



**US Army Corps  
of Engineers®**

# **LOS ANGELES COUNTY DRAINAGE AREA SEPULVEDA DAM RESERVOIR**

## **CONCERT IN THE PARK**

### **Draft Environmental Assessment**

**Prepared by  
US Army Corps of Engineers  
Los Angeles District  
915 Wilshire Blvd.  
Los Angeles, California 90017-3401**

**With Technical Assistance by  
City of Los Angeles Department of Recreation and Parks**

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Appendix B	Valley Concert Parking and Traffic Assessment
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## 1.0 INTRODUCTION

### 1.1 AUTHORITY

The U.S. Army Corps of Engineers (Corps) is in receipt of a request by the City of Los Angeles Department of Recreation and Parks (RAP), the recreational lessee at Sepulveda Recreation Area at the Sepulveda Dam Reservoir, for a proposed special event entitled Concert in the Park (Concert), produced and managed by Valley Music Live LLC, proposed to be held over Labor Day weekend in 2019 (August 31-September 2). This Concert is referred to as the Proposed Project or Proposed Action below.

The Sepulveda Dam (Dam) is a federally authorized flood risk management project constructed, operated, and maintained by the Corps, Los Angeles District with a primary purpose to provide flood risk management for the residents of Los Angeles County residing downstream of the Dam.

The Flood Control Act (FCA) of 1936 (Public Law [PL] 74-738) authorized civil works projects for flood risk management to reduce flood risk for Los Angeles County, California. The FCA of 1938 authorized acquisition of land for flood control projects for the Los Angeles County Drainage Area (LACDA), including Sepulveda Dam and Section 4 of the FCA of 1944, (PL 78-534), as amended, authorize the Corps to construct, maintain, and operate public park and recreation amenities at water resource development projects, to permit the construction of such facilities by local interests (particularly those to be operated and maintained by such interests), and to permit the maintenance and operation of such facilities by local interests.

Pursuant to 36 Code of Federal Regulations (CFR) Section 327.21, the Corps is authorized to approve special events at its water resources development projects. Under this authority, special events at Corps projects are prohibited unless written permission has been granted by the District Commander. An appropriate fee may be charged for an event under the authority of Section 327.23. Consistent with the CFR and RAP's lease, the public shall not be charged any fee by the sponsor of such event unless the District Commander has approved in writing (and the sponsor has properly posted) the proposed schedule of fees. The District Commander has authority to revoke permission, require removal of any equipment, and require restoration of an area to pre-event condition, upon failure of the sponsor to comply with terms and conditions of the permission or these regulations. RAP has requested such permission from the District Commander for this special event.

In addition to evaluating whether to provide approval for the special event pursuant to 36 CFR §327.21, the Corps must also evaluate whether to waive certain requirements of its policy as presented in Appendix A:5 of the Basin Master Plan: Corps Policy on Special Events at Sepulveda Basin (Special Events Policy), found in Appendix A of this EA. When a proposed event does not comply with conditions of the Master Plan, the Corps may consider a waiver.

The Corps has prepared this Draft Environmental Assessment (EA) to evaluate the potential impacts of approving the event as proposed by RAP and granting the waiver to the Special Events Policy which is described here as the Proponent's Preferred Alternative, along with the No Action Alternative. This Draft EA has been prepared pursuant to the National Environmental Policy Act (NEPA) (42 USC 4321 et seq.), Council on Environmental Quality (CEQ) regulations published at 40 Code of Federal Regulations (CFR) Part 1500 et seq., the Corps' *Procedures for*

*Implementing NEPA* Engineer Regulation 200-2-2, (33 CFR Part 230), other environmental laws, Executive Orders, and Corps regulations and policies.

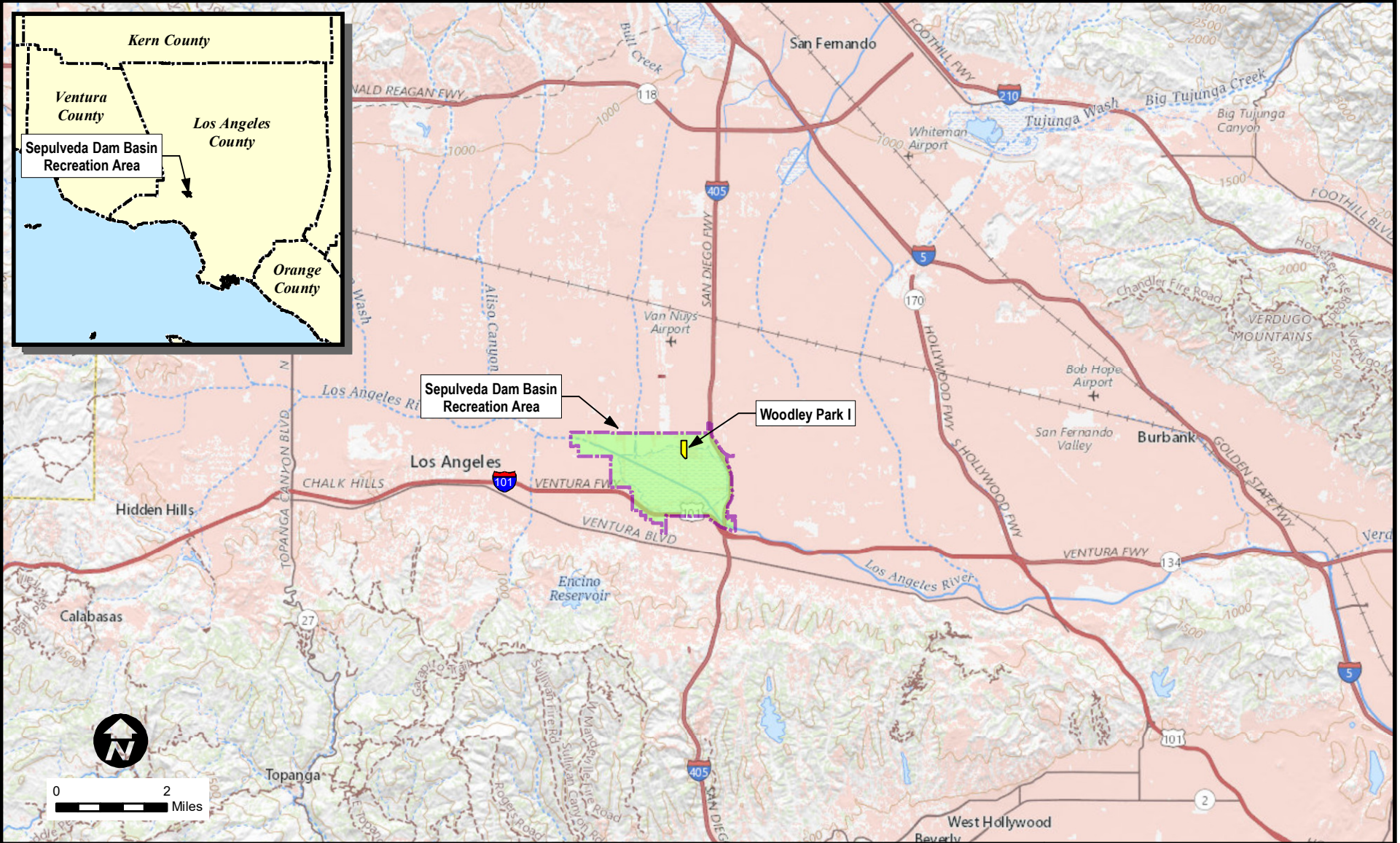
The Sepulveda Dam Basin Master Plan and Environmental Assessment (2011) describes the baseline conditions for the natural and human resources within the Reservoir. Those portions of Chapters 3 and 4 of the Master Plan EA that describe baseline environmental conditions relevant to the alternatives are incorporated here by reference.



## **1.2 PROPOSED PROJECT SITE**

The Sepulveda Dam Flood Control Basin (Basin or Reservoir) is located in the San Fernando Valley about 17 miles northwest of downtown Los Angeles and two miles southwest of the community of Van Nuys, within the City of Los Angeles, Los Angeles County, California. Regional access is provided by two freeways, the Ventura Freeway (U.S. Highway 101 [US-101]) and the San Diego Freeway (Interstate 405 [I-405]) and lies northwest of the junction of these freeways. Local access is provided from Victory Boulevard, Woodley Avenue, Balboa Boulevard, and Burbank Boulevard (Figure 1).

The Proposed Project Site for the Concert is defined as Woodley Park I for the music and associated amenities, and various areas for parking (Figure 2). In the Master Plan, Woodley Park I is identified as a location for special events which would not require separate approval from the Corps if other Special Events Policy conditions are met (such as a maximum of 5,000 attendees and timing restrictions). Thus, Woodley Park I is currently used for numerous special events with a limited scope. However, the Master Plan does not specifically identify a suitable area for special events with scopes exceeding 5,000 people, or for events not consistent with other Special Events Policy conditions, so the location for large proposed events must be independently analyzed by the Corps for suitability.





-  Woodley Park I
-  Sepulveda Dam Basin Recreation Area Boundary

CONCERT IN THE PARK EA

**Figure 1**  
**Regional Location Map**





**Legend**

Basin Facilities

Amenities

- Lodge, Pro-Shop, or Rentals
- Community Center
- P Parking
- Shelter
- ✻ Playground
- RR Restroom

Trails: Paved | Uses

- No Pedestrian
- Yes Pedestrian
- No Ped-Bicycle
- Yes Ped-Bicycle

- 1 Proposed Parking Areas
- V Long-term Noise Monitoring Location, 2015



VALLEY MUSIC FESTIVAL EA

**Figure 2**

**Sepulveda Basin**  
Recreational Amenities with  
Concert Location and Parking

**Tt** TETRA TECH

### **1.3 PROPOSED PROJECT OVERVIEW**

The Corps has received a request from the City of Los Angeles RAP, to hold a special event at the Reservoir. As proposed, the Proponent's Preferred Alternative is described as a three (3)-day family-friendly concert (Concert) to be held within Woodley Park I, which is generally within the northeastern portion of the Reservoir at a Proposed Project Site (which is defined below). Parking onsite (within the Reservoir) would be on multiple fairways (no greens) at the golf course south of Victory Boulevard (Woodley Lakes Municipal Golf Course), a parking lot just west of Lake Balboa and parking lot west of Bull Creek. Within Woodley Park I, parking spaces for event artists would be reserved. Americans with Disabilities Act (ADA)-compliant parking within an existing parking lot just south of Woodley Park I would be identified. Offsite satellite parking for staff and overflow would be provided at Erwin Street/Sepulveda Boulevard. The event attendees would also have easy access from Metro lines and would have designated Uber/Lyft drop-off and pick-up points away from residential streets.

Set up and break down of the event is proposed for eight (8) days before and four (4) days after the event for a total of 15 days during which the northeast portion of the Reservoir would be affected. Woodley Park I would be closed to the public for a maximum of 15 days to ensure a safe and secure load in/load out space for the set up and tear down of the Concert. The golf course would be only partially shut down in the afternoon on event days only to accommodate parking. Other parking areas would also be needed, but only in the afternoon on event days.

### **1.4 PROJECT PURPOSE AND NEED**

The Corps has received a request from the City of Los Angeles RAP, the recreation lessee at Sepulveda Dam Reservoir, to hold the Concert in the Reservoir. The proposed event does not comply with several conditions of the Corps' Policy on Special Events at the Sepulveda Dam Reservoir and as such, the Corps has been asked for a waiver of the conflicting conditions of the Special Events Policy. Since the primary purpose of the Reservoir is to provide flood risk management for the residents of Los Angeles County residing downstream of Sepulveda Dam, the Corps will review the Proponent's request in light of the Reservoir's primary flood risk management purpose and applicable Federal laws, Corps' regulations, and policies in assessing whether the proposed event is a compatible use with Corps operations and land use guidelines/policies and whether it is in the public interest.

### **1.5 RAP'S PROJECT OBJECTIVES**

The RAP has identified the following objectives for the special music event:

- Central location in City of Los Angeles that is within 30 miles of most of the population of Los Angeles County and that highlights and is central to showcasing the best of Los Angeles.
- Location on a public park managed by the City of Los Angeles RAP.
- Minimize disruption to regular users of a City public park.

- Regional accessibility with access to multiple major freeways, public transit lines and stations (such as Metro, Amtrak, and Metrolink) bus stops, and bicycle lanes.
- Accessibility to majority of parking areas requiring a walking distance less than 1 mile from auto to entrance gate (some shuttling from satellite parking acceptable).
- Topographic requirement of continuous flat area of grass with minimal sight line obstructions.
- A site large enough to accommodate approximately 25,000 people.
- Site large enough to accommodate 2 stages, ample ingress/egress, gathering areas, and sufficient creative space for event activities (roughly 80 acres), and a separate area for “back of house” production.
- Site with sufficient buffer to minimize impacts to surrounding communities

## **1.6 SCOPE OF ANALYSIS**

This EA analyzes potential effects of the proposal by comparing a No Action Alternative, with the Proposed Action which would provide approval to the City to permit the special event, the Concert in the Park, proposed to be held over Labor Day weekend in 2019 (August 31-September 2), and to waive particular sections of the Special Events Policy.

All public comments received by the Corps in a timely manner following the 30-day review period will be actively considered prior to determining whether an Environmental Impact Statement (EIS) will be required or if a Finding of No Significant (FONSI) can be issued. Any comments regarding this event which are received by the Corps will be incorporated into the planning and review process.

## **2.0 ALTERNATIVES**

NEPA requires that Federal agencies rigorously explore and objectively evaluate all reasonable alternatives to a proposal. The purpose in analyzing alternatives is to show whether there may be different, possibly superior way(s), to meet the project purpose and need and project objectives as described above. This Draft EA also evaluates the No Action Alternative as required by NEPA and provides a description and discussion of alternatives that were considered and eliminated from further analysis.

