff of these materials into Laguna Channel and El Estero Swale. Silt fencing, straw bales, and/or sand bags should be used in conjunction with other methods to prevent turbid waters from entering stream channels.

During construction activities, washing of concrete, paint, or equipment shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing will not be allowed in locations where the tainted water could enter Laguna Channel or El Estero Swale.

3. **Pre-Construction Conference.** Not less than 10 days or more than 20 days prior to commencement of construction, a conference to review site conditions, construction schedule, construction conditions, and environmental monitoring requirements (see condition No. E.4 below), shall be held by the General Contractor. The conference shall include representatives from the Public Works Department Engineering and Transportation Divisions, Community Development Department Building and Planning Divisions, the Creeks Division, the approved Biologist, Contractor and each Subcontractor.
4. **Workers Educational Training. (BIO-8)** Prior to the initiation of any site disturbance and/or construction activities, all personnel associated with the project shall attend a worker education training program (program) conducted by a qualified biologist. In general, it is recommended that the program discuss tidewater goby and Pacific pond turtle habitat preference(s), occupied habitat in the area, life histories, law and regulations, as well as potential construction impacts and protection measures, and project limits. Protections and regulations for the Laguna Channel, the riparian habitat, and nesting birds shall also be included in the program. It is recommended that a species and habitat fact sheet also be developed

prior to the training program and distributed at the training program to all contractors, employers and other personnel involved with the construction of the Projects. Specifically, the program should also include:

- a. Measures to prevent indirect impacts during construction activities should be covered, including delivery, storage, and usage of construction materials and chemicals as they relate to the protection of adjacent aquatic habitat.
- b. Training materials should include laws and regulations that protect sensitive biological resources, the consequences of non-compliance with those laws and regulations and a contact person (i.e. construction manager, biological monitor, and City's Project manager) in the event that protected biological resources are affected.

The City shall notify the approved biologist in advance of the kick-off meeting and any subsequent meetings that may take place if additional contractors are employed during additional construction projects of the project. A sign in sheet will be circulated for signatures to all personal that attend the workers educational training to confirm that program materials were received and that they understand information presented.

5. **Construction Storage/Staging.** Construction vehicle/equipment/materials storage and staging shall be done on-site. No parking or storage shall be permitted within the identified "no disturbance buffer" adjacent to the Laguna Creek Channel, unless specifically permitted by the Creeks Division.
6. **Construction Parking.** During construction, free parking spaces for construction workers shall be provided on-site.
7. **Air Quality and Dust Control.** The following measures shall be shown on grading and building plans and shall be adhered to throughout grading, hauling, and construction activities:
 - a. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.
 - b. Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.
 - c. If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
 - d. Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.

- e. After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
- f. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading of the structure.
- g. All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
- h. Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.
- i. All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.
- j. Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
- k. Diesel powered equipment should be replaced by electric equipment whenever feasible.
- l. If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.
- m. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
- n. All construction equipment shall be maintained in tune per the manufacturer's specifications.
- o. The engine size of construction equipment shall be the minimum practical size.

- p. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time. Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.
8. **Asbestos & Lead-Containing Materials.** Pursuant to Air Pollution Control District (APCD) Rule 1001, the applicant is required to complete and submit an Asbestos Demolition / Renovation Notification form for each regulated structure to be demolished or renovated. The completed notification shall be provided to the Santa Barbara County APCD with a minimum of 10 working days advance notice prior to disturbing asbestos in a renovation or starting work on a demolition. Any abatement or removal of asbestos and lead-containing materials must be performed in accordance with applicable federal, State, and local regulations. Disposal of material containing asbestos and/or lead shall be in sent to appropriate landfills that are certified to accept this material.
9. **Biological Resources Minimization Monitoring Compliance Reports.** The City-approved biologist shall submit monthly reports during demolition, excavation, grading and footing installation and monthly reports on all other construction activity regarding required Minimization Measures compliance to the Community Development Department.
10. **Unanticipated Archaeological Resources Contractor Notification.** Standard discovery measures shall be implemented per the City master Environmental Assessment throughout grading and construction: Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts. If such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and the Applicant shall retain an archaeologist from the most current City Qualified Archaeologists List. The latter shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation and/or monitoring with a Barbareño Chumash representative from the most current City qualified Barbareño Chumash Site Monitors List, etc.

If the discovery consists of possible human remains, the Santa Barbara County Coroner shall be contacted immediately. If the Coroner determines that the remains are Native American, the Coroner shall contact the California Native American Heritage Commission. A Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

If the discovery consists of possible prehistoric or Native American artifacts or materials, a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to any certificate of occupancy for the project.

F. **Prior to Final Inspection.** Prior to performance of the Final Inspection by Building & Safety staff, the Owner of the Real Property shall complete the following:

1. The two existing drain inlets adjacent to the Laguna Creek Channel, in proximity of the project, shall be rerouted to the "front end" of the plant prior to final inspection.

G. **General Conditions**

1. **Compliance with Requirements.** All requirements of the City of Santa Barbara and any other applicable requirements of any law or agency of the State and/or any government entity or District shall be met. This includes, but is not limited to, the Endangered Species Act of 1973 and any amendments thereto (16 Uq.), the 1979 Air Quality Attainment Plan, and the California Code of Regulations.
2. **Land Development Team Recovery Fee Required.** The land development team recovery fee (30% of all planning fees, as calculated by staff) shall be paid at time of building permit application.

NOTICE OF COASTAL DEVELOPMENT PERMIT TIME LIMITS:

The Planning Commission action approving the Coastal Development Permit shall expire two (2) years from the date of final action upon the application, per Santa Barbara Municipal Code §28.44.230, unless:

1. Otherwise explicitly modified by conditions of approval for the coastal development permit.
2. A Building permit for the work authorized by the coastal development permit is issued prior to the expiration date of the approval.
3. The Community Development Director grants an extension of the coastal development permit approval. The Community Development Director may grant up to three (3) one-year extensions of the coastal development permit approval. Each extension may be granted upon the Director finding that: (i) the development continues to conform to the Local Coastal Program, (ii) the applicant has demonstrated due diligence in completing the development, and (iii) there are no changed circumstances that affect the consistency of the development with the General Plan or any other applicable ordinances, resolutions, or other laws.

CITY OF SANTA BARBARA

EEWTP TERTIARY FILTRATION PLANT REPLACEMENT

PROJECT NO. 8292, BID NO. 3688
PART D - DRAWINGS

APR 017-113-018
PARCEL OWNER: CITY OF SANTA BARBARA
SITE: 1000 W. SANTA BARBARA CA
SITE NET AREA: 7.28 ACRES
PROPOSED NON-ENCLOSED CANOPY SF: 3882 SF
BUILDING PERMIT NO. B102019-3000
GENERAL PLAN: INSTITUTIONAL
HIGH FIRE: NO
FLOOD PLAN: YES
SLOPE OF PROPERTY: APPROX. 1%
CUT OF

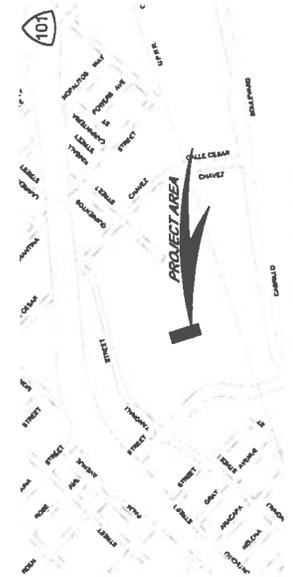
AMOUNT EXPORT: 0
PROPOSED PAVING: 4,510 SF
PROPOSED PARKING: 50

THIS PROJECT SHALL COMPLY WITH THE FOLLOWING CODES:
CALIFORNIA BUILDING CODE (CBC)
CALIFORNIA ELECTRICAL CODE (CEC)
2008 NATIONAL ELECTRIC CODE (NEC)
2010 CALIFORNIA PLUMBING CODE (CPC)
2010 CALIFORNIA MECHANICAL CODE (CMC)
2010 CALIFORNIA GREEN BUILDING CODE (CGBC)

SUMMARY OF WORK

THE WORK CONSISTS OF:

- DEMOLITION OF THE EXISTING GRANULAR MEDIA FILTER COMPLEX AND ANCILLARY EQUIPMENT (APPROX. 2,300 SF)
- NEW SUBGRADE PILES FOUNDATION WORK AND ENGINEERED CANOPY STRUCTURE FOR THE NEW TERTIARY FILTRATION FACILITY (6,900 SF FOUNDATION WITH APPROX. 2,800 SF (87X44) CANOPY).
- REMOVAL OF APPROX. 3,000 SF OF EXISTING LANDSCAPING.
- PLANTING OF 150 SF OF NATIVE WILLOWS ON LAGUNA CHANNEL FOR SCREENING.
- CONSTRUCTION OF NEW FACILITIES TO ACCOMMODATE A NEW TERTIARY FILTRATION FACILITY USING MICROFILTRATION (MFUF) SYSTEM AND INCLUDING ANCILLARY FACILITY EQUIPMENT FOR INTEGRITY TESTING, CLEANING AND BACKWASHING, AND CLEANING OF THE MEMBRANES. ANCILLARY EQUIPMENT INCLUDE FEED PUMPS, AUTOMATIC BACKWASHING TRAINERS, COMPRESSED AIR SYSTEM, FILTRATE TANK, BACKWASH PUMPS, CIP TANKS, CIP PUMPS, AND CITRIC ACID AND SODIUM HYDROXIDE ASSOCIATED CHEMICAL STORAGE AND FEED SYSTEMS
- IMPROVEMENTS TO THE EXISTING EEWTP SODIUM HYPOCHLORITE AND SODIUM BISULFITE BULK CHEMICAL AREAS TO ACCOMMODATE SUPPLY OF SODIUM HYPOCHLORITE AND SODIUM BISULFITE TO THE PROPOSED MFUF SYSTEM FOR PRETREATMENT AND CLEANING
- REPLACEMENT OF CONSTANT SPEED MOTORS WITH VARIABLE SPEED MOTORS FOR EXISTING RECLAIMED WATER TRANSFER PUMPS.
- ADDITION OF POTABLE WATER CONNECTION TO THE EXISTING RECLAIMED WATER CHLORINE CONTACT BASIN.
- IMPROVEMENTS OF THE EXISTING SODIUM HYPOCHLORITE AND SODIUM BISULFITE FEED SYSTEMS TO INCLUDE NEW CHEMICAL METERING PUMPS WITH ASSOCIATED CONTROLS AND APPURTENANCES. THIS INCLUDES THE ADDITION OF NEW METERING PUMPS TO PROVIDE SODIUM HYPOCHLORITE AND SODIUM BISULFITE TO THE PROPOSED (MFUF) SYSTEM FOR PRETREATMENT AND CLEANING.
- MODIFICATIONS TO THE EXISTING ELECTRICAL ROOM TO ACCOMMODATE ELECTRICAL FEED FOR THE PROPOSED MFUF SYSTEM.
- EVALUATION OF THE EXISTING STANDBY POWER GENERATORS AND RECOMMENDATIONS TO PROVIDE STANDBY POWER TO THE PROPOSED MFUF SYSTEM.
- SITING AND TIE-INS FOR NEW AND EXPANDED PROCESS SYSTEMS.
- ELECTRICAL POWER EXPANSION.
- INSTRUMENTATION/CONTROL SYSTEMS: INTEGRATION OF THE PROPOSED MFUF SYSTEMS WITH THE EXISTING PLANT SCADA SYSTEM AND DEVELOPMENT OF SAMPLE IHI SCREENS.



THE UNDERIGNED HAS APPROVED THIS DOCUMENT FOR AND ON BEHALF OF CDM SMITH

PROJECT MANAGER

SPECIAL INSPECTION:

SPECIAL INSPECTION SHALL BE IN ACCORDANCE WITH CBC 2010 CHAPTER 17 AND SHALL BE AS INDICATED ON DWG 8-01

NOTES:

- NO SETBACKS ARE REQUIRED.
- THE SITE STATISTICS ARE AS FOLLOWS:

LOT COVERAGE	EXISTING	PROPOSED
BUILDING	2,310 SF	5,820 SF
PAVING	4,240 SF	4,510 SF
LANDSCAPING **	4,000 SF	150 SF
TOTAL	10,550 SF	10,480 SF

** INCLUDES CHEMICAL STORAGE AREA
*** INCLUDES ALL PERMISSIBLE AREAS



CDM Smith
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SANTA BARBARA, CA 93101
TEL: 805.964.1100
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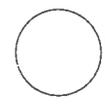
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EEWTP TERTIARY FILTRATION PLANT REPLACEMENT
COVER SHEET
VICINITY & PROJECT LOCATION MAPS

PROJECT NO.	200-00672
BID NO.	3688
REV. NO.	G-01-1401
DATE	1 of 110



PROJECT NUMBER

DATE

PROJECT MANAGER

DATE

PROJECT NUMBER

DATE

PROJECT MANAGER

DATE

PROJECT NUMBER



CPM Smith
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 DENVER, COLORADO 80202
 PHONE: 303.733.1100
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 WWW: WWW.CPMENGINEERS.COM

