

**INITIAL STUDY/MITIGATED NEGATIVE DECLARATION**

**LAKWOOD STORMWATER AND RUNOFF CAPTURE  
PROJECT AT BOLIVAR PARK**

**LAKWOOD, CALIFORNIA**

**PREPARED FOR:**

**CITY OF LAKEWOOD  
Department Public Works  
5050 Clark Avenue  
Lakewood, CA 90712**

**PREPARED BY:**

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Industry, California 91746**

**JUNE 2016**

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# INITIAL STUDY, ENVIRONMENTAL CHECKLIST AND MITIGATED NEGATIVE DECLARATION

1. **Project title:** Lakewood Stormwater and Runoff Capture Project at Bolivar Park
2. **Lead agency name and address:** City of Lakewood  
Department of Public Works  
5050 Clark Avenue  
Lakewood, CA 90712
3. **Contact person and phone number:** Paul Kuykendall, AICP, Senior Planner (562) 866-9771
4. **Project location:** The project site is located in Bolivar Park, at 3300 Del Amo Boulevard, in the western part of the City of Lakewood, Los Angeles County, north of the San Diego Freeway (Interstate 405), south of the Artesia Freeway (CA State Route 91), west of the San Gabriel River Freeway (Interstate 605), and east of the Long Beach Freeway (Interstate 710). The site is primarily comprised of a rectangular parcel (Assessor's Parcel No.: 7154-001-901) bounded by Del Amo Boulevard, Downey Avenue, Levelside Avenue, and Deerford Street and would occupy approximately 0.89 acre in the northwest portion of the park, near the corner of Del Amo Boulevard and Levelside Avenue. Additional areas included in the project are a portion of the Del Amo Channel, the parklet area in between the channel and Bolivar Park, adjacent roadways, and areas along and/or adjacent Del Amo Boulevard (See Figure 3).
5. **Project sponsor's name and address:** City of Lakewood  
Public Works Department  
5050 Clark Avenue  
Lakewood, CA 90712
6. **General Plan Designation:** Open Space
7. **Zoning:** Open Space (O-S)
8. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

Simon Bolivar Park is a community park located within a low-density residential neighborhood surrounded by single-family homes to the north, east and west. Riley Elementary School is located to the south. Again, the project site is bounded by Del Amo Boulevard, a four-lane divided arterial street to the north, and by residential streets to the east, west and south: respectively, Downey Avenue, Levelside Avenue, and Deerford Street. The Del Amo Channel (Los Cerritos Channel, Unit 3, Line B) is located northeast of Bolivar Park and flows southerly parallel to Downey Avenue towards Del Amo Boulevard.<sup>1</sup> At Del Amo Boulevard, the Channel

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<sup>1</sup> The *Lakewood Stormwater and Runoff Capture Project – Project Design Concept Report for Bolivar Park*, prepared by Tetra Tech, Inc. dated January 25, 2016, has identified the nearby urbanized concrete lined channel as the “Del Amo Channel.” The Los Angeles County Department of Public Works has also identified this channel as the Los Cerritos Channel as part of the greater Los Cerritos Watershed. However, for the purposes of this document, all references to this local urbanized channel will be addressed as the Del Amo Channel.

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turns and flows eastward, parallel to Del Amo Boulevard, ultimately terminating at its outfall into Alamitos Bay, in the City of Long Beach.

The project site is also located within the Pressure Area of the Central Groundwater Basin. The Central Basin (CB) covers approximately 270 square miles and is bounded on the north by the Hollywood Basin and the Elysian, Repetto, Merced, and Puente hills, to the east by the Los Angeles County/Orange County line, and to the south and west by the Newport-Inglewood Uplift (NIU). The California Department of Water Resources (1961) divided the Central Basin into four sections; the Los Angeles Forebay, the Montebello Forebay, the Whittier Area, and the Pressure Area.

The regional location of the project and local project are depicted on Figure 1 and Figure 2.

## 9. Description of project:

### Background

The City of Lakewood is one of several southeast Los Angeles cities located within the Del Amo Channel Watershed, which is a largely built-out, urbanized watershed of approximately 17,711 acres in the Los Cerritos and Alamitos Bay Watershed Management Area. The Del Amo Channel (LCC) Watershed Management Group (WMG) is an inter-agency working group with management authority in the watershed, chaired by the City of Long Beach Watershed Management Program (WMP), Coordinated Integrated Monitoring Program (CIMP) development, and includes the Los Angeles County Flood Control District, as well as the cities of Bellflower, Cerritos, Downey, Lakewood, Paramount, and Signal Hill.

The Los Cerritos Watershed Group developed a Watershed Management Program as a collaborative effort pursuant to the NPDES (National Pollutant Discharge Elimination System) Municipal Permit to ensure that pollutant discharges from the watershed comply with applicable water quality goals, including Total Maximum Daily Loads (TMDLs), of the NPDES Permit.<sup>2</sup> The WMP is a long-term planning document that takes a comprehensive look at the LCC Watershed, including land uses, MS4s, existing and planned control measures, and historical monitoring data. The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Regional Board) approved the LCC Watershed final WMP on July 21, 2015.

The highest priority pollutants addressed by the WMP are metals and organic compounds. There are two TMDL measures that apply to the Del Amo Channel: the Del Amo Channel Metals TMDL, established by the United States Environmental Protection Agency (USEPA), and the Harbor Toxics TMDL for metals and legacy organic compounds, established by the Los Angeles Regional Water Quality Control Board. The WMP addresses these and other pollutants through a multi-

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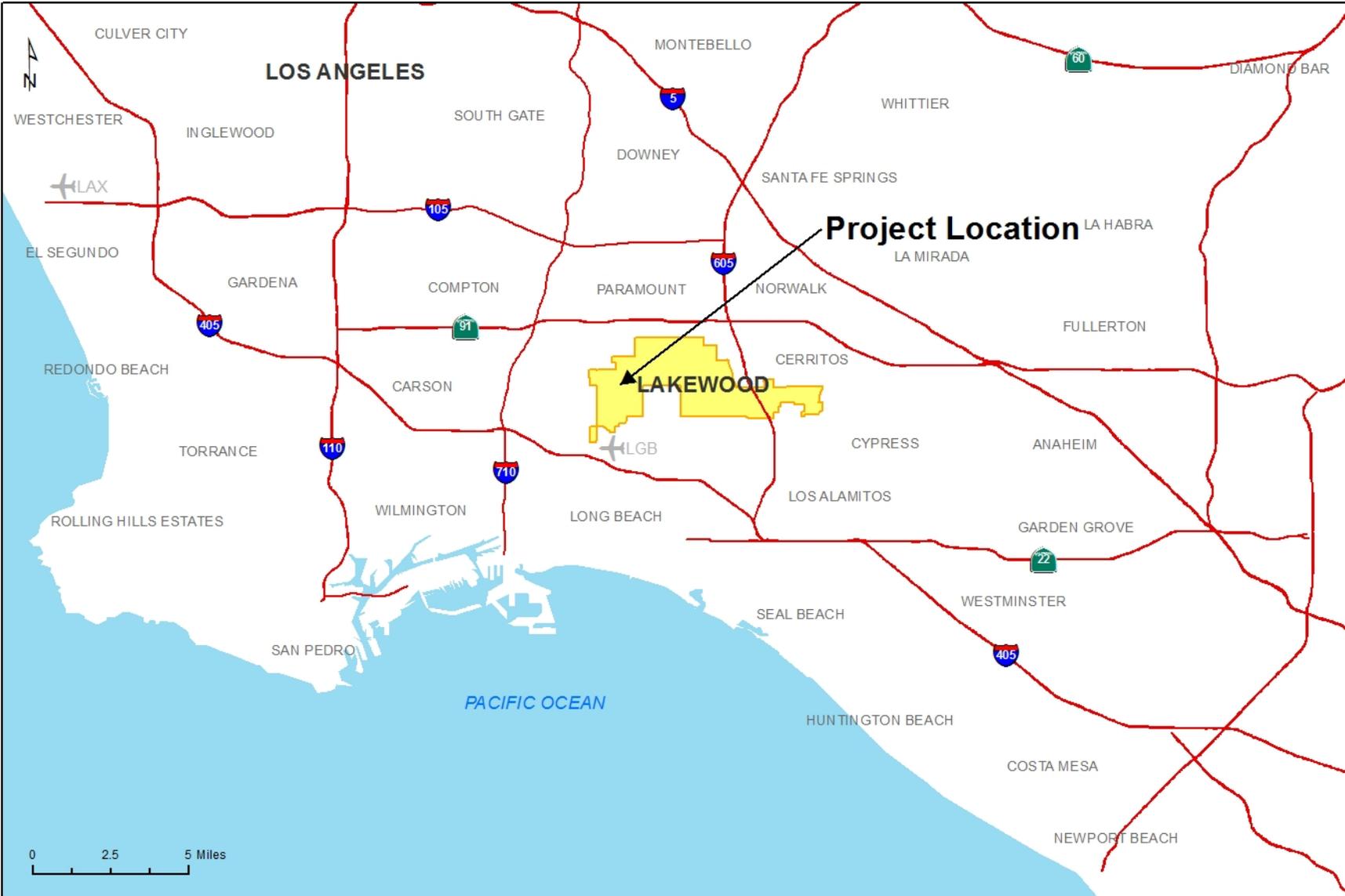
<sup>2</sup> In November 2012, the Los Angeles Regional Board adopted Order R4-2012-0175, *Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, except those Discharges Originating from the City of Long Beach MS4* (hereafter, the MS4 Permit). In 2015, the MS4 Permit was amended by State Water Board Order WQ 2015-0075. The MS4 Permit requires Permittees to comply with TMDLs for priority pollutants in the region. Through the MS4 Permit, Permittees can develop a WMP to implement permit requirements on a watershed scale through strategic non-structural and structural BMPs. A WMP allows Permittees to address the highest watershed priorities.

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pronged strategy that includes storm and “nuisance” water capture and infiltration, as well as storm/nuisance water capture and use.

As part of the Watershed Group, the City of Lakewood emphasizes dry-weather urban runoff and stormwater capture and infiltration or use, rather than treatment, to comply with Metals TMDL standards while addressing other pollutants and water supply issues. Bolivar Park was selected to accomplish incrementally the Watershed Management Program’s TMDL compliance requirements because of its dual purpose function of promoting water filtration and irrigation.

**Figure 1**  
**Regional/Vicinity Map**



**Figure 3**  
**Project Location and Surrounding Uses**



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## **Purpose and Need**

To provide the flexibility to use captured dry and wet-weather urban runoff where infiltration is infeasible, the WMG proposes locating water-capture facilities under parks and golf courses. The Bolivar Park site was chosen since there is a potential to both reduce potable water use for irrigation and to promote infiltration. The Lakewood Stormwater and Runoff Capture Project is intended to demonstrate how targeted project selection and innovative design can not only help the City of Lakewood comply with the Metals TMDL, but also identify the potential for multiple additional benefits, such as water supply.

Funds from Caltrans will be used for final design and construction of the facility at Bolivar Park to divert water from one of two major flood control channels to infiltrate the water and/or use it for landscape irrigation. Bolivar Park was chosen because of its dual purpose function of promoting water filtration and irrigation.

The LCC WMP focuses initially on compliance with the Metals TMDL, which comprises the highest priority pollutant load in the LCC Watershed. This project is being studied and implemented by the City of Lakewood to incrementally meet TMDL compliance.

Through the WMP, potential sites for Best Management Practice (BMP) storm water capture methods were identified in the Watershed. The modeling analysis performed for the LCC WMP indicated that the critical “water year” was 2003 and that a runoff volume reduction of 2,380 acre-feet was required. The City of Lakewood was determined to be responsible for 496.9 acre-feet of the total. Since limited space exists for widespread regional BMP implementation, the City must select “high efficiency” BMPs that can be implemented quickly in order to comply with TMDL requirements. This project represents an ideal “first” opportunity to demonstrate how smart project selection and innovative design can not only help the City comply with the Metals TMDL, but also provide additional benefits, such as augmentation of local water supplies by using non-potable runoff water for irrigation.

The proposed project is intended to:

1. Capture dry-weather (nuisance) runoff in order to eliminate metals and other pollutant transport in the Del Amo Channel during dry weather,
2. Capture – at a minimum - the first flush of wet-weather runoff to reduce the load of pollutants transported downstream to the Metals TMDL compliance point at the Stearns Street monitoring site, and
3. Reduce the amount of potable water use for park and open-space irrigation in the City of Lakewood.

### Water Conservation Benefits

The Final Project Concept Report<sup>3</sup> for the Bolivar Park states that the project will provide the following water conservation benefits:

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<sup>3</sup> Lakewood Stormwater and Runoff Capture Project – Project Design Concept Report for Bolivar Park, Tetra Tech Inc., January 25, 2016.

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1. 623 acre-feet for groundwater recharge.
  2. 3.26 million gallons per year of treated stormwater to offset the potable water used for irrigation in the park.

## **Project Description**

In addressing the requirements of the project, a project concept report has been prepared to evaluate the site's feasibility as a stormwater capture facility which include<sup>4</sup>:

- Addressing and integrating site components,
- Evaluating expected design flows and water quality,
- Assessing the potential for infiltration, irrigation and the release of treated water for use in the park, and
- Identification of major components and equipment as part of an overall site plan, including operations and maintenance needs and costs.