### **2.1 NO ACTION**

The No Action Alternative is the most likely condition expected to exist in the future in the absence of any developed alternative, including known changes in law or public policy. Under the No Action Alternative, the Corps would not provide its approval to RAP under the terms of the lease to grant permission for the three (3)-day Concert in the Park to occur in any form. The Proponent has indicated that were permission for the event to be denied, the Concert in the Park would not occur in a different location. The existing recreation area would continue to serve park patrons and hold special events at a capacity similar to current conditions. There are no changes to current environmental conditions associated with the No Action Alternative.

### **2.2 ON-SITE (PROPOSED ACTION) ALTERNATIVE**

Under the Proposed Action, the Corps would grant permission to hold the Concert in the Park as proposed. The Proponent's Preferred Alternative is described as a three (3)-day family-friendly concert to be held within Woodley Park I, which is generally within the northeastern portion of the Reservoir. Proposed parking onsite (within the Reservoir) would be on multiple fairways (no greens) at the Woodley Lakes Municipal Golf Course south of Victory Boulevard, a parking lot just west of Lake Balboa and parking lot west of Bull Creek. Within Woodley Park I, parking spaces for event artists would be reserved. Americans with Disabilities Act (ADA)-compliant parking within an existing parking lot just south of Woodley Park I would be identified. Offsite satellite parking for staff and overflow would be provided at Erwin Street/Sepulveda Boulevard. The event attendees would also have easy access from Metro lines and would have designated Uber/Lyft drop-off and pick-up points away from residential streets. The Concert would start during daytime hours in the late afternoon and continue into the evening.

Set up and break down of the event is proposed for eight (8) days before and four (4) days after the event for a total of 15 days during which the northeast portion of the Reservoir would be affected. A detailed project description with accompanying maps and figures is provided in Chapter 3.0.

### **2.3 ALTERNATIVES ELIMINATED FROM CONSIDERATION**

In identifying a reasonable range of alternatives to the Proponent's preferred alternative, other possible concert location sites both within and outside of the Sepulveda Reservoir were considered and evaluated based on their feasibility (both economic and practicality); their ability to meet the purpose and need of the project (a concert in the park); and the effectiveness of alternative locations to reduce potential environmental effects. A screening evaluation was conducted and is provided below.

### **2.3.1 Alternative Locations in the Sepulveda Reservoir**

Several locations within the Reservoir, including variations of the Proposed Project Site, were considered. These locations, similar to the Proponent's Preferred Alternative, would require approval by the Corps as well as the granting of a waiver for Several Special Events Policy conditions. Locations considered included both a full or partial use of Woodley Lakes Municipal Golf Course for the concert (as opposed to a portion of the fairways to use in the Proponent's preferred alternative for parking only), the use of Anthony C Beilenson Park, and the cricket fields. Alternative sites in the Reservoir would meet project objectives related to location on a City of Los Angeles RAP facility with adequate regional access; however, they would not meet several other key objectives.

In evaluating the full or partial use of Woodley Lakes Municipal Golf Course for the concert, several limitations were identified. A golf course cannot be easily closed off and secured as a park like Woodley Park I can, and the entire golf course would be effectively unusable for two (2) weeks. In addition to the overall closure limitations, use of the golf course for the concert presents other practical limitations that would conflict with other project objectives. The topographic variations that make it ideal for golfing present challenges in siting cohesive concert grounds with easy access, pedestrian movement between stages, and locating of concert components such as bathrooms, food and beverage areas, and carnival rides. The trees, sand traps, greens, water features, and other golf related accessories present impediments to the overall site cohesiveness.

Another location within the Reservoir that was considered but eliminated from further analysis is the use of the north side of Lake Balboa in Anthony C Beilenson Park for the concert. Similar to Woodley Park, the north side of Lake Balboa is identified as a special use area in the Sepulveda Basin Master Plan (2011) and has often hosted special events in the past. However, RAP has determined that there are significant ingress/egress access issues at the site itself, as there are limited entrance points. Pedestrian and vehicle traffic would use the same access points, which present a safety hazard and logistical concerns. An event at the size proposed would exceed its carrying capacity and the Los Angeles Police Department/Los Angeles Fire Department (LAPD/LAFD) have encouraged RAP to not permit the north side of Lake Balboa for special events after a previous music event of 20,000 people raised concerns.

The Sepulveda Basin Cricket Fields are located in the northeastern portion of the Reservoir, east of the Tillman Water Reclamation Plant (TWRP). The facility has four contiguous cricket fields with the wildlife area directly to the south. Per RAP and the wildlife groups contacted by the Proponent, the area was determined to not be usable for a concert or for parking due to proximity of wildlife and riparian areas.

### **2.3.2 Two-Day Event in Sepulveda Reservoir**

A two (2) day Concert instead of a three (3)-day Concert was considered within the same footprint as the Proponent's Preferred Alternative. This alternative would still require the same set up and breakdown time as a three-day Concert. Therefore, impacts related to the closure of Woodley Park I would not be reduced. Further, a two-day Concert would not be considered economically feasible. The costs of coordinating and building a two-day Concert of this scale are similar to the costs of a three-day Festival. The reduced ticket prices and revenues for a two-day Concert would not cover the expenses. By limiting the days of the Concert to two days versus

three days, the economic benefits to the City, local businesses, and RAP would be reduced. These benefits would be generated from the Concert through direct and indirect spending, and the direct contributions by the Concert operator. Therefore, a two-day Concert is considered logistically and financially infeasible.

### **2.3.3 Daytime Event in Sepulveda Reservoir**

A three-day daytime only Concert was also considered within the same footprint as the Proponent's Preferred Alternative. This alternative would still require the same set up and breakdown time as the Preferred Alternative. Under this alternative, the Concert would start mid-morning and conclude by late afternoon, with attendees leaving by early evening on the three days of the event. However, this would disrupt more daytime users of the Reservoir, including for parking and use of the Woodley Lakes Municipal Golf Course, which would need to be closed for the entire three-day period of the Concert. In addition, all headline artists require special lighting packages, stage designs, and video walls. Per the Concert promoter, each main act wants to ensure a high level of visual effects that coincide with their performance, creating a unique and unforgettable experience for attendees. These visual effects only play well at night when it is dark. Therefore, only the last 2-1/2 hours of the show would be played under optimum nighttime conditions. For these reasons, a daytime Concert is considered infeasible.

### **2.3.4 Alternative Park Locations Outside of the Sepulveda Reservoir**

#### **2.3.4.1 Grand Park (Los Angeles County)**

Grand Park is located in the Civic Center core of downtown Los Angeles but is not managed by RAP. While Grand Park is the location for various one-day smaller-scale musical events throughout the year, it is not an appropriate location for an event of the size and type that is proposed. For the most part, this park is made up of intermixed areas of concrete, grass, bushes, and trees, and, therefore, does not have the available contiguous acres to accommodate the needs of the show from a staging and operational use area. The only section of Grand Park with a larger contiguous grassy area is the Grand Park playground but it does not have enough square footage to accommodate 25,000 attendees and the area would not be available to the public for two weeks. In addition, the site layout would not be suitable for adequate security including fencing surrounding the site to prevent people from wandering in and out without tickets/credentials. While the location is served by a variety of transit options, it does not have suitable ingress/egress points to major streets and freeways to accommodate the three Concert days.

#### **2.3.4.2 Exposition Park (City of Los Angeles)**

Exposition Park is a sizeable recreational amenity located in the City of Los Angeles that currently holds several large events. However, it presents space limitations and parking constraints due to current construction projects going on throughout the Park. The open grass spaces at the Natural History Museum and Christmas Tree Lane do not provide a contiguous cohesive space for attendees.

### **2.3.4.3 Pomona Fairplex (City of Pomona)**

The Pomona Fairplex is in the City of Pomona about 30 miles east of downtown Los Angeles. It is near only one major freeway and has limited public transportation options. It is not managed by RAP; therefore, one of the primary objectives of locating the concert on a park managed by RAP would not be met. There would also be a time conflict between the concert and the Los Angeles County Fair.

### **2.3.4.4 Other City of Los Angeles Park Locations**

Griffith Park, Hansen Dam, Ken Malloy Harbor Regional Park, and Venice Beach are all City-managed locations but fall outside of the 30-mile requirement, multiple freeway access, good public transportation, continuous grass with good sight lines, and sufficient parking located close to the Concert area. These alternatives were not considered feasible.

### **2.3.5 Alternative Locations Outside of the City of Los Angeles**

Alternative locations outside the City of Los Angeles and not managed by RAP were considered but dismissed because they do not meet several of the primary RAP project objectives including (primarily) a central location in the City of Los Angeles, location in a park managed by City of Los Angeles RAP, and regional accessibility. The locations considered were Will Rogers State Beach (County of Los Angeles), The Rose Bowl (City of Pasadena), Zuma State Beach (Los Angeles County), King Gillette Ranch (City of Calabasas), Whittier Narrows Recreation Area (federal land but resource managed by Los Angeles County), Chatsworth Reservoir (County of Los Angeles), Pierce College (Los Angeles City College District), and Orange County Fairgrounds (City of Costa Mesa).

For these reasons, the above locations as alternatives for the Concert would fail to meet several of the project objectives and are not considered feasible locations to be carried forward as a project alternative.



### **3.0 PROPOSED ACTION WITH SITE MAP**

The Proposed Action would be a three (3)-day family-friendly concert (Concert) with two (2) musical stages to be held within Woodley Park I, which is generally within the northeastern portion of the Reservoir (Figures 1, 2 and 3) across Woodley Avenue from the Woodley Lakes Municipal Golf Course and south of the Air National Guard facility. The event would feature a line-up of popular touring artists anchored by headlining acts and would bring together musical acts from the 1970s, 1980s, and 1990s. Proposed parking onsite (within the Reservoir) would be on multiple fairways (no greens) at the Woodley Lakes Municipal Golf Course south of Victory Boulevard, a parking lot just west of Lake Balboa and parking lot west of Bull Creek. Within Woodley Park I, parking spaces for event artists would be reserved. Americans with Disabilities Act (ADA)-compliant parking within an existing parking lot just south of Woodley Park I would be identified. Offsite satellite parking for staff and overflow would be provided at Erwin Street/Sepulveda Boulevard. The event attendees would also have easy access from Metro lines and would have designated Uber/Lyft drop-off and pick-up points away from residential streets.

Set up and break down of the event is proposed for eight (8) days before and four (4) days after the event for a total of 15 days during which the northeast portion of the Reservoir would be affected. Woodley Park I would be closed to the public for a maximum of 15 days to ensure a safe and secure load in/load out space for the set up and tear down of the Concert. The golf course would be only partially shut down in the afternoon on event days only to accommodate parking. Other parking areas would also be needed, but only in the afternoon on event days.


### **3.1 CONCERT CHARACTERISTICS**

#### **3.1.1 Attendance**

The Concert would have a maximum attendance of 25,000 people per day, which includes approximately 500 employees. Until tickets are sold, it is impossible to forecast the approximate daily attendance and regional market. However, it is anticipated that the Concert would draw from the widely diverse and scattered zip code population of southern California much like that of a Dodgers game, a concert event at Staples Center, or entertainment events at the Rose Bowl Stadium. Individual one (1)-day general admission tickets are projected to average \$130 and would be sold in phases. The charge for parking has not yet been determined but will be reviewed and approved by the Corps.

On Saturday and Sunday, the daily schedule for the Concert would be: gates open at 3:00 p.m., music begins at 4:30 p.m., the amplified music and all Concert activities end at 11:00 p.m., and gates close at 12:00 a.m. (midnight). On Monday, the schedule would be: gates open at 1:00 p.m., music begins at 2:00 p.m., the amplified music and all Concert activities end at 8:30 p.m., and gates close at 9:30 p.m. There would be multiple music acts playing on two (2) Concert stages, plus a carnival, which may include a Ferris Wheel, carousel, and carnival games. Patrons would be required to begin vacating the Concert at the end time (11:00 p.m. or 8:30 p.m.), when the music would stop and temporary security lights are turned on. Patrons would be required to be vacated by 12:00 a.m. on Saturday and Sunday and 9:30 p.m. on Monday.



 Festival Location  
(Woodley Park I)

CONCERT IN THE PARK EA

**Figure 3**  
**Concert Location**

Source: USACE



The Concert would feature a superior quality broadband connection, allowing guests to easily share in real-time across all social media platforms (such as Instagram and Facebook Live). In addition, Valley Music Live LLC would provide a live-stream of the event which would provide opportunities for local business sponsors to gain broad media exposure.