DATE: 11/15/13
 DRAWN BY: JMC
 CHECKED BY: JMC
 DESIGNED BY: JMC
 APPROVED BY: JMC

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 GENERAL SHEET DATE

PROJECT NO: 200-00672
 SHEET NO: G03
 SHEET DATE: 11/15/13

PROJECT NAME: EEWTP TERTIARY FILTRATION PLANT REPLACEMENT

DATE: 11/15/13

SHEET 3 OF 110

SYMBOLS AND ABBREVIATIONS

GENERAL SHEET DATE

PROJECT NO: 200-00672

SHEET NO: G03

SHEET DATE: 11/15/13

PROJECT NAME: EEWTP TERTIARY FILTRATION PLANT REPLACEMENT

DATE: 11/15/13

SHEET 3 OF 110

SYMBOLS AND ABBREVIATIONS

GENERAL SHEET DATE

PROJECT NO: 200-00672

SHEET NO: G03

SHEET DATE: 11/15/13

PROJECT NAME: EEWTP TERTIARY FILTRATION PLANT REPLACEMENT

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SHEET 3 OF 110

SYMBOLS AND ABBREVIATIONS

GENERAL SHEET DATE

PROJECT NO: 200-00672

SHEET NO: G03

SHEET DATE: 11/15/13

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SHEET 3 OF 110

SYMBOLS AND ABBREVIATIONS

GENERAL SHEET DATE

PROJECT NO: 200-00672

SHEET NO: G03

SHEET DATE: 11/15/13

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SHEET 3 OF 110

SYMBOLS AND ABBREVIATIONS

GENERAL SHEET DATE

PROJECT NO: 200-00672

ABBREVIATION LEGEND

AB	ANCHOR BOLT	EQIP	EQUIPMENT
AC	ACRYLIC CONCRETE OR ASPHALT	FA	FABRICATED
ADH	ADHESIVE	FC	FLEXIBLE COUPLING OR CONNECTION
AG	AGGREGATE	FD	FLOOR DRAIN
AH	AIR	FE	FLOOR ELEVATION
AI	AIR RELEASE VALVE	FG	FINISHED GRADE
AJ	ALUMINUM	FH	FIRE HOSE VALVE
AK	ALUMINUM	FI	FINISHING TRANSMITTER
AL	ALUMINUM	FL	FLOOR FINISH
AM	ALUMINUM	FLX	FLEXIBLE
AN	ALUMINUM	FLV	FLOOR VALVE
AO	ALUMINUM	FM	FLOOR FINISH
AP	ALUMINUM	FN	FLOOR FINISH
AQ	ALUMINUM	FO	FLOOR FINISH
AR	ALUMINUM	FP	FLOOR FINISH
AS	ALUMINUM	FS	FLOOR FINISH
AT	ALUMINUM	FT	FLOOR FINISH
AV	ALUMINUM	GA	GAS
AW	ALUMINUM	GC	GAS
AX	ALUMINUM	GD	GAS
AY	ALUMINUM	GE	GAS
AZ	ALUMINUM	GF	GAS
BA	ALUMINUM	GG	GAS
BB	ALUMINUM	GH	GAS
BC	ALUMINUM	GI	GAS
BD	ALUMINUM	GJ	GAS
BE	ALUMINUM	GK	GAS
BF	ALUMINUM	GL	GAS
BG	ALUMINUM	GM	GAS
BH	ALUMINUM	GN	GAS
BI	ALUMINUM	GO	GAS
BJ	ALUMINUM	GP	GAS
BK	ALUMINUM	GQ	GAS
BL	ALUMINUM	GR	GAS
BM	ALUMINUM	GS	GAS
BN	ALUMINUM	GT	GAS
BO	ALUMINUM	GU	GAS
BP	ALUMINUM	GV	GAS
BQ	ALUMINUM	GW	GAS
BR	ALUMINUM	GX	GAS
BS	ALUMINUM	GY	GAS
BT	ALUMINUM	GZ	GAS
BU	ALUMINUM	HA	HAND VALVE
BV	ALUMINUM	HB	HAND VALVE
BW	ALUMINUM	HC	HAND VALVE
BX	ALUMINUM	HD	HAND VALVE
BY	ALUMINUM	HE	HAND VALVE
BZ	ALUMINUM	HF	HAND VALVE
CA	ALUMINUM	HG	HAND VALVE
CB	ALUMINUM	HH	HAND VALVE
CC	ALUMINUM	HI	HAND VALVE
CD	ALUMINUM	HJ	HAND VALVE
CE	ALUMINUM	HK	HAND VALVE
CF	ALUMINUM	HL	HAND VALVE
CG	ALUMINUM	HM	HAND VALVE
CH	ALUMINUM	HN	HAND VALVE
CI	ALUMINUM	HO	HAND VALVE
CJ	ALUMINUM	HP	HAND VALVE
CK	ALUMINUM	HQ	HAND VALVE
CL	ALUMINUM	HR	HAND VALVE
CM	ALUMINUM	HS	HAND VALVE
CN	ALUMINUM	HT	HAND VALVE
CO	ALUMINUM	HU	HAND VALVE
CP	ALUMINUM	HV	HAND VALVE
CQ	ALUMINUM	HW	HAND VALVE
CR	ALUMINUM	HX	HAND VALVE
CS	ALUMINUM	HY	HAND VALVE
CT	ALUMINUM	HZ	HAND VALVE
CU	ALUMINUM	IA	INSULATION
CV	ALUMINUM	IB	INSULATION
CW	ALUMINUM	IC	INSULATION
CX	ALUMINUM	ID	INSULATION
CY	ALUMINUM	IE	INSULATION
CZ	ALUMINUM	IF	INSULATION
DA	ALUMINUM	IG	INSULATION
DB	ALUMINUM	IH	INSULATION
DC	ALUMINUM	II	INSULATION
DD	ALUMINUM	IJ	INSULATION
DE	ALUMINUM	IK	INSULATION
DF	ALUMINUM	IL	INSULATION
DG	ALUMINUM	IM	INSULATION
DH	ALUMINUM	IN	INSULATION
DI	ALUMINUM	IO	INSULATION
DJ	ALUMINUM	IP	INSULATION
DK	ALUMINUM	IQ	INSULATION
DL	ALUMINUM	IR	INSULATION
DM	ALUMINUM	IS	INSULATION
DN	ALUMINUM	IT	INSULATION
DO	ALUMINUM	IU	INSULATION
DP	ALUMINUM	IV	INSULATION
DQ	ALUMINUM	IW	INSULATION
DR	ALUMINUM	IX	INSULATION
DS	ALUMINUM	IY	INSULATION
DT	ALUMINUM	IZ	INSULATION
DU	ALUMINUM	JA	JUNCTION
DV	ALUMINUM	JB	JUNCTION
DW	ALUMINUM	JC	JUNCTION
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JK	ALUMINUM	JO	JUNCTION



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 www.cdm-smith.com

DATE: 10/28/2013
 TIME: 10:20 AM
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 APPROVED BY: [blank]

PROJECT: EMMWTP TERTIARY FILTRATION PLANT REPLACEMENT
 SHEET: 4 of 110

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 APPROVED: [blank]

NO.	DATE	REVISIONS
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DESIGN CRITERIA

200-00672
 3688
 G-04-1401

PROJECT NUMBER: [blank]

PARAMETER	CRITERIA
CITRIC ACID STORAGE	
BULK CHEMICAL PROPERTIES	CITRIC ACID
CHEMICAL	
CONCENTRATION	50%
SPECIFIC GRAVITY	1.24
pH	< 2.5
STORAGE TANKS	
NO. OF TANKS	2 (1 DUTY, 1 STANDBY)
NOMINAL TANK VOLUME	BULK STORAGE TOIE = 250 GAL DELIVERY TOIE = 5.3 FT
DELIVERY TOIE DIMENSIONS	4 FT X 3.5 FT X 4.2 FT
MATERIAL	PE
DAYS OF STORAGE, MIN.	30 DAYS

PARAMETER	CRITERIA
CITRIC ACID METERING PUMPS	
M/F U/F CLEANING	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	35 GPH @ 100 PSIG
FEED FLOW RANGE	TBD
MOTOR SIZE	0.5 HP
DRIVE	VARIABLE SPEED

PARAMETER	CRITERIA
SODIUM HYDROXIDE STORAGE	
BULK CHEMICAL PROPERTIES	
CHEMICAL	SODIUM HYDROXIDE (CAUSTIC SODA)
CONCENTRATION	25%
SPECIFIC GRAVITY	1.252
pH	14
STORAGE TANKS	
NO. OF TANKS	2 (1 DUTY, 1 STANDBY)
NOMINAL TANK VOLUME	BULK STORAGE TOIE = 250 GAL DELIVERY TOIE = 5.3 FT
DELIVERY TOIE DIMENSIONS	4 FT X 3.5 FT X 4.2 FT
MATERIAL	PE
DAYS OF STORAGE, MIN.	30 DAYS

PARAMETER	CRITERIA
SODIUM HYDROXIDE METERING PUMPS	
M/F U/F CLEANING	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	35 GPH @ 100 PSIG
FEED FLOW RANGE	TBD
MOTOR SIZE	0.5 HP
DRIVE	VARIABLE SPEED

PARAMETER	CRITERIA
SODIUM HYPOCHLORITE METERING PUMPS	
PLANT EFFLUENT SHC FEED PUMPS	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	110 GPH @ 100 PSIG
FEED FLOW RANGE	TBD
MOTOR SIZE	0.75 HP
DRIVE	VARIABLE SPEED
RECLAIMED WATER SHC FEED PUMPS	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	72 GPH @ 100 PSIG
FEED FLOW RANGE	TBD
MOTOR SIZE	0.75 HP
DRIVE	VARIABLE SPEED

PARAMETER	CRITERIA
SODIUM BISULFITE STORAGE	
BULK CHEMICAL PROPERTIES	
CHEMICAL	SODIUM BISULFITE
CONCENTRATION	15% to 40%
SPECIFIC GRAVITY	1.11 to 1.33
pH	9.17 to 11.09
STORAGE TANKS	
NO. OF TANKS	1 (1 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	5,000 GAL
DELIVERY TOIE DIMENSIONS	10.3 FT X 3.5 FT X 4.2 FT
MATERIAL	PE
TANK COLOR	WHITE

PARAMETER	CRITERIA
SODIUM BISULFITE METERING PUMPS	
PLANT EFFLUENT DECHLORINATION	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	45 GPH @ 100 PSIG
FEED FLOW RANGE	TBD
MOTOR SIZE	0.75 HP
DRIVE	VARIABLE SPEED
M/F U/F CIP SRS FEED PUMPS	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	50 GPH @ 100 PSIG
FEED FLOW RANGE	TBD
MOTOR SIZE	0.5 HP
DRIVE	VARIABLE SPEED

PARAMETER	CRITERIA
M/F U/F CIP SRS FEED PUMPS	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	16.9 GPH @ 100 PSIG
FEED FLOW RANGE	2.9 TO 15.9 GPH
MOTOR SIZE	0.5 HP
DRIVE	VARIABLE SPEED
M/F U/F CIP SRS FEED PUMPS	
PERISTALTIC	
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	50 GPH @ 100 PSIG
FEED FLOW RANGE	TBD
MOTOR SIZE	0.5 HP
DRIVE	VARIABLE SPEED

PARAMETER	CRITERIA
RECLAIMED WATER TRANSFER PUMPS	
CHEMICAL	
CONCENTRATION	
SPECIFIC GRAVITY	
pH	
STORAGE TANKS	
NO. OF TANKS	3 (2 DUTY, 1 STANDBY)
NOMINAL TANK VOLUME	1,040 GPM
DELIVERY TOIE DIMENSIONS	10.3 FT X 3.5 FT X 4.2 FT
MATERIAL	PE
TANK COLOR	WHITE

PARAMETER	CRITERIA
SODIUM HYPOCHLORITE STORAGE	
BULK CHEMICAL PROPERTIES	
CHEMICAL	SODIUM HYPOCHLORITE
CONCENTRATION	12.5%
SPECIFIC GRAVITY	1.21
pH	12
STORAGE TANKS	
NO. OF TANKS	3 (2 DUTY, 1 STANDBY)
NOMINAL TANK VOLUME	7,500 GAL
DELIVERY TOIE DIMENSIONS	12.5 FT X 3.5 FT X 4.2 FT
MATERIAL	PE
TANK COLOR	WHITE

PARAMETER	CRITERIA
M/F U/F CIP TANKS	
TYPE	VERTICAL
NO. OF TANKS	2 (2 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	4,200 GAL
STRAIGHT SIDESHELL HEIGHT	15 FT
MATERIAL	FRP
TANK COLOR	WHITE
HEATER TYPE	IMMERSION
CAPACITY	TBD
MATERIAL	316L SS

PARAMETER	CRITERIA
M/F U/F CIP PUMPS	
TYPE	VERTICAL IN-LINE CENTRIFUGAL
NO. OF PUMPS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER PUMP	750 GPM
TDH	50 PSI
DRIVE	CONSTANT SPEED

PARAMETER	CRITERIA
COMPRESSED AIR SYSTEM	
AIR COMPRESSORS	
NO. OF UNITS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER UNIT	70 SCFM @ 150 PSI
MOTOR SIZE	15 KW
AIR RECEIVER TANK	
NO. OF UNITS	1 (1 DUTY, 0 STANDBY)
CAPACITY PER UNIT	1,000 GAL

PARAMETER	CRITERIA
RECLAIMED WATER TRANSFER PUMPS	
CHEMICAL	
CONCENTRATION	
SPECIFIC GRAVITY	
pH	
STORAGE TANKS	
NO. OF TANKS	3 (2 DUTY, 1 STANDBY)
NOMINAL TANK VOLUME	1,040 GPM
DELIVERY TOIE DIMENSIONS	10.3 FT X 3.5 FT X 4.2 FT
MATERIAL	PE
TANK COLOR	WHITE

PARAMETER	CRITERIA
M/F U/F CIP TANKS	
TYPE	VERTICAL
NO. OF TANKS	2 (2 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	4,200 GAL
STRAIGHT SIDESHELL HEIGHT	15 FT
MATERIAL	FRP
TANK COLOR	WHITE
HEATER TYPE	IMMERSION
CAPACITY	TBD
MATERIAL	316L SS

PARAMETER	CRITERIA
RECLAIMED WATER TRANSFER PUMPS	
CHEMICAL	
CONCENTRATION	
SPECIFIC GRAVITY	
pH	
STORAGE TANKS	
NO. OF TANKS	3 (2 DUTY, 1 STANDBY)
NOMINAL TANK VOLUME	1,040 GPM
DELIVERY TOIE DIMENSIONS	10.3 FT X 3.5 FT X 4.2 FT
MATERIAL	PE
TANK COLOR	WHITE

PARAMETER	CRITERIA
M/F U/F CIP TANKS	
TYPE	VERTICAL
NO. OF TANKS	2 (2 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	4,200 GAL
STRAIGHT SIDESHELL HEIGHT	15 FT
MATERIAL	FRP
TANK COLOR	WHITE
HEATER TYPE	IMMERSION
CAPACITY	TBD
MATERIAL	316L SS

PARAMETER	CRITERIA
M/F U/F CIP TANKS	
TYPE	VERTICAL
NO. OF TANKS	2 (2 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	4,200 GAL
STRAIGHT SIDESHELL HEIGHT	15 FT
MATERIAL	FRP
TANK COLOR	WHITE
HEATER TYPE	IMMERSION
CAPACITY	TBD
MATERIAL	316L SS

PARAMETER	CRITERIA
TERTIARY FILTRATION PLANT PRODUCTION CAPACITY	3.0 MGD
M/F U/F FEED PUMPS	
CAN VERTICAL TURBINE PUMP TYPE	
NO. OF PUMPS	4 (3 DUTY, 1 STANDBY)
CAPACITY PER PUMP	760 GPM
TDH	61 PSI
DRIVE	50 HP