Therefore, the goals of the project would seek to maximize the reduction of pollutants based upon capture of stormwater runoff and available project capacity. Figure 3 depicts the various BMP components at the Bolivar Park site. To implement these performance goals, the proposed project consists of the following six components:

1. *Channel Diversion System:* The diversion from the Del Amo Channel would be accomplished through a new drop-inlet structure that would accommodate the full dry weather runoff flows and would divert a maximum of 20 cubic feet per second (cfs) of wet-weather flows. A channel diversion gate raised by an air-inflatable rubber dam within the Del Amo Channel would provide in-channel storage for the system during storm events. In addition, there is a 48-in. storm drain along Downey Avenue that would be diverted with a diversion berm for dry weather runoff from the channel.
2. *Pretreatment:* Two types of pretreatment devices are proposed: a hydrodynamic separator or a baffle box for the diversion flow rate of 20 cfs.
3. *Stormwater Pump Station:* Due to the depth, distance to the storage facility, and elevations of the existing channel, a pumping system will be required for the project. A 3-pump configuration is recommended for this facility. It will be located in the parklet area (in between the Del Amo channel and Bolivar Park) and also within the Los Angeles County Flood Control District right-of-way). A combination 20 to 24-inch RCP/PVC pipe will be installed beneath the Del Amo Boulevard frontage road which will connect the pump station to the storage facility in Bolivar Park.
4. *Storage and Infiltration Facility:* An underground storage reservoir would be constructed in the northwest area of Bolivar Park. The storage facility would consist of a 38,895-square-foot underground infiltration gallery and will provide storage volume for more than 8 acre-feet of water (7,144 gallons).
5. *Return Flow Water Line:* The project proposes a return flow water line (used for dewatering of the storage and infiltration facility). This water line will run north from the infiltration facility and then west along the Del Amo Boulevard frontage road (350-feet) where it will connect to an existing storm drain in Obispo Street.

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<sup>4</sup> Ibid.

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6. *Active Controls:* Real-time controls (RTC) would be used to optimize performance of BMPs (for marginal extra cost) relative to passive systems. RTC operate by relaying real-time monitoring data, such as water level and flow, from on-site sensors to cloud-based software. This software automatically regulates on-site control hardware (such as valves, gates, or pumps) based on configurable and adaptable logic or control systems.
  7. *Treatment and Use:* The facility would incorporate a treatment system to filter and sanitize the water stored within the storage reservoir. The treatment unit would involve a two-step filtering unit and ultraviolet treatment to meet the Los Angeles County Public Health Tier IV requirements. The treated water would fulfill approximately 99 percent of Bolivar Park's irrigation requirements.

The pump station, rubber dam controls, discharge pump, and the Irrigation treatment system will be managed via a PLC locally. The OptiRTC (cloud-based system) will monitor the operational status of these systems. In the event of a communication interruption for the OptiRTC, the City of Lakewood will continue to access the system via their local high-frequency radio-based network. There will also be local controls for this equipment. In the event of a power interruption, the rubber dam will have a mechanical deflate system as a backup.

The City of Lakewood Public Works Department will be responsible for operating and maintaining the proposed facilities and will obtain the necessary easements from the Los Angeles County Flood Control District (LACFCD) for the pre-treatment device, pump station, and all other encroachment in the LAFCD right-of-way. In addition, the City of Lakewood will enter into a Maintenance Agreement with the LACFCD to ensure the operation and maintenance of the proposed facilities and will not impede LAFCD's operation and maintenance of LACFCD flood control facilities.

Conceptual design drawings of the project are included in Appendix A.

### **Construction Activities and Staging**

Project implementation would involve the use of heavy equipment (i.e., excavators, trucks, cranes, cement trucks, backhoes, rollers, and pavers) during project construction. The entire frontage road along the length of the project could be used for equipment staging and material deliveries. This amount of space would be needed to stockpile the various materials such as excavated earth and rock, concrete debris and other items necessary to construct the proposed project. As such, this construction staging area could be utilized for material and equipment storage and stockpiling throughout construction activities as well as providing access and parking for worker vehicles.

The anticipated truck haul route would be accessed from Interstate 605 and would generally follow along designated truck routes via Carson Street, Lakewood Boulevard and Del Amo Boulevard. Construction ingress/egress for the project site would be on the frontage road adjacent to the project. Once trucks have made deliveries or picked up materials to haul away, they would, if possible, exit the way they entered the site, or would alternately continue through the site to the west and exit the site back onto Del Amo Boulevard via Obispo Avenue. Trucks would then head east to access Interstate 605 via Lakewood Boulevard and Carson Street.

Grading of the project site that would include the storage and infiltration facility, pump station, wet well, piping and picnic structures would result in the movement of approximately 31,000 cubic yards of earth up to a depth of twenty feet with approximately 30,790 cubic yards of cut and approximately 11,000 cubic yard of fill, resulting in approximately 19,790 cubic yards of

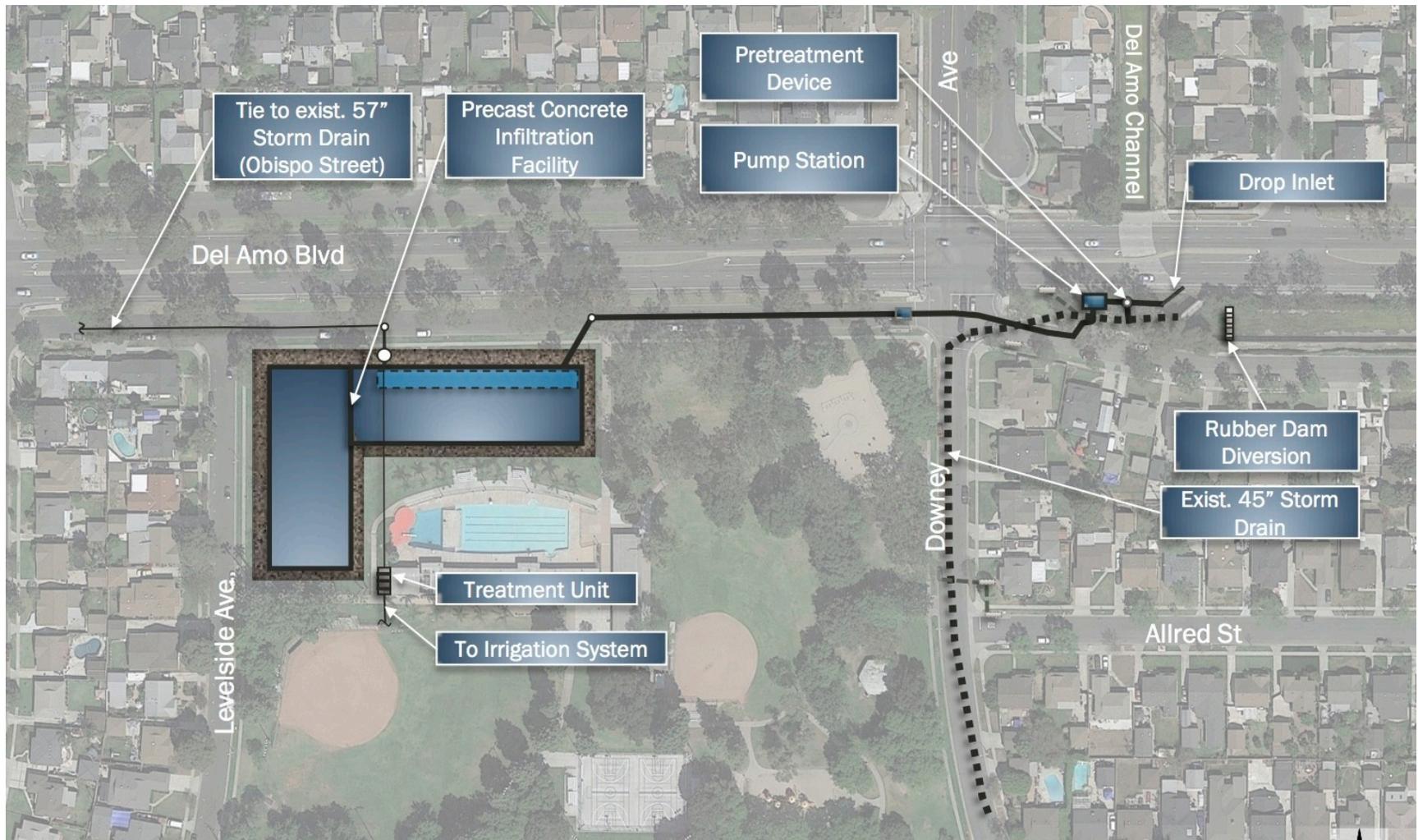
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export. Excess soil would be incorporated into the project and re-graded on-site where possible as part of final grading. Based on the capacities of the proposed configuration, up to six (6) feet of soil and/or gravel will be spread over the entire capture facility. Excavation for the foundation pad would require 0.5 feet of over excavation and replacement with compacted gravel.

Installation of the capture storage facility would involve a precast concrete modular system from StormTrap System. Since the facility is comprised of modular construction, it is anticipated that the modular pieces are constructed off-site and delivered to the project site via truck and lifted into place with a crane. With up to 60 to 70 units that may be installed in a day, the Bolivar Park project site may require between five to eight days to install approximately 270 units for the site. Using this modular construction method would significantly reduce the construction schedule from more traditional cast-in-place structures where additional time would be required to form, pour and cure the structure.

### **Construction Schedule**

It is anticipated that construction of the project would commence in the Fall of 2016 and last approximately 19 months. Assuming this construction time frame, the proposed stormwater capture facility would be completed by Spring of 2018 and commence operations following final inspection and testing.



**Figure 3**  
**Bolivar Park Layout for the Stormwater Capture Facility**

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**10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

Los Angeles County Flood Control District

Del Amo Channel Watershed Management Group

The California Department of Transportation (Caltrans)

State of California Regional Water Quality Control Board

**11. References:**

The following are also referenced where appropriate in the Environmental Checklist Form:

- A. Lakewood Stormwater and Runoff Capture Project – Project Design Concept Report for Bolivar Park, January 25, 2016. Prepared by Tetra Tech, Inc.
- B. Fifty (50) Percent Design Drawings
- C. Air Quality/Greenhouse Gases Modeling Results
- D. Cultural Resources Assessment, McKenna et. al., March 2016.
- E. Geotechnical Investigation and Infiltration Testing Report, Tetra Tech, March 18, 2016.

**PURPOSE OF THE INITIAL STUDY**

The proposed Lakewood Stormwater and Runoff Capture Project at Bolivar Park is analyzed in this Initial Study, in accordance with the California Environmental Quality Act (CEQA), to determine if approval of the Project would have a significant impact on the environment. This Initial Study has been prepared pursuant to the requirements of CEQA, under Public Resources Code 21000-21177, of the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387) and under the guidance of the City of Lakewood. The City of Lakewood is the Lead Agency under CEQA and is responsible for preparing the Initial Study for the Project.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages. For each identified “Potentially Significant Impact,” mitigation measures are identified in this document that can reduce the impacts to “Less Than Significant With Mitigation Incorporated”:

<input checked="" type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Population and Housing
<input type="checkbox"/>	Agricultural and Forestry Resources	<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Air Quality	<input type="checkbox"/>	Hydrology and Water Quality	<input type="checkbox"/>	Recreation
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Land Use and Planning	<input type="checkbox"/>	Transportation and Traffic
<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Utilities and Service Systems
<input checked="" type="checkbox"/>	Geology and Soils	<input type="checkbox"/>	Noise	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

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**DETERMINATION: (To be completed by the Lead Agency)**

On the basis of this initial evaluation:

     I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

  X   I find that although the proposed project could have a significant effect on the environment, there will not be significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

     I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

     I find that proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

     I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

06/15/2016

Date

Sonia Dias Southwell, AICP  
Director of Community Development  
City of Lakewood

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## **EVALUATION OF ENVIRONMENTAL IMPACTS:**

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factor as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including offsite as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
  - 9) The explanation of each issue should identify: a) The significance criteria or threshold, if any, used to evaluate each question; and b) the mitigation measure identified, if any, to reduce the impact to less than significance.

**Issues:**

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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**I. AESTHETICS** – Would the project:

- |  |                          |                                     |                          |                                     |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?                                    | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**II. AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 1220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**III. AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

Issues:	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**IV. BIOLOGICAL RESOURCES** – Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**V. CULTURAL RESOURCES** – Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Issues:**

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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VI. GEOLOGY AND SOILS – Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. GREENHOUSE GAS EMISSIONS – Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

VIII. HAZARDS AND HAZARDOUS MATERIALS –

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Issues:**

	Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**IX. HYDROLOGY AND WATER QUALITY – Would the project:**

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<b>Issues:</b>	<b>Potentially Significant Impact</b>	<b>Significant Unless Mitigation is Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>X. LAND USE AND PLANNING – Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XI. MINERAL RESOURCES – Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XII. NOISE – Would the project:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Issues:**

Potentially Significant Impact	Significant Unless Mitigation is Incorporated	Less Than Significant Impact	No Impact
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XIII. POPULATION AND HOUSING – Would the project:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

XIV. PUBLIC SERVICES

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: |                          |                          |                                     |                                     |
| Fire protection?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Police protection?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Schools?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Parks?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Other public facilities?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

XV. RECREATION

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?                        | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

XVI. TRANSPORTATION/TRAFFIC – Would the project:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

<b>Issues:</b>	<b>Potentially Significant Impact</b>	<b>Significant Unless Mitigation is Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?
- c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**ENVIRONMENTAL CHECKLIST:**

I. <b><u>AESTHETICS</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

I(a). **No Impact.** According to the City of Lakewood General Plan, there are no scenic vistas in the immediate vicinity of the project site and Del Amo Boulevard is not designated as a scenic highway. Moreover, the surrounding area is relatively flat and wholly urbanized with commercial, residential and institutional uses. The proposed project would not create above-ground structures that would obstruct views. Therefore, the proposed project will have no adverse impact upon a scenic vista.