### **3.1.2 Employment**

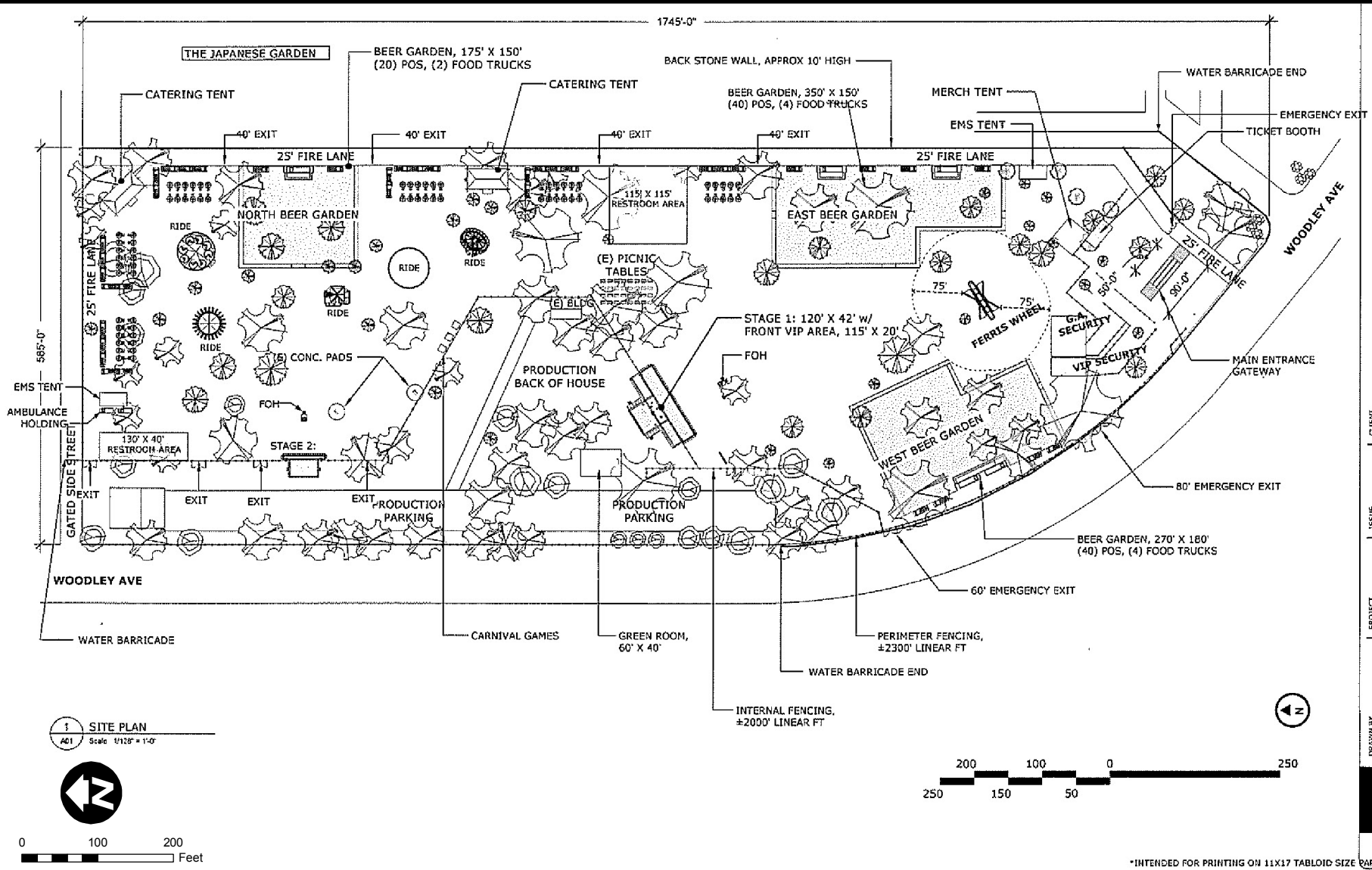
Included within the estimated 25,000 people are approximately 500 employees per day to support the Concert over the three-day event. The 500 employees would include but not be limited to concessions employees, security, sales, maintenance, and band-associated employees during the Concert. There would be employees working on the Proposed Project Site each day beginning eight (8) days prior to the Concert. It is anticipated that pre-Concert activities would start off at approximately 100 staff per day and increase to approximately 200 in the few days immediately prior to the Concert. Over the four (4) days following the Concert, staff would be on-site removing all temporary structures and cleaning up the area in similar numbers as the pre-Concert activities.

### **3.1.3 Stages and Carnival Area**

As shown in Figure 4, two musical stages and one carnival area are proposed as part of the Proponent's Preferred Alternative. The stages would be used for amplified musical performances through the three-day Concert. Each stage would be equipped with sound systems, lighting systems, display screens, generators, and sound system control panels, typical of music concerts. Stage effects could include the use of indoor-type stage pyrotechnics that are highly specialized to create the maximum impact during a performance, while maintaining high standards of safety, but would not include the use of aerial pyrotechnics or fireworks.

While a definitive stage timing schedule for the Concert has not been finalized at this time, it is anticipated that Stage #1 and Stage #2 would not be operating simultaneously during the Concert.

**Stage #1 (Main Stage).** This stage would be located in the middle of Woodley Park I and would face southeast towards the river and away from the residential area to the north of the Sepulveda Reservoir. The stage would be 120 feet wide, 40 feet deep, and no more than 30 to 40 feet high above the ground surface. The stage would cover an audience area of approximately 750 feet southeastward and approximately 460 feet wide. This area provides capacity for approximately 25,000 attendees during the headline act. Music at Stage #1 would continue until 11:00 p.m. Saturday and Sunday nights, but on Monday night conclude at 8:30 p.m. As with both stages, Stage #1 would be located such that no trees would need to be removed for installation of the stage.



CLIENT: CONFIDENTIAL  
ISSUE: October 11, 2018

PROJECT: WOODLEY PARK EVENT

DRAWN BY: CH, MB  
DESCRIPTION: SITE PLAN

**a**

**01**

\*INTENDED FOR PRINTING ON 11X17 TABLOID SIZE PAPER

CONCERT IN THE PARK EA

**Figure 4**  
**Detailed Event Map**

Virtually all stage components and structures are prefabricated and would be assembled on the Proposed Project Site. The structures would not require subsurface installation. The equipment that would generally be used for the setup and breakdown activities would include forklifts, boom lifts, platform lifts, cranes, crawler loaders, and skid-steer loaders.

**Stage #2 (Secondary Stage).** This stage would be located north of Stage #1 and would face east towards the water reclamation plant. The stage would be 42 feet wide, 24 feet deep, and no more than 30 to 40 feet high above the ground surface and would be constructed in a similar manner as Stage #1. Music at Stage #2 would end before 10:00 p.m. each day, and earlier on Monday. Stage #2 would provide capacity for 10,000 people. Similar amplification as Stage #1 would be used and is described in Section 3.1.4. As with Stage #1, the system would include advanced subwoofer technology.

**Carnival Area.** The carnival area would be located at the southern end of Woodley Park I and may include a Ferris Wheel, carousel, carnival rides, and carnival games. Food trucks, restrooms (Porta Potties), beer garden, and seated areas would also be located in this Carnival Area.

### 3.1.4 Sound Systems

The sound system for the two stages would consist of two speaker clusters hung on stage left and stage right, a total of two bass clusters with one cluster on stage right and one cluster on stage left located at the bottom of each speaker cluster, subwoofer cabinets on the ground in front of the stage and behind the audience barricade. Stage #1 would use adaptive speaker systems capable of directing sound using digital signal processing to control the dispersion of sound into the surrounding communities.

The Concert in the Park would use Fly Larger Systems or flying loudspeaker systems rather than ground or stage stacking the loudspeaker for The Main Stage (Stage 1) and the Second Stage (Stage 2). The array of loudspeakers act together to project the low frequency energy in one main direction, toward the audience, and not in off-axis directions (i.e., not to the sides or rear). Focusing the sound often results in an overall lower level of sound bleed, thus ensuring that the sound is focused in on the audience in front of the stage and not off to the sides or surrounding areas. For the entire Concert planning period and during the operation, production teams would be instructed to use the following steps to reduce off-site noise levels on adjacent neighborhoods and in environmentally sensitive areas:

1. **CONTROL DISPERSION:** Sound systems with the latest technology would be used that are able to control the dispersion of sound. Several loudspeaker systems now offer the ability to control both where sound is projected and also where it is not. For both stages, adaptive systems would be used.
2. **OPTIMIZE PERFORMANCE:** The performance of the sound systems would be optimized, so that they provide tonally balanced and impactful sound without generating excessive sound energy.
3. **DIGITAL SIGNAL PROCESSING (DSP):** Use of DSP is under consideration and would control the dispersion of sound. This is a new and very effective tool that has only in the past few years become cost effective and widely used. DSP has better control of accuracy

compared to traditional analog systems. Sophisticated signal processing algorithms can be implemented by using the DSP method.

4. **FLY LARGER SYSTEMS:** For both stages, flying loudspeakers systems rather than ground or stage stacking the loudspeakers would be employed to physically or electronically aim the loudspeaker systems downward. This allows the sound to be pointed or directed at the audience and not at distance off-site areas.
5. **MONITOR SOUND LEVELS ON AND OFF-SITE:** Throughout the Concert, noise monitors would be employed to monitor sound levels in real time both at the Front of House and at strategic locations. The monitoring would also be used to inform the production team if noise reaches levels that exceed community standards, so that adjustments in volume could be made.
6. **TEST AND VERIFY DURING SETUP.** During system setup sound levels would be monitored to set limits on sound system performance levels as measured at Front of House to inform the production team if they are reaching levels that exceed community standards so that volume adjustments could be made.

### **3.1.5 Concession Areas**

The Concert in the Park would feature local food and beverages in three concession areas in Woodley Park I, as shown on Figure 4. The North Beer Garden would be 175 feet by 150 feet and would contain 20 points of service (POS) and two food trucks. The East Beer Garden would be 350 feet by 150 feet and would contain 40 POS and 4 food trucks. The third concession area, the South Beer Garden, would be 270 feet by 180 feet with 40 POS and 4 food trucks. Each tent would be approximately 12 feet tall. Additional food trucks (approximately 50 total) would be available and a variety of beverages would be sold in several locations throughout the event and any alcohol would be distributed by a California Department of Alcoholic Beverage Control (ABC) licensed provider. A merchandise tent would be located by the front entrance.

### **3.1.6 Support Facilities**

The Concert intends to rely on the widespread use of generators. No electrical energy from the local grid is anticipated. The Concert would employ the following equipment at various times (numbers and sizes are estimated at this time), including setup, the Concert operation, and breakdown activities:

- One (1) twin 300kW generator
- Three (3) 125kW generators
- One (1) 225kW generator
- Three (3) 60kW generators
- Two (2) 40kW generators
- Eight (8) forklifts
- Four (4) boom lifts
- One (1) platform lift
- One (1) 90-ton crane
- One (1) 40-ton crane
- Fifty (50) lighting towers

- Twenty-five (25) genie lifts
- Fifty (50) golf carts

### **3.1.7 Water Use**

The primary potable water would come from the Los Angeles Department of Water and Power. An estimated two gallons per day of potable water per person is anticipated, including water bottle fills, cooking, cleaning, and other concessions. This equates to approximately 180,000 gallons of potable water overall. An estimated 1.7 gallons of recycled (gray) water would be generated per person per day for the three-day Concert. This equates to approximately 153,000 gallons of wastewater.

### **3.1.8 Restroom Facilities**

Approximately 300 portable toilets, 150 hand-washing stations, and 35 ADA compliant restrooms would be provided throughout the Concert site, providing a ratio of approximately one (1) restroom to 100 people. They would be located in areas that have the necessary accessibility in order to maintain cleanliness (Figure 4). No permanent restroom structures that are a part of the existing recreational amenities would be available for Concert attendees.

### **3.1.9 Event Lighting**

Lighting would be temporarily located throughout the Concert area for nighttime entertainment purposes, public safety, event cleanup, and after-hours preparation for the next event day. On non-event days, lighting would be limited to security lighting for equipment primarily within Woodley Park I. On event days, there would be more lighting to ensure safety for attendees coming and going to Woodley Park I. The lighting towers would be powered by generators and would be supported by a large base with support legs. No stakes into the ground would be necessary. All lighting would be directed to the interior of the Proposed Project Site and directed to parking areas and pedestrian walkways between Woodley Park I and the parking lots. Limited lighting would be used after dark for security of assets, including the equipment storage area.

Six 20-kilowatt (kW) light towers would be temporarily installed and used at night for the Concert itself. Some night lighting would also be needed for nighttime security when there are equipment and vehicles on site for the eight (8) days prior to the Concert until four (4) days after the Concert. There would be security onsite 24-hours per day while needed. Major production equipment would be removed from the Proposed Project Site the morning following the last show night after the last act. Therefore, on Tuesday morning work and associated lighting would run from 7:00 a.m. through dusk. Production parking and equipment storage would be located along the west side of Woodley Park I, adjacent to Woodley Avenue, and in an area behind the Main Stage.

Both stages would include lighting designed to light the artists. The theatrical lighting instruments would be focused downward onto the stage performance area. Screens would be placed in the back of the stages to project a larger view of the artist and artwork. Light towers would be located throughout the site and in the parking areas for exit and security lighting at the conclusion of each Concert day. Theatrical parabolic aluminized reflector (PAR) lamps and light-emitting diode (LED) lighting fixtures would be placed at the base of the stage and/or hung on some of the Proposed Project Site's trees to provide pathway lighting.

### **3.1.10 Event Signage**

Event notification, directional, and detour signage would be located on primary access streets surrounding the Proposed Project Site. These would be placed in coordination with RAP, Los Angeles Department of Transportation (LADOT), California Department of Transportation (Caltrans), and Metro. Local residential streets with access to Victory Boulevard would be blocked to event attendees by security guards (local access only). For additional safety and to ensure proper traffic flow throughout the neighborhood, DOT would cover various intersections in the area along Victory Boulevard and Burbank Boulevard.

### **3.1.11 Waste Management**

The Proponent's Preferred Alternative would incorporate a waste management plan to reduce waste generation by recycling and composting, and by providing paperless tickets. The purchasing guidelines of the Concert would be focused on sourcing materials locally and those made from the highest percentage of post-consumer materials available. In addition, waste generation could be greatly reduced through a robust recycling and composting program.

During the three Concert days, regular waste management and cleanup would continuously occur within the Concert area and all parking areas. At the end of each day, waste would be removed from the area and transferred to the appropriate waste collection areas. Following the Concert and during the breakdown period, a comprehensive waste collection effort would be conducted throughout the Proposed Project Site.

### **3.1.12 Fencing**

Fencing of the Concert site is necessary to ensure site safety and control access. An existing 10-foot high stone wall is located along the east side of Woodley Park I, adjacent to the Japanese Garden. For the rest of the site boundary, a temporary eight-foot high chain-link fence would be installed. This would include approximately 1,000 linear feet of perimeter fencing and 3,000 linear feet of internal fencing. The internal fencing would be to secure production parking and areas for artists and equipment. This backstage fencing would connect to the exterior Concert fence-line and would be screened with green or black windscreen for backstage privacy and security.

Mojo Barriers, which are aluminum stage barricades, would be placed in front of each stage. Each stage would include a VIP area with Mojo Barriers either left or right of the stage.

### **3.1.13 Security**

The Concert would have an experienced director of security who would coordinate with all security personnel required on the Proposed Project Site including the Los Angeles Police Department (LAPD) and Los Angeles Fire Department (LAFD) as well as private security employed by the Concert organizers. Consistent with the Sepulveda Dam Basin Master Plan, there is anticipated to be at least one security guard for every 500 people. A full deployment schedule by each security post would be completed by the director of security and the director would hold daily security briefings during the Concert to update the deployments.