PARAMETER	CRITERIA
AUTOMATIC STRAINERS	
TYPE	AUTO-BACKWASHING STRAINER
NO. OF UNITS	2 (1 DUTY, 1 STANDBY)
CAPACITY PER UNIT	2,290 GPM
SCREEN TYPE	WEDGE WIRE
SCREEN PORE SIZE	300 MICRONS
STRAINER RECOVERY	MIN. 80%
CLEAN SCREEN HEADLOSS	MAX. 5.0 PSI
OPERATING HEADLOSS	MAX. 5.0 PSI
VESSEL PRESSURE RATING	150 PSI
VESSEL MATERIAL	316L SS
SCREEN MATERIAL	316L SS
MOTOR SIZE	0.5 HP

PARAMETER	CRITERIA
M/F U/F SYSTEM	
M/F U/F MEMBRANES	
NOMINAL PORE SIZE	0.01 - 0.10 MICRONS
MATERIAL	PVDF
TYPE/FIBER FLOW PATH	PRESSURIZED/OUTSIDE-IN
M/F U/F SKIDS	
NO. OF SKIDS	3 (3 DUTY, 0 STANDBY)
PRODUCTION CAPACITY PER SKID	1.0 MGD (667 GPM)
Avg. DESIGN FLUX	20 GFD
MAX. INSTANTANEOUS DESIGN FLUX	25 GFD
MAX. INSTANTANEOUS FLUX WITH ONE SKID OFFLINE	35 GFD
MIN. INSTALLED ROBRANE AREA	48,000 SF/SKID
MIN. SPARE MEMBRANE AREA PER SKID	7,200 SF/SKID
MAX. TOTAL NO. OF MEMBRANE MODULES PER SKID	100 MODULES/SKID
OPERATION CRITERIA	
ONLINE FACTOR	88%
BACKWASH INTERVAL	25 MINUTES
CEB INTERVAL	24 HOURS
CIP INTERVAL	30 DAYS
CEB CHLORINE DOSE	MAX. 100 MG/L
CIP CHLORINE DOSE	MAX. 3,000 MG/L (0.3%)
CIP ACID DOSE	MAX. 30,000 MG/L (3.0%)

PARAMETER	CRITERIA
M/F U/F TRATE TANK	
TYPE	VERTICAL
NO. OF TANKS	1 (1 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	12,000 GAL
DIAMETER	MAX. 120 FT
STRAIGHT SIDESHELL HEIGHT	16.5 FT
RESIDENCE TIME AT DESIGN FLOW	5.8 MINUTES
MATERIAL	HDPE
TANK COLOR	BLACK

PARAMETER	CRITERIA
M/F U/F CIP TANKS	
TYPE	VERTICAL
NO. OF TANKS	2 (2 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	4,200 GAL
STRAIGHT SIDESHELL HEIGHT	15 FT
MATERIAL	FRP
TANK COLOR	WHITE
HEATER TYPE	IMMERSION
CAPACITY	TBD
MATERIAL	316L SS

PARAMETER	CRITERIA
M/F U/F CIP TANKS	
TYPE	VERTICAL
NO. OF TANKS	2 (2 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	4,200 GAL
STRAIGHT SIDESHELL HEIGHT	15 FT
MATERIAL	FRP
TANK COLOR	WHITE
HEATER TYPE	IMMERSION
CAPACITY	TBD
MATERIAL	316L SS

PARAMETER	CRITERIA
M/F U/F CIP TANKS	
TYPE	VERTICAL
NO. OF TANKS	2 (2 DUTY, 0 STANDBY)
NOMINAL TANK VOLUME	4,200 GAL
STRAIGHT SIDESHELL HEIGHT	15 FT
MATERIAL	FRP
TANK COLOR	WHITE
HEATER TYPE	IMMERSION
CAPACITY	TBD
MATERIAL	316L SS

NOTE: LIGHTER COLOR INDICATES EXISTING PROCESS EQUIPMENT.



CDM Smith
 10000 Wilshire Blvd, Suite 1000
 Los Angeles, CA 90024
 Tel: 310.734.3300
 Fax: 310.734.3301

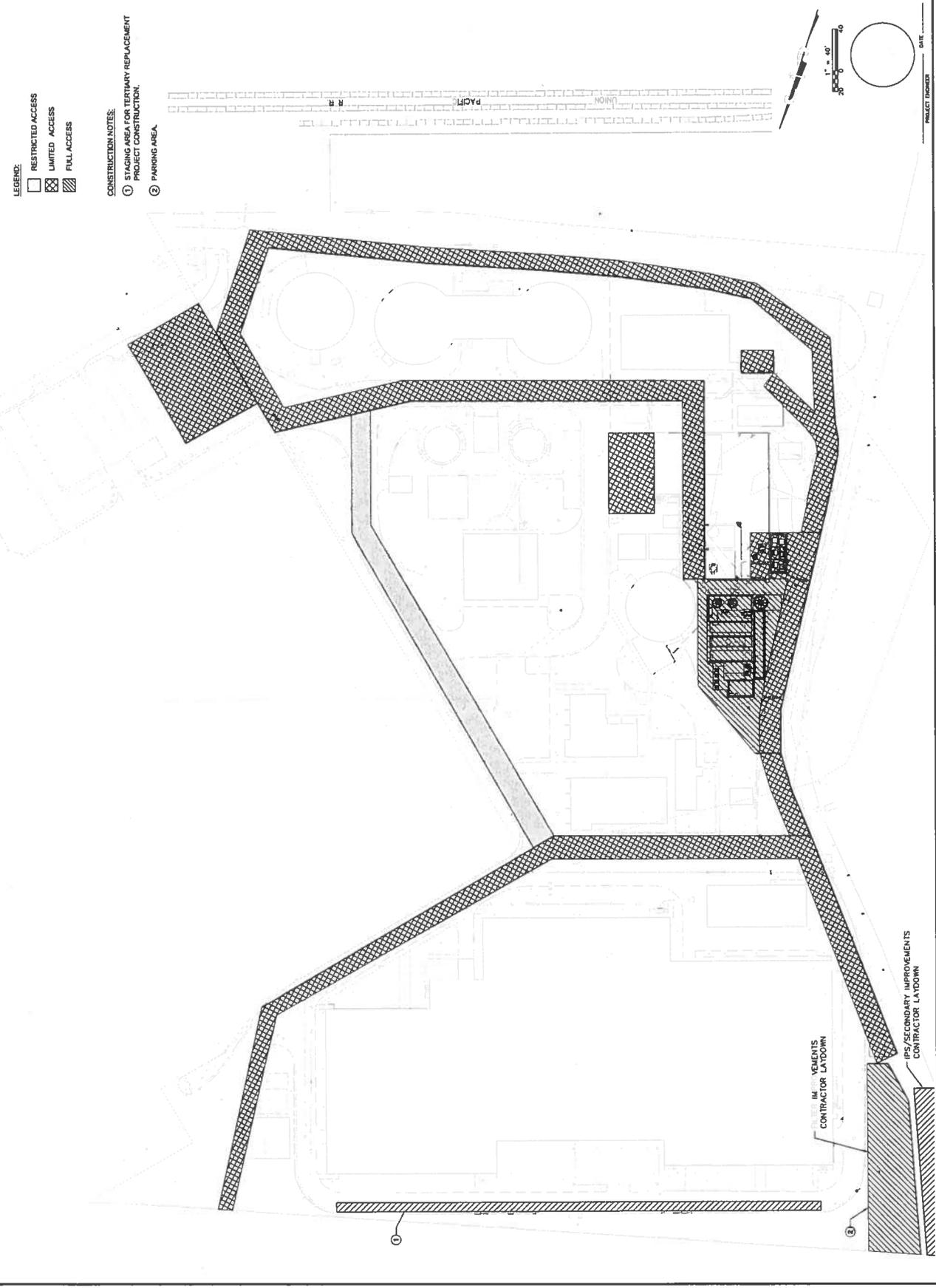
PROJECT NO. 200-00672
 SHEET NO. 3688
 SHEET DATE G08
 PROJECT DATE G-08-1401
 SHEET NO. 8 OF 110

DATE: _____
 PROJECT ENGINEER: _____
 PROJECT CHECKER: _____

DESIGN: EV
 DRAWN: DJ
 CHECKED: DMC
 90%
 DRAFT

DATE: _____
 APPROVED: _____

**EEMWTP TERTIARY FILTRATION PLANT REPLACEMENT
 CONSTRUCTION STAGING AREA
 GENERAL LAYOUT &
 CONSTRUCTION STAGING AREA**



- LEGEND:**
- RESTRICTED ACCESS
 - ▨ LIMITED ACCESS
 - ▩ FULL ACCESS

- CONSTRUCTION NOTES:**
- ① STAGING AREA FOR TERTIARY REPLACEMENT PROJECT CONSTRUCTION.
 - ② PARKING AREA.

IM VELENTIS
 CONTRACTOR LAYDOWN

IPS/SECONDARY IMPROVEMENTS
 CONTRACTOR LAYDOWN

①

②

DATE: _____



STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
DIVISION OF WATER SUPPLY

PROJECT NUMBER
DATE
DRAWN BY
CHECKED BY
90%
DRAFT

DESIGN
DRAWN
CHECKED
90%
DRAFT

DATE
APPROVED

GENERAL NOTES:
1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND INSPECT THE NATURE AND CONDITION OF ALL FACILITIES TO BE DEMOLISHED, PARTIALLY DEMOLISHED, OR TO BE ALTERED IN ANY WAY PRIOR TO SUBMITTAL OF THIS BID.
2. EXISTING EASEMENTS ARE NOT SHOWN ON THE GENERAL SITE PLAN FOR CLARITY.

SURVEY BENCHMARK AND CONTROL
BENCHMARK: CHESLED SQUARE, TOP OF CURB, NEAR FIRE HYDRANT POST, EAST WALL
HYPOCURETTE STATION'S EAST WALL
ELEVATION: 13.77 NAVD 88
BASIS OF BEARINGS: R/S BOOK 147, PAGES 70 TO 74

APN 017-113-012
7.58 ACRES

APN 017-113-016
7.58 ACRES

APN 017-540-005
4.58 ACRES

PROPERTY LINE

REINFLUENT PUMP STATION

STATION 'B'

CONCRETE SLAB

MF/UF FACILITY

SLUDGE HOLDING TANK

CONTROL BLDG

ADMINISTRATION BLDG

ADMINISTRATION BLDG

ADMINISTRATION BLDG

MAINTENANCE BLDG

THICKENER CONTROL BLDG

GRAVITATIONAL THICKENER

FLUOTATIONAL THICKENER

SLUDGE HOLDING TANK

COLLECTION CREW QUARTERS

SOULIUM HYPOCURETTE FACILITIES

CHLORINE CONTACT CHAMBER

SOULIUM BISULFITE FACILITIES

SLUDGE HANDLING BLDG

STATION 'A'

CHEMICAL STORAGE FACILITY

MF/UF FACILITY CANOPY

MODIFIED ROADWAY

50' BUFFER FROM TOP OF CURB

MATCHLINE SEE DWG C-02B

SCALE: 1" = 20'

PROJECT ENGINEER

DATE



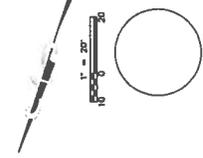
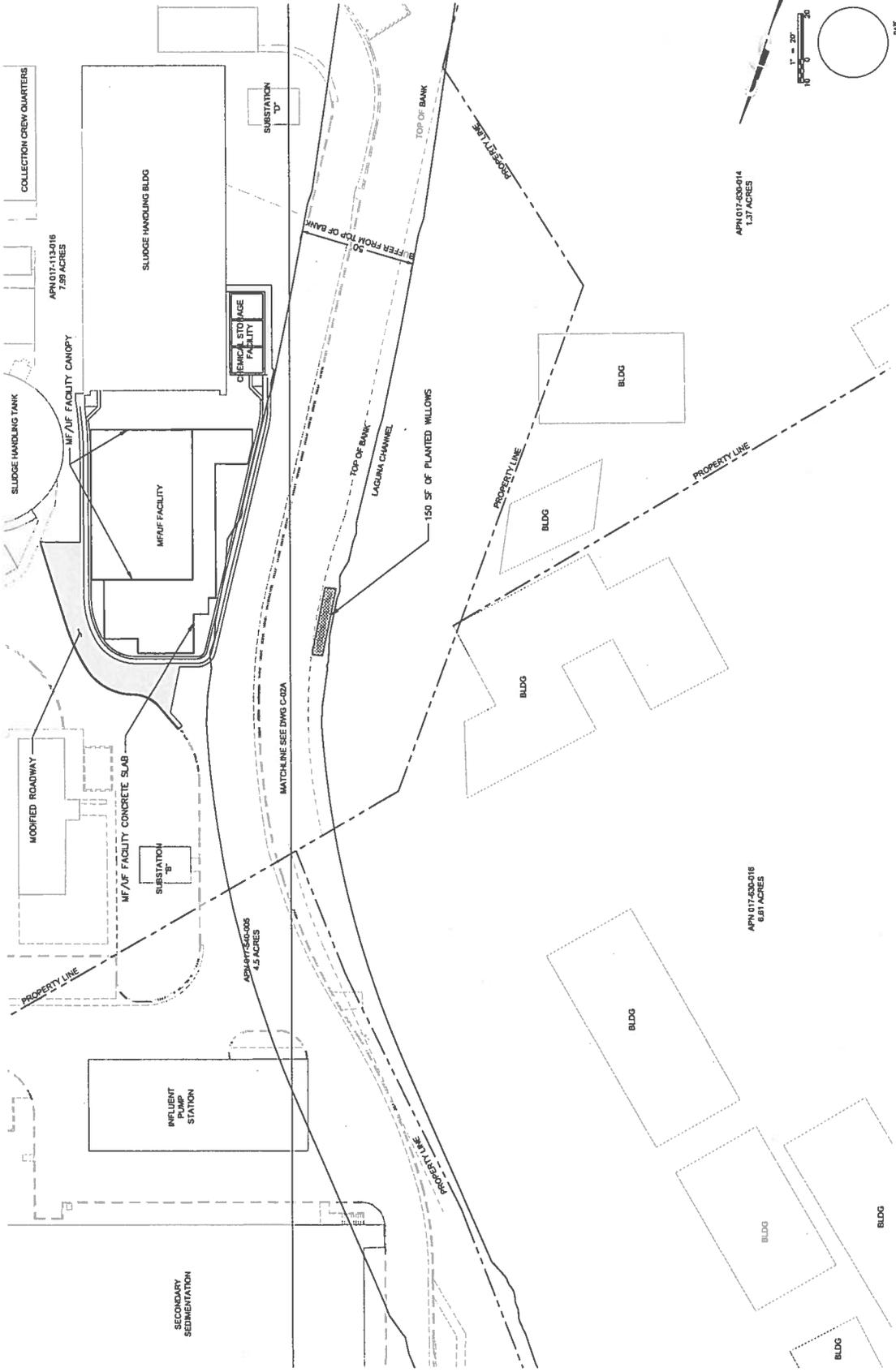
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GENERAL SITE PLAN II

EWWTP TERTIARY FILTRATION PLANT REPLACEMENT

200-006543	PERM. NO.
36688	C-02E
APN 017-530-014	PERM. NO.
C-02B-1401	PERM. NO.