I(b,c). **Less Than Significant with Mitigation Incorporation.** The project site comprises the north and west portions of Simon Bolivar Park and portions of Del Amo Boulevard, and is located on a commercial corridor bordered by a mix of retail, restaurants, and other commercial uses as well as single-family residences within an urban environment characterized mostly by low to mid-rise development. There are no formally designated scenic resources or historic buildings near the project site, but the park itself may be considered as a local scenic resource because of its green space and mature trees.

The proposed project would require temporary disruption of the park and portions of the streetscape along Del Amo Boulevard, including excavation of approximately 31,000 cubic yards of soil for installation of infiltration vaults, removal of trees, landscaping and shade structures. Given the loss of these trees and existing landscaped areas as an aesthetic resource, the following mitigation measure is recommended:

**Mitigation Measure Aesthetics Ib-1:** *Upon completing stormwater capture project improvements, new water-conserving turf or other appropriate groundcover material and at least ten (10) ornamental trees shall be planted on all disturbed areas not to be dedicated to other uses (e.g. pathways, parking/pavement, etc), to the satisfaction of the City’s Departments of Public Works and Recreation and Community Services. The appropriate City department shall determine replacement tree species, container size, and planting locations. The ten replacement trees shall be a minimum 24” box size. Additional trees may be smaller specimens, but no smaller than five (5) gallon nursery containers.*

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- l(d). **No Impact.** The proposed project will not introduce new light sources in the project area that would result in light and glare impacts. Although the proposed improvements may require relocating existing streetlights along Del Amo Boulevard to accommodate trenching for the stormwater diversion inlet piping, those streetlights would ultimately be replaced. The amount and quality of light in the project area would not be expected to change as a result. Accordingly, no impacts associated with light or glare would occur.

II. <b><u>AGRICULTURE AND FORESTRY RESOURCES</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<p><i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i></p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

II(a). **No Impact.** The project site is located along a heavily traveled regional arterial highway (Del Amo Boulevard), and is largely surrounded by residential uses. No agricultural uses or related activities currently occur on the site or within the surrounding area. Prime farmland, unique farmland, and farmland of statewide importance as defined in the Farmland Protection Policy Act (FPPA) are lands identified by appropriate state or local government agencies as containing valuable farmland soils. Urban areas are excluded from FPPA as described in 7 CFR 9 Part 658. The project will not result in conversion of any farmland to a non-agricultural use, as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation. The project site and surrounding areas are committed to urban development and are not unique or prime farmlands or farmlands of statewide importance.

II(b,e). **No Impact.** Since there are no agricultural crops, commercial timber stands, or prime, unique, or other farmlands of State or local importance in the vicinity of the project site, there is no conflict with the Williamson Act or any existing agricultural use. The project is located within the right-of-way of a Major Arterial of an urbanized commercial corridor of the City of Lakewood.

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II(c,d). **No Impact.** There is no forest land or timberland production in the City of Lakewood. There would be no impact to forest land resulting from the project.

<b>III. AIR QUALITY</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Checklist Judgments:**

III(a). **No Impact.** The proposed project, constructing a stormwater diversion, treatment system and infiltration system, would comply with the South Coast Air Quality Management District’s (SCAQMD) (2012 Air Quality Management Plan (AQMP))<sup>5</sup> because except for the construction process, the project would use only electric-powered pumps and controls, and would not generate emissions directly. The 2012 AQMP focuses on reducing fine particulate matter (PM2.5), as generated by pollutants such as nitrogen oxides (NOx), sulfur oxides (SOx), volatile organic compounds (VOC), directly-emitted PM2.5 (from diesel engines, etc.), and ammonia.<sup>6</sup> Measures to implement the plan include controlling point-source emissions (from power plants, industrial sources, etc.), combustion sources (fireplaces, restaurant charbroilers, open burning) and indirect sources (emissions related to harbor and port activities). Both stationary and mobile emission sources are regulated under the Plan.

Generally, a project would be considered compliant with the AQMP if its emissions did not exceed applicable thresholds, or if it generated no emissions at all. The proposed project would generate direct emissions only during the construction phase, from off-road diesel-powered equipment and workers’ vehicles. As explained in (b-c) below, all construction emissions are predicted to remain well under the SCAQMD thresholds of significance. As explained in Section VII *Greenhouse Gas Emissions* below, the energy consumption of the project’s controls and pumps (and off-site greenhouse gas emissions from electric power generation) is also not anticipated to be significant. Accordingly, with both construction and operations emissions below thresholds, the proposed project would not conflict with the AQMP or affect its implementation.

<sup>5</sup> South Coast Air Quality Management District, *2012 Air Quality Management Plan (AQMP)*, available at <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan> (accessed March 18, 2016).

<sup>6</sup> Id., Chapter 4, *Control Strategy and Implementation*, p. 4-5.

III(b-c). **Less than Significant Impact.** The proposed stormwater diversion and infiltration project is not expected to result in a measurable long-term increase in air pollutant emissions, since most of the project's emissions would be related to construction, and would cease at the end of the construction phase. Such emissions would be generated primarily from off-road diesel-powered equipment, as well as workers' passenger vehicles and light trucks, including respirable particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), ozone (O<sub>3</sub>), carbon monoxide (CO), reactive organic gasses (ROG), nitrogen oxides (NOx), and sulfur dioxide (SO<sub>2</sub>).

The *Road Construction Emissions Model (version 7.1.5.1)* was used to estimate emissions. The output tables from this model are included in Appendix B of this Initial Study and the overall results are shown in Table AQ-1 below. Construction of the proposed project would involve clearing and grubbing, excavation and grading, installing stormwater capture vaults, treatment system and pumps, restoring the finish grade, and limited paving.

<b>Table AQ-1 Estimated Construction Emissions<sup>1</sup> (without Mitigation) (lbs/day on the worst day)</b>					
	ROG	CO	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>
Grubbing/Land Clearing	3.0	14.7	30.0	24.6	6.2
Grading/Excavation	3.8	19.8	49.5	25.6	7.0
Drainage/Utilities/ Sub-Grade	4.2	21.0	37.5	25.3	6.9
Paving	1.0	6.4	8.2	0.5	0.4
<b>Maximum Daily Emissions (lbs/day)</b>	<b>4.2</b>	<b>21.0</b>	<b>49.5</b>	<b>25.6</b>	<b>7.0</b>
<b>SCAQMD Regional Thresholds</b>	<b>100</b>	<b>75</b>	<b>550</b>	<b>150</b>	<b>55</b>
<sup>1</sup> Assumptions:  Project Start Year: 2016 Project Construction Time: 6 months Soil Type: Weathered Rock/Earth Project Length: 0.3 mile Project Area: 2.30 +/- acres Max Area Disturbed/Day: 2 acres Water Trucks Used: Yes Soil Imported: No Soil Exported: 504 yd <sup>3</sup> /day Avg. Truck Capacity: 12 yd <sup>3</sup>					

Emissions estimates indicate that the proposed project would not exceed SCAQMD regional thresholds for any regulated pollutant. Given the low volume of air pollutants that the project would generate, the temporary nature of such pollutant emissions (six months), the proposed project would not cause or substantially contribute to an existing or projected air quality violation, would not generate pollutants in excess of

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standards, and would not result in a cumulative considerable net increase of any criteria pollutant.

- III(d). **Less than Significant Impact.** Certain residents, such as the very young, the elderly and those suffering from certain illnesses or disabilities, are particularly sensitive to air pollution and are considered sensitive receptors. In addition, active park users, such as participants in sporting events, can be sensitive air pollutant receptors due to increased respiratory rates. Land uses where sensitive air pollutant receptors congregate include homes, medical facilities, rest homes, convalescent care facilities, schools, day care centers, parks, and recreational areas. Residents of homes and long-term care facilities may be subject to both long-term/chronic and short-term/acute exposures to poor air quality, whereas park users are primarily at risk from acute exposure to air quality.

The proposed project is located in a City park, which is bordered by single-family homes on three sides. However, as noted above in Table AQ-1, the project would generate relatively low emissions during construction, and would not be likely to affect sensitive receptors over the long-term. Given this low amount and the short-term nature of such pollutant generation, the primary concern for surrounding properties would be the nuisance caused by construction dust. APCD Rule 402 (Fugitive Dust) requires that dust generation be reduced with control measures, such as using water trucks to moisten exposed soils. Because project construction must comply with air quality regulations, including Rule 402, impacts on surrounding land uses are anticipated to be less than significant.

- III(e). **Less Than Significant Impact.** Project construction equipment and activities, including diesel exhaust emissions and paving operations, would generate odors. There may be situations where construction activity odors would be noticeable by persons at nearby uses, but these odors would not be unfamiliar or necessarily objectionable. In addition, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. Long-term odors, which would be associated with operation of vehicles on the roadway, would be the same as for the existing conditions; therefore, impacts would be less than significant.

IV. <b><u>BIOLOGICAL RESOURCES</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b><i>Would the project:</i></b>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Checklist Judgments:**

IV(a). **No Impact.** The proposed project would affect existing roadways in the project vicinity, a suburban park, and landscaped median adjacent to the Del Amo Channel (Los Cerritos Channel, Unit 3, Line B), but would not affect listed species or their habitat. There are no federally-listed threatened or endangered species, including natural habitat for such species, located in the vicinity of the project site. The surrounding area is entirely developed and urbanized.

IV(b, c). **Less Than Significant Impact.** The proposed project, would not directly affect riparian habitat, wetlands or other sensitive natural communities, because none of these exist on or near the project site. No City or regional plans, or CDFW or USFWS regulations identify the site or the engineered Del Amo Channel as a sensitive natural community. Although the Del Amo/Los Cerritos channel flows into Alamitos Bay approximately eight miles downstream and connects with the remnant Los Cerritos tidal wetlands, home to several sensitive or listed coastal species,<sup>7</sup> impacts are expected to be less than significant because the primary source of fresh water to the wetlands is the San Gabriel River, not the Del Amo tributary to the Cerritos channel, and the wetlands are tidal, not freshwater.<sup>8</sup> Moreover, the project would divert

<sup>7</sup> See California Resources Agency, *Los Cerritos Wetlands*, available at [http://resources.ca.gov/wetlands/geo\\_info/so\\_cal/los\\_cerritos.html](http://resources.ca.gov/wetlands/geo_info/so_cal/los_cerritos.html) (accessed March 4, 2016); Los Cerritos Wetlands Authority, *The Wetlands* (2015), available at <http://www.lcwetlands.org> (accessed March 4, 2016).

<sup>8</sup> Los Cerritos Wetlands Authority, cited in Footnote 7, above.

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primarily dry-weather flows and a portion of wet-weather flows containing high levels of zinc and other metals that have been found to exceed TMDLs.<sup>9</sup> Diverted water would be treated and either infiltrated into groundwater through an engineered sub-grade system or used for park irrigation. Based on these considerations, particularly that the project would help prevent many pollutants from reaching Alamos Bay, impacts are expected to be less than significant.

- IV(d). **Less Than Significant Impact.** The project would not interfere with native fish or wildlife species, nor would it result in a significant barrier to the migration or movement of animals, because the project site is within a wholly-developed urban area, without substantial connections to wildlife habitat or migration corridors. The project site consists of an existing suburban park, city streets, and an engineered concrete storm channel, which is unlikely to serve as a significant wildlife corridor or habitat. Accordingly, impacts to native species, wildlife corridors or nursery sites are anticipated to be less than significant.
- IV(e). **Less Than Significant Impact.** The project anticipates that several ornamental trees (*Eucalyptus* sp., Canary Island Pine (*Pinus canariensis*), Crape Myrtle (*Lagerstroemia indica*), *Ficus* sp., and other ornamental species would be removed in the street medians, as well as in the north and west portions of Simon Bolivar Park for infiltration vault installation. These tree species are not California-native species, were planted as ornamental specimens, and are not protected by a local ordinance or tree preservation policy. Impacts with respect to trees are less than significant; moreover, Aesthetics Mitigation Measure **AES-1b-1** recommends replacing these trees, at least fifty percent with 24-inch box specimens. Impacts with respect to tree loss are expected to be less than significant.
- IV(f). **No Impact.** The project would not conflict with any Habitat Conservation Plans or other conservation plans, because there are no such plans that encompass the project site. The project is not anticipated to conflict with restoration plans for the Los Cerritos Wetlands for the reasons explained in IV(b,c) above. Impacts are anticipated to be less than significant.

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<sup>9</sup> Tetra Tech, *Project Design Concept Report, Bolivar Park*, prepared for the City of Lakewood, Department of Public Works, January 25, 2016, p. 14.

V. <b><u>CULTURAL RESOURCES</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b><i>Would the project:</i></b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A comprehensive Cultural Resource Investigation<sup>10</sup> was prepared for the project (December 2015 – March 2016), is wholly incorporated by reference to this Initial Study and attached (**Appendix C**).

**Explanation of Checklist Judgments:**

V(a). **Less Than Significant Impact.** The proposed project is a stormwater capture facility that will require excavation of approximately 31,000 cubic yards to an approximate depth of 20 feet for installation of water storage and infiltration vaults in the northwest portion of Simon Bolivar Park. The City’s General Plan does not identify the Park or its structures as historical resources. The Cultural Resources Investigation performed for the project inventories several sites in the vicinity, and revisited a 2008 report that catalogued the existing structures in the park, notably the swimming pool, bathhouse and snack bar, which were constructed in 1957-58. The pool was named – and re-dedicated in 1996 – for Patricia “Pat” McCormick, a local 1956-era Olympic four-time gold medalist (McKenna, p. 15). None of the resources inventoried, including the park itself, are either listed as historic or were found to be ineligible for Federal listing. The report does advise that the pool facilities meet the criteria for local recognition, and may in the future be eligible for state or national recognition because of the association with a noted Olympian (McKenna, p. 22). However, the project’s footprint is separated from the pool and structures by approximately 50 feet, and no excavation or construction is planned to occur near them (Tetra Tech, p. 16). Accordingly, the project would not cause a substantial adverse change in the significance of a historical resource, and any associated project impacts are anticipated to be less than significant.