The director of security would coordinate with the California Highway Patrol (CHP) on freeway management, freeway signage, and any CHP personnel needed on site. The director of security



would also coordinate with the LAPD and Los Angeles Department of Transportation (LADOT) with regards to local roads, road signage and LAPD presence onsite and streets adjacent to the Concert.

Contemporary Services Corporation (CSC), an experienced leader in crowd management services for large events, would be used for security, ushers, and other crowd management services. CSC would provide staff for security posts in the parking lots, walkways, entrances, fence lines, stages, backstage areas, and within the venue. The security presence would be 24-hours a day and seven days a week from the day that the equipment arrives onsite until the complete removal of all equipment and personnel from the site after the Concert. The Concert would provide a security operations center located near the entrance to the venue.

### **3.1.14 Emergency Response**

Police, fire, and medical services would include a unified command post (LAPD, LAFD, Event Chief, Public Safety Chief), fire inspectors, one LAFD engine company, one LAFD Emergency Management Services EMS Captain, six ambulances, one medical doctor and needed staff, and one private ambulance Supervisor to coordinate with LAFD's EMS Captain, and event medical doctor.

An emergency response plan for the Concert would be prepared in coordination with LAPD, LAFD, RAP, and the Corps. The plan would cover all types of potential emergency scenarios such as flooding, fire, hazardous material encounters, employee safety, and general public safety. It would be developed during the detailed planning phase of the Concert as directed by the emergency responders. The emergency response plan would include but not be limited to:

- Evacuation details and routes for various emergency scenarios;
- Rain forecast event cancellation details;
- How emergency announcements would be broadcasted;
- Setup and breakdown procedures in the event of a significant emergency; and
- Human health emergency response.

The Concert would have a safety director to coordinate with all medical and safety personnel onsite, as well as the director of security. The Concert would contract with local emergency services/ambulance services to provide ambulances on the Proposed Project Site during the Concert. The Concert would have on staff physicians, paramedics, and emergency medical teams. EMTs and paramedics would be stationed at the medical tent, located at the north end of Woodley Park I. The director of safety would coordinate with the local hospitals for all transports. The director of safety would also coordinate with the director of security and director of site operations to establish the most efficient routes for medical carts onsite and for the best egress for ambulances.

### **3.1.15 Access**

Traffic and parking would be managed through traffic control, LAPD, and security oversight, consistent with special event and current best practices. Some parking passes would be sold in advance during the ticketing sales process and would consist of color-coded hang tags matching color coded designated parking areas. The passes would have directions and traffic patterns

printed on the back to assist patrons and the event staff getting patrons to the appropriate lots. This also avoids the potential for overflow parking in surrounding areas.

A Traffic and Parking Assessment has been prepared for the Concert and is provided in Appendix B. The Assessment covers the following topics:

- Parking capacities
- LADOT
- Day Before and Day of – Changeable Message Signs (CMS)
- Traffic Ingress
- Traffic Egress
- ADA Parking
- VIP Parking
- Drop-off Zone
- Employee Parking
- Egress Pedestrian Crossing Point

### **3.1.16 Pedestrian Circulation**

A pedestrian crossing point would be implemented west of Parking Lot 2 to expedite pedestrian egress flow. Approved safety devices would be used to prevent any vehicles from entering the temporary pedestrian crossing point.

### **3.1.17 Parking**

Based on typical industry standards for similar events, it is assumed that of the 25,000 people in attendance 1,250 people (5 percent) would use mass transit or hired vehicles, 5,000 people (20 percent) would use a rideshare for pick-up/drop-off, and the remaining 18,750 patrons would need parking. It is assumed that there would be approximately 3 people per vehicle, thereby resulting in the need for approximately 6,250 parking spaces. Of the on-site parking spaces, a minimum of 97 ADA compliant spaces would be needed.

Five areas within the Reservoir would be used for 6,620 parking spaces for the Concert, as shown in Table 1. An additional satellite parking area has been identified for staff and overflow parking at Erwin Street/ Sepulveda Boulevard (1,000 spaces) on the east side of the Interstate 405 (I-405) (shuttles would be provided). Thus, the total parking available for the Concert would be 7,620. This would comfortably accommodate parking for 25,000 attendees.

In addition, barriers that could include temporary fencing would be used to deter parking outside of designated parking areas and to direct attendees to the Concert on existing paths. This would ensure no accidental parking or inadvertent trespassing in environmentally sensitive areas. Signage would be used to direct Concert attendees from parking areas towards the event area.

**Table 1 Parking Areas and Vehicle Capacities**

<b>CENTRAL RESERVOIR PARKING AREAS</b>		
<b>General Location</b>	<b>Description</b>	<b>Parking Spaces</b>
Woodley Lakes Municipal Golf Course Parking Lots and Fairways 1 and 2	1. South of Victory Boulevard	4,930
Woodley Avenue	2. VIP parking in Woodley Park I south of Air National Guard	130
Woodley Avenue	3. ADA south of Water Treatment Plant	800
Balboa Boulevard	4. West of Lake Balboa	500
Balboa Boulevard and Victory Boulevard	5. West of Bull Creek	260
	<b>Subtotal</b>	<b>6,620</b>
<b>SATELLITE PARKING AREA</b>		
Erwin Street/Sepulveda Boulevard	Staff/Overflow Parking	1,000
	<b>Subtotal</b>	<b>1,000</b>
<b>TOTAL PARKING COUNT</b>		<b>7,620</b>

Source: A+ Traffic Management, Inc., 2018

### 3.1.18 Transit Options

Concert attendees would also be encouraged to use transit options such as those provided by Metrolink, Amtrak, Metro Rail, ridesharing (such as Uber and/or Lyft), and taxis. The Metro Orange Line stops at Woodley Park, Balboa and Victory Boulevards, and Sepulveda and Haskell. Metro Orange Local has six (6) stops on Victory Boulevard all within walking distance of the Proposed Project Site. An Amtrak Station is located at Van Nuys Boulevard and Saticoy (3.5 miles bus ride to the Proposal Site). Metrolink stations are located at Van Nuys Boulevard and Saticoy, and the Northridge Metrolink Station is located at Wilbur Avenue and Parthenia Street, 0.8 miles southwest of California State University, Northridge.

### 3.2 CONCERT PRODUCTION SCHEDULE

Setup of the Concert would begin eight (8) days prior to the Concert and would occur from 7:00 a.m. to 8:00 p.m. Eight to twelve trucks per day for the eight-day pre-production period would deliver Concert materials to the Proposed Project Site. A similar number of trucks would be required for the post-production days. Different truck types would be used including flatbeds, closed-back trucks, semi-trailers, trailer-hitched cabs, and dump trucks. The trucks would vary in length from 18 feet to 40 feet.

Setup activities would include fencing, positioning trailers, portable restrooms, power hookups, stage production equipment, scaffolding, scenery, lighting and sound, and stage erection, set-up

of food and beverage operations. Production trailers, portable restrooms, and installation of perimeter and interior fence lines would be positioned and powered eight (8) days prior to the Concert.

Load-in of stage production equipment (stages and stage barricades, sound, lights, and video) and Concert production equipment (e.g., scaffolding, scenery, lighting, and sound) would commence five (5) days prior to the Concert. Load-in and set-up of food and beverage concessions would begin two (2) days prior to the Concert.

Load-out of the production gear and cleanup at Woodley Park I and the adjacent areas would commence on closing night (Monday). Breakdown would continue for four (4) days. The site would be restored to its pre-Concert condition. Remediation of the site would include turf restoration, replacement of damaged shrubs and trees, fence and parking lot barrier replacements, and other areas as required. Areas used for parking only would reopen two days after the three (3)-day event to allow for final inspection and cleanup the day after the event. Parking at and adjacent to Woodley Park I would reopen to the public four (4) days post-Concert to allow for removal of equipment and trash, cleanup and restoration of the site, and final inspection.

## **4.0 ENVIRONMENTAL IMPACTS**

The following presents an analysis of potential environmental impacts from the Proposed Action and the No Action Alternative.

### **4.1 GEOLOGY AND SOILS**

#### **4.1.1 Affected Environment**

While the region is subject to seismic events, the Sepulveda Basin Dam Recreation Area does not lie within a fault zone, however, several active Quaternary faults (faults less than 1.6 million years old) are found in the immediate area, including the Northridge Hills Fault located 3.5 miles north of the Reservoir, the Chatsworth Fault located 4 miles northwest of the Reservoir, the Verdugo Fault located approximately 6.5 miles east of the Reservoir, and the Malibu Coast Fault located immediately adjacent to the Reservoir. The most recent surface rupture activity for these faults is estimated to be in the late Quaternary period, most likely less than 130,000 years ago.

Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database, which is the most detailed level of soil mapping done by the Natural Resources Conservation Service (NRCS). Each of the NCRS SSURGO soil hydrologic groups (A through D) are represented at Sepulveda Basin Map 19 in the Sepulveda Dam Master Plan (2011). Soils in hydrologic group A have low runoff potential, and a high rate of infiltration when thoroughly wet. Soils that have a moderate rate of infiltration when thoroughly wet are in hydrologic group B. Hydrologic group C soils have a slow rate of infiltration rate when thoroughly wet. Soils in hydrologic group D have a high runoff potential and a very slow infiltration rate when thoroughly wet.

The Reservoir is almost entirely covered by recent alluvium composed of relatively fine material. All areas needed for the Proposed Project have been used extensively for many years for similar uses. It is likely that most native soil is already compacted or has been paved over (e.g., some of the parking areas) or reworked to install non-native turf grass like at Woodley Park I and the Woodley Lakes Municipal Golf Course fairways.

#### **4.1.2 Thresholds of Significance**

A significant impact could occur from a seismic event if the Proposed Action would result in:

- Result in substantial adverse effect to people or structures from earthquakes or related ground shaking; and/or
- Significantly increases wind or water erosion of soils or loss of topsoil, either on or off site.

#### **4.1.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.1.4 Proposed Action**

The Proposed Project would be subject to an unpredictable seismic event as would the Sepulveda Basin Dam region. An emergency response plan will be prepared in coordination with emergency responders to address emergencies, including evacuation in the event of an earthquake.

While Concert set-up and break-down would not require excavation of soils, minor disturbance of topsoil may occur. Pedestrian use of areas of Woodley Park I that are not paved or are covered by grass may also cause minor disturbance of topsoil. This would be temporary in nature and no permanent loss of topsoil would occur. Soils in the Woodley Park I area are likely already compacted due to long-term use of this area for recreation. The Concert would occur within Woodley Park I and would not likely increase compaction of soils in this area.

Parking for the event would occur in designated parking areas and in unpaved areas used in the past for parking. Soil in the unpaved parking areas are likely compacted from past parking and are not likely to be more compacted due to parking associated with the event. Parking would also occur on fairways (non-native turf grass) of the Woodley Lakes Municipal Golf Course for three days and would not result in increased compaction of soils, or adverse effects to use of the golf course. Concert attendees would be walking on unpaved areas that may be bare soil or vegetated with non-native turf grass that have been used as parking areas in the past. As indicated earlier, these soils are likely compacted from past use and would not likely increase compacted soils in this area.

#### **4.1.5 Environmental Commitments**

**GE-1** Emergency access routes will be identified as part of the development of the emergency response plan based on input from emergency responders to address an emergency such as an earthquake.

In addition, Environmental Commitments (ECs) WR-4 and WR-5 identified in Section 4.2.5 would reduce minor project-related impacts that may occur due to erosion of top soil.

### **4.2 WATER RESOURCES**

#### **4.2.1 Affected Environment**

Normal annual precipitation over most of the San Fernando Valley ranges from less than 15 inches to more than 22 inches atop both the Santa Susana and Santa Monica Mountains. Daily rainfall recorded annually at the Sepulveda Dam rain gauge from 2012 to 2017 showed that no rain had been recorded during the time frame of the Proposed Action (County of Los Angeles Department of Public Works 2014, 2015, 2016, 2017, 2018), although 0.01 inches of rain was recorded on September 4, 2017. The entire Sepulveda Reservoir recreational area is subject to rapid onset flooding. The timing for the Proposed Action would be Labor Day weekend in 2019. Based on recorded rainfall for the past 5 years, this is a potentially dry time of the year and rainfall is not likely.

Within the Reservoir, several tributaries of the Los Angeles River carry local run-off through the Reservoir to the river. Encino Creek, Woodley Creek, Hayvenhurst Channel, Bull Creek and

Haskell Creek found within the Reservoir are direct tributaries to the Los Angeles River that trends from the northwest to southeast through the Reservoir. With urbanization, these creeks/channel have become degraded, and wildlife connectivity has been reduced. As a result of the intense urbanization of the region, these water bodies have lost habitat value and water quality has been reduced.

#### **4.2.2 Thresholds of Significance**

A significant impact could occur from a flooding event if the Proposed Action would result in:

- Expose people or structures to a significant risk of loss, injury, or death involving flooding; and/or
- Cause a violation of any water quality standard or waste discharge requirement, or otherwise substantially degrade water quality.

#### **4.2.3 No Action Alternative**

The No Action Alternative would leave the concert site in its present conditions and there would be no potential for flooding and exposure to people or structures to a significant risk or cause violation of water quality or waste discharge requirement, or otherwise substantially degrade water quality. Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.2.4 Proposed Action**

Given the rapid nature of flooding that can occur in the Reservoir, the Corps requires that evacuation plans for the Reservoir include rainfall monitoring of the National Oceanic and Atmospheric Administration (NOAA) Quantitative Precipitation Forecast (QPF) with potential for evacuation where forecast events exceed 0.5 inches of rain in a day. To minimize potential impacts should a rain event occur, locations of portable toilets would be located in areas of higher elevations to the extent feasible (EC WR-1). As described as part of the Proponent's Preferred Alternative (Section 2.2), an evacuation/emergency response plan would be prepared for the Concert, led by emergency response providers (LAPD/LAFD) (EC WR-2). This would also include a requirement that all activities would be suspended if a rain event is forecast of 0.5 inches or greater in any 24-hour period for any of the event days, including all eight (8) days of setup, the three (3) Concert days, or the four (4) days for breakdown (EC WR-3). In addition, parking in the areas lowest in the Reservoir would not be allowed. Overall, there would be no significant impact with respect to flooding, and EC WR-1 through WR-3 would further minimize any potential impacts.