- GENERAL NOTES:**
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND INSPECT THE NATURE AND CONDITION OF ALL FACILITIES TO BE DEMOLISHED, PARTIALLY DEMOLISHED, OR ALTERED IN ANY WAY PRIOR TO SUBMITTAL OF THIS BR.
 - EXISTING EASEMENTS ARE NOT SHOWN ON THE GENERAL SITE PLAN FOR CLARITY.





2014 JULY 15
 CIVIL ENGINEER
 STATE OF CALIFORNIA
 SAN JOSE, CALIFORNIA

PROJECT NUMBER
 DRAWING NUMBER
 DATE

CITY CHECKED
 DATE

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DESIGNED
 CHECKED
 DATE

DATE
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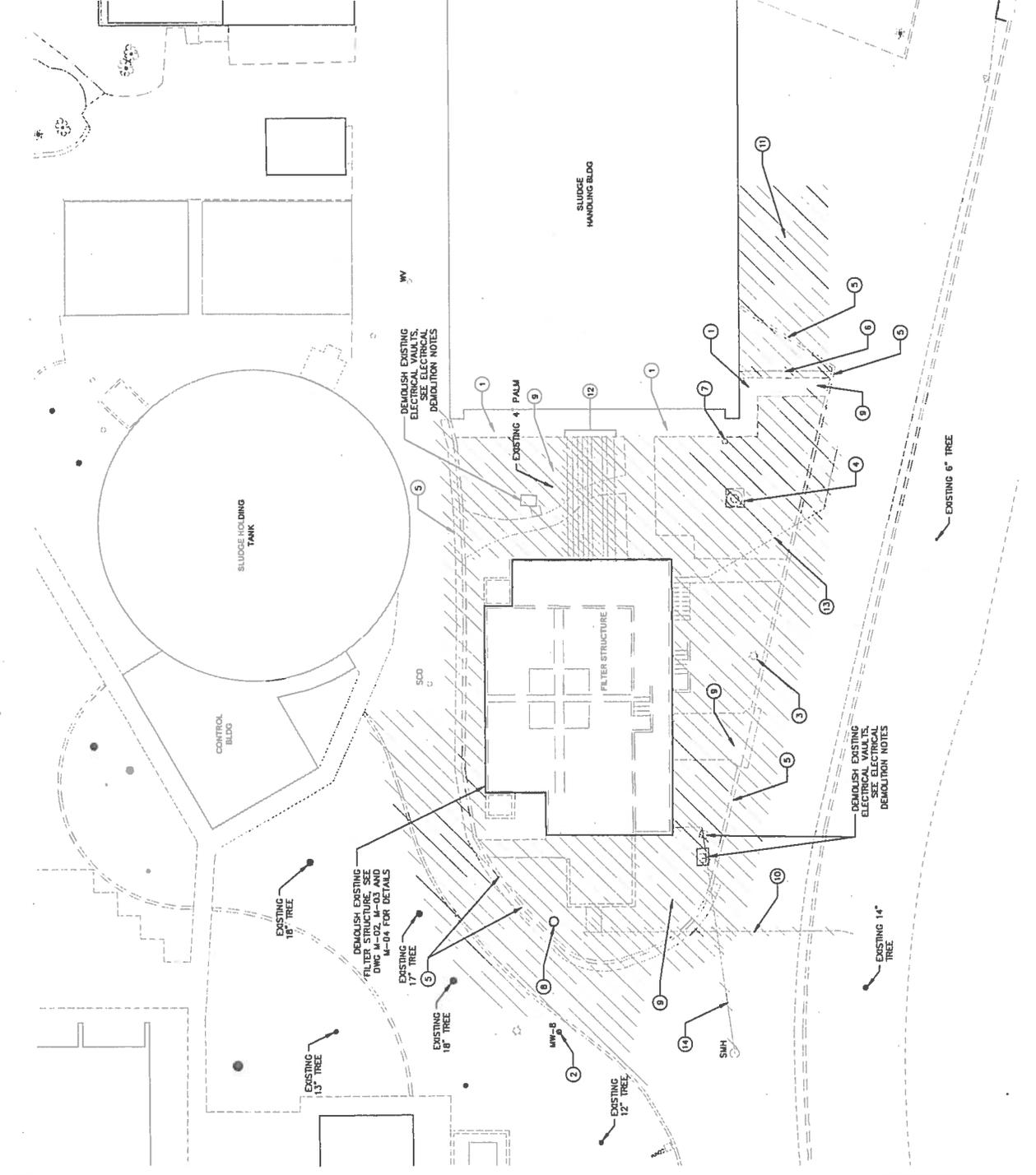
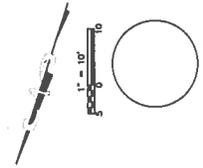
REVISIONS

SITE DEMOLITION PLAN

200-00844
 3688 IC03
 C-03-1401
 SHEET 11 OF 110

- NOTES:
- EXISTING CONCRETE TO REMAIN. PROTECT IN PLACE.
 - PROTECT USGS WELL IN PLACE.
 - REMOVE AND RELOCATE EXISTING LIGHT POLE. SEE DWG C-04 FOR FILTERATION LIGHTING PLAN FOR DETAILS.
 - REMOVE AND DISPOSE OF EXISTING FOUNTAIN.
 - SAW CUT AND REMOVE EXISTING CURB AND CUTTER, AS REQUIRED.
 - REMOVE AND RECONSTRUCT EXISTING 3" PVC DRAIN. SEE DWG X DETAIL X FOR RECONSTRUCTION DETAILS.
 - DEMOLISH EXISTING IRRIGATION CONTROLS.
 - EXISTING MANHOLE TO BE DEMOLISHED AND RECONSTRUCTED. SEE DWG C-04 FOR NEW MANHOLE LOCATION.
 - REMOVE EXISTING CONCRETE PAVING SIDEWALKS. LANDSCAPING PLANTS TO BE DEMOLISHED. ALL EDGES OF PAVEMENT AND CONCRETE SHALL BE SAW CUT. SEE DWG C-04 FOR LIMITS OF PAVEMENT DEMOLITION.
 - EXIST 18" AND 24" SEE TO BE REMOVED TO NEW POINT OF CONNECTION. INVERT ELEVATION -0.45. SEE DETAIL I, DWG C-11.
 - SAW CUT AND REMOVE EXISTING ASPHALT.
 - EXISTING 6" ALP, 1" AMP, 1" CPO, 2-1/2" AND 1" LINES TO BE REMOVED IN BELOW GRADE LOCATIONS TO EDGE OF EXISTING SIDEWALK AS SHOWN.
 - EXISTING 24" PVC TERTIARY EFFLUENT LINE TO BE REMOVED TO NEW POINT OF CONNECTION.
 - EXISTING 18" OVERFLOW LINE TO BE REMOVED TO NEW POINT OF CONNECTION. EXISTING MANHOLE PENETRATION TO BE PLUGGED WITH CONCRETE AT INVERT ELEVATION 4.37.

- ELECTRICAL DEMOLITION NOTES:
- REMOVE ALL ELECTRICAL CONNECTIONS AND EQUIPMENT THAT IS TO BE REMOVED.
 - REMOVE ALL OBSOLETE WIRING BACK TO SOURCE.
 - REMOVE ALL OBSOLETE EXPOSED CONDUIT.
 - EXISTING CONDUITS IN THE SUBSTATION AND DEWATERING BUILDING MAY BE USED WHERE POSSIBLE.





PROJECT NUMBER: 2000-00646
 SHEET NO: C05
 DATE: 8/29/2013

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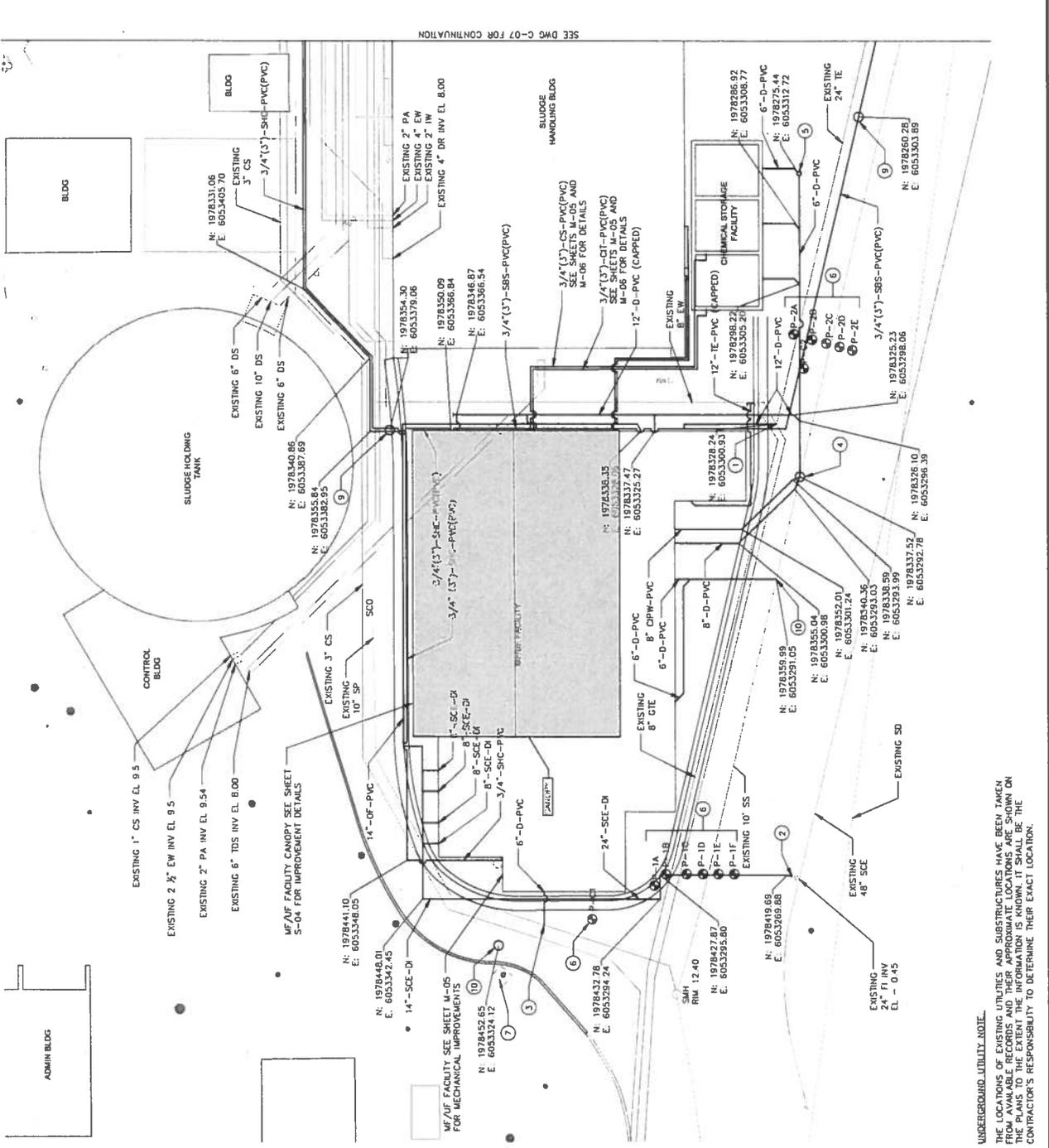
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GENERAL NOTES:

- CONTRACTOR SHALL RESTORE SURROUNDING OF EXISTING UTILITIES TO ORIGINAL OR BETTER PRIOR TO COMPLETION.
- ALL BELOW GRADE UTILITIES SHALL BE BACKFILLED WITH 3" GRANULAR FILL AND STANDARD DETAILS U-011, U-012, AND U-013.

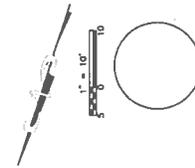
CONSTRUCTION NOTES:

- TE-IN TO EXISTING 24" TERTIARY EFFLUENT LINE. SEE DETAIL 3 SHEET C-11. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING 24" TERTIARY EFFLUENT LINE PRIOR TO CONSTRUCTION.
- TE-IN TO EXISTING 24" SECONDARY EFFLUENT LINE. SEE DETAIL 1 SHEET C-11. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING 10" SEWER LINE PRIOR TO CONSTRUCTION.
- TE-IN TO EXISTING SS.
- PROVIDE AND INSTALL A NEW 48" MANHOLE PER CITY OF SANTA BARBARA STANDARD DETAIL 5-01.1. CONTRACTOR TO VERIFY APPROPRIATE LOCATION PRIOR TO CONSTRUCTION.
- PROVIDE AND INSTALL CLEANOUT AT SEWER JUNCTION.
- POTHOLE INVESTIGATION PERFORMED ON APRIL 16/17, 2013. SEE POTHOLE REPORT DATED MAY INCLUDED AS PART OF DESIGN MANUAL.
- PROTECT IN PLACE EXISTING MONITORING WELL.
- PROVIDE AND INSTALL A NEW 48" LEAK DETECTION MANHOLE PER CITY OF SANTA BARBARA STANDARD DETAIL 5-01.1. CONTRACTOR TO VERIFY APPROPRIATE LOCATION PRIOR TO CONSTRUCTION.
- RECOATED LEAK DETECTION MANHOLE. CONTRACTOR SHALL INSTALL NEW MANHOLE AS SHOWN. CONTRACTOR SHALL RECONNECT 3"-3" PVC SECONDARY CONTAINMENT LINES, AND 1"-1" PVC SHC LINE RECONNECTION LOCATIONS TO BE COORDINATED WITH ENGINEER.
- TE INTO EXISTING SEWER WITH CHIMNEY PER CITY OF SANTA BARBARA STANDARD DETAIL 5-5.0.



UNDERGROUND UTILITY NOTE:
 THE LOCATIONS OF EXISTING UTILITIES AND SUBSTRUCTURES HAVE BEEN TAKEN FROM AVAILABLE RECORDS AND THEIR APPROXIMATE LOCATIONS ARE SHOWN ON THE PLANS TO THE EXTENT THE INFORMATION IS KNOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXACT LOCATION.