V(b, d). **Less Than Significant with Mitigation Incorporation.** The project area is within an area known to be associated with the prehistoric and proto-historic Native American populations generally referred to as the Gabrieliño/Tongva (McKenna, p. 7). Although the area has been urbanized for decades, consultation with local tribal representatives indicate that the Lakewood area is generally sensitive for archaeological resources,

<sup>10</sup> Jeannette A. McKenna, McKenna et al., *A Cultural Resources Investigation For The Proposed Simon Bolivar Park Stormwater and Run-Off Capture Project In The City Of Lakewood, Los Angeles County, California*, March 18, 2016.

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including Native American resources. Because there will be substantial excavation associated with the project, there is a low-to-moderate potential that archeological resources would be discovered during excavation of the shallow alluvium underlying the site (McKenna, pp. 20-21). Accordingly, Mitigation Measure Cult-1 requires an archeological monitoring program and, should resources or human remains be identified, appropriate retrieval and treatment of those resources. With mitigation, no substantial adverse changes to local archeological resources are anticipated, and associated impacts would be less than significant.

- V(c). **Less Than Significant with Mitigation Incorporation.** The project area is in an area that may bear significant fossil vertebrate remains. (McKenna, pp. 19-20, citing McLeod). Because there will be excavation to a depth of at least 20 feet associated with the project, there is a low-to-moderate potential that paleontological resources would be discovered in the deeper alluvium - Quaternary Alluvial deposits and/or Plio-Pleistocene marine deposits – underlying the site (McKenna, pp. 20-21). Such resources could include mammoths, birds, fish, and skull otoliths. Accordingly, Mitigation Measure Cult-2 requires a paleontological monitoring program and, should resources be identified, appropriate retrieval and treatment of those resources. With mitigation, no substantial adverse changes to local paleontological resources are anticipated, and associated impacts would be less than significant.

**Mitigation Measure Cult-1:**

- a) The City shall conduct an archaeological monitoring program during any earthmoving involving excavations into younger Quaternary Alluvial deposits;
- b) The archaeological monitoring program shall be conducted in a manner consistent with archaeological standards and, in this case, conducted on a full-time or part-time bases, at the discretion of the Lead Agency;
- c) Should evidence of archaeological resources be uncovered, the archaeological monitoring program shall continue on a full-time basis until it is determined no more younger alluvium is being impacted;
- d) If evidence of Native American resources is identified, a Native American Monitor of Gabrieliño descent shall be added to the remainder of the monitoring program;
- e) If, at any time, evidence of human remains is uncovered, the County Coroner must be notified immediately and permitted to examine the find in situ. If the remains are determined to be of Native American descent, the Native American Heritage Commission shall be contacted and the Most Likely Descendent (MLD) named. In consultation with the MLD, City, Coroner, and archaeological consultant, the disposition of the remains will be determined.

**Mitigation Measure Cult-2:**

- a) The City shall conduct a paleontological monitoring program during all earthmoving activities impacting older Quaternary Alluvial deposits and/or Plio-Pleistocene marine deposits;
- b) The paleontological monitoring program shall be conducted in a manner consistent with the standard protocols of the Natural History Museum of Los Angeles County;

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- c) The paleontological monitoring program shall include formal documentation of the program, its analysis and results, and curation of the recovered specimens, as applicable.



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fault resulted in the 1933, magnitude 6.3, Long Beach earthquake, which caused significant damage to the City of Long Beach. Nevertheless, based on current available geologic information, no active faults are known to exist on or in the immediate vicinity of the project site. The project site is not located within an Alquist-Priolo Fault Zone for surface fault rupture hazards. Because there are no known active faults located on the project site, the potential for fault rupture on the site is low.

ii). As is typical of all of southern California, the project site is located in a seismically active region and is potentially subject to severe ground shaking generated by high seismic activity. However, as discussed previously, ground shaking caused by severe seismic activity is considered to be low due to the distant locations of active faults and the absence of the seismic activity from local faults according to historical data and other documented evidence.

iii). There are no above-ground proposed structures included as part of the proposed improvements. It is not anticipated that the project will result in unstable earth surfaces or increase the exposure of people or property to geologic or seismic hazards as no fill or significant structure is proposed.

iv). The City of Lakewood is relatively flat and so is the project site. Consequently, hazards such as slope instability, mudslides and landslides are not considered to be likely threats. The project is not located in an area susceptible to landslide or slope failure.

VI(b). **Less Than Significant Impact.** During project construction, the exposure of soils in open or excavated areas will temporarily increase the potential for soil erosion. Soil erosion could be caused either by water or wind, a situation which could be exacerbated during the rainy season (November 1 through April 1). Required compliance with the South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust) would reduce erosion due to wind to a less than significant level. Required compliance with the Best Management Practices (BMP) of the National Pollution Discharge Elimination System (NPDES) permit and implementation of the required Storm Water Pollution Prevention Plan would reduce erosion due to water to a less than significant level. Construction plans shall specify measures for controlling erosion at the project site.

VI(c). **Less Than Significant Impact with Mitigation Incorporation.** A geotechnical investigation and infiltration testing study was performed by Tetra Tech on March 18, 2016 for the Project Concept Design Report (**Appendix D**). The study examined subsurface soil and groundwater conditions of the project area through five exploratory soil borings and three field percolation borings. The purpose of the investigation was to determine the characteristics of the subsurface materials (including infiltration rates, expansive index, and liquefaction potential) below the invert of the proposed infiltration facilities at the site. The project site itself is located within the Central Groundwater Basin.

The geological investigation of the determined that the project area is underlain by alluvial deposits, artificial fill, and alluvial soils. The younger alluvial deposits are associated with the Los Angeles Basin. Locally, these deposits are classified as near shore alluvial deposits. The artificial fill is likely associated with possible grading activities at the park and was encountered in the borings for the current study to a depth of about 4 to 6 feet. The fill materials consisted mainly of hard to very hard

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sandy lean clays. Beneath the fill, younger alluvial soils, consisting of medium dense to dense sands and silty fine sands and stiff to very stiff sandy silts, were encountered at the base of the explorations. These soils were typically yellowish brown and gray in color and extended to the total depth of the exploratory borings.

Based on the soil exploration program, the soils at the site below the invert of the proposed infiltration facilities were observed to range from silty sands to clean sands with good drainage characteristics. The design infiltration rate of about 1.3 inches/hour is above the minimum required infiltration rate by the County of Los Angeles for on-site infiltration systems of 0.3 inches/hour; therefore, the soils at the site are considered suitable for infiltration use.<sup>11</sup> Furthermore, although the historic groundwater depth has been mapped at 20 feet at the site, the available data within the last 50 years indicate that the high groundwater depth is at least 50 feet, which provides a more likely scenario for the design life of the project (50 years).

The observed groundwater table at the site is not actually perched, but it is the actual groundwater table. Infiltration tests were performed according to the percolation borehole methodology established by the County of Los Angeles and the minimum required infiltration rate for the County of Los Angeles (0.3 inches per hour). According to the Final Geotechnical Report, measured percolation rates at the site varied between 75 and 79-inches per hour, when adjusted for horizontal flow and also applying a very conservative “Factors of Safety” as recommended by the County. Actual infiltration rates are in the order of 1.3 to 1.5 inches per hour which is about 4 times higher than the minimum recommended by the County and, therefore, these infiltrations rates are considered suitable for the proposed infiltration facilities.

The maximum depth of the Bolivar Park swimming pool is 12 feet, which would be around the same depth as the invert of the proposed infiltration (stormwater capture) facility. Given the fact that the pool walls are at least 45 to 50 feet away from the proposed infiltration/storage facility, no impacts are anticipated on the pool foundations due to BMP infiltration. Nevertheless, and in accordance with recommendations in the geotechnical investigation report, the following mitigation measure is recommended:

**Mitigation Measure GEO-1:** At least one (1) groundwater monitoring well shall be installed adjacent to the stormwater capture facility to monitor groundwater levels in the project vicinity.

- VI(d). **No Impact.** The project is the design and construction of a facility to divert water from one of two major flood control channels, to infiltrate the water and/or use it for landscape irrigation. No above-ground structures are proposed and any potential impacts from expansive soils will have no impact.
- VI(e). **No Impact.** The proposed project is a stormwater and runoff capture project. It does not include a septic component. There are no septic tanks or alternative waste water disposal systems in the project vicinity.

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<sup>11</sup> Geotechnical Investigation and Infiltration Testing Report, Bolivar Park, Lakewood, California, Page 12, TetraTech, May 11, 2016

<b>VII. <u>GREENHOUSE GAS EMISSIONS</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

“Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” These greenhouse gases contribute to an increase in the temperature of the earth by allowing incoming short wavelength visible sunlight to penetrate the atmosphere, while restricting outgoing terrestrial long-wavelength heat radiation from exiting the atmosphere. The principal greenhouse gases (GHGs) include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Collectively, GHGs are measured as carbon dioxide “equivalents” (CO<sub>2</sub>e); mass emissions of CO<sub>2</sub> are typically expressed in metric tons (MT).

Fossil-fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second-largest contributors of GHG emissions with about one-fourth of total emissions. According to climate scientists, California and the rest of the developed world would have to cut emissions by 80 percent from today’s levels to stabilize the amount of CO<sub>2</sub> in the atmosphere and prevent the most severe effects of global climate change.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statues and executive orders (EO) include Assembly Bill (AB) 32, Senate Bill (SB) 1368, Executive Order (EO) S-03-05, EO S-20-06 and EO S-01-07. Of these, AB 32, the California Global Warming Solutions Act of 2006, mandates that California’s GHG emissions be reduced to 1990 levels by 2020, and tasks the California Air Resources Board (CARB) with regulating GHG emissions as well as coordinating with other state agencies to implement AB 32’s reduction goals. Executive Order S-3-05 provides a more long-range goal and requires an 80 percent reduction of GHGs from 1990 levels by 2050. On a per-capita basis, that means reducing annual emissions of 14 MTs of CO<sub>2</sub> equivalent for every person in California down to approximately 10 MTs per person by 2020.

The CARB’s 2008 Climate Change Scoping Plan explains that reducing GHG emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emissions levels projected for 2020, or about 15 percent from today’s levels. “Business as usual” generally describes a GHG emissions scenario that reflects the levels that would result if land development proceeded without implementing GHG-reduction measures. The Scoping Plan, and updates – the most recent in 2014 – set forth an array of strategies for reducing GHG emissions, categorized by economic sector. These strategies include policies and programs to be adopted by local agencies; however, they do not set numeric “bright-line” GHG thresholds.

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A late-2015 California Supreme Court decision, *Center for Biological Diversity, et al. v. California Department of Fish and Wildlife*, (2015) 62 Cal 4th 204, reh'g. den. Feb. 17, 2016), addressed the Newhall Ranch (Los Angeles County) project's use of the "business-as-usual" method of determining greenhouse gas impact significance, where that EIR had used the Scoping Plan's 29% reduction goal as a project-level threshold. The Court criticized the document for failing to explain how a quantitative statewide goal, based on one set of underlying land-use assumptions, could be directly applied to an individual project, at a particular location, where underlying land use assumptions might be different. Stating that "[t]he analytical gap left by the EIR's failure to establish, through substantial evidence and reasoned explanation, a quantitative equivalence between the Scoping Plan's statewide comparison, and the EIR's own project-level comparison deprived the EIR of its 'sufficiency as an informative document,' " the Court opined that if an EIR uses the Scoping Plan's statewide measure of emissions reduction, it must fully substantiate its rationale for doing so. Specifically, the Court held that this method not be used to set a hypothetical environmental baseline, and then to compare a proposed project's emissions to that baseline. Further, the Court stated that agencies may determine whether a project is consistent with AB 32's goals by evaluating whether a project complies with relevant regulations or regulatory programs, including local Climate Action Plans, which are designed to reduce GHG emissions. Agencies may also set numeric thresholds similar to those established for other air pollutants.

Water management is one of the economic sectors targeted by the Scoping Plan:

California's 2009 Water Conservation Act (Senate Bill x7-7) specifically addresses urban and agricultural water conservation. The Act's key urban provision established an aggressive statewide goal to reduce per capita water use by 20 percent by 2020. To date, 400 urban water agencies have prepared water management plans, which cover close to 80 percent of California's population. The State has also set ambitious goals for development of alternative water sources such as recycled water and stormwater.

The State Water Resources Control Board (SWRCB) adopted recycled water and stormwater goals through a stakeholder-driven process. Recycled water usage is to be increased above the 2002 usage levels by at least one million acre-feet per year by 2020 and by at least two million acre feet per year by 2030. ***Stormwater usage is to increase above the 2007 usage levels by at least 500,000 acre-feet per year by 2020 and by at least one million acre-feet per year by 2030 (emphasis added).*** Grant and loan programs have provided over \$1.15 billion for recycling and stormwater capture infrastructure, and projects are coming online.<sup>12</sup>

The SCAQMD sets forth a GHG threshold only for industrial facilities (10,000 MT CO<sub>2</sub>eq per year), but neither it nor the City of Lakewood have adopted specific GHG emission thresholds for GHG emissions for other sources. The City has not yet created a Climate Action Plan. As such, determining the significance of the proposed project's GHG emissions can be based upon whether the project itself is consistent with a regulatory plan or program from the CARB Scoping Plan, at the same time evaluating the project's measurable GHG emissions from both construction and operation phases.