The Proposed Action has been sited in areas away from direct contact with the creeks, channels, and the Los Angeles River. Water quality in these systems would not be directly impacted by the Proposed Action. The event would occur during a time of the year where a rain event that could cause an indirect effect to water quality due to uncontrolled stormwater runoff entering any water body in the Reservoir is not likely.

With the incorporation of Best Management Practices (BMPs) that would be used to control erosion of soils that could lead to a decrease in water quality within the Proposed Project Site, potential impacts would be further reduced. No significant impacts would occur. EC WR-4 through WR-6 would minimize any potential impacts to water quality from soil erosion. In addition, to reduce the risk to surface water quality impacts related to project activities, fluids accidentally released due to equipment failure would be immediately controlled, contained and cleaned up.

#### **4.2.5 Environmental Commitments**

- WR-1** To minimize potential impacts should a rain event occur, locations of portable toilets will be located in areas of higher elevations to the extent feasible.
- WR-2** The Concert Proponent or organizer will prepare a final evacuation/emergency response plan in coordination with emergency response providers (LAPD/LAFD) and the Corps' Safety Office. The plan will include rainfall monitoring of the National Oceanic and Atmospheric Administration (NOAA) Quantitative Precipitation Forecast (QPF) with potential for evacuation where forecast events exceed 0.5 inches of rain in a day. The plan will be consistent with Corps' Engineer Manual 385-1-1, where applicable. The plan will address all protocols for response to public safety matters including weather, an accidental hazardous material exposure, earthquakes, early warning intelligence indicating the potential need to evacuate, and other conditions. The plan will be developed during the detailed planning phase of the Concert as directed by the emergency responders.
- WR-3** Consistent with the evacuation/emergency response plan to be prepared (EC WR-2), the Concert Proponent will be immediately notified and all activities will be suspended if a rain event is forecast of 0.5 inches or greater in any 24-hour period for any of the event days, including the eight (8) days of setup, the three (3) Concert days, or the (4) four days for breakdown.
- WR-4** The Proponent will water all unpaved areas to minimize soil erosion as needed. All unpaved areas will be watered down prior to opening for use each day to minimize fugitive dust.
- WR-5** To reduce potential sediment erosion, vegetated areas disturbed by the event would be immediately returned to pre-event conditions by re-vegetating as appropriate.
- WR-6** Assembly of stage components and other Concert-related structures shall not be conducted during a rain event. Workers and equipment shall be removed from the area until the cessation of rain.
- WR-7** Fluids released because of spills, equipment failure (broken hose, punctured tank) or refueling will be immediately controlled, contained and cleaned-up per Federal and state regulations. All contaminated materials will be disposed of promptly and properly to prevent contamination of the site.



### 4.3 AIR QUALITY

#### 4.3.1 Affected Environment

The U.S. Environmental Protection Agency (EPA) uses monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. If the air quality in a geographic area meets or is cleaner than the national standard, it is called an attainment area; areas that do not meet the national standard are called nonattainment areas. Unclassified is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. Once a nonattainment area meets the standards and additional re-designation in the Clean Air Act, EPA will designate the area as “maintenance.” The current Federal attainment statuses for the Los Angeles County are provided in Table 2.

**Table 2 Los Angeles County Attainment Status**

<b>Pollutant</b>	<b>Federal Attainment Status</b>
Ozone	Nonattainment Extreme
CO	Maintenance
NO <sub>2</sub>	Maintenance
PM <sub>10</sub>	Maintenance
PM <sub>2.5</sub>	Nonattainment
Lead	Nonattainment

Source: USEPA 2018

#### 4.3.2 Thresholds of Significance

There could be significant impacts to air quality if the Proposed Action would:

- Result in non-compliance with the Federal General Conformity Rule (40 CFR Parts 6, 51, and 93) Requirements;
- Substantially negatively contribute to the effects of climate change;
- Exceed any Federal *de minimis* thresholds for any criteria pollutant for which the project region is non-attainment under an applicable federal ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- Expose the public (including sensitive receptors such as schools, day care centers, hospitals, retirement homes; convalescence amenities, and residences) to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

### **4.3.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project site would continue in its present condition and a concert would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event. Under the No Action Alternative, air and greenhouse gas emissions from current activities would remain unchanged.

### **4.3.4 Proposed Action**

The Proposed Action would have only short-term air quality and greenhouse gas impacts. Emissions would occur during the setup of temporary structures (e.g., tents and stages) prior to the event, breakdown of these structures following the event culmination, and during the event. During setup and breakdown stages, emissions would occur from equipment used to install and assemble facilities plus vehicles used by workers, attendees, and performers. During the event, emissions would be limited to emissions from Concert-related equipment and food trucks.

An emissions analysis was previously performed for a similar but larger event (AngelFest) at the project site that determined no significant impacts associated with air quality or greenhouse emissions would occur (U.S. Army Corps of Engineers 2016). The larger project would not have exposed the public to substantial pollutant concentrations or created objectionable odors. The air quality and greenhouse gas analysis accounted for up to 65,000 patrons attending each of the three days of the event. In comparison, the Proposed Project is estimated to attract 25,000 patrons each of three days. The total greenhouse gas emission from the AngelFest event was determined to be well below 25,000 metric tons or more of carbon dioxide. As the Proposed Project activity is less than half of the size of the AngelFest event, it is not anticipated to have significant air quality and greenhouse gas impacts and no mitigation is required. The air and greenhouse gas analyses from the AngelFest project is used as a reference for air quality and greenhouse gas analyses in this EA and is found as Appendix C.

The Proposed Action would occur within the Woodley Park I area and Sepulveda Reservoir. Sensitive receptors such as schools, day care centers, hospitals, retirements homes, convalescence amenities and residences are not located within the Sepulveda Reservoir. As a result, no significant effect from increased pollutant concentrations would occur. Substantial odor-generating sources are generally associated with land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The Proposed Action does not propose any such uses or activities that would result in significant effects associated with odors. Odors from food would be generated during the Proposed Action but no significant effects associated with this type of odor would occur.

In order to ensure that odors and vehicle and equipment emissions and odors are further minimized, ECs AQ-1 and AQ-2 would be implemented.

### **4.3.5 Environmental Commitments**

**AQ-1** All refuse generated at the Proposed Project Site will be stored in covered containers and removed at regular intervals in compliance with solid waste regulations to ensure no objectionable odors.

**AQ-2** All on-road construction equipment will meet all applicable California on-road emission standards and will be licensed in the State of California. This does not apply to personal vehicles used by project workers.

**AQ-3** Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes; auxiliary power units will be used whenever possible. State law requires drivers of diesel fueled commercial vehicles weighing more than 10,000 pounds to not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if you have a sleeper berth and you are within 100 feet of a restricted area (homes and schools).

## **4.4 VEGETATION**

### **4.4.1 Affected Environment**

The Proposed Project Site is within Woodley Park I public use area adjacent to the Tillman Water Reclamation Plant. The Proposed Project Site has mixture of native and non-native trees and shrubs set amongst picnic tables at Woodley Park I.

Proposed parking onsite (within the Reservoir) would be on multiple fairways (no vegetated putting greens) at the Woodley Lakes Municipal Golf Course south of Victory Boulevard. The fairways are vegetated with non-native turf grasses. All other parking would be in areas that are paved or unvegetated.

### **4.4.2 Thresholds of Significance**

A significant impact could occur to vegetation if the Proposed Action would result in:

- Impacts which would result in the loss or harm of a federally-listed species, either directly or through habitat modifications that would substantially diminish population numbers, or the distribution of a habitat type or its functions and values within the region;
- Substantial loss of species diversity in natural vegetation or wildlife habitat;
- Substantial loss of habitat that is regionally unique or designated as sensitive; and/or
- Substantial disturbance or degradation of existing native and/or sensitive vegetation.

### **4.4.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur. No potential for impacts to special-status vegetation and/or wildlife, would occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

### **4.4.4 Proposed Action**

The Proposed Action would be entirely within Woodley Park I that is actively used for by the public for picnicking and other activities such as weddings. Use of this area for a concert is consistent with past and current uses of this area and while minor impacts to plants and compaction of soils may occur as a result of the Proposed Action, impacts would be temporary and natural resources within the Proposed Project Site would likely quickly recover. Concert

attendees would be directed with signage and fencing to use designated pathways and impacts to soils and plants would be minimal. Concert attendees would have no access to sensitive habitat associated with Haskell Creek found to the east and south of Woodley Park I and no impact would occur as a result of the Proposed Action. As Haskell Creek would be inaccessible to Concert attendees during the Concert, no disturbance or degradation to existing riparian/wetland habitats associated with this sensitive area would occur from the Proposed Action. Parking would be in paved areas and/or area of non-native grasses/bare ground. Signage would be used to direct attendees to parking areas and temporary fencing would be installed to ensure attendees parking in designated parking areas. At the Woodley Lakes Municipal Golf Course, several Fairways may be used for parking. Fencing would be used to limit accidental parking or traversing in areas outside approved parking areas to reduce impacts to sensitive habitat. To further minimize any potential impacts, including potential indirect impacts, immediately following the Concert and during breakdown activities, all areas of the Proposed Project Site including parking at the golf course would be returned to pre-event conditions. The Proposed Project would not cause a substantial disturbance or degradation of existing native trees (including oak trees) and/or sensitive vegetation. As result, no significant impacts to vegetation within the Proposed Project Site would occur.

## **4.5 WILDLIFE**

### **4.5.1 Affected Environment**

During the 2016 reconnaissance survey for the AngelFest project, bird species observed included black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), and common raven (*Corvux corax*). An osprey (*Pandion haliaetus*) was observed during the site reconnaissance but was determined to be a seasonal visitor to the area. In addition, red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), barn owl (*Tyto alba*), and great-horned owl (*Bubo virginianus*) are species known to nest and forage within the Woodley Park I and adjacent areas. A comprehensive species list of both wildlife and plants is found as Appendix D2 and D1, respectively, in the Sepulveda Dam Basin Master Plan and Environmental Assessment. While both lists are not exhaustive, they capture common wildlife species and the dominant plant species by habitat type found at Woodley Park I and in the Sepulveda Reservoir.

Migratory and resident birds move along the major flyways between the Los Angeles River and other sites with surface water such as are in the Sepulveda Reservoir. The 225-acre Sepulveda Reservoir Wildlife Preserve is the only officially designated wildlife area along the Los Angeles River. Sepulveda Reservoir provides opportunities for local wildlife movement for species that may use the river to travel between habitats. Woodley Park I, Sepulveda Reservoir and other open space areas in the vicinity of the Proposed Project Site used for parking, even though disturbed, may provide stopover habitat for migrating birds, and common terrestrial species such as skunk, long-tailed weasels and coyote that use the Los Angeles River and Sepulveda Reservoir for local movement. A wildlife movement or habitat linkage study has not been completed for the project; however, the connection between Sepulveda Reservoir and the Los Angeles River provides local and regional terrestrial wildlife an opportunity to move between areas of suitable habitat. In addition, areas of relatively intact vegetation communities found in

Sepulveda Reservoir and the Wildlife Area provide stopover for migratory birds to forage and rest. The Proposed Project Site is situated outside the Sepulveda Reservoir Wildlife Area.

#### **4.5.2 Thresholds of Significance**

A significant impact could occur to wildlife resources if the Proposed Action would result in:

- Impacts which would result in the loss or harm of a federally-listed species, either directly or through habitat modifications that would substantially diminish population numbers, or the distribution of a habitat type or its functions and values within the region;
- Substantial interference with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impeded use of native wildlife breeding sites; and/or
- Substantial increase in the ambient noise levels for adjoining areas that interfere with breeding behavior and/or movement of foraging of resident species, specifically birds of prey.

#### **4.5.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and therefore, potential for impacts to special-status wildlife, would not occur. The Proposed Project Site would continue as an open space and recreational area to be used for weddings, film productions, and special events. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.5.4 Proposed Action**

As the Concert would occur outside of the typical passerine bird nesting season of March 1 to August 31, no impacts are expected to occur to breeding pairs or their nests. Concert set-up and festival activities are highly unlikely to impact nesting and fledging migratory birds, as festival activities would occur after most hatchlings have fledged, and adults have left to migrate south. Least Bell's vireo would not be affected as known breeding territories are in areas that are more than 2,500 feet from either of the stages. In addition, pedestrians would be obligated to stay on pre-existing marked and paved pathways to traverse from parking areas to the Concert venue. As a result, indirect impacts to sensitive breeding habitat would be avoided.

The nesting season for raptors is considered to range from January 1 to September 15. The Proposed Action would occur Labor Day weekend (August 31-September 2) near the end of raptor breeding and nesting activities for the season. While the 2019 Labor Day weekend would be within the last two weeks of the raptor breeding season, raptor breeding activities will have concluded and most young will have fledged and vacated the nest. Great horned owls and red-tailed hawks are year-round species in California. These raptors may also continue to feed juveniles for up to a year after they have fledged. Birds and raptor species known to forage within the Sepulveda Reservoir Dam area may temporarily be deterred from the Woodley Park I portion of the recreational area. However, other open woodland foraging areas in the Sepulveda Basin would be available nearby. Foraging behavior of terrestrial wildlife species such as coyotes, bats, skunks, raccoons, and ground squirrels may also be temporarily disrupted. As Woodley Park I is consistently used by the public, wildlife in the area are likely habituated to the presence and activities of humans. As a result, the assembly of stages, installation of temporary

fencing and signage, placement of portable toilets, operation, and teardown of the event would result in temporary but less than significant impacts to local wildlife.

Noise and vibration from the Concert speakers, increased human presence, and nighttime lighting has the potential to temporarily alter nocturnal wildlife behavior within the Woodley Park I area and the portions of the Woodley Lakes Municipal Golf Course adjacent to the parking areas. These disruptions would be temporary and would not affect the life history of any rare species or species -listed under the Federal Endangered Species Act (ESA), nor would it cause a population displacement of any other wildlife species to drop below self-sustaining levels. Use of Woodley Park I for a concert represents a temporary restriction of wildlife movement in this area. No significant impacts to wildlife movement corridors would occur due to the temporary nature of the Concert.