YARD PIPING PLAN I
 EMMWTP TERTIARY FILTRATION PLANT REPLACEMENT



DATE: 8/29/2013

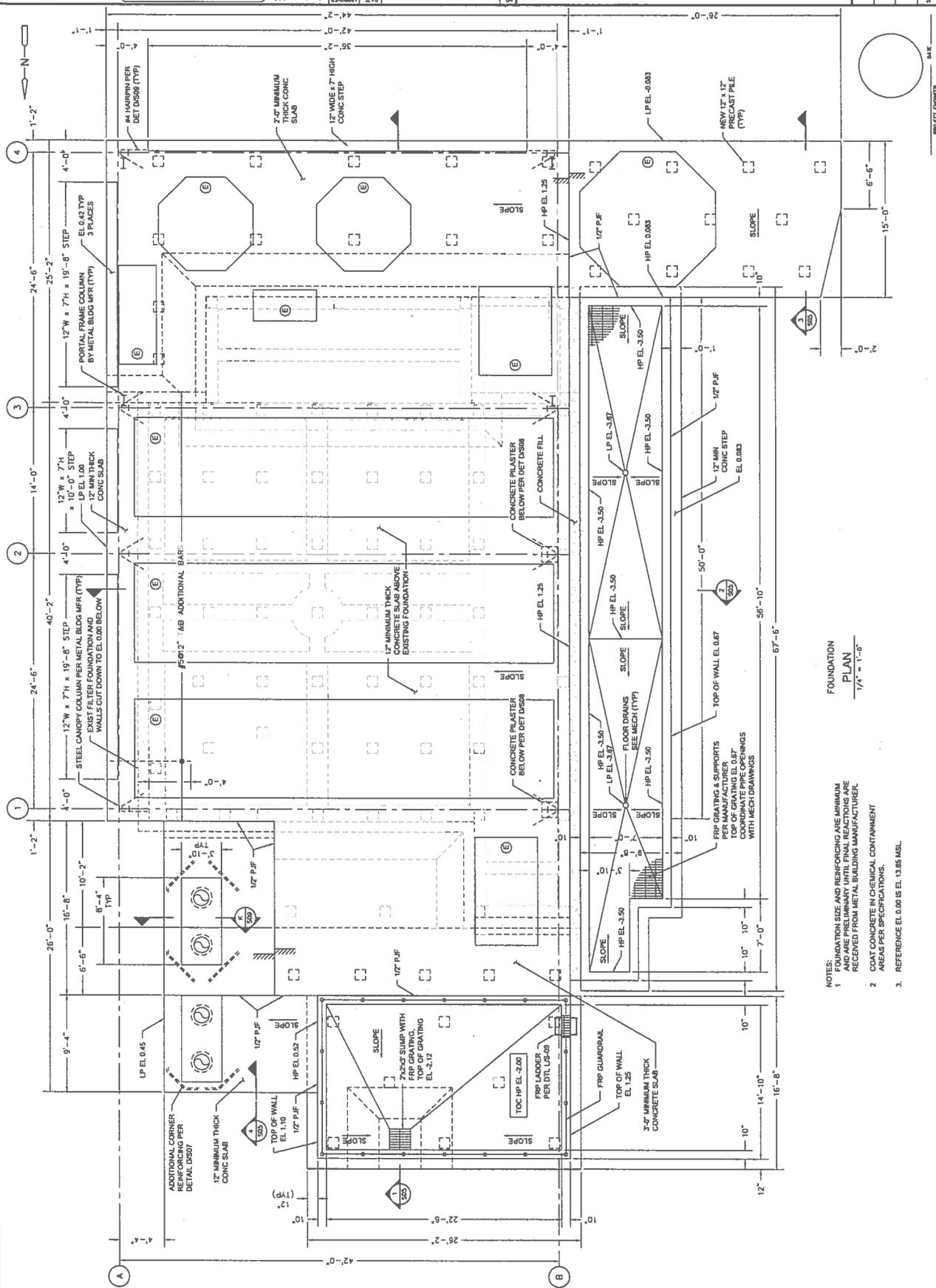


DATE: _____
 CHECKED BY: _____
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 90%
 APPROVED: _____
 DRAWN BY: _____
 PROJECT NO.: _____
 SHEET NO.: _____

NO.	REVISIONS	DATE	BY

EWMTP TERTIARY FILTRATION PLANT REPLACEMENT
M/F/F FACILITY
FOUNDATION PLAN

200-00672
 3688
 S-03-1401
 DATE: 10/28/2013 8:32 AM Johnson, Audrey S.



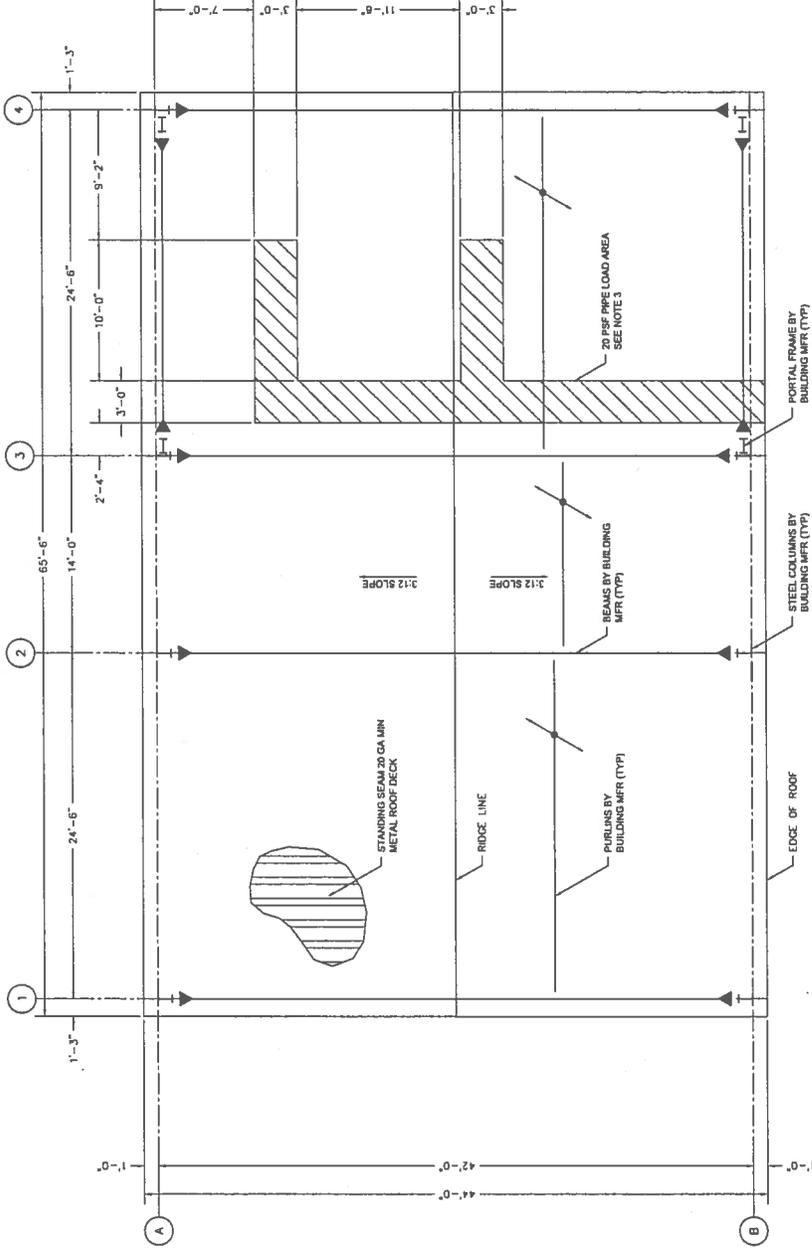


DATE: 04/25/11
 PROJECT NO: S-04-1401
 SHEET NO: 25 OF 110

DESIGN	LIA
DRAWN	ASL
CHECKED	PLB
90% DRAFT	
CITY ENGINEER	DATE
APPROVED	

EEMWTP TERTIARY FILTRATION PLANT REPLACEMENT
 M/F/F FACILITY
 ROOF PLAN

200-00672
 3688
 S-04-1401



ROOF PLAN
 1/4" = 1'-0"

- NOTES:
- 1 MINIMUM COLLATERAL LOAD ON ROOF: 10 PSF. FUTURE COLLATERAL LOADS SHALL BE CONSIDERED CONCURRENTLY WITH ROOF LIVE LOAD.
 - 2 FUTURE SOLAR PANEL LOAD SHALL BE 5 PSF ON ENTIRE ROOF SURFACE.
 - 3 LOAD IN PLACE OF 10 PSF COLLATERAL LOAD.
 - 4 BUILDING MANUFACTURER TO PROVIDE REQUIRED ROOF SUPPORT FOR PROCESS MECHANICAL PIPING.

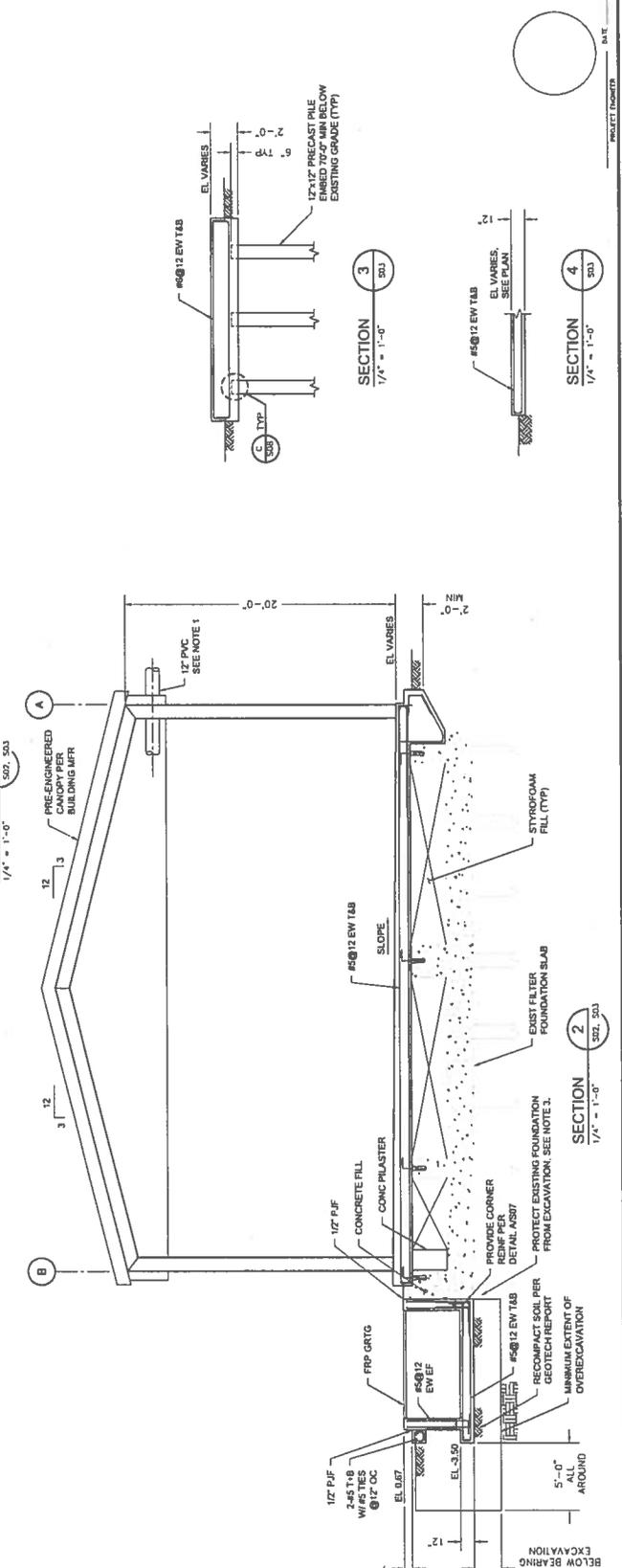
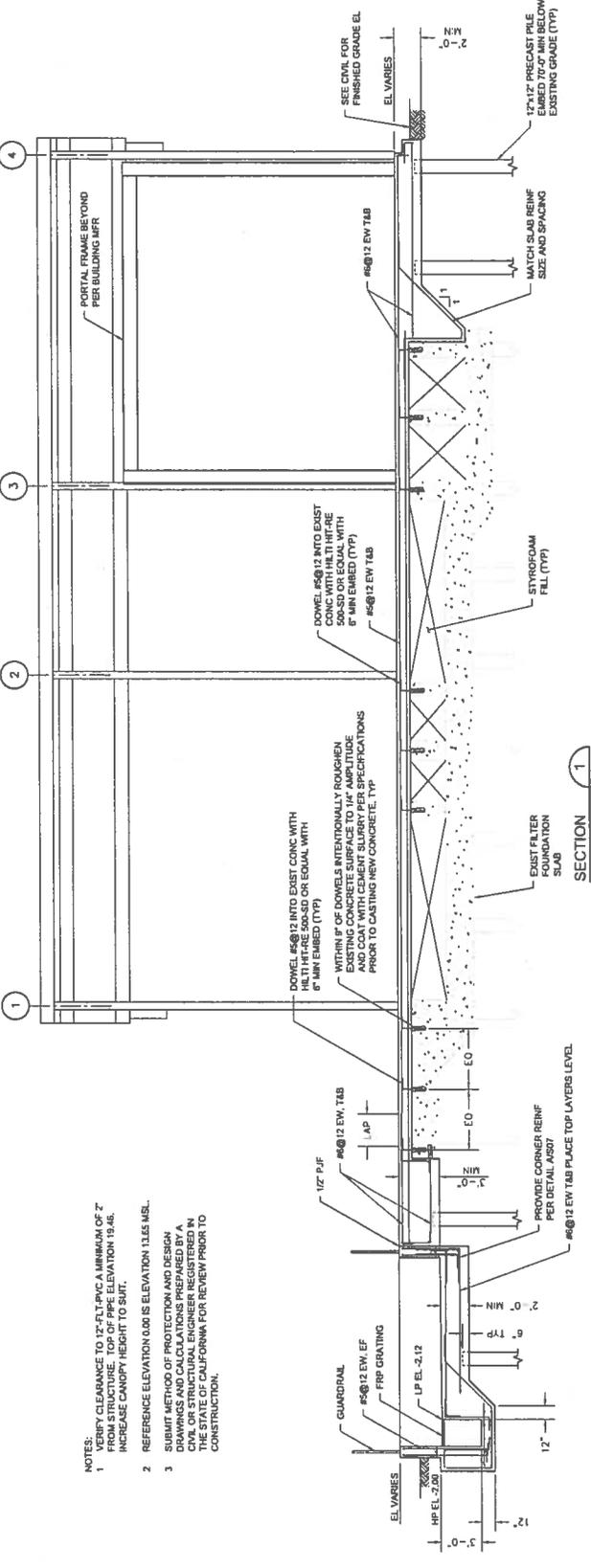
DATE: 04/25/11
 PROJECT NUMBER: S-04-1401



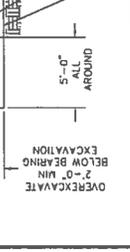
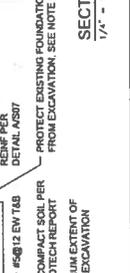
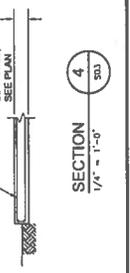
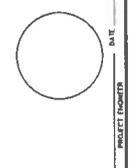
PROJECT NO. 200-00672
 SHEET NO. S-05-1401
 DATE: 10/28/2013 9:19 AM
 DRAWN BY: J. J. JENSEN
 CHECKED BY: J. J. JENSEN
 DATE: 10/28/2013 9:19 AM
 90% DRAFT
 CIVIL ENGINEER
 DATE:

NO.	DATE	REVISIONS

EWFWTP TERTIARY FILTRATION PLANT REPLACEMENT
M/F/F FACILITY
SECTIONS



- NOTES:
1. VERIFY CLEARANCE TO 12" FLTPVC A MINIMUM OF 2' FROM STRUCTURE. TOP OF PIPE ELEVATION 19.48. INCREASE CANOPY HEIGHT TO SUIT.
 2. REFERENCE ELEVATION 0.00 IS ELEVATION 11.65 MSL.
 3. SUBMIT METHOD OF PROTECTION AND DESIGN FOR OVEREXCAVATION TO THE STATE OF CALIFORNIA FOR REVIEW PRIOR TO CONSTRUCTION.