### **Explanation of Checklist Judgments:**

#### **VII(a,b). Less Than Significant Impact.**

**Construction Phase:** Project construction would generate approximately 296 MTs of CO<sub>2</sub> emissions from the use of construction equipment and from worker commute trips. The

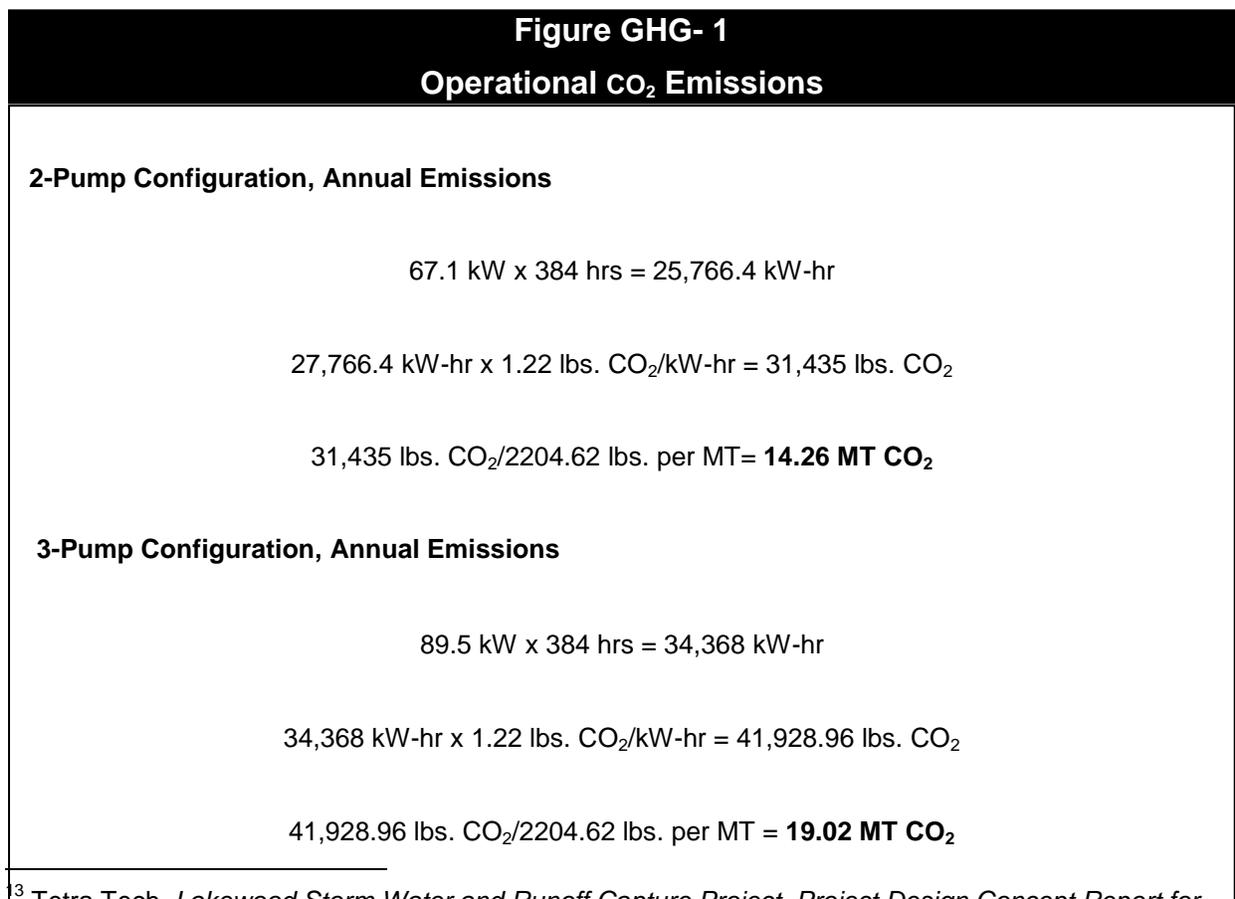
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<sup>12</sup> Id., p. 62.

project's construction phase emissions were calculated using the *Road Construction Emissions Model (version 7.1.5.1)* (this model, rather than the California Emissions Estimator Model (CalEEMod) was used because the project construction requires the same diesel-powered off-road equipment as is generally used in roadway construction, and the project will not build structures requiring large energy inputs or generating vehicle trips). Overall construction CO<sub>2</sub> emissions total 296 MT.

**Operational Phase:** The proposed project would use two to three electric pumps for transferring stormwater from the Del Amo Channel to the vaults within Simon Bolivar Park. Both the two-pump and the three-pump configuration would operate on average eight hours per month, approximately 384 hours per year. The two-pump configuration requires 67.1 kilowatts (kW) per year, and the three-pump requires 89.5 kW/year.<sup>13</sup>

Because the pumps are electric, the CO<sub>2</sub> emissions are indirect – they are released by a power plant burning natural gas. Assuming that none of the electricity used for the pumps comes from “renewable” sources such as solar fields or wind power, CO<sub>2</sub> emissions may be calculated by first determining the annual energy in kW-hours that runs the pumps, then multiplying by the number of pounds (lbs.) of CO<sub>2</sub> generated per kW-hour (1.22 for natural gas-fueled plants<sup>14</sup>), then converting lbs. to MTs (both units of mass). Figure GHG-1 shows this calculation for both two- and three-pump configurations.



<sup>13</sup> Tetra Tech, *Lakewood Storm Water and Runoff Capture Project, Project Design Concept Report for Bolivar Park BMP* (January 25, 2016), Table 6-4, p. 25.

<sup>14</sup> U.S. Department of Energy, U.S. Energy Information Administration, *Frequently Asked Questions: How much carbon dioxide is produced per kilowatt hour when generating electricity with fossil fuels?*, available at <http://www.eia.gov/tools/faqs/faq.cfm?id=74&t=11> (accessed March 22, 2016).

For comparison, Southern California Edison (SCE) reports that it generated 87,418,414,061 kW-hrs for all sectors in 2014, the most recent year such data are available.<sup>15</sup> This amount of energy represents 48,375,899.78 MT CO<sub>2</sub> annually. For agricultural and water pumping, SCE reports 3,597,526,677 kW-hrs, or 1,990,811.36 MT CO<sub>2</sub>. Assuming current energy usage is similar to that from 2014, the proposed project would generate between 2.9 x 10<sup>-5</sup> and 3.9 x 10<sup>-5</sup> percent of SCE's overall CO<sub>2</sub> emissions, and between 7.1 x 10<sup>-4</sup> and 9.5 x 10<sup>-4</sup> percent of SCE's CO<sub>2</sub> agricultural and water-pumping emissions.

Table GHG-1 below summarizes the project's GHG emissions, and the comprehensive output tables are included in **Appendix B** of this Initial Study.

<b>Table GHG-1 Greenhouse Gas Emissions (Metric Tons (MT))</b>	
	<b>CO<sub>2</sub></b>
Total Construction Emissions	296
Operational Emissions (MT/year)	14.26 – 19.02
<sup>†</sup> Approximate CO <sub>2</sub> generation from electricity generated from natural-gas-fueled power plant; values reflect 2-pump or 3-pump configuration.	

As noted above, the CARB Scoping Report 2014 Update includes storm water-capture projects as components of a GHG-reduction strategy. Since this project is indeed a stormwater-capture project, it would “comply with or exceed regulations outlined in the Scoping Plan” (*Center for Biological Diversity, et al. v. California Department of Fish and Wildlife*, p. 25). Additionally, since the captured stormwater would ultimately be used to irrigate Simon Bolivar Park, the project would likely reduce CO<sub>2</sub> emissions associated with potable water treatment, pumping and transport.

Accordingly, given the proportionately small amount of GHG emissions that the proposed project would generate, and the project's consistency with the CARB Scoping Report Update, the proposed project's GHG emissions would not have a significant effect on the environment, and would not conflict with applicable GHG-reduction plans, policies or regulations.

<sup>15</sup> California Energy Commission, Energy Consumption Data Management System, *Electricity Consumption by Entity*, available at <http://www.ecdms.energy.ca.gov/elecbyutil.aspx> (accessed March 22, 2016).

<b>VIII. HAZARDS AND HAZARDOUS MATERIALS</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

VIII(a). **No Impact.** Although construction of the proposed project would involve the excavation and transport of earth, project components, and construction-related materials (e.g., concrete, piping, and equipment), the project does not involve the routine transport, use, or disposal of hazardous materials. All such construction-related materials, including construction debris/waste, would be transported and disposed of in accordance with applicable codes and regulations, and therefore transport and disposal of these items is not expected to create significant hazard to workers or the community. During project operation, the proposed project would include the storage and disposal of accumulated trash, debris and organics collected as part of the project's pretreatment of captured runoff. However, the collected materials would not pose a particular hazard nor require hazardous waste disposal to be performed as part of routine maintenance of these stormwater pretreatment devices. As such, the proposed project would not create impacts related to the routine transport, use, or disposal of hazardous materials, and no mitigation is required.

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- VIII(b). **No Impact.** Implementation of the proposed project would not involve the use, storage, or disposal of explosive or hazardous substances that could result in an upset and accident condition. The project site is currently occupied as Bolivar Park, a community park, which includes a municipal pool facility and recreational open space on an approximately 9.9 acre site. The project, which includes the installation of a passive storm water capture and retention facility does not involve the use or storage of hazardous materials. Similarly, the proposed staging area is not used for storage of hazardous materials, and no excavation or hazardous materials handling would occur at this location as part of the project. Additionally, before commencing any excavation on-site, the construction contractor would be required to obtain an “Underground Service Alert Identification Number.” To minimize potential damage to any existing utilities in the adjacent street right-of-way, the contractor would not be allowed to excavate until all utility owners are notified, and all substructures are clearly identified. As the proposed project would capture and store runoff for grey water usage and reduce the transport of pollutants downstream, operation would not create a significant hazard to the public or environment involving the release of hazardous materials. No reasonably foreseeable upset or accident condition that could involve the release of hazardous materials into the environment are anticipated during construction or operation. Therefore, no impacts are anticipated and no mitigation is required.
- VIII(c). **No Impact.** Riley Elementary School is located directly south of the project, across Deerford Street. As discussed in the Air Quality section above, operation of construction equipment creates air contaminant emissions. However, none of these emissions would be generated at levels that are considered hazardous. Construction of the proposed project would also involve the excavation and transport of earth and other construction-related materials (e.g., concrete, piping, project components, and equipment). All such materials, including construction debris/waste would be transported and disposed of in accordance with applicable codes and regulations. As noted previously, operation of the proposed project would not involve hazardous emissions or materials. The proposed project would capture and store runoff from Del Amo Channel and operate passively. As such, no hazardous materials impacts to schools are anticipated in this regard and no mitigation is required.
- VIII(d). **No Impact.** The proposed project is not on a site listed as a hazardous material site, nor is any such properties within a ½-mile of the project site (See California Department of Toxic Substances Control Envirostor searchable database, <http://www.envirostor.dtsc.ca.gov/public/>, accessed March 14, 2016). Accordingly, the proposed project would not expose the public to related hazards. No impacts with respect to hazardous materials sites are anticipated.
- VIII(e,f). **No Impact.** The project is not located within the vicinity of an airport. The nearest airport is Long Beach Airport which is located approximately 1.5 miles to the south of the project. The site is not located in either the Clear Zone or the Approach Safety Zone of the airport. Therefore, the project would not result in an airport-related safety hazard for people residing or working in the project area.
- VIII(g). **No Impact.** The proposed project would not impair or physically interfere with an adopted emergency response plan or a local, state, or federal agency's emergency evacuation plan, except possibly for short-term periods during construction of the proposed project. Any on-street construction activities in the project area would conform to all City of Lakewood, Los Angeles County Sheriff's Department (LACSD), and Los Angeles County Fire Department (LACFD) access standards to allow

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adequate emergency access. Likewise, material and equipment haul trucks would follow prescribed truck routes to and from the project site, subject to review and approval by the City Public Works Department, LACSD, and LACFD. Once operational, the proposed project would operate passively underground, and therefore its operation would not interfere with emergency response or evacuation plans. No impacts are expected and no mitigation is required.

- VIII(h). **No Impact.** The proposed project would not of itself expose significant numbers of people or structures to wildland fire risk, because the project area is located in an urban environment, and is not near fire-prone wildland. According to the Lakewood Hazard Mitigation Plan 2009, the risk of wildland/urban interface fires in Lakewood is nonexistent. Thus, there are no impacts with respect to wildland fires.

IX. <u>HYDROLOGY AND WATER QUALITY</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

IX(a). **Less Than Significant Impact.** The proposed project would not violate water quality standards or waste discharge requirements, because (and as explained in more detail below):

- (1) The project is intended to *capture*, not discharge pollutants (particularly metals and organic compounds); and
- (2) All construction work would be subject to federal and state regulations protecting water quality, and thus be required to incorporate water-quality-protection best management practices (BMPs) that would minimize construction-related pollutant runoff (see below for examples).
- (3) The City of Lakewood would coordinate efforts with the Greater Los Angeles County Vector Control District to ensure that pest control issues (primarily mosquitos) related to standing water are adequately addressed.

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Specifically, the federal Clean Water Act (CWA) assigns jurisdiction to federal, state, and local agencies over specific activities that could affect stream channels, wetlands, and other water bodies. CWA Section 402(p) sets forth the National Pollutant Discharge Elimination System (NPDES) storm water permitting program, administered by the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) under delegation by the United States Environmental Protection Agency (U.S. EPA). Where projects would affect an area larger than one acre, the project proponent must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which details the appropriate Best Management Practices (BMPs) for reducing or eliminating pollutant discharge from the construction area. Smaller projects, such as the present project (encompassing 0.89 acre of disturbed soil area), still must incorporate BMPs.