## **4.6 SENSITIVE SPECIES AND HABITATS**

### **4.6.1 Affected Environment**

The Proposed Project Site does not support habitat for any Federally-protected plant species. The only animal species listed under the ESA with the potential to occur in the Proposed Project Site is the least Bell's vireo, which is an endangered species. Least Bell's vireo is found in riparian habitat in the vicinity of water or seasonally dry river bottoms. Nests are found along margins of bushes or on twigs projecting into pathways. Federally designated critical habitat exists for the species, but not at Sepulveda Reservoir. Suitable habitat for least Bell's vireo exists within Haskell Creek. Nesting, chick-rearing, and fledging takes place from early April through the end of August, with two broods sometimes being attempted. Although the birds may begin migrating by late July, most individuals have departed by September (Brown 1993). Stragglers have been noted in October and November (Kus 2002). Least Bell's vireos are known to breed in specific land parcels with the Sepulveda Reservoir such as the Los Angeles River, Bull Creek, and Haskell Creek. Least Bell's vireo have been expanding their breeding territories within Sepulveda Reservoir. Vireo were first encountered along the Los Angeles River in 2010, were then found to inhabit Bull Creek in 2012, and expanded their breeding territories in Haskell Creek in 2014 where large population existed in 2015.

Mixed riparian forests occurring in Bull Creek, Haskell Creek and the Los Angeles River (to the east and south of the Proposed Project Site) is considered a sensitive natural community. As noted in the Los Angeles County's 1996 Los Angeles River Master Plan, migratory and resident birds move along the major flyways between the Los Angeles River and other sites with surface water such as the Sepulveda Reservoir. The 225-acre Sepulveda Reservoir Wildlife Preserve is the only officially designated wildlife area along the River, within the City. The soft-bottom portions of the Los Angeles River here provide valuable resting and feeding zones for migratory birds, yet these areas are seasonally inundated with high flows, which often preclude nesting. The creeks found within the Reservoir provide opportunities for local wildlife movement for species that may use these natural corridors to travel between habitats, including those that occur at Woodley Park I. The connection between Haskell Creek, Bull Creek and the Los Angeles River provides local and regional terrestrial wildlife an opportunity to move between areas of suitable habitat. In addition, areas of relatively intact vegetation communities found in Haskell Creek and the Wildlife Area provide stopover for neotropical migratory birds to forage and rest. These areas are also important habitat areas for nesting raptors such as horned owls and red-tailed hawks.

#### **4.6.2 Thresholds of Significance**

A significant impact could occur to sensitive species and habitat resources if the Proposed Action would result in:

- Impacts which would result in the loss or harm of a federally-listed species, either directly or through habitat modifications that would substantially diminish population numbers, or the distribution of a habitat type or its functions and values within the region.

#### **4.6.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and, therefore, potential for impacts to sensitive species and habitat would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.6.4 Proposed Action**

The Proposed Action would occur during the 2019 Labor Day weekend (August 31 through September 2). This timeframe is marginally outside the nesting season of March 1 to August 31 for the least Bell's vireo. The Proposed Project Site is not suitable as foraging or nesting habitat for least Bell's vireo. The species' habitat is confined to riparian areas and is not present in open woodland environments that characterize the Proposed Project Site. Migration of neotropical migratory birds including the least Bell's vireo would have likely commenced at the time of the Concert. Direct impacts to nesting neotropical migratory birds are highly unlikely to occur as a result. Moreover, the Woodley Park I area where the Concert would occur is subject to continual use by the public year-round.

As the Concert would occur entirely within the Woodley Park I area, no direct or indirect impacts to least Bell's vireo habitat associated would likely occur. Foot traffic from the parking areas would be directed around riparian habitat zones to avoid impacts to migratory birds and the endangered least Bell's vireo. There would be no access to these sensitive riparian habitat areas by festival attendees during the Concert as fencing and signage would direct pedestrian traffic to Woodley Park I and fencing as needed would be used to maintain attendees within the Woodley Park I concert area. However, normal use of these areas by non-Concert attendees would not be restricted. No direct impacts to least Bell's vireo habitat associated with Haskell Creek and Bull Creek would occur. The noise and vibration resulting from the Concert is not anticipated to result in an effect to the species as noise and vibration as described in Sections 3.1.3 and 3.1.4 are specifically directed away from these sensitive areas. The proposed lighting at night would not result in an effect to least Bell's vireo as Concert lights would be specifically directed to the interior of Woodley Park I minimizing lighting impacts to the remainder of the Reservoir and adjacent neighbors. As such, there would be no significant impacts from the Proposed Project to these sensitive natural community and no effect to the species.

## **4.7 CULTURAL RESOURCES**

### **4.7.1 Affected Environment**

Cultural resources are expressions of human culture and history in the physical environment, and may include archaeological sites, buildings, structures, objects, districts, works of art, architecture, and natural features that were important in past human events. They may consist of physical remains, but also may include areas where significant human events occurred, even though evidence of the events no longer remains. Cultural resources also include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups.

Section 106 of the National Historic Preservation Act (NHPA) requires a Federal agency with jurisdiction over a proposed Federal action (referred to as an “undertaking” under the NHPA) to take into account the effects of the undertaking on historic properties, and to, in certain circumstances, provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the undertaking. The term “historic properties” refers to “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register [of Historic Places]” (36 CFR 800.16(l)(1)). The steps of the Section 106 process are accomplished through consultation with the State Historic Preservation Office (SHPO), Federally-recognized Indian tribes, local governments, and other interested parties. The goal of consultation is to identify historic properties, assess potential effects to such properties, and seek ways to avoid, minimize, or mitigate any significant effects on such properties.

An Area of Potential Effects (APE) is defined as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties” (36 CFR 800.16(d)). The APE for this project is defined as the Proposed Project Site which includes the Concert site and parking areas. The APE is generally heavily disturbed by grading, development and continuous use for recreational activities.

In support of the proposed AngelFest concert, a cultural resources records search was conducted at the California Historical Resources Information System-South Central Coastal Information Center (CHRIS-SCCIC) in October 2015. This records search included an examination of previous survey coverage and reports, and known cultural resources within the APE, as well as within a half-mile radius of the proposed AngelFest festival site. Other sources that were reviewed included the California Points of Historical Interest, the California Historical Landmarks, the California Register of Historical Resources (California Register), the National Register of Historic Places (National Register), and the California State Historic Resources Inventory. This search covered a larger area than necessary for the Proposed Project and is still considered current.

Results of the CHRIS-SCCIC search indicate that the proposed AngelFest project site, which was larger than the Proposed Project Site (or APE), had been a part of ten archaeological studies. Three historic resources are located within 1-mile of the Proposed Project Site and are the Sepulveda Dam (P-19-188093), and two Cold War-era military sites (P-19-189772 and P-19-187950). One prehistoric site, CA-LAN-345, was previously recorded but was noted as destroyed prior to 1977. A second prehistoric site, CA-LAN-111, is more than one mile from the



proposed action and has been noted as destroyed prior to 1977. No historic or prehistoric resources have been identified in Woodley Park I or any of the proposed parking areas.

#### **4.7.2 Thresholds of Significance**

Criteria for the evaluation of effects to National Register properties are found in 36 CFR 800.9, *Criteria of Effect and Adverse Effect*:

- An undertaking has an effect on a historic property when the undertaking may alter characteristics of the property that may qualify the property for inclusion in the National Register. For the purpose of determining effect, alteration to features of a property's location, setting, or use may be relevant depending on a property's significant characteristics and should be considered. An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. For purposes of this Draft EA, an effect would be considered significant if it resulted in an adverse effect to a historic property or cultural resource.

#### **4.7.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and, therefore, potential for impacts to cultural resources would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.7.4 Proposed Action**

The Proponent's Preferred Alternative would constitute an undertaking as defined in 36 CFR § 800.16(y). However, the APE has previously been fully surveyed and no cultural resources or historic properties have been recorded within the APE. Further, the Site is generally a highly disturbed area and proposed activities would consist of temporary, non-ground-disturbing activities (except for minor soil disturbances). Because there are no historic properties within the Proposed Project Site including parking areas outside Woodley Park I, there would be no effect and no significant impact to historic properties or cultural resources. The Corps sent a letter with this determination to the SHPO during the week of February 4, 2019.

A Sacred Lands Search for the Proposed Project Site was requested from the Native American Heritage Commission (NAHC) on December 6, 2018, and their response was received on December 19, 2018. No Native American cultural resources have been identified in the Sacred Lands File search. Project notification/consultation letters are being sent concurrently to individuals and tribes based on the current and past NAHC lists and the SHPO and follow-up calls will be made to Native American contacts to identify any concerns. The general Proposed Project Site vicinity is considered sensitive for prehistoric archaeological resources. The Los Angeles River and Encino Spring were important water sources, and prehistoric settlement would have concentrated around them.

#### **4.7.5 Environmental Commitments**

The following environmental commitment would be in place to further minimize any potential impacts to cultural resources.

- C-1** If previously unknown cultural resources are uncovered, work in the immediate area would cease until the requirements in 36 C.F.R. §800.13 are complied with. The on-site supervisor shall contact an approved archaeological consultant immediately. The on-site supervisor shall additionally divert all project-related activities to other areas until the discovery has been evaluated by the approved archaeological consultant, who will determine if further actions are warranted

### **4.8 AESTHETICS**

#### **4.8.1 Affected Environment**

The topography of the area is relatively flat. The major visual features within the Sepulveda Reservoir Dam region include the Los Angeles River, Sepulveda Dam, Lake Balboa, adjacent parks and golf courses, and the Wildlife areas.

Woodley Park I and surrounding facilities are dominated by tall trees. A fence at an Air National Guard facility and Tillman Water Reclamation Plant is found on the northern and eastern side of Woodley Park I, respectively. The Wildlife Area in the eastern and southeast portion of the Reservoir include an expanse of scrub vegetation west of Woodley Avenue, south of Burbank Boulevard, and a manmade lake with additional acreage of scrub vegetation to the east of Woodley Avenue. These areas are crisscrossed with trails. Views in these areas are short-range due to trees, except to the west of Woodley Avenue, where mid-range views sweep over the scrub shrub habitat below the model airplane airspace. There are few long-range views within the Sepulveda Reservoir that are suitable for identification as overlooks, primarily due to the presence of tall trees and the absence of elevated topographic areas. However, Burbank Boulevard passes over the Dam into the Reservoir near the southeastern corner, providing a long-range view of the wildlife area, lake, Dam, and Los Angeles River.

#### **4.8.2 Thresholds of Significance**

A significant impact could occur to esthetic resources if the Proposed Action would result in:

- Direct, permanent changes to important existing scenic characteristics of a landscape that are enjoyed by a large number of viewers;
- The impairment of or obstruction of views from public gathering places of scenic resources;
- Viewing distance and degree to which the Proposed Action would dominate the view of the observer;
- Resulting contrast of amenities related to the Proposed Action with existing visual resources; and/or
- The level of public interest in the existing landscape characteristics and concern over potential changes.

### **4.8.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and, therefore, potential for impacts to esthetic resources would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

### **4.8.4 Proposed Action**

The Proposed Action would cause temporary changes to the Woodley Park I due to the installation and assembly of a stage, carnival rides and booths, concession areas associated with the beer gardens and supporting facilities such as portable toilets, emergency medical services and security. In addition, there would be lighting at night from the Concert. No permanent changes to Woodley Park I would occur. As the Proposed Project is a temporary action, no permanent impairment of or obstruction of views from the Los Angeles River, Sepulveda Dam, Lake Balboa, adjacent parks and golf courses, and the Wildlife area would occur.

The proposed Concert would be a temporary change in use of the park, but the park is currently accessible to the public for picnicking and does not represent a drastic change in amenities. Parking would occur in areas determined specifically for the Proposed Action. Woodley Park I has no long and mid-range view and the Proposed Project would not dominate the view of outside observers. The nighttime lighting would not result in a significant impact as the Concert venue has been specifically designed to contain lighting within the Woodley Park I area and minimize lighting impacts to adjacent sensitive habitats and neighborhoods. At the conclusion of the Concert, the Project Proponent would remove all Concert-related equipment and structures and return Woodley Park I and non-paved parking areas to its current conditions. Therefore, there would be no significant impact to aesthetics and no mitigation is required.

## **4.9 WATERS OF THE UNITED STATES**

### **4.9.1 Affected Environment**

Haskell Creek and Bull Creek, found on the eastern side and central area of the Sepulveda Dam Reservoir, respectively, flow into the Los Angeles River, a Traditionally Navigable Waterway that is under the jurisdiction of the Corps. The recycled water from Donald C. Tillman Water Reclamation Plant (TWRP) is used for the Japanese Garden Lake, the Wildlife Area Lake, Lake Balboa, and Bull Creek, all of which flow into the Los Angeles River. The remainder of the TWRP treated water is discharged to the Los Angeles River through Haskell Creek. As such, each stream is considered to be a tributary water of the United States (U.S), subject to regulation under Section 404 of the Clean Water Act (CWA).

### **4.9.2 Thresholds of Significance**

A significant impact could occur to Waters of the U.S. resources if the Proposed Action would result in:

- Substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the USFWS; and/or

- Substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means.

#### **4.9.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and, therefore, potential for impacts to Waters of the U.S. would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.9.4 Proposed Action**

The Proposed Action would be entirely limited to Woodley Park I that is composed of a mosaic of native and oak woodland alliance and non-native species with interspersed park features (tables, concrete pads, barbeque pits, etc.) used for picnics and recreation. No jurisdictional Waters of the U.S. traverse through the Woodley Park I, and access to Haskell Creek, Bull Creek and the Los Angeles River would be restricted from Concert attendees. Non-attendees would not be restricted from accessing other areas of the Sepulveda Dam Reservoir. Parking at the Woodley Lake Municipal Golf Course would be limited to the paved parking lot, dirt lot found adjacent to the paved parking lot, and on fairways closest to the parking lot. As such, there would be no potential impacts to jurisdictional Waters of the U.S.