OVEREXCAVATE
 2'-0" MIN
 BELOW BEARING
 EXCAVATION
 5'-0" ALL
 AROUND



City of Santa Barbara

Public Works Department

www.SantaBarbaraCA.gov

October 28, 2013

Main Office

630 Garden Street
P.O. Box 1990
Santa Barbara, CA
93102-1990

Administration

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Transportation

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Water Resources

Tel: 805.564.5387
Fax: 805.897.2613

Santa Barbara Planning Commission
City of Santa Barbara
630 Garden Street
Santa Barbara, California 93101

RECEIVED
OCT 28 2013

CITY OF SANTA BARBARA
PLANNING DIVISION

SUBJECT: Submittal of Coastal Development Permit Application for the El Estero Wastewater Treatment Plant Tertiary Treatment Rehabilitation Project (APN 017-113-019)

Dear Commissioners:

The City of Santa Barbara Public Works Department is pleased to submit a Coastal Development Permit application for your review and consideration for the El Estero Wastewater Treatment Plant (El Estero) Tertiary Treatment Rehabilitation Project (Project) at 520 East Yanonali Street.

Discretionary Approval Requested

A Coastal Development Permit to allow development in the Appealable Jurisdiction of the City's Coastal Zone (SBMC Section 28.44).

Background and Purpose

The purpose of the proposed project is to upgrade the existing tertiary filtration facilities at El Estero with newer technology, which would provide enhanced tertiary treatment of wastewater effluent for compliance with Title 22 of the California Code of Regulations for recycled water use.

For over 150 years, the City of Santa Barbara (City) has continued to provide, protect, and preserve groundwater, drinking water and recycled water for its community. The City is a leader in water system planning and use of recycled water. Committed to protecting the environment and public health and safety, the City now seeks to replace aging equipment in order to continue sustainable and reliable recycled water service at El Estero.

El Estero is an 11 million gallons per day (mgd) wastewater treatment plant that was initially constructed in 1951. At that time it operated as a "screening plant" with ocean discharge, where mechanically operated screens removed solids and debris immediately before the untreated wastewater was discharged into the ocean. Since then, upgrades have occurred in 1973 (completed in 1979), which provided secondary treatment, and again in 1988 to include tertiary treatment. The plant has primary sedimentation, secondary treatment, tertiary filtration, and disinfection processes.

EXHIBIT C

Currently, El Estero produces Title 22 recycled water for 60 to 80 users, which serves over 400 acres of landscaped areas including golf courses, parks, schools, and the Santa Barbara Zoo. Recycled water demand occurs primarily at night with the distribution time occurring between the hours of 9:00 pm and 6:00 am. Although this is an ideal time for irrigation (due to the lessened amount of evaporation and direct human contact), it can also present some issues due to the low influent flow to the treatment plant during the early morning hours.

In the recent years, the tertiary filter effluent has not reliably met the regulatory turbidity limit of <2 Nephelometric Turbidity Units (NTU). The influent wastewater is also relatively high in Total Dissolved Solids (TDS), which results in high TDS in the tertiary filter effluent. As a result, the City currently blends tertiary filter effluent with potable water to decrease turbidity and TDS in the recycled water.

Recycled water production preserves potable water supplies, and is therefore a critical water supply source, especially during drought conditions. Therefore, it is essential to construct this Project in a timely manner, as we currently blend tertiary effluent with up to 90% potable water and are experiencing below average rainfall. In addition, the existing tertiary filter is experiencing a number of operational, maintenance and safety challenges.

Project Site

El Estero is located at 520 East Yanonali Street in the City of Santa Barbara, between Garden Street and Calle Cesar Chavez. The main access to the plant is through an access gate just off Yanonali Street on the northeast side of the plant. A secondary access gate is located on the southeast side of the plant off Quinientos Street. A main access road and various secondary access roads provide vehicular access to the various process areas within the plant.

El Estero is located within the City of Santa Barbara Zone OM-1 (Ocean Oriented Light Manufacturing), S-D-3 (Coastal Zone), and has a General Plan Land Use Designation of Institutional. Highway 101 is directly north of the project site and the UPRR is south of the site.

Zoning and land use designations surrounding the site are as follows:

- Northwest of the project site:
 - Zoning designation: M-1, S-D-3 (Light Manufacturing, Coastal Zone)
 - General Plan Land Use: Industrial

- West of the project site:
 - Zoning designation: OM-1, S-D-3 (Ocean Oriented Light Manufacturing, Coastal Zone)
 - General Plan Land Use: Ocean Related Industrial

- South of the project site:
 - Zoning designation: HRC-2, SP-1, S-D-3 (Hotel Related Commerce, Specific Plan, Coastal Zone)
 - General Plan Land Use: Parks/Open Space

- East of the project site:
 - Zoning designation: OM-1, S-D-3 (Ocean Oriented Light Manufacturing, Coastal Zone).

o General Plan Land Use: Ocean Related Industrial

See the Project Vicinity Map on Sheet 1 (Cover Sheet) of the attached project plans.

Existing Facilities

The existing facilities at El Estero include various process equipment and yard piping, surface drainage features, an access road and parking within a fenced site. Storm water flows at the site are discharged to a reinforced concrete storm drain system or directly off-site. The storm drain system discharges into Laguna Channel located on the east side the plant.

The existing tertiary facility generally consists of a single-media gravity filters type with an air/water backwash system. The filters consist of four cells, each 14 feet by 14 feet and 20 feet deep. The filters receive secondary effluent that is pumped through two filter supply pumps (one duty and one standby). The filtered water flows by gravity to the chlorine contact basin. The existing filter complex is approximately 2,300 square feet and 31 feet tall at its highest point.

Project Description

The City requires recycled water for irrigation purposes for properties situated along the main recycled water lines, and encourages users who are not required to utilize recycled water to do so. In order to provide reliable Title 22 recycled water El Estero for existing and future users, the existing filtration facilities must be upgraded. The following is a description of the proposed project components:

Filtration System

The proposed project consists of elements within the existing El Estero Wastewater Treatment Plant that would replace the existing filtration facilities. The proposed project consists of the demolition of the existing Filter Complex, adjacent landscaping and asphalt. The project includes the construction and operation of a Membrane Filtration Facility and hydrochloric acid system within the unpaved area occupied by the existing Filter Complex. A new concrete truck-loading pad would be located on the west side of the new hydrochloric acid system, and chemical containment areas would also be constructed for the citric acid, sodium hydroxide, and antiscalant systems.

The concrete truck-loading pad would have a sump and a drain line with an isolation valve to capture any potential chemical spills during the chemical delivery and allow storm water runoff to drain into plant influent. New cross gutters would be provided to divert the storm water runoff around the concrete truck-loading pad and to the curb and gutter on the west side of the access road, where it enters the storm drain system south of the tertiary facility. Storm water run-off to the storm drain system is not expected to increase, as the new facility footprint will drain to the sewer drain system, where it will go back to the front of El Estero for treatment prior to ocean discharge.

In addition, the proposed project includes additional chemical systems - citric acid, sodium hydroxide, and antiscalant - as part of the replacement filtration system. These systems would be located along the west side of the solids handling building in the existing parking area. The existing sodium hypochlorite storage and feed equipment area would be reconfigured to accommodate four additional feed pumps. The existing sodium bisulfite storage and feed equipment would be reconfigured to accommodate two additional feed pumps.

Yard Piping

The proposed project includes new and replacement yard piping associated with the membrane filtration (microfiltration [MF]/ultrafiltration [UF]) feed and filtrate, backwash/chemical clean-in-place (CIP) drainage associated with the MF/UF systems, drains, and chemical lines. The piping would be made of polyvinyl chloride (PVC), high density polypropylene (HDPE), ductile iron pipe (DIP) or stainless steel (SS) and be buried with a minimum cover of four feet. Construction of the piping (including trenching, backfill, bedding, compaction and testing) would be per the City's standard details and geotechnical report recommendations. Please see Sheet 13 of the project plans (Yard Piping Plan 1).

Sanitary Sewer/Drain

Several drains would also be demolished and removed from the site. New drain lines would be provided to convey backwash, CIP waste, and drainage from the spill capture area by gravity to an existing sewer manhole by the new Membrane Filtration Facility.

Drainage and Paving

The proposed project includes new piping/connections to existing process piping and the new MF system foundation. The pipelines would be buried with a minimum of four foot of cover; however, the deepest pipe excavation is approximately 20 feet deep for connection to the existing secondary effluent pipe. Please see Sheet 13 of the project plans (Yard Piping Plan 1).

The foundation for the new facilities would be constructed on top of the existing piles that support the filter complex. It is expected that excavation associated with construction of the foundation would be approximately four to five feet below grade. In addition, 36 new 12-inch square pre-cast concrete piles will be driven to support the new foundation.

The new structure would be located at grade, and minimal grading is expected to occur at the site. Any new grading would be limited to the landscaped area around the existing filter complex. Minimal impact to the existing site drainage is expected. Where existing drainage path is disrupted (i.e., chemical truck loading area), a new cross gutter is proposed to divert storm water flow around the containment pad and connect to the existing gutter across the roadway.

Landscaping

Approximately 4,000 square feet of landscaping would be removed as part of the proposed project. Landscaping would be provided to restore the post-construction site to existing conditions as much as possible. Landscaping would be per the City's Landscape Design Standards for Water Conservation or as directed by the City's Architectural Review Board. Removal of one palm tree is proposed as part of this project. The palm tree is located between the existing filtration complex and the solids handling building (see Sheet 11 of the project plans).

Per ABR comments on the conceptual review of the project, native willows will be planted on the western bank of Laguna Channel in an area that is currently covered by low growing California rose and berry thickets. The willow plantings will screen the project from adjacent neighbors in addition to improving the creek habitat on Laguna Channel. The area of restoration will consist of willow cutting installation along a 30-foot by 5-foot reach of Laguna Channel. This work will be in accordance with an existing California Department of Fish and Wildlife (CDFW) Section 1601 Streambed Alteration

Agreement. The Department of Fish and Wildlife has approved this work.

Parking

The site currently has 52 parking spaces; it will have 50 parking spaces post-construction. The loss of two parking spaces is due to the new chemical containment areas west of the sludge handling building. Post-construction parking will be sufficient for operation of El Estero. In addition, El Estero is site constrained, as it is adjacent to the creek, so there is little room for parking improvements.

Lighting

One exterior light, located on the west side of the existing filtration complex will be relocated approximately 100 feet north as part of this project. In addition, nine lighting fixtures will be installed underneath the canopy. The new lighting will be high efficiency, LED lighting. The light fixtures will be shielded from reflecting light out beyond the canopy by the roof and drop panels, which are constructed as part of the pre-engineered canopy. The lighting is not expected to add to existing ambient lighting currently installed as part of the existing filtration complex.

Noise

It is not anticipated that there will be a significant increase in noise as a result of this Project. Engineering has retained Dudek consultants to perform a noise study. Any recommendations to reduce noise as related to the Project will be included in the final design of the Project.

Biology

The Project is located in close proximity to Laguna Channel in the City of Santa Barbara. The existing and proposed building footprint is within the 50 foot setback from the top of the bank. A biological report has been prepared by Dudek and is attached to this submittal.

Construction

The proposed Project would be constructed on previously developed areas within the plant. No changes would be made to existing topography.

The proposed Project includes excavation and grading associated with the burial of new piping/connecting to existing process piping and related to demolition of the existing Filter Complex. It is expected that excavation associated with construction of the foundation would be approximately four to five feet below grade. The new structures would be located at grade and minimal grading is expected to occur at the site. The Project would include zero cubic yards of cut and zero cubic yards of fill. The average slope of the property is 0.08%.

A temporary construction lay down area would be located in a dirt covered area in the northwestern portion of the Project site (see Sheet 8 of the Project plans). The site is currently used as a contractor yard and will continue to be used as such after completion of the Project. The temporary lay down area is within 50 feet of the top of bank of Laguna Channel. In order to protect the riparian area adjacent to the lay down area, all hazardous materials will be stored outside of the 50 foot creek setback, orange construction fencing will be placed along the dripline of the riparian habitat in

order to delineate the sensitive habitat and erosion control devices such as straw wattle will be placed at the toe of the orange fencing. The contractor will be required to prepare Storm Water Pollution Prevention Plan (SWPPP) and implement the SWPPP prior to starting construction. Best practices erosion control details are located on Sheet 21 of the Project plans (Erosion Control Details). Additional information regarding the SWPPP is explained below.

The foundation for the new facilities would be constructed on top of the piles that support the existing Filter Complex. 36 new 12-inch square pre-cast concrete piles will be driven to support the new foundation. Any new grading would be limited to the landscaped area around the existing Filter Complex. Where an existing drainage path is disrupted (i.e., chemical truck loading area) a new cross gutter is proposed to divert storm water flow around the containment pad and connect to the existing gutter across the roadway.