BMPs for the construction phase of the project would include, but not be limited to:

1. Good housekeeping: conducting an inventory of products used, implementing proper storage & containment, and properly cleaning all leaks from equipment and vehicles;
2. Non-storm water management: properly washing vehicles in contained areas, cleaning streets and minimizing irrigation runoff;
3. Erosion control: covering disturbed areas with mulch, temporary seeding, soil stabilizers, binders, fiber rolls or blankets, temporary vegetation, permanent seeding;
4. Sediment control: straw wattles along drainage pathways and around storm drains.
5. Run-off and run-on controls: berms and run-off/on diversions;
6. Inspection, maintenance and repair of BMPs to ensure continued efficacy.

By applying these and other BMPs, construction impacts are anticipated to be less than significant, and no supplementary mitigation measures would be required.

IX(b). **Less Than Significant Impact.** The proposed project would not deplete groundwater supplies; rather, the project is designed to supplement groundwater supplies by capturing, treating and infiltrating storm water. The project is estimated to supplement local groundwater with treated/sanitized storm water by as much as 623 acre-feet per year.<sup>16</sup> Accordingly, impacts with respect to groundwater depletion are anticipated to be less than significant, and no additional mitigation measures are required.

IX(c). **Less Than Significant Impact.** As explained below, the proposed storm water capture facility would not adversely affect the existing drainage pattern of the area nor cause siltation or erosion, although it would divert a portion of storm water flows from an existing concrete channel facility into a treatment and capture/infiltration facility. The local drainage pattern would essentially remain as it exists now, since the project would not construct new drainage channels. The project consists primarily of augmenting existing storm water facilities within a fully-developed urban setting, where water flowing into storm drains does not carry significant amounts of silt, and does not flow over erosion-prone undeveloped land. As such, significant siltation or erosion would not be expected to occur. Accordingly, impacts with respect to drainage pattern alteration, or erosion/siltation are anticipated to be less than significant, and no additional mitigation measures are required.

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<sup>16</sup> Tetra-Tech, p. 36.



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IX(d). **Less Than Significant Impact.** The proposed stormwater capture project would not substantially affect the area's existing drainage pattern or increase the rate or amount of surface runoff, causing flooding on or off-site, because any detained water would not overtop the 12'-deep Del Amo Channel. In addition, the project incorporates a proposed diversion structure in the channel which is a three-foot tall rubber dam placed within the channel and which is designed to deflate by the force of water when flow in the channel exceeds three feet in height, thus permitting the channel to convey floodwaters away from public and private property.<sup>17</sup> The operation of this rubber dam is described as follows:

#### Rubber Dam Operations

The rubber dam gate will inflate in preparation for wet-weather events in order to capture the first flush pollutants. The rubber dam gate will be programmed to begin to deflate if the channel flows overtop the rubber dam gate at 1-foot (117 cfs). There will also be a backup mechanical deflate system that will lower the rubber dam gate at 2-feet over the rubber dam (333 cfs). As a result, during high storm flows (greater than 333 cfs in the Del Amo Channel) the rubber dam deflated (4" height) will not impede the capacity of the channel to convey flows of 1,438 cfs.

The rubber dam operations will be monitored by the City of Lakewood staff during storm conditions through the SCADA system and the OptiRTC system. The LACFCD will be provided web access to the OptiRTC for remote status monitoring. For communication purposes, the SCADA system will use a high-frequency radio system. The OptiRTC system will communicate via wireless communication. In addition, the City of Lakewood and the LACFCD will have direct access via the rubber dam control house for manual operation of the diversion structure.

#### Flood Plain Designation

The Federal Emergency Management Agency (FEMA) Map for the project vicinity (Map No. 06037C1960F, panel 1960F) indicates that the area is generally at a very low risk of flooding because of the network of engineered storm drain channels. The Del Amo Channel drainage area is generally within FEMA Zone X, which includes areas subject to inundation by 0.2-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are less than one foot, or where areas are protected by levees from the one-percent annual chance flood.<sup>18</sup> Accordingly, impacts with respect to flooding are anticipated to be less than significant, and no additional mitigation measures are required.

IX(e). **Less Than Significant Impact.** The proposed project would not contribute substantial amounts of runoff water exceeding storm water drainage system capacity, simply because the project itself is designed to *capture* and treat up to 623 acre-feet of stormwater inflows, moderating the amount of stormwater that the Del Amo Channel

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<sup>17</sup> Personal communication from Jason Fussel, Tetra Tech, Inc., March 15, 2016.

<sup>18</sup> Department of Homeland Security, Federal Emergency Management Agency, *Flood Insurance Rate Map, Los Angeles County, California, Panel 1960 of 2350*, September 26, 2008, available at <http://msc.fema.gov/portal/search?AddressQuery=Lakewood%2C%20CA#searchresultsanchor> (accessed March 14, 2016).

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conveys now. Construction runoff would be controlled as described in Part IX(a) above, and would not be expected to contribute polluted runoff to the storm drain system.

As previously indicated, the project proposes a return flow water line (used for dewatering of the storage and infiltration facility). This water line will run north from the infiltration facility and then west along the Del Amo Boulevard frontage road (350-foot) where it will connect to an existing storm drain in Obispo Street. The return flow may discharge water from the underground storage facility under the following conditions:

- When irrigation use in the park and groundwater recharge infiltration rate is not adequate to provide storage capacity for a storm event; and
- When maintenance is required in the underground storage facility.

Under these conditions, the discharge pump will discharge into the City of Lakewood storm drain at a rate of 5 cubic feet per second maximum during dry-weather conditions only. As a result, the operation of the discharge pump will not have any effect on the conveyance capacity of the 60" storm drain in Obispo Street during storm events. Accordingly, impacts with respect to runoff are anticipated to be less than significant, and no additional mitigation measures are required.

IX(f). **Less Than Significant Impact.** The proposed project would not otherwise substantially degrade water quality, primarily because the BMPs described in IX(a) above would minimize runoff water contamination during project construction. Impacts associated with water quality are anticipated to be less than significant, and no additional mitigation measures are required.

IX(g,h). **No Impact.** The proposed project would not construct housing or other structures, thus would not directly subject housing or structures to flood hazards.

IX(i). **No Impact.** The project would not be expected to expose people or structures to significant risk of loss, injury or death involving flooding, since, as explained in IX(d) above, the area within the Del Amo Channel/San Gabriel River drainage area is at a very low risk for flooding generally, and the project itself would not impede flood flows through the storm water conveyance system.

The project site is located in an area drained by the Del Amo Channel, and is approximately three miles east of the San Gabriel River. The Del Amo Channel is a "major channel" within the San Gabriel River Watershed, a largely engineered stormwater management system that drains into Alamitos Bay and, more generally, Long Beach Harbor. The San Gabriel River/Coyote Creek-2 (SGR/CC2) Levee System along the river protects property from winter floods. The Los Angeles County Department of Public Works manages the San Gabriel River, the SGR/CC2 Levee System and the Los Cerritos/Del Amo Channel for multiple purposes, including flood protection.<sup>19</sup>

As noted above in (d), according to FEMA Map 06037C1960F, the project is located in Zone X within an area protected by San Gabriel River/Coyote Creek-2 levees, with a

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<sup>19</sup> Los Angeles County Department of Public Works, *A Common Thread Rediscovered: San Gabriel River Corridor Master Plan*, June 2006, available at <http://ladpw.org/wmd/watershed/sg/> (accessed March 14, 2016).

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0.2-percent annual chance of flooding. Since completion of the levee system in the 1960s, there has not been a failure that resulted in flooding among nearby local communities.<sup>20</sup> For this reason, the potential risk to life and property resulting from a dam or levee failure is remote. Therefore, the project would have no impact from potential flooding of levees or dams.

- IX(j). **No Impact.** The proposed project would not directly expose people or structures to inundation by seiche (standing waves generated by earthquakes) or tsunami, because (1) there are no large bodies of water nearby to generate a seiche and the project would not create such a water body; and (2) the project site is more than eight miles north of the Pacific Ocean, outside of any tsunami zone. The project would not expose people or structures to mudflow, since the project site is located within a relatively flat urban environment and is considered to have “zero” soil-slip (mudflow) susceptibility.<sup>21</sup>

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<sup>20</sup> The California Resources Agency, San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, and Santa Monica Mountains Conservancy, “Common Ground – from the Mountains to the Sea: Watershed and Open Space Plan – San Gabriel and Los Angeles Rivers,” October 2001.

<sup>21</sup> U.S. Geological Survey, U.S. Department of the Interior, California Geological Survey, *Plate 4. Soil-Slip Susceptibility Map for the Long Beach 30' x 60' Quadrangle*, Southern California (2003), available at <https://pubs.er.usgs.gov/publication/ofr0317> (accessed March 15, 2016).

X. <b><u>LAND USE AND PLANNING</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

- X(a). **No Impact.** The proposed project would not physically divide an established community, since it is proposed to be constructed entirely on a single vacant parcel with a General Plan land use designation of Open Space and which is also currently zoned Open Space (O-S). There is no aspect of the project that would interfere with existing access to adjoining properties or the street circulation patterns in general. Development of the project site with the proposed stormwater and runoff capture facility would capture dry-weather (nuisance) runoff in order to help the City comply with Metals TMDL and will also increase local water supplies by using non-potable runoff water for irrigation. No impacts related to this issue area are anticipated, and no mitigation measures are required.
- X(b). **No Impact.** The proposed project would not conflict with applicable land use plans, policies or regulations, including the City’s 1996 Comprehensive General Plan or the City’s Municipal Code and the development and design standards included therein. The project consists of the installation of an underground stormwater runoff and capture facility at Bolivar Park. Once installed, the park will continue to function as it has in the past (as a public park) with park and recreational uses consistent with its Open Space (O-S) zoning designation. No park spaces or uses will be permanently displaced because of the facility. There would be no impact.
- X(c). **No Impact.** The proposed project would not conflict with a habitat conservation plan or natural community conservation plan, because none exist that apply to the project site. No associated impacts are anticipated, and no mitigation is required.

Mitigation/Residual Impacts: Based on the above discussion, the project would have a less no impact with respect to Land Use, City and Regional Plans. As such, no mitigation measures are required.

XI. <u>MINERAL RESOURCES</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## ENVIRONMENTAL SETTING

According to the City of Lakewood Comprehensive General Plan (1996), there are no known significant mineral resources or deposits of regional or statewide importance located in Lakewood. There is a small area containing mineral deposits, the significance of which cannot be evaluated from available data, and there is a small area where available information is inadequate for assignment to any other Mineral Resource Zone (MRZ).

Most of Lakewood is classified as MRZ 1, an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

## REGULATORY SETTING

The project site is under the jurisdiction of the City of Lakewood (City) and therefore would be subject to the City's Comprehensive General Plan (1996), Conservation Element,<sup>22</sup> and Lakewood Municipal Code (LMC).

### Explanation of Checklist Judgments:

XI(a). **No Impact.** No mineral resources of statewide or regional importance have been identified in the City. Therefore, project construction and operation would not result in the loss of availability of any known mineral resource that would be of local, regional, or statewide importance. No impact would occur and no mitigation measures would be necessary.

XI(b). **No Impact.** The City of Lakewood Comprehensive General Plan Conservation Element does not designate any portion of the City as a locally important mineral resource recovery site. Project construction and operation would not result in the loss of availability of any known mineral resource so no impact would occur.

<sup>22</sup> City of Lakewood, Comprehensive General Plan (1996), Conservation Element, Page 4-3.

<b>XII. NOISE</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporation</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<i>Would the project result in:</i>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## ENVIRONMENTAL SETTING

### Characteristics of Sound

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dB higher than another is judged to be twice as loud; a sound 20 dB higher is perceived to be four times as loud; and so forth. Everyday sounds normally range from 30 dB (very quiet) to 100 dB (very loud).

Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA. Sound levels decrease as a function of distance from the source as a result of wave divergence, atmospheric absorption and ground attenuation. As the sound wave form travels away from the source, the sound energy is dispersed over a greater area, thereby dispersing the sound power of the wave. Atmospheric absorption also influences the levels that are received by the observer. The greater the distance traveled, the greater the influence and the resultant fluctuations. The degree of absorption is a function of the frequency of the sound as well as the humidity and temperature of the air. Turbulence and gradients of wind, and temperature also play a significant role in determining the degree of attenuation. Intervening topography can also have a substantial effect on the effective perceived noise levels.

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Noise has been defined as unwanted sound and it is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. This criterion is based on known impacts of noise on people, such as hearing loss, speech interference, sleep interference, physiological responses and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narratives:

**HEARING LOSS** is not a concern in community noise situations of this type. The potential for noise induced hearing loss is more commonly associated with occupational noise exposures in heavy industry or very noisy work environments. Noise levels in neighborhoods, even in very noisy airport environs, are not sufficiently loud as to cause hearing loss.

**SPEECH INTERFERENCE** is one of the primary concerns in environmental noise problems. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level.

**SLEEP INTERFERENCE** is a major noise concern for traffic noise. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep disturbance. Note that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep.

**PHYSIOLOGICAL RESPONSES** are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent to which these physiological responses cause harm or are signs of harm is presently unknown.