### **4.10 NOISE**

#### **4.10.1 Affected Environment**

Sound has two main components to a human ear: pitch and loudness. While the pitch of a sound is generally associated with an annoyance, sound loudness can interfere with activities such as conversation, sleep, and learning, and can even have lasting physiological effects, such as hearing loss. Those who are more sensitive to noise such as children and the elderly are at higher risk of being significantly affected by excessive noise levels.

The source of existing noise that can be heard in the Reservoir is traffic noise generated by two major freeways and one large arterial roadway. The Ventura Freeway (U.S. Highway 101 [U.S. 101]) traverses immediately south of the Reservoir. The San Diego Freeway (Interstate-405 [I-405]) traverses along the eastern edge of the Reservoir and Victory Boulevard is on the northern border of the Reservoir. The interchange for U.S. 101 and I-405 is at the southeastern corner of the Reservoir. In 2015, long-term (24-hour) noise measurements were taken at a location on Victory Boulevard just north of the Air National Guard facility approximately 1,600 feet from the northern border of Woodley Park I and at a location east of the archery range between the I-405 and the Orange Line busway. The second location was more than 0.5-miles from the eastern border of Woodley Park I. Results are presented in Table 3 below and locations shown on Figure 2.

**Table 3 2015 Ambient Noise Measurement Results**

Time	Noise Levels, Hourly dBA (Leq)	
	Location on Victory Boulevard	Location between I-405 and Orange Line Busway
12:00 AM	60	68
1:00 AM	59	66
2:00 AM	59	65
3:00 AM	62	65
4:00 AM	63	69
5:00 AM	63	73
6:00 AM	63	77
7:00 AM	62	77
8:00 AM	62	77
9:00 AM	62	77
10:00 AM	62	77
11:00 AM	62	76
<b>12:00 PM</b>	<b>63</b>	<b>76</b>
<b>1:00 PM</b>	<b>63</b>	<b>76</b>
<b>2:00 PM</b>	<b>62</b>	<b>76</b>
<b>3:00 PM</b>	<b>61</b>	<b>77</b>
<b>4:00 PM</b>	<b>60</b>	<b>77</b>
<b>5:00 PM</b>	<b>59</b>	<b>77</b>
<b>6:00 PM</b>	<b>61</b>	<b>76</b>
<b>7:00 PM</b>	<b>60</b>	<b>75</b>
<b>8:00 PM</b>	<b>63</b>	<b>74</b>
<b>9:00 PM</b>	<b>63</b>	<b>74</b>
<b>10:00 PM</b>	<b>62</b>	<b>74</b>
<b>11:00 PM</b>	<b>61</b>	<b>71</b>

**Notes:** The 2015 long-term noise monitoring locations are illustrated on Figure 2. dBA (Leq) is the sound level in decibels equivalent to the total A-weighted sound energy measured over a stated time frame. The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources.

#### 4.10.2 Thresholds of Significance

A significant impact could occur to wildlife and habitat resources if the Proposed Action would result in:

- Projected noise levels would not comply with the relevant Federal, state, and/or local standards or regulations; and/or
- There would be a substantial permanent increase in noise levels above the existing ambient condition at either residential or sensitive wildlife receptors as a result of the activities.

#### **4.10.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and no temporary increases to ambient noise levels would occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.10.4 Proposed Action**

Set up and breakdown activities associated with the Concert would generate some noise, including from the equipment used for setting up venue-related structures in Woodley Park I, that may be perceived by adjacent Reservoir users. Set up and breakdown activities would be completed during daytime hours and, therefore, no nighttime impacts to adjacent neighborhoods is likely from these activities.

Section 3.1.4 provides a description of the sound system proposed for the Concert. Its design is intended to project the noise (low frequency energy) towards the audience and not to the sides or rear of the stages. Section 3.1.3 provides a description of the stage design. The Concert would use two stages, both which would face away from the residential areas to the north of the Reservoir. The larger stage would be approximately 0.65 miles from the wildlife area with the parking for the Japanese gardens and a portion of the DTWR plant in between. With the noise level attenuating from the point source, perceived sound by wildlife in the Sepulveda Wildlife Area may be diminished, likely to a level barely perceived above noise generated by the adjacent I-405 Freeway. The second, smaller stage (Stage #2) would be located in the northern portion of the site facing a 10-foot wall with the Japanese Gardens and the DTWR plant beyond. The smaller stage is approximately 0.68 miles from the wildlife area.

There would also be potential noise impacts to neighbors and other persons using the Reservoir from music played during the Concert, although most recreational users would be gone by the evening. Nighttime amplified music would not be a significant impact because digital equipment would be used that would direct concentrate sound within the Woodley Park I area reducing perceived sound. Specific measures have been incorporated into the Project to minimize noise impacts, as described in Section 3.1.3.

As the Concert would be held after nesting season for passerine birds, noise from the event would not cause an impact to nesting birds. At the time of the Concert, nesting season for raptors would be concluding and perceived noise would be attenuated by the Japanese Garden, the Japanese Garden parking lot and DTWR plant facility. No impacts to remaining raptors or other species in the wildlife area from noise during the event would be likely as the event has been design to specifically direct noise using digital equipment to minimize noise perception from sensitive receptors both within and outside the Reservoir. Resident and migrating foraging

bats would likely avoid the Concert area during the event but the remaining Reservoir, including the wildlife area, would be available for foraging and roosting activities.

#### **4.10.5 Environmental Commitments**

The following environmental commitments would be in place to further minimize any potential impacts from noise.

- N-1** All equipment used will be muffled and maintained in good operating condition. All internal combustion engine driven equipment will be fitted with well-maintained mufflers in accordance with manufacturer's recommendations.
- N-2** All equipment shall include noise reduction measures, as applicable. These measures shall include, but may not be limited to, properly operating and maintained mufflers, correct placement of equipment engine covers, and ensuring the small loading equipment is equipped with rubber tires.
- N-3** All measures described in Section 3.1.4 of the Draft EA will be implemented for the applicable sound system.

### **4.11 TRAFFIC**

#### **4.11.1 Affected Environment**

The Reservoir is located in the northwest quadrant of the I-405 and U.S. 101 interchange. Access into the Reservoir can be attained via main entrances along Woodley Avenue from the north of the Reservoir, Burbank Boulevard (which runs through the southern portion of the Reservoir) from the east or west, Balboa Boulevard on the western side of the Reservoir, or from Victory Boulevard from the north. The Burbank Boulevard entrances can also be accessed from Hayvenhurst Avenue from the south. Other roadways near the Reservoir area include Sepulveda Boulevard, Sherman Way, and Vanowen Street. Average daily traffic volumes on the above-cited Reservoir-serving roadways are shown in Table 4.

**Table 4 Local Roadways and Traffic Volumes**

<b>Roadway</b>	<b>Cross Street</b>	<b>Average Daily Two-Way Traffic</b>	<b>Roadway Designation</b>	<b>Number of Lanes</b>
Interstate 405	Victory Boulevard	14,700 (1)	Freeway	12
U.S. Highway 101	I-405-Right	14,200 (1)	Freeway	12
Balboa Boulevard	Devonshire Street	38,829	Arterial	6
Burbank Boulevard	Van Nuys Boulevard	35,839	Arterial	6
Hayvenhurst Avenue	Burbank Boulevard	18,516	Arterial	4–6
Sepulveda Boulevard	Orange Line Busway	47,256	Arterial	6
Sherman Way	Sepulveda Boulevard	52,483	Arterial	6
Vanowen Street	Sepulveda Boulevard	37,104	Arterial	4
Victory Boulevard	Sepulveda Boulevard	59,175	Arterial	6
Woodley Avenue	Hart Street	17,141	Arterial	4

(1) Traffic for peak hour ahead of measuring location

Sources: Caltrans, 2013; City of Los Angeles Department of Transportation, 2011-2012

Visitors may access the Reservoir using public transit (the Metro Orange bus line or by train to the nearby Van Nuys Metrolink Station). The Metro Orange line is within a dedicated bus and bicycle expressway just south of and parallel to Victory Boulevard, immediately adjacent to the Propos Project Site. The nearest Orange line stops, from east to west, are at Van Nuys Boulevard (east of I-405), Sepulveda Boulevard at Erwin Street (east of I-405), Woodley Avenue, and Balboa Boulevard. At the Van Nuys Metrolink Station, bus and train passengers can make a bus connection west to the Reservoir.

The Reservoir is nearly surrounded by Class I bike paths along Victory, Balboa, and Burbank Boulevards. A short stretch of a Class II bike lane is available to the east of the Reservoir. These bike paths connect to various other neighborhoods along Balboa Boulevard, Woodley Avenue, and Oxnard Street. For visitors who prefer to walk to the Reservoir, there are continuous sidewalks on most connecting streets.

Emergency vehicles can access the Reservoir through the main public access nodes along Woodley Avenue, Burbank Boulevard, Balboa Boulevard, or Victory Boulevard. The two Burbank Boulevard entrances can also be accessed from Hayvenhurst Avenue to the south.

#### **4.11.2 Thresholds of Significance**

A significant impact could occur related to traffic if the Proposed Action would result in:

- Closure of a major roadway (arterial or collector classification) to through traffic as a result of project activities, and there would be no suitable alternative route available;
- Restricted access to or from adjacent land uses, and there would be no suitable alternative access;
- An increase in vehicle trips associated with additional commuter and truck trips that would result in an extended or permanent unacceptable reduction in level of service of



local jurisdictions on roadways in the vicinity of the project, or would result in long-term safety problems for vehicular traffic, transit operations, or trains;

- An increase in roadway wear in the vicinity of the work zone as a result of heavy truck or equipment movements, resulting in noticeable deterioration of roadway surfaces; and/or
- Conflict with planned transportation improvements in the area.

#### **4.11.3 No Action Alternative**

Under the No Action Alternative, the Concert would not occur, and the Proposed Project Site would remain in its current state of functioning as an open space and recreational area. The Proposed Project Site would as an open space and recreational area, and there would be no change to current traffic conditions.

#### **4.11.4 Proposed Action**

##### **4.11.4.1 Concert Traffic and Circulation**

The Proponent's Preferred Alternative would result in a three (3)-day Concert that would generate a substantial number of temporary vehicle trips in the Reservoir and surrounding roadways associated with the 25,000 in attendance, which includes approximately 500 staff.

A preliminary Traffic and Parking Assessment (A+ Traffic Management 2018) that identifies anticipated road closures, parking areas, and ingress/egress into the Concert is provided in Appendix B.

On Saturday and Sunday, the daily schedule for the Concert would be: gates open at 3:00 p.m., music begins at 4:30 p.m., the amplified music and all Concert activities end at 11:00 p.m., and gates close at 12:00 a.m. (midnight). On Monday, the schedule would be: gates open at 1:00 p.m., music begins at 2:00 p.m., the amplified music and all Concert activities end at 8:30 p.m., and gates close at 9:30 p.m. Patrons would be required to begin vacating the Concert at the end time (11:00 p.m. or 8:30 p.m.), when the music would stop, and temporary security lights are turned on. Patrons would be required to be vacated by 12:00 a.m. on Saturday and Sunday and 9:30 p.m. on Monday.

During periods of arrival and departure over each of the three Concert days, traffic flow within the roadways serving the Reservoir would be notably increased. The anticipated arrival and departure schedule would result in traffic being distributed over multiple hours, resulting in a less-than-substantial concentration of Concert traffic over the course of the event days. In addition, Concert-generated traffic would use different roads to access the various parking areas (lessening the effect on any individual road).

The preferred traffic ingress (off-ramps) from the I-405 and U.S. 101 are Burbank Boulevard and Hayvenhurst/Balboa Avenue, respectively. Traffic egress would exit northbound to Victory Boulevard and then east to the I-405, southbound to Burbank Boulevard and east to the I-405 or west to the U.S. 101, and westbound past Lake Balboa onto Balboa Boulevard. As part of event egress, possible road closures may include Burbank Boulevard westbound from Woodley Avenue to Sepulveda Boulevard and Woodley Avenue from Victory Boulevard to Burbank Boulevard. Signage and traffic personnel would be used to direct traffic away from the site into major city streets that have direct access to main arteries and freeways. With the exception of Woodley Park I and the Woodley Lakes Municipal Golf Course for part of each day, all other

areas of the Sepulveda Recreation Area would continue to be open to the public. RAP, LADOT, LAPD, and a traffic management team would ensure that access for non-Concert goers is provided. Access into local neighborhoods would only be accessible to residents and their guests. This access into neighborhoods would also be controlled and monitored by Concert security and police presence.

A pedestrian crossing point would be implemented west of Parking Lot 2 to expedite pedestrian egress flow. Approved safety devices would be used to prevent any vehicles from entering the temporary pedestrian crossing point. For the overflow parking, shuttles would be provided for employees and attendees.

There would be a temporary increase in traffic in the area, especially during the three (3) days of the Concert but there would not be an on-going/long-term increase in vehicle trips associated with additional commuter or truck trips that would result in a permanent unacceptable reduction in level of service of local jurisdictions on roadways in the vicinity of the project.

Implementation of the provisions for traffic and parking management and other site-specific issues associated with the Concert will be addressed in a traffic management plan coordinated with LADOT and LAPD (EC T-1); Therefore, impacts would be less than significant. Implementation of ECs T-2 through T-5 would further minimize any potential impacts.

#### **4.11.4.2 Setup/Breakdown**

Setup and breakdown activities would employ a maximum of 500 people per day, a subset of which would go to and from the Proposed Project Site over the course of the days leading up to the Concert. This would be a temporary change and would not result in a significant change to existing conditions or a significant impact to local traffic resources. In addition, although setup and breakdown of the Concert would generate between 8 to 12 truck trips daily to deliver materials to the Site, including use of flatbeds, closed-back trucks, semi-trailers, trailer-hitched cabs, and dump trucks, this temporary increase in truck traffic would occur over a short of a duration and would not materially affect road wear and tear, and the major roads (arterials and freeways) in the area are built to accommodate truck traffic.