The new facility equipment generally consists of:

- 3 Microfiltration/Ultrafiltration (MF/UF) skids with 100 membrane modules per skid
- New Pumps
 - 4 MF/UF feed pumps (3 duty, 1 standby)
 - 2 Backwash system (1 duty, 1 standby)
 - 2 Clean-in-Place (1 duty, 1 standby)
 - 10 Various Chemical Metering Pumps
- 2 automatic strainers
- 3 tanks (1 filtrate, 2 for Clean-in-Place chemicals)
- 4 Chemical storage totes (2 citric acid, 2 sodium hydroxide)
- Compressed Air System (will be located within the Solids Handling Building), consisting of 2 compressors (1 duty, 1 standby), and an air tank

Construction would be per the City's standard details (as applicable) and geotechnical report recommendations. Following are assumptions associated with the proposed construction:

- Most of the construction would occur over a 12 month period. It is anticipated that the contractor will sequence their work as follows:
 - Notice to proceed, mobilization, submittals (month 1)
 - Improvements to the chlorine contact basin and recycled water reservoir (month 2)
 - Demolish existing filtration complex (months 3-4)
 - Construct new foundation (months 4-6)
 - Install new filtration equipment (months 6-10)
 - Construct canopy and start-up new filtration system (10-12)
- High ground water is not expected during construction, as most of the excavation will occur during the dry season and because El Estero is constructed on fill material with most excavations above groundwater level. Therefore, dewatering is not anticipated. However, if dewatering is needed, the water will be pumped back into the sewer drain system where it will go back to the front of El Estero for treatment prior to ocean discharge.
- All Asphalt Concrete and Portland Cement Concrete debris will be taken to a recycling facility and will not be disposed of at a landfill.

- An orange temporary construction fence would be installed at the edge of the adjacent riparian habitat associated with the Laguna Channel. The fence would be installed elevated two inches above ground so that species such as frogs and snakes could pass through the corridor. The fence would be removed post-construction.
- No lead based paint or asbestos is expected to be encountered during this Project. No hazardous materials would be used or generated as part of the construction of this Project.
- The contractor is expected to have a trailer and port-a-potty in their staging area. In addition, the type of equipment expected to be used consists of dump trucks, pick-ups, tractors, and trailers.
- Between 5 and 25 workers are expected on site to construct this Project.
- Construction would be limited to eight hours per day, five days a week. There will be an occasion for night work, and during all night work, construction lighting will be shielded away from the creek.

Biological Protection Measures

The following biological protection measures will be used to avoid adverse impacts to riparian habitat and biological resources within and adjacent to the Project, as provided by Dudek in their Biological Assessment dated October 28, 2013 (Attached).

BIO – 1. Pre-construction Nesting Bird Survey. A pre-construction survey for nesting birds will be conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present in the construction zone or within 300 feet of the construction zone within one week prior to construction or site preparation activities that occur during the nesting/breeding season of native bird species (March 1 through August 30).

BIO – 2. Nesting Bird Buffers and Requirements. If active nests are found, a non-construction buffer will be established at a minimum of 100 feet (this distance may be greater depending on the bird species and construction activity, as determined by the biologist) around the nest site where it overlaps with work areas. Clearing and construction within no-construction buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated, juveniles have fledged and there is no evidence of a second attempt at nesting. In addition, all active nests will be mapped with a GPS unit and nest locations with 100-foot buffers overlain on aerial photographs to provide regular updated maps to inform the Project manager/engineer and construction crew of areas to avoid. The City appointed biologist should also serve as a construction monitor during the breeding season to ensure that there are no inadvertent impacts to nesting birds.

BIO-3. Stormwater Pollution Prevention Plan. The City will retain a Qualified SWPPP Developer (QSD) to prepare a SWPPP to minimize the potential for discharge of pollutants from the Projects during construction and operational activities. The SWPPP will be designed to meet the requirements of the City and Regional Water Quality Control Board's (RWQCB) General Construction Permit (GCP). The SWPPP shall include both structural and non-structural best

management practices (BMPs) including straw wattles around storm drains, silt fencing and or other physical controls to diver flows from exposed soil, spill prevention methods, and clean housekeeping methods for storing and refueling machinery.

The City will retain a Qualified SWPPP Practitioner (QSP) to monitor the site's SWPPP measures prior to the start of construction and throughout the duration of construction to ensure they continue to function properly.

BIO-4. Revised Chemical Delivery, Storage, and Usage Plan. The City will revise the El Estero Wastewater Treatment Plant Hazmat Business Plan, as appropriate. The plan will identify all hazardous material transported, stored and used during wastewater treatment processing. The plan will also identify designated access routes for delivery and transport of chemicals. Storage areas will be identified and equipped with secondary containment, spill response measures, spill response kits and notifications to authorities. Chemical usage should be documented and usage areas will be monitored for leaks and an emergency cleanup plan will be incorporated. Measures ensuring that spill will not enter tidewater goby and Pacific pond turtle habitat is essential. These include the aquatic habitats of Laguna Channel and El Estero Swale, which should be addressed thoroughly and be included in the Plan. Storm drains are the most direct route to aquatic habitats.

BIO-5. Riparian Protection. All construction-related activities, including, but not limited to demolition, construction, staging area, and access routes should be located a minimum of 50-feet from riparian habitat associated with Laguna Channel and El Estero Swale, when possible. In locations where the construction activities encroach within this buffer, it is important to provide further protection to riparian vegetation and the wetland and aquatic habitats of Laguna Channel to the greatest extent possible. Specifically, these protection measures will include the following:

A. The Contractor will establish a temporary barrier between riparian habitat using highly visible construction fencing to ensure that trees and other vegetation are visible during construction. It is recommended that the fencing be placed along the access road, just to the west of the curb.

B. The Contractor will install road signs along the western access route that notify drivers of sizeable vehicles/construction equipment (cranes, drilling rigs, water and concrete trucks, etc.) that sensitive riparian trees and vegetation occur adjacent to the road and work site.

C. When sizeable construction equipment is working near riparian vegetation, flaggers will be utilized to assist in equipment positioning to avoid riparian impacts during construction activities.

If direct impacts to riparian vegetation cannot be avoided, a CDFW Streambed Alteration Agreement (SAA) pursuant to Section 1600 et seq. of the California Fish and Game Code will be acquired before initiation of construction. This SAA will add additional costs and time, thus it is beneficial to the fast-paced track of this Project to avoid riparian vegetation. The SAA is further discussed in mitigation measure **BIO-7**.

BIO-6. Best Management Practices (BMPs). The Contractor will install appropriate BMPs to control sediment, coarse particles, concrete, and other materials exposed during demolition and drilling to protect aquatic, wetland, and riparian habitats adjacent to construction site. Erosion control measures will be implemented to prevent runoff of these materials into Laguna Channel and El Estero Swale. Silt fencing, straw bales, and/or sand bags will be used in conjunction with other methods to prevent turbid waters from entering stream channels.

During construction activities, washing of concrete, paint, or equipment will occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Washing will not be allowed in locations where the tainted water could enter Laguna Channel or El Estero Swale.

If direct impacts (temporary or permanent) to riparian habitat, including vegetation impacts or removal, are not fully avoided, the City will take the following measure:

BIO-7. The City will consult with the California Department of Fish and Wildlife (CDFW) to obtain a Streambed Alteration Agreement from the CDFW pursuant to Section 1600 et seq. of the California Fish and Game Code for any impacts associated with vegetation removal or bank disturbance (within top of bank) within or adjacent to Laguna Channel.

BIO-8. Workers Educational Training. Prior to the initiation of any site disturbance and/or construction activities, all personnel associated with the Projects will attend a worker education training program (program) conducted by a qualified biologist. In general, it is recommended that the program discuss tidewater goby and Pacific pond turtle habitat preference(s), occupied habitat in the area, life histories, law and regulations, as well as potential construction impacts and protection measures, and project limits. Protections and regulations for the Laguna Channel, the riparian habitat, and nesting birds should also be included in the program. It is recommended that a species and habitat fact sheet also be developed prior to the training program and distributed at the training program to all contractors, employers and other personnel involved with the construction of the Projects. Specifically, the program should also include:

A. Measures to prevent indirect impacts during construction activities should be covered, including delivery, storage, and usage of construction materials and chemicals as they relate to the protection of adjacent aquatic habitat.

B. Training materials should include laws and regulations that protect sensitive biological resources, the consequences of non-compliance with those laws and regulations and a contact person (i.e. construction manager, biological monitor, and City's Project manager) in the event that protected biological resources are affected.

The City should notify the qualified biologist in advance of the kick-off meeting and any subsequent meetings that may take place if additional contractors are employed during additional construction projects of the project. A sign in sheet will be circulated for signatures to all personal that attend the workers educational training to confirm that program materials were received and that they understand information presented.

BIO-9 The City should retain a qualified biologist to monitor installation, operations, and compliance of recommended measures **BIO-3** (SWPPP), **BIO-4** (Chemical Delivery, Storage, and Usage Plan), **BIO-5** (wetland and riparian protection), and **BIO-6** (BMPs).

Operation

The proposed Project would be operated within the existing El Estero boundary. No additional employees would be required based on the operation of the replacement/new MF/UF system. With the exception of the additional chemical requirements associated with the new system, the operation

of the proposed Project would be similar to the existing filtration system. The use of sodium hypochlorite, hydrochloric acid, citric acid, sodium hydroxide, and antiscalant would require a monthly chemical delivery to maintain those systems. Hydrochloric acid and sodium hydroxide would be stored in totes within containment areas for use in CIP systems for the membranes for operation of the Project.

Pre-Application Reviews

Architectural Board of Review (ABR)

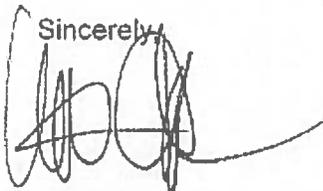
The Project was reviewed by the ABR twice for conceptual review, on September 20 and October 14, 2013. The minutes from both hearings are attached.

Community Development Pre-application Review

A meeting was held with Community Development staff on October 23, 2013. Renee Brooke, Development Review Supervisor, and Steven Greer, Environmental Analyst, were present. Public works staff discussed the permit and hearing path for the Project and associated submittal requirements. It was discussed that a Coastal Development Permit is appropriate for this Project. In addition, it was discussed that this Project would qualify for an exemption from California Environmental Quality Act (CEQA review).

Thank you for your consideration.

Sincerely,



Lisa Arroyo
Supervising Civil Engineer

LA/sk

cc (without attachments):
Chris Toth, Wastewater System Manager

Attachments:

1. Select sheets from the Project Plans (18 sheets, 10 copies)
2. Color Photographs of the Site
3. ABR Minutes (September 30, 2013. October 14, 2013 minutes not yet available)
4. El Estero Waste Water Treatment Plant Tertiary Treatment Biological Report (Dudek, 2013)

- Motion: Ratify the Consent Calendar of **September 30, 2013**. The Consent Calendar was reviewed by **Kirk Gradin**.
- Action: Poole/Hopkins, 6/0/0. Motion carried. (Cung absent).

D. Announcements, requests by applicants for continuances and withdrawals, future agenda items, and appeals.

- a. Mr. Boughman made the following announcements:
- a) Item #B, 813 E. Anapamu Street was referred to Full Board and will be reviewed as the last item on today's Full Board agenda.
 - b) Board member Cung will be absent from today's meeting.
 - c) The ABR's approval of the People's Self Help Housing project at 510 North Salsipuedes Street was appealed to the City Council.

E. Subcommittee Reports.

There were no reports.

DISCUSSION ITEM

1. AMERICAN INSTITUTE OF ARCHITECTS - URBAN LIVING SANTA BARBARA

- (3:10)** Presenter: Christopher Mason-Hing, AIA SB Chapter President Elect
 (The 2013 AIA ArchitecTours, entitled "Urban Living Santa Barbara," will take place this week on Saturday, on October 5, 2013, and is a walking tour in the downtown of the City with its Housing and Living Amenities. For more information visit: www.aiasb.com/architecTours2013.cfm.)

Actual time: 3:13 p.m.

Presentation made and discussion held.

CONCEPT REVIEW - NEW ITEM: PUBLIC HEARING

- 1. 520 E YANONALI ST** **OM-1/SD-3 Zone**
(3:25) Assessor's Parcel Number: 017-113-016

Application Number: MST2013-00388

Owner: City of Santa Barbara

Applicant: Lisa Arroyo, Project Engineer

(Proposal for the replacement of the existing Tertiary Filtration Plant at the El Estero Wastewater Treatment Plant. The project will demolish the existing 2,200 square foot building and construct a 5,300 square foot facility including a 2,900 square foot metal canopy. The canopy will be approximately 25.5 feet tall.)

(Action may be taken if sufficient information is provided. Project requires Tier 3 SWMP compliance.)

Actual time: 3:20 p.m.

Present: Don Cutler for CDM Smith, Consultant for the City of SB/Public Works-Engineering Division; Lisa Arroyo, City Supervising Engineer.

Public comment opened at 3:37 p.m., and as no one wished to speak, public comment was closed.

EXHIBIT D

A letter of concern from Paula Westbury was received.

Motion: Continued two weeks to the Full Board with comments:

- 1) Provide additional photo documentation both to and from the nearest adjacent neighbors and public way so the Board can analyze any visual impacts to adjacent neighbors. If there are visual impacts, study additional landscape screening from neighboring and public views.
- 2) Provide a flat work paving plan to show the extent and type of any new paving, what is being removed, and what is being replaced.
- 3) Provide all four elevations on the plans to show how the project appears from all sides.
- 4) Study longer roof eave overhangs to provide weather and solar protection and to add more architectural character to the building.
- 5) The Board requested to know if a full sound analysis is required by staff under additional CEQA review, and if any modifications will be required to comply.
- 6) Study to adapt the building to provide future solar panels to the building.
- 7) At least two Board members prefer that the project be restudied and redesigned to be enclosed in a building.

Action: Gradin/Wittausch, 6/0/0. Motion carried. (Cung absent).

CONCEPT REVIEW - NEW ITEM

2. 3943 STATE ST

C-2/SD-2 Zone

(3:55)

Assessor's Parcel Number: 051-010-021
 Application Number: MST2013-00359
 Owner: GRI- Regency, LLC
 Architect: Brian Cearnal

(Proposal to reconfigure parking lot and add 21 parking spaces in the Five Points Shopping Center parking lot. The proposal includes grading work, accessibility improvements (parking and paths of travel), replacement of existing light fixtures, and an additional trash enclosure.)

(Action may be taken if sufficient information is provided. Project requires Tier 3 SWMP compliance.)

Actual time: 4:13 p.m.

Present: Rogelio Solis and Joseph Andrulaitis, Architects for Cearnal Andrulaitis; Martha Degasis Maintenance Contractor for Arcadia Studio; and John Nahas, Patrick Conway, and Chris Danielle, Agents for Regency Centers.