**ANNOYANCE** is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability.

## Figure NOI-1 – A-Weighted Noise Levels

**SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES  
IN INDOOR AND OUTDOOR ENVIRONMENTS**  
Numbers in Parentheses are the A-Scale Weighted Sound Levels for that Noise Event

dB(A)	OVER-ALL LEVEL	COMMUNITY (Outdoor)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
120		Military Jet Aircraft Take-Off With After-Burner From Aircraft Carrier @ 50 Ft. (130)	Oxygen Torch (121)	120 dB(A) 32 Times as Loud
110	UNCOMFORTABLY LOUD	Concord Takeoff (113)*	Riveting Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100		Boeing 747-200 Takeoff (101)*		100 dB(A) 8 Times as Loud
90	VERY LOUD	Power Mower (96) DC-10-30 Takeoff (96)* Motorcycle @25 Ft. (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Ft. (89) Boeing 727 w/ Hushkit Takeoff (96)* Diesel Truck, 40 MPH @ 50 Ft. (84) Diesel Train, 45 MPH @ 100 Ft. (83)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Ft. (77) Freeway @ 50 Ft. From Pavement Edge, 10:00 AM (76 ± 6) Boeing 757 Takeoff (76)*	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Propeller Airplane Takeoff (67)* Air Conditioning Unit @ 100 Ft. (60)	Cash Register @ 10 Ft. (65-70) Electric Typewriter @ 10 Ft. (64) Dishwasher (Rinse) @ 10 Ft. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft. (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
20	JUST AUDIBLE	(dB(A) Scale Interrupted) Desert at Night		
10	THRESHOLD OF HEARING			

\*Aircraft takeoff noise measured 6,500 meters from beginning of takeoff roll

SOURCE: Leo L. Beranek "Noise And Vibration Control," 1971.  
\*Aircraft Levels From FAA Advisory Circular AC-36-3G

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## Noise Measurement Scales

The description, analysis and reporting of community noise levels around communities is made difficult by the complexity of human response to noise and the myriad of noise metrics that have been developed for describing noise impacts. Each of these metrics attempts to quantify noise levels with respect to community response. Most of the metrics use the A-Weighted noise level to quantify noise impacts on humans. A-Weighting is a frequency weighting that accounts for human sensitivity to different frequencies.

Noise metrics can be divided into two categories: single event and cumulative. Single-event metrics describe the noise levels from an individual event such as an aircraft fly-over or perhaps a heavy equipment pass-by. Cumulative metrics average the total noise over a specific time period, which is typically 1 or 24-hours for community noise problems. For this type of analysis, cumulative noise metrics is typically used.

Several rating scales have been developed for measurement of community noise. These account for: (1) the parameters of noise that have been shown to contribute to the effects of noise on man, (2) the variety of noises found in the environment, (3) the variations in noise levels that occur as a person moves through the environment, and (4) the variations associated with the time of day. They are designed to account for the known health effects of noise on people described previously. Based on these effects, the observation has been made that the potential for a noise to impact people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. The two most predominate noise scales are the: Equivalent Noise Level (LEQ) and the Community Noise Equivalent Level (CNEL). These scales are described in the following paragraphs along with the Ldn and L(%) scales that are also used for community noise assessment.

**LEQ** is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. LEQ is the "energy" average noise level during the time period of the sample. LEQ can be measured for any time period, but is typically measured for 1 hour. This 1-hour noise level can also be referred to as the Hourly Noise Level (HNL), the energy average of all the events and background noise levels that occur during that time period.

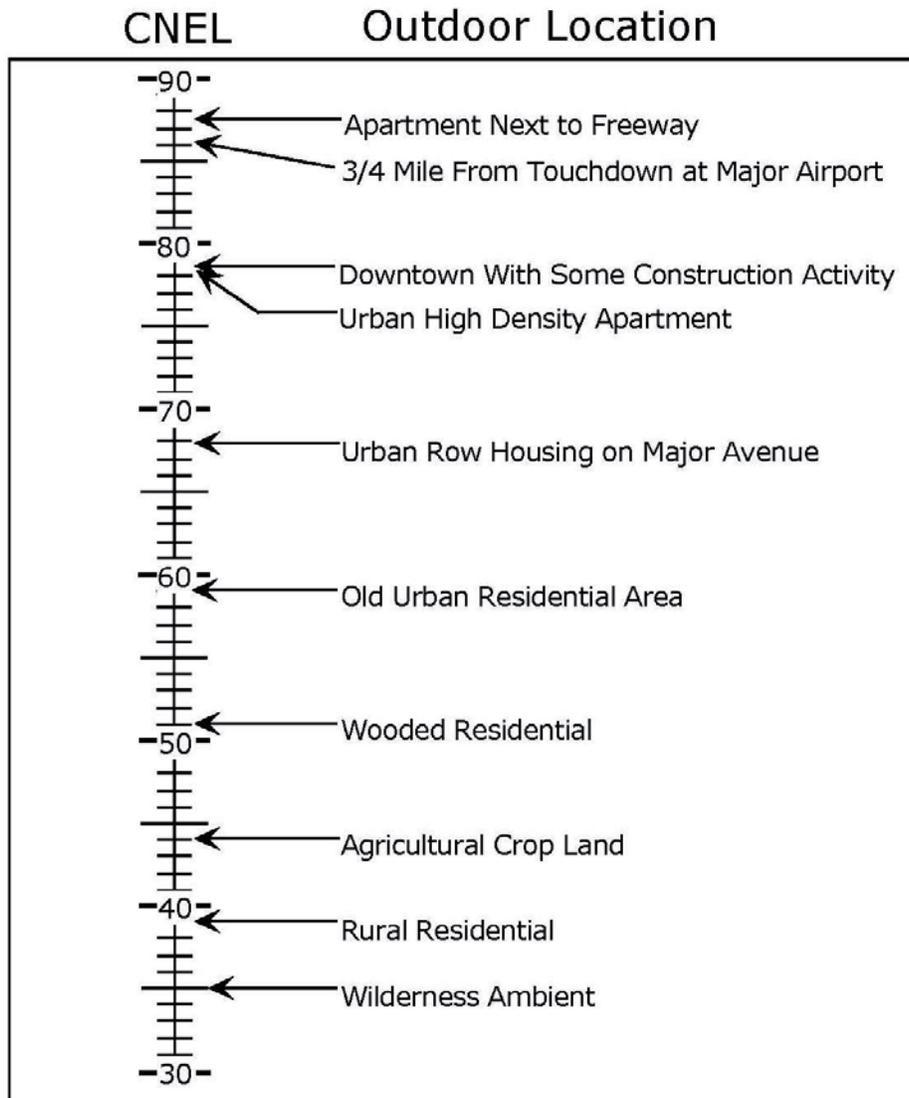
**CNEL**, Community Noise Equivalent Level, is the predominant rating scale now in use in California for land use compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the A-weighted decibel. Time weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA. These time periods and penalties were selected to reflect people's increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a "CNEL of 60 dBA," "60 dBA CNEL," or simply "60 CNEL." Typical noise levels in terms of the CNEL scale for different types of communities are presented in Figure NOI-2.

**LDN**, the day-night scale is similar to the CNEL scale except that evening noises are not penalized. It is a measure of the overall noise experienced during an entire day. The time-weighted refers to the fact that noise that occurs during certain sensitive time periods is penalized. In the Ldn scale, those noise levels that occur during the night (10 pm to 7 am) are penalized by 10 dB. This penalty was selected to attempt to account for increased human sensitivity to noise during the quieter period of a day, where resting at home and sleep are the most probable activities.

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**L (%)** is a statistical method of describing noise which accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example since 5 minutes is 25% of 20 minutes, L(25) is the noise level that is equal to or exceeded for five minutes in a twenty-minute measurement period. It is L(%) that is used for many Noise Ordinance standards. For example, most daytime City, State and City Noise Ordinances use an ordinance standard of 55 dBA for 30 minutes per hour or an L(50) level of 55 dBA. In other words the Noise Ordinance states that no noise level should exceed 55 dBA for more than fifty percent of a given period. The L(%) levels are not used for the City of Noise Ordinance.

**Figure NOI-2 – Typical Outdoor Noise Levels**



Source: U.S. Environmental Protection Agency, "Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure," EPA Report NTID 73.4, 1973.

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## Noise Setting

The nearest existing residential uses to the project site are located to the west across Levelside Avenue as well as residential uses located south and east of Downey Avenue that would be near the proposed storm water pump station installation at the Del Amo Channel.

Currently, the primary source of noise impacting residents in the project site area is traffic noise from vehicles on Del Amo Boulevard and Downey Avenue. Additional noise is generated by the active recreational facilities at Bolivar Park including the swimming pool, baseball diamonds, and other uses of the park. It should be noted, however, that these active recreational uses at the park (and noise generated by these uses) have been in existence for many years.

### REGULATORY SETTING

#### Applicable Noise Regulations

##### State of California

The State of California's 2013 Green Building Code (California Code of Regulations, Title 24, Part 11) specifies an interior noise standard for non-residential uses exposed to exterior noise levels from transportation noise sources (aircraft, roadway or rail) exceeding 65 CNEL or a one-hour Leq of 65 dBA or greater. The standard specifies minimum outdoor-indoor-transmission-class (OITC) ratings for exterior walls or a performance standard of a one-hour interior noise level of 50 dBA Leq(H). Prior State Building Codes also contained interior noise standards for residential buildings but these have been omitted from in the most recent updates to the code.

##### City of Lakewood Noise Element

The Noise Element of the Comprehensive General Plan includes goals and implementation programs to help mitigate or offset noise impacts on the community. Most of these goal pertain to efforts to reduce noise impacts from railroad rights-of-ways as well as noise generated by the Long Beach Airport. Specific noise regulations (concerning construction) are included in the City's municipal code, as discussed below.

##### City of Lakewood Municipal Code

Section 8019 of the Lakewood Municipal Code establishes permitted hours of construction that seek to control sources of noise for construction projects. These regulations state that "No person shall engage in any act of grading, construction, reconstruction, or demolition, including but not limited to the use of any air compressors; jackhammers; power-driven drill; riveting machine; excavator/truck, tractor or other earth moving equipment; or any machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in a dwelling, apartment, hotel, mobile home, or other place of residence, except during the hours of 7 A.M. to 7 P.M., Monday through Saturday; and 9 A.M. to 7 P.M., on Sundays."

Exemptions to the above-stated hours of permitted construction can include the following:

- Work performed in a zone prohibiting residential uses when such work is at least five hundred (500) feet from a residential zone within any jurisdiction.
- Work performed by a public utility or governmental agency when such work is necessary for the preservation of life or property and such necessity requires work within the prohibited hours.

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- Emergency work necessary for the preservation of life or property when such necessity arises during prohibited hours or immediate action is required prior to the time permissions could be obtained except when this work is performed by a public utility or governmental agency.

In addition to the foregoing, the Director of Community Development may approve a written request for construction activity during prohibited hours, provided the written request states the reason and the facts upon which the reasons are based, and the Director makes the following findings:

1. The work to be done is in the best public interest; or
2. Hardship or injustice or unreasonable delay would result from the interruption of the work during the specified times; or
3. The building or structure involved is devoted or intended to be devoted to a use immediately incident to public defense.

#### **Explanation of Checklist Judgments:**

XII(a). **Less Than Significant Impact.** Noise impacts resulting from the project can be considered either short-term construction related or long-term operational related. Short-term construction noise would be regulated by noise control provisions in the City's Municipal Code while operational noise impacts are considered less than significant, as discussed below.

##### Short-Term Construction Noise

As indicated above, the City's municipal code contains specific provisions that regulate the hours of permitted construction activities in the City. These regulations address construction noise impacts by limiting the hours in which construction can take place, namely only during the hours of hours of 7 A.M. to 7 P.M, Monday through Saturday; and 9 A.M. to 7 P.M. on Sundays. There are exemptions to these hours of permitted construction, however, these would not apply in the case of this project as the construction work is not necessary for the preservation of life or property and is not the result of an emergency. The adherence of construction activities to the day and time construction restrictions in the Code will result in less than significant short-term construction noise impacts.

##### Operational Noise

Operational noise impacts could result from the proposed pumping systems required for all alternatives. Preliminary designs call for two types of pumping requirements for the project adjacent to the Del Amo Channel:

- 2-Pump Configuration: The pump station will have two duty pumps, each capable of pumping the full peak design flow. This configuration allows redundancy if one pump fails or is removed from the station for maintenance.
- 3-Pump Configuration (recommended): The pump station will have three duty pumps, each capable of pumping 50 percent of the peak design flow. In the event of a single pump failure, the two remaining pumps will be capable of conveying the design flow.

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Operations of the pump station for either configuration will allow for routine cycling of all pumps to evenly maintain operations for all pumps equally. Additionally, a single low-flow pump will be provided in either configuration to dewater the pump station to a level below the level permitted by the main duty pumps.

Site conditions prescribe that the pump station be constructed below grade as to allow for maximum site use. Additionally, to minimize noise from pump operations while providing for security, both pumps and motors be installed below grade within a secure wet well. Consequently, noise from pumping operations will be less than significant.

XII(b). **No Impact.** The stormwater runoff and capture facility is largely a below-ground facility and does not include operational aspects that will generate excessive groundborne vibration or groundborne noise levels.

XII(c). **Less Than Significant Impact.** As indicated above, operational noise impacts could result from the proposed pumping system chosen for the project. The recommended system includes a 3-pump configuration in which the pump station will have three duty pumps, each capable of pumping 50 percent of the peak design flow. However, to minimize noise from pump operations while providing for security, both pumps and motors be installed below grade within a secure wet well. Consequently, noise from pumping operations will be less than significant.

XII(d). **Less Than Significant Impact.** As discussed, temporary or periodic increases in ambient noise levels in the project vicinity will occur as a result of construction activities. However, provisions in the City's municipal code regulate the permitted hours of construction activities. Conformance with these regulations will reduce periodic increases in ambient noise levels to less than significant.

XII(e). **No Impact.** The proposed project would not expose people to levels of aircraft noise beyond those that currently exist. The Long Beach Airport (public) is located approximately 1.5 miles south of the project site. There are no private airstrips in the vicinity of the proposed project. The project would not influence airport operations; accordingly, the project would not generate impacts from airport noise, or expose people to new airport noise.

XII(f). **No Impact.** See response to XII e., above.