Public comment opened at 4:29 p.m., and as no one wished to speak, public comment was closed.

A letter of concern from Paula Westbury was received.

The applicants requested a phased review with today's review being the portion of the project from the curbs outward toward the parking lots.

D. Announcements, requests by applicants for continuances and withdrawals, future agenda items, and appeals.

Mr. Boughman announced that Board member Hopkins will be stepping down from agenda Item #4, 240 W. Alamar Avenue.

E. Subcommittee Reports.

There were no reports.

CONCEPT REVIEW - CONTINUED ITEM

1. **520 E YANONALI ST**

OM-1/SD-3 Zone

(3:10)

Assessor's Parcel Number: 017-113-016

Application Number: MST2013-00388

Owner: City of Santa Barbara

Applicant: Lisa Arroyo, Project Engineer

(Proposal for the replacement of the existing Tertiary Filtration Plant at the El Estero Wastewater Treatment Plant. The project will demolish the existing 2,200 square foot building and construct a 5,300 square foot facility including a 2,900 square foot metal canopy. The canopy will be approximately 25.5 feet tall.)

(Second review; project last reviewed on September 30, 2013. Action may be taken if sufficient information is provided. Project requires Tier 3 SWMP compliance.)

Actual time: 3:09 p.m.

Present: Don Cutler for CDM Smith, Consultant for the City of SB/Public Works-Engineering Division; and Lisa Arroyo, City Supervising Engineer.

Public comment opened at 3:27 p.m., and as no one wished to speak, public comment was closed.

A letter of concern from Paula Westbury was received.

Motion: Continued indefinitely to return to Full Board with comments:

- 1) Study adding additional landscaping in the buffer area between the access road and the west side property line at the creek to screen the view into the site.
- 2) The Board finds that enhanced concrete paving is not required as it does not benefit the project.
- 3) Provide detailed architectural elevation drawings to scale with heights and dimensions showing all four sides of the structure and the filtration system.
- 4) Provide heights and dimensions of adjacent buildings showing the relationship between the proposed project and adjacent structures.
- 5) Provide a color board and details.
- 6) Provide exterior lighting details of dark sky compatible lighting fixtures.

Action: Gradin/Wittausch, 7/0/0. Motion carried.

- 7) Study varying the plate heights and eave lines to add additional character, especially along the western property lines.
- 8) The Board made the Compatibility Analysis (SBMC 22.68.045) findings as follows:
 - a) The proposed project is consistent with applicable ABR Design Guidelines and is consistent with the City Charter and applicable Municipal Code provisions; including site design, architecture, and landscaping.
 - b) The project's design is consistent with the City and the architectural character of the City and neighborhood.
 - c) The project's mass, bulk, and scale are appropriate for its location and its neighborhood, given compliance with additional comments made by the Board.
 - d) The project's design is appropriately sensitive to adjacent City Landmarks and historic resources, City structures of merit, sites, and a significant improvement over the previous building in preserving established scenic public vistas.
 - e) The project's design provides an appropriate amount of open space and landscaping, given compliance with additional landscape comments made by the Board.

Action: Mosel/Wittausch, 6/0/0. Motion carried. (Zink absent).

CONCEPT REVIEW - CONTINUED ITEM

2. 520 E YANONALI ST

OM-1/SD-3 Zone

(3:40)

Assessor's Parcel Number: 017-113-016
 Application Number: MST2013-00388
 Owner: City of Santa Barbara
 Applicant: Lisa Arroyo, Project Engineer

(Proposal for the replacement of the existing Tertiary Filtration Plant at the El Estero Wastewater Treatment Plant. The project will demolish the existing 2,200 square foot building and construct a 5,300 square foot facility including a 2,900 square foot metal canopy. The canopy will be approximately 25.5 feet tall.)

(Third review; project last reviewed on October 14, 2013. Project requires Environmental Assessment and Planning Commission review.)

Actual time: 4:37 p.m.

Present: Don Cutler, CDM Smith, Consultant; Sara Iza, City Public Works Project Planner; and Lisa Arroyo, City Public Works Supervising Engineer.

Public comment opened at 4:59 p.m., and as no one wished to speak, public comment was closed.

A letter of concern from Paula Westbury was received.

Motion: Continued indefinitely to the Planning Commission to return to Full Board with comments:

- 1) In general the project is acceptable at this stage provided the proposed changes are incorporated, including adequate landscaping screening of the project as requested. Return with a site plan showing the proposed Willow trees.
- 2) A gray skirt board is preferred over the white skirt board.
- 3) Provide a color board and materials board including the temporary screening.
- 4) Any mechanical equipment that *can* be painted, then *should* be painted to match the roof color.

- 5) The Board made the Compatibility Analysis (SBMC 22.68.045) findings as follows:
- a) Given the project's location, the proposed project is consistent with applicable ABR Design Guidelines and with the City Charter and applicable Municipal Code provisions.
 - b) The project's design is consistent with the City and the architectural character of the City and neighborhood given the project's location.
 - c) The project's mass, bulk, and scale are appropriate for its location and its neighborhood, given compliance with additional comments made by the Board.
 - d) The project's design is appropriately sensitive to adjacent City Landmarks and historic resources, City structures of merit, sites, or established scenic public vistas.
 - e) The project's design provides an appropriate amount of open space and landscaping, given compliance with additional landscape comments made by the Board.

Action: Hopkins/Wittausch, 6/0/0. Motion carried. (Zink absent).

PROJECT DESIGN HEARING

3. **525 E MICHELTORENA ST**

R-3 Zone

(4:15)

Assessor's Parcel Number: 027-260-031
 Application Number: MST2013-00461
 Owner: PB Micheltorena LLC
 Architect: DMHA

(Proposal for façade improvements to an existing commercial building and accessibility upgrades to the parking lot, new entry stairs, accessible ramp, and exterior patio. Also included is a reconfiguration of the front stairs to accommodate an accessible lift at the front of the building.)

Actual time: 5:03 p.m.

Present: Edward DeVicente, and Ryan Mills, DMHA, Applicants; and Courtney Miller, SJMLA, Landscape Architect.

Public comment opened at 5:30 p.m., and as no one wished to speak, public comment was closed.

A letter of concern from Paula Westbury regarding was received.

Straw vote: How many Board members found the flat steel for the front canopy acceptable? 3/3 (tie vote).

Motion: Continued two weeks to Full Board with comments:

- 1) Provide larger scaled, detailed, and dimensioned floor plan to show the street frontage at the lift and new stairs. Study making the stairway access wider and more inviting, and screen the lift from direct view from the sidewalk and street.
- 2) Provide accurate and to-scale street front south elevations.
- 3) The material chosen for the imitation wood siding will be critical.
- 4) Provide a replacement canopy tree for the liquid amber trees proposed for removal to help buffer the building elevation at the west side.
- 5) Restudy the cornice details on Sheet A2.02 on the plans.

Action: Hopkins/Wittausch, 6/0/0. Motion carried. (Zink absent).

*** THE BOARD BRIEFLY RECESSED AT 5:46 P.M., AND RECOVERED AT 5:49 P.M. ***

RELATED LOCAL COASTAL PLAN POLICIES

GENERAL POLICIES

Policy 1.1 The City adopts the policies of the Coastal Act (Public Resources Code Sections 30210 through 30263) as the guiding policies of the land use plan.

Policy 1.2 Where policies within the land use plan overlap, the policy which is the most protective of the resources, i.e. water, air, etc. shall take precedence.

Policy 1.3 Where there are conflicts between the policies set forth in the land use plan and those set forth in any other element of the City's existing General Plan or existing regulations, the policies of the land use plan take precedence.

WATER AND MARINE ENVIRONMENTS POLICIES

General Biotic Resources

Policy 6.1 The city, through ordinance, resolutions, and development controls, shall protect, preserve, and, where feasible, restore the biotic communities designated in the City's Conservation Element of the General Plan and any future annexations to the City, consistent with PRC Section 30240.

Creek Environments

Policy 6.8 The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.

Policy 6.9 The City shall support the programs, plans, and policies of all governmental agencies, including those of the Regional Water Quality Control Board with respect to best management practices for Santa Barbara's watersheds and urban areas.

Policy 6.10 The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.

OCEAN DEPENDENT ACTIVITIES POLICIES

Policy 7.5 Land area inland of the proposed easterly breakwater shall be designated to permit and encourage ocean-oriented industrial uses.

VISUAL QUALITY POLICIES

Policy 9.1 The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced. This may be accomplished by:

- (1) Acquisition of land for parks and open space;
- (2) Requiring view easements or corridors in new development;
- (3) Specific development restrictions such as additional height limits, building orientation, and setback requirements for new development;
- (4) Developing a system to evaluate view impairment of new development in the review process.

RELATED GENERAL PLAN POLICIES

Environmental Resources (GPU 2011)

Biological Resources Policies

- ER11. **Native and Other Trees and Landscaping.** Protect and maintain native and other urban trees, and landscaped spaces, and promote the use of native or Mediterranean drought-tolerant species in landscaping to save energy and water, incorporate habitat, and provide shade.
- ER12. **Wildlife, Coastal and Native Plant Habitat Protection and Enhancement.** Protect, maintain, and to the extent reasonably possible, expand the City's remaining diverse native plant and wildlife habitats, including ocean, wetland, coastal, creek, foothill, and urban-adapted habitats.

Hydrology, Water Quality and Flooding Policies

- ER15. **Creek Resources and Water Quality.** Encourage development and infrastructure that is consistent with City policies and programs for comprehensive watershed planning, creeks restoration, water quality protection, open space enhancement, storm water management, and public creek and water awareness programs.
- ER16. **Storm Water Management Policies.** The City's Storm Water Management Program's policies, standards and other requirements for low impact development to reduce storm water run-off, volumes, rates, and water pollutants are hereby incorporated into the General Plan Environmental Resources Element.
- ER17. **Creek Setbacks, Protection, and Restoration.** Protection and restoration of creeks and their riparian corridors is a priority for improving biological values, water quality, open space and flood control in conjunction with adaptation planning for climate change.

Aesthetics and Visual Resources Policies

- ER24. **Visual Resources Protection.** New development or redevelopment shall preserve or enhance important public views and viewpoints for public enjoyment, where such protection would not preclude reasonable development of a property.
- ER25. **Enhance Visual Quality.** Not only retain, but improve visual quality of the city wherever practicable.

VISUAL RESOURCES

Policies

- 1.0 Development adjacent to creeks shall not degrade the creeks or their riparian environments.
- 3.0 New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.
- 5.0 Significant open space areas should be protected to preserve the City's visual resources from degradation.

BIOLOGICAL RESOURCES

Policies

- 5.0 The habitats of rare and endangered species shall be preserved.
- 10.0 Programs shall be developed to maintain a productive urban biotic community.
- 11.0 Where Biological Resources policies conflict, the policy most protective of the natural environment shall prevail.

DRAINAGE AND FLOOD CONTROL

Policies

- 1.0 The City shall participate in the Federal Flood Insurance Program so that property owners may receive disaster assistance.⁴
- 2.0 Floodplain management programs shall be implemented through the Building Officer of the Division of Land Use Controls, and the Flood Control Division.
- 3.0 Hazard reduction programs shall be implemented in urban sections of the City already built in hazardous flood-prone areas.
- 4.0 Goals and policies of this Element are interrelated with those of the Safety and Open Space Elements and shall be considered together in land use planning decisions.

WATER RESOURCES

Policies

- 1.0 Provide for a continued supply of water to the City which meets all Regional, State, and Federal health standards.
- 2.0 Develop plans for implementation of water conservation regulations.
- 3.0 Implement monitoring program of groundwater resources in the Santa Barbara basin.

Noise Element (1979, prior amendment 1983)

Policies

- 1.0 Land use noise compatibility standards should be established for general planning and zoning purposes.
- 2.0 Provision should be made for the identification and evaluation of potential noise problem areas.
- 3.0 Existing and potential incompatible noise levels in problem areas should be reduced through land use planning, building and subdivision code enforcement, and other administrative means.
- 4.0 Existing and potential incompatible noise levels in problem areas should be reduced through operational or source controls where the City has responsibility for such controls.
- 5.0 A program should be developed for the education of the community in the nature and extent of noise problems in the City.
- 6.0 Noise control activities should be coordinated with those of other responsible jurisdictions.
- 7.0 Provision should be made for periodic review and revision of the Noise Element.

Safety and Public Services (GPU 2011)

City Infrastructure Policies

- PS1. City Services and Facilities. City services and facilities shall be built, maintained and operated in a manner to provide adequate services to all residents and coexist compatibly with surrounding land uses.
- PS2. Financing Capital Improvements. The City shall pursue a variety of financing sources for the maintenance and enhancement of capital improvement projects.

PS3. Planning for Climate Change Adaptation. The City shall include in the Climate Action Plan an estimated timeline of anticipated potential climate changes over the next 100 years to the extent information is available. This timeline will be periodically updated as part of the Adaptive Management Program and will be considered in all City capital projects.

Water Supply and Wastewater

PS4. Long-Term Water Supply Plan. The City shall update and maintain the currency of the City Long-Term Water Supply Plan to accommodate needs for the next 20-year period, including all of the following measures:

7. Additional Conservation Opportunities: Ongoing efforts to assess the technical and economic merits of the next generation of conservation measures should be used to identify an updated target for demand reduction under the new plan. A rate study should be conducted to identify opportunities to improve conservation pricing signals and update revenue requirements. Existing City ordinances should be reviewed for appropriate updates given changes in technology and statewide water supply conditions.
8. Recycled Water Expansion Opportunities: Opportunities exist to expand recycled water use ranging from increased irrigation uses to industrial uses of recycled water and implementation of broader use of recycled water for toilet flushing. Economic issues and available capacity should be assessed to identify an optimal target for expanded recycled water use under the new plan. Opportunities to partner with neighboring agencies should be explored.

PS5. Water Conservation Program. The use of water conservation practices shall be both encouraged and required, as appropriate, for all development projects.

SEISMIC SAFETY/SAFETY ELEMENT (1979)

Policy

The specific policies listed below provide a general direction or more specific steps for achieving the stated goals through implementation and action programs. The following are recommended policy statements:

To maintain, revise (wherever necessary), and enforce existing standards and criteria to reduce or avoid all levels of seismic or other geologic risk.

To evaluate the compatibility of existing zoning as well as future land use allocation with known geologic risk zones, or those which may be identified in the future.

To recognize the need to provide greater safety for important or critical-use structures (such as hospitals, schools, public assembly facilities, dams, and utility corridors) through careful site selection, appropriately comprehensive site investigation, and enforcement of applicable codes and regulations.