<b>XIII. <u>POPULATION AND HOUSING</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

XIII(a). **No Impact.** As discussed, the project involves water quality infrastructure improvements. This action would not directly increase the population or housing in the City of Lakewood. The project is intended to demonstrate how targeted project selection and innovative design can not only help the City of Lakewood comply with the Metals TMDL, but also identify the potential for multiple additional benefits, such as water supply.

XIII(b-c). **No Impact.** As discussed, the project involves a stormwater runoff capture facility. As such, the project would not result in the loss of residential units. Therefore, the project would not displace any residents and would have no associated impact.

<b>XXIV. <u>PUBLIC SERVICES</u></b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project: result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

XIV(a). **Less Than Significant Impact.** Construction of the proposed project could have the potential to reduce access for emergency vehicles near construction activities. However, all construction activities would occur on the existing park site with construction staging areas located on the frontage road adjacent to the park and would be carried out in accordance with all applicable City and/or Los Angeles County Fire Department (LACFD) emergency access standards. Emergency vehicle access would be maintained throughout the construction period. Operation of the proposed project would be passive and largely underground, and therefore would not require additional fire protection services, facilities, or equipment. No significant adverse physical impacts would occur to fire services and no mitigation is required.

XIV(b). **Less Than Significant Impact.** Construction of the proposed project could have the potential to reduce access for emergency vehicles near construction areas. However, as explained above, all construction activities would be carried out in accordance with all applicable City and/or Los Angeles County Sheriff's Department (LACSD) emergency access standards, and emergency vehicle access would be maintained throughout construction. Operation of the proposed project would be passive and would not require additional police protection. No significant adverse physical impacts would occur relative to police services and no mitigation is required.

XIV(c). **No Impact:** As discussed, the project does not involve the development of residences and would not significantly induce growth. Consequently, the amount of people served by the local school system would not increase as a result of the project. Therefore, the project would have no impact to schools.

XIV(d). **Less Than Significant Impact:** The project would not introduce any new population that would create additional demands on existing or planned park facilities. However, the project would temporarily displace a portion of Bolivar Park from recreational use during construction. The stormwater capture facility would be installed at the northwestern corner of the park temporarily removing approximately 39,000 square feet (0.9 acres) of park open space, including space needed for project staging. The

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proposed staging area would be on the frontage road adjacent to the park site and will be for on-site storage of vehicles, materials, and project components. After construction, the existing park use and park amenities would be restored since new landscaping consisting mostly of turf will be installed over the project facility. Hence, temporary construction activities would result in less than significant impacts related to the short term loss of recreational use within a portion of the Bolivar Park.

- XIV(e). **No Impact.** The project would involve periodic inspection and/or maintenance of facilities at the park site and pump station adjacent to Del Amo Channel. However, no substantial increase in City services would be required above and beyond those already provided by the City, as various components of the system will be managed by a service contractor to provide operations and maintenance, including some operations within the channel that will require coordination and notifications to the Los Angeles County Flood Control District (LACFD). In all, no impacts regarding other public facilities would occur.

<b>XV. RECREATION</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Checklist Judgments:**

XV(a). **No Impact.** The proposed project includes the construction and operation of an underground stormwater capture facility, which would not result in a measurable demand for parks and recreation services. As such, implementation of the proposed project is not anticipated to cause an increase in the use of existing neighborhood and regional parks and other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, and thus, no impact to parks and recreational facilities would result from the proposed project.

XV(b). **Less Than Significant Impact.** As stated in the discussion under XIV(d) above, the proposed project would restrict recreational use within a portion of Bolivar Park during construction of the project. With completion of the construction phase, the proposed project will operate passively with only minimal maintenance occurring once per month on-site at or near Bolivar Park. Park use will resume as before the project, functioning mostly as recreational open space landscaped with turf and accommodating such park amenities as picnic tables, walkways, and benches. As demonstrated throughout this Initial Study, the development of these project features would not result in a physical adverse effect on the surrounding environment. Therefore, the proposed project would result in a less than significant impact with respect to recreational facilities.

<b>XVI. TRANSPORTATION/TRAFFIC</b>		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<b>Would the project:</b>					
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Explanation of Checklist Judgments:**

XVI(a). **Less Than Significant Impact.** The proposed project would result in temporary traffic and circulation impacts during construction activities. Construction worker vehicle trips to and from the project site, as well as delivery truck trips of modular components to and from the project site, would increase traffic levels on surrounding streets in the area. During the 2-3 month excavation period for the stormwater diversion/storage facility, there would be approximately 36 hauling truck round-trips per day, representing peak construction operations. These trips would be spaced irregularly over the course of an eight-hour workday, potentially averaging 4.5 to 10 trips per hour. For the modular construction phase, deliveries of the modular units may result in 60 to 70 units that may be installed in a day, resulting in approximately 10 truck trips per day over the course of five to eight days. However, given the relatively short duration of this construction phase, combined with the nature and intensity of the proposed worker vehicle and delivery truck traffic, project construction traffic is not anticipated to be substantial, and would cease at the completion of construction activities.

Delivery and haul trucks would generally follow and access the site by designated truck routes from Interstate 605 (I-605) by heading west on Carson Street, turning right onto Lakewood Boulevard, then turning onto non-designated truck routes (Del Amo Boulevard and Downey Avenue) to access the site from the adjacent streets. Once trucks have made deliveries or picked up materials to haul away, they would, if possible, exit the way they entered the site, or would alternately continue through the site to the west and exit the site back onto Del Amo Boulevard via Obispo Avenue. Trucks would then head east to access Interstate 605 via Lakewood Boulevard and

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Carson Street.

Traffic associated with the operation of the proposed stormwater runoff reservoir would not be notably affected, as the ongoing maintenance and operation activities for the new stormwater capture facility would require vehicles trips of approximately once per month and therefore project-related traffic impacts would be minimal. As such, temporary construction activities and long-term operation of the proposed project would result in less than significant impacts related to conflicts with applicable plans, ordinances, and policies intended to maintain the function of the local and regional circulation system.

- XVI(b). **Less Than Significant Impact.** The Congestion Management Program (CMP) is a state-mandated program enacted by the State legislature to address impacts that urban congestion has on local communities and the region as a whole. New projects located in the City must comply with the requirements set forth in the CMP. These requirements include the provision that all freeway segments where a project could add 150 or more trips in each direction during peak hours must be evaluated. The guidelines also require evaluation of all designated CMP roadway intersections where a project could add 50 or more trips during peak hours. The proposed project would not result in a net increase of more than 20 trips during with either the A.M. or P.M. peak hours. Thus, the project would not generate 150 or more trips to a freeway segment or 50 trips to a CMP roadway intersection. Accordingly, less than significant impact to CMP designated facilities would occur with project implementation.
- XVI(c). **No Impact.** The project is not an air traffic-related use and would not result in the disruption or change of air traffic patterns in the area. Thus, no impact would occur in this regard.
- XVI(d). **Less Than Significant Impact.** The project would not involve the permanent construction or modification of traffic-related improvements. Additionally, the project would not involve the construction of any uses that would be considered incompatible with existing roadways. However, semi-trailer trucks entering the project site from, and exiting onto, could create a temporary hazard to vehicles traveling on Del Amo Boulevard due to limited roadway widths and turning radii on residential streets adjacent to the project site. However, per standard construction traffic procedures, truck ingress and egress would be controlled by a flagman, or other equivalent means determined appropriate by the City, which would minimize the potential for vehicular hazards associated with truck activity on and adjacent to the project site. Thus, impacts in this regard would be less than significant.
- XVI(e). **Less Than Significant Impact.** The proposed project would not hinder emergency access in the area, since peak project-related traffic would be associated with temporary construction and delivery truck trips on Del Amo Boulevard. As mentioned above, all construction activities would be carried out in accordance with all City, LACSD, and LACFD emergency access requirements and access would be maintained during construction activities. As such, no significant emergency access impacts are expected and no mitigation is required.
- XVI(f). **No Impact.** The proposed project would not conflict with adopted policies supporting alternative transportation. Construction activities would be coordinated with MTA and other transit agencies, as necessary, in order to minimize impacts to alternative transportation facilities (e.g., bus stops, bike lanes). Access to public transportation

and bike lanes would be maintained throughout construction, as required by the City and MTA. As a result, no significant impacts would result from the proposed project and no mitigation is required.

<b>XVII. UTILITIES AND SERVICE SYSTEMS</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Checklist Judgments:**

XVII(a). **No Impact.** The proposed project would not result in changes to facilities or operations at existing wastewater treatment facilities, as proposed improvements are intended to capture existing stormwater runoff for treatment of contaminants to improve water quality and to supplement existing water supply for grey water use. The new storm water capture facility would increase infiltration to recharge underground water supplies while potentially reducing the amount of potable water consumed. Therefore, the proposed project would not have the potential to exceed wastewater treatment requirements, and no impact to wastewater treatment requirements of the applicable Regional Water Quality Control Board would occur.

XVII(b). **No Impact.** As stated above, the proposed project is the construction of a new stormwater capture and retention facility and does not include the construction of any new developments that would generate wastewater, solid waste, or increase the demand for water supplies. Therefore, the proposed project would not require the construction of new wastewater treatment facilities or expansion of existing facilities. As such, there will be no impacts.

XVII(c). **Less Than Significant Impact.** As a new stormwater capture facility, construction of the proposed project would not be expected to increase stormwater runoff at the project site, but in fact, reduce stormwater runoff diverted from Del Amo Channel to increase underground infiltration and grey water use in Bolivar Park such as for landscape irrigation. Given the installation of a soil/gravel layer with turf over the underground storage reservoir, the proposed project would not increase overall

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impervious surface area on-site since the replacement landscaping over the reservoir would serve to absorb any potential stormwater on-site. The project would result in the potential reduction of stormwater runoff by diverting flows from the Del Amo Channel to the runoff and infiltration facility.

The project proposes the installation of a return flow water line (used for dewatering of the storage and infiltration facility). This return flow water line will run north from the new facility and west along Del Amo Boulevard where it will connect to an existing storm drain in Obispo Street. There will be an infrequent use of this water line as the stormwater capture facility will need dewatering only after wet weather stormwater events. Also, the existing stormwater drainage facilities serving the site and surrounding areas have sufficient capacity to serve the proposed facility. Therefore, construction and operation of the proposed project would not require, or indirectly result in, the construction of new stormwater drainage facilities or the expansion of existing facilities. Thus, no impacts are expected and no mitigation is required.

- XVII(d). **No Impact.** No new or expanded water entitlements would be required with implementation of the project, as the project would increase water supplies through infiltration of stormwater and recharging groundwater aquifer. As such, the proposed project would not increase the demand for water supplies, and thus, no impacts would occur in this regard.
- XVII(e). **No Impact.** The project would not generate wastewater, and therefore, would not impact the capacity of any wastewater treatment provider. Thus, no impacts would occur in this regard.
- XVII(f). **Less Than Significant Impact.** The completed project will generate excess inert fill, concrete and asphalt material during excavation and the installation of piping along the street right-of-way for project construction. Excavation and construction debris would be recycled or transported to La Puente Hills Landfill and disposed of appropriately. However, the amount of debris generated during project construction is not expected to significantly impact landfill capacities. Additionally, operation of the stormwater capture facility would generate minimal solid waste as part of monthly maintenance of its pretreatment activities. Therefore, there would be a less than significant impact to solid waste disposal.
- XVII(g). **Less Than Significant Impact.** Disposal of waste materials generated during construction will comply with all local, state, and federal requirements for integrated waste management (e.g., recycling, green waste) and solid waste disposal. As stated above, operation of the project will not exceed the standards or capacity of local disposal facilities. Therefore, no significant impacts related to compliance with solid waste statutes and regulations will occur.

<b>XVIII. MANDATORY FINDINGS OF SIGNIFICANCE</b>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Does the project:</i>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Explanation of Checklist Judgments:**

XVIII(a). **Less Than Significant Impact with Mitigation Incorporation.** There are no sensitive fish or wildlife habitat areas in the vicinity of the proposed project. The project is also located within an area of low biological resource value since the surrounding area is considered urbanized and highly disturbed with little to no native vegetation to support any sensitive species. Therefore, no degradation of the environment or any adverse impacts to any sensitive plant or animal species will result from the project.

The Cultural Resources Assessment prepared for the project notes that Bolivar Park is sensitive for paleontological, archeological, and cultural (including Native American) resources. As such, mitigation measures have been incorporated into the study to address the potential to uncover such resources during the excavation/construction phase of the project. This includes the provision of full-time monitoring during excavation/construction for paleontologic, archeological, and cultural resources. A Native American Monitor of Gabrieliño descent will monitor excavation/construction activities for Native American resources if Native American resources are uncovered during the course of excavation/construction activities.

XVIII(b). **Less Than Significant Impact.** Cumulative impacts are limited to the construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.) for this project, and would be minimized by avoiding simultaneous construction of each component (i.e., pumping station, return flow water line, installation of underground infiltration facility, irrigation lines, etc.) of this project. Coordination within the separate components of this project and with other current and future infrastructure projects within proximity of each other will be necessary to avoid undue inconvenience to nearby residents and the general public. Since the project is intended to address water runoff issues and water quality, it will not contribute to an existing capacity demand and no cumulative impacts will occur.

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XVIII(c). **Less Than Significant Impact.** Any potentially adverse effects on human beings associated with the project will be limited to project construction. Short-term exposure to potential noise, air and water pollution associated with heavy construction vehicles may be expected. However, implementation of mitigation measures during the construction phase will minimize the potential adverse impacts associated with project construction to a less than significant impact. Appropriate measures and management practices such as limiting construction periods to those permitted by the municipal code, and coordinating construction activities with other service agencies will be employed during construction as necessary. Otherwise, the project will not have any long-term adverse impacts on human beings. Based on the analysis in this Initial Study, and with application of the incorporated mitigation measures, the project will not present substantial adverse effects on human beings.