#### **4.11.4.3 Parking**

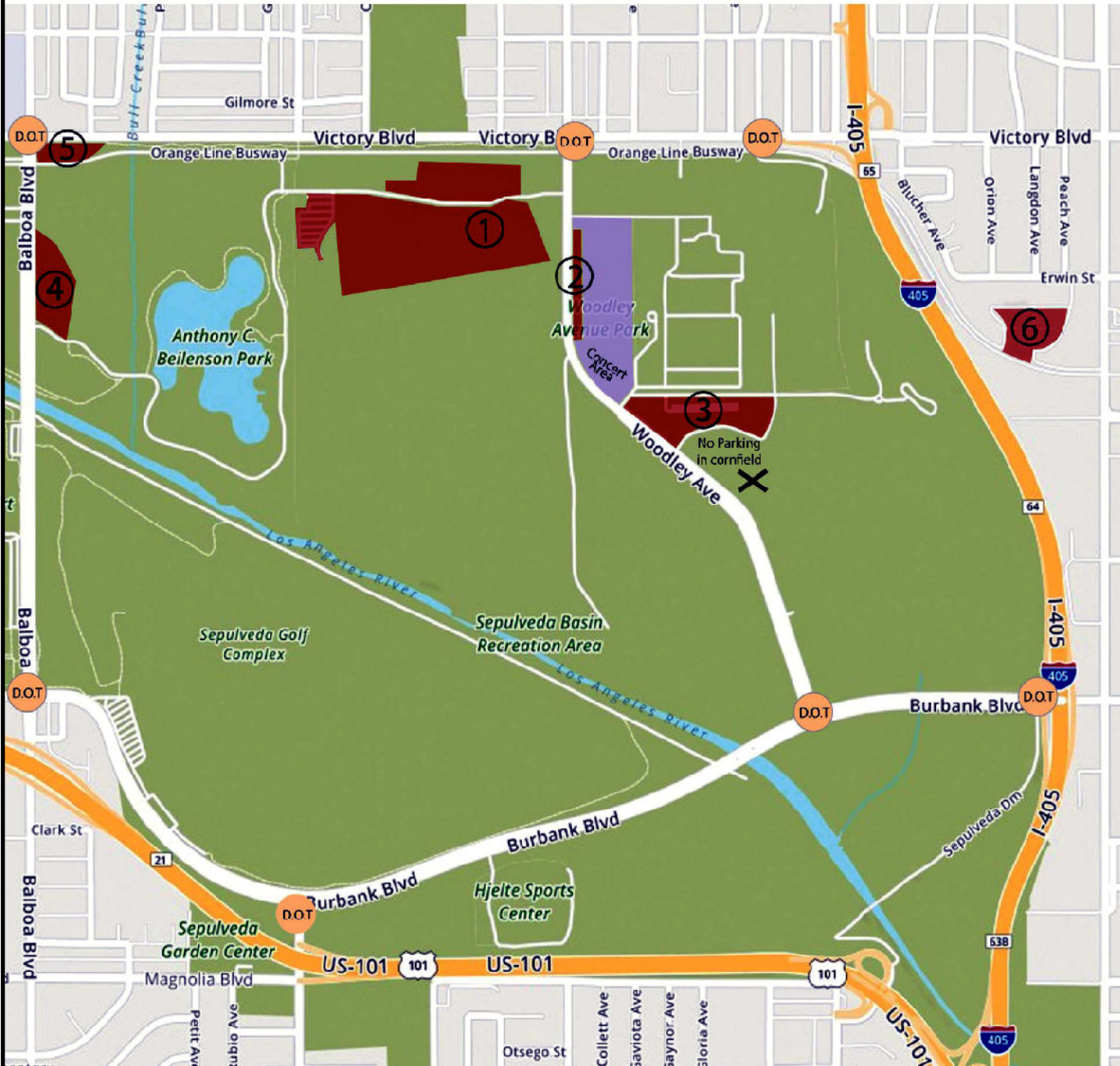
It is assumed that there would be approximately 3 people per vehicle, thereby resulting in the need for approximately 6,250 parking spaces. Of the on-site parking spaces, a minimum of 97 ADA compliant spaces would be needed, although the identified ADA lot has a capacity of 253 spaces. Currently, the Concert promoter expects up to 25,000 attendees.

Five areas within the Reservoir would be used for 6,620 parking spaces for the Concert, as shown in Table 1 (in Section 3.1.17) and Figure 5. An additional satellite parking area has been identified for staff and overflow parking at Erwin Street/ Sepulveda Boulevard (1,000 spaces) on the east side of the 405 Freeway (shuttles would be provided). Thus, the total parking available for the Concert would be 7,620. This would comfortably accommodate parking for 25,000 attendees.

# PARKING OVERVIEW



NOT TO SCALE



- ① VIP Parking
- ② ADA Parking
- ③ Golf Course Parking
- ④ Balboa Boulevard Parking
- ⑤ Balboa Boulevard and Victory Boulevard Parking  
Employees = Employee Parking and Overflow

CONCERT IN THE PARK EA

**Figure 5**  
**Concert in the Park**  
**Parking Locations**

ADA parking would be provided in Lot 2 off Woodley Avenue. If required, staff would have ADA-approved golf carts to transport patrons to the venue. VIP parking would be provided on Woodley Avenue south of Victory Boulevard (within Woodley Park I). VIP passes would be given out in advance. The passes would have directions and traffic patterns on them to assist patrons and event staff in getting VIP patrons into the appropriate lot. A drop-off zone would be located along Woodley Avenue north of Burbank Boulevard with an estimated 2,810 feet (230 cars) of available drop-off space using the northeast curbside of Woodley Avenue.

Traffic and parking would be managed through traffic control, LAPD, and security oversight, consistent with special event and current best practices in accordance with the final traffic and parking management plan approved for the Concert (EC T-1). Some parking passes would be sold in advance during the ticketing sales process and would consist of color-coded hang tags matching color coded designated parking areas. The passes would have directions and traffic patterns printed on the back to assist patrons and the event staff getting patrons to the appropriate lots. This also avoids the potential for overflow parking in local neighborhoods. During the ticketing process, individuals would also be encouraged to utilize public transit as opposed to parking. The Concert would occur during the late afternoon/evening hours. Users of the Woodley Lakes Municipal Golf Course and Japanese Water Garden would have left the Reservoir by then. Users of the Reservoir other than Concert attendees would be able to park along Woodley Avenue and no restrictions to use of the Reservoir would occur. The proposed action would not result in the closure of any of the major roadways associated with the Reservoir. The parking demands would not result in a significant impact regarding traffic.

#### **4.11.5 Environmental Commitments**

- T-1** A final traffic and parking management plan shall be prepared for the Concert to ensure that significant effects on traffic (including transit and pedestrian) conditions (congestion and safety), are minimized. The plan shall be submitted to LADOT special events division in advance of beginning setup for the Concert, after thorough coordination to ensure it meets the needs of the community, LADOT, transit providers, and safety providers.
- T-2** The final traffic and parking plan, as approved by LADOT, shall be implemented during all phases of the event: setup, the Concert, and breakdown.
- T-3** Public streets shall be kept operational to the extent possible, particularly during the morning and evening peak hours of traffic. If required, any lane closures would be minimized during peak traffic hours.
- T-4** If damage to roads occurs, the Concert Proponent shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired. Roads disturbed by trucks or equipment shall be properly restored to ensure long-term protection of road surfaces. Such repairs shall occur as part of the active installation and assembly period.
- T-5** The Concert Proponent or organizer (RAP or Valley Music Live LLC) shall obtain all applicable permits and clearances from appropriate agencies for transporting and hauling equipment and debris.

## **4.12 HUMAN HEALTH AND SAFETY**

### **4.12.1 Affected Environment**

Human health and safety focuses on the potential risks to the public from hazards that may occur within the Proposed Project Site or may impact public services adjacent to the Proposed Project Site. Health and safety hazards to the public can result from recreation uses, plants and wildlife, flooding, hazardous materials, and criminal activity. Nearby public services, such as law enforcement, fire protection, hospitals, and schools, may be dependent on access throughout the Proposed Project Site, designated as respondents to health and safety issues, or be impacted by activities within the Proposed Project Site.

The potential hazard posed by the flood risk within the Reservoir is of primary concern for any activities within the Reservoir. The Corps manages the Reservoir to facilitate periodic inundation so as to hold back flood waters and prevent flooding in downstream communities. The Reservoir's flood frequency elevations corresponding to the 1 percent (100-year), 2 percent (50-year), and 10 percent (10-year) annual exceedance probability events are shown in Map 16 of the Sepulveda Dam Basin Master Plan. There is no human habitation allowed within the overall Reservoir and existing structures and improvements are either floodable, flood-proofed, or protected by flood walls up to at least the base flood (100-year) elevation.

Onsite law enforcement at the recreation amenities within the Reservoir is provided by the City of Los Angeles, Department of General Services – Office of Public Safety, which is headquartered at Griffith Park, and the LAPD. The nearest law enforcement services are located at the LAPD West Valley Police Station at 19020 Vanowen Street.

According to the Los Angeles Fire Department (LAFD) and the City of LA Zoning Maps System, the Proposed Project Site is located outside of a wildfire hazard area and is not located within a Very High Fire Severity Zone (City of Los Angeles, 1996; ZIMAS, 2015). The Proposed Project Site does contain some naturally vegetated areas that are susceptible to wildfire. This includes the model airplane field, which experiences fairly regular fires that are controlled and generally not extinguished to by the local fire department. Fire protection and emergency medical services are provided nearby by the LAFD Fire Station 39 located at 14415 Sylvan Street. Emergency room and Hospital services are found at Valley Presbyterian Hospital in Van Nuys approximately 1 mile east of the Proposed Project Site.

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including the Resource Conservation and Recovery Act (RCRA) (42 U.S.C., Ch. 82); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C., Ch. 103); the Toxic Substances Control Act of 1976 (TSCA) (15 U.S.C., Ch. 53); the Emergency Planning and Community Right-to-Know Act (42 U.S.C., Ch. 116); and the Hazardous Materials Transportation Act (49 U.S.C., Ch. 51). The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials.

#### **4.12.2 Thresholds of Significance**

An alternative would have a significant impact on human health and safety if it would:

- Create conditions that would present potential dangers to the public or attract the public to a potentially hazardous area (e.g., attractive nuisances);
- Noticeably impact public services or emergency services;
- Substantially increase emergency service response times by fire and law enforcement; and/or
- Require substantial changes to the daily schedule or calendar of a school, a major reorganization of students or classrooms, or other temporary or permanent disturbance to the school's activities.

#### **4.12.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and, therefore, potential for impacts to human health and safety would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals or of a concert of providing a music cultural event.

#### **4.12.4 Proposed Action**

This dense concentration of people who would attend the Concert in Woodley Park I increases the risk of exposing more people to a flood hazard and poses a need for additional police, fire, and emergency response personnel to be onsite throughout the duration of the Concert. Given the rapid nature of flooding that can occur in the Reservoir, a preliminary emergency evacuation plan for the Proposed Action has been prepared and a final plan would be prepared during the planning and implementation phase for the Concert and would be implemented by emergency response personnel who are responsible for ensuring public safety in the event of a flood. This plan would be required by EC WR-2, previously described in Section 4.2.5. Rainfall monitoring of the NOAA Quantitative Precipitation Forecast (QPF) would also be conducted. In addition, the Corps would require that all activities be suspended if a rain event is forecast of 0.5 inches or greater in any 24-hour period for any of the event days, including the eight (8) days of setup, the three (3) Concert days, or the four (4) breakdown days.

The emergency evacuation plan prepared for the Concert would be implemented to reduce the risks of exposure of people to hazards from flooding and other emergency events. It would be prepared in coordination with the Concert Proponent and organizer, the Corps, and the local emergency services that includes LAFD and LAPD. The plan would address all protocols for response to public safety matters including weather, an accidental hazardous material exposure, earthquakes, early warning intelligence indicating the potential need to evacuate, and other conditions. The Proponent's Preferred Alternative would include measures to ensure that sufficient access for emergency response vehicles would be still be provided at all times in and out of the site. The Concert evacuation routes would correspond to the quickest exists out of the Reservoir to higher ground in the event of flooding. The emergency evacuation plan would help reduce the demand on public services and thus reduce the potential for significant impacts regarding public safety.

A director of safety would be responsible for coordinating all medical and safety personnel onsite. Local emergency services/ambulance services would be contracted to provide ambulances during the Concert that would provide assistance in the case of car accidents, accidental injury to pedestrians crossing the streets, or incidental wildlife interactions with attendees. The Concert would have onsite staff physicians, paramedics, and emergency medical teams stationed throughout the Proposed Project Site at a medical tent located at the western end of the Proposed Project Site (see Figure 5) or as a roaming response team. The director of safety would also coordinate with local hospitals for all transports and with the director of security to establish the most efficient routes for medical carts onsite. Coordination with LAPD would ensure a proper response for homeless interactions with attendees. The proper coordination between the LAPD, LAFD, local emergency services, and the directors of security and safety prior to the implementation of the Proponent's Preferred Alternative would ensure a sufficient amount of public service personnel available during the Concert to help further reduce this impact.

Concert set-up and tear down may involve the use of hazardous materials such as petroleum products and may result in the generation of small amounts of hazardous wastes. Best management practices and appropriate measures to prevent, minimize, and control spills of hazardous materials should be taken, and any hazardous and non-hazardous wastes generated disposed of in accordance with applicable federal, state, and local requirements.

With implementation of ECs HS-1 through HS-3, overall impacts to public health and safety would be less than significant.

#### **4.12.5 Environmental Commitments**

**HS-1** Compliance with all applicable local, regional, state and Federal laws, policies, and regulations regarding the transportation, storage, handling, management, and disposal of hazardous materials and wastes.

**HS-2** If requested by emergency response providers, a Fire Incident Plan shall be prepared with the LAFD that will describe the LAFD operation conditions and emergency response in case of an accidental spill.

**HS-3** The Proponent shall prepare a plan to maintain public health and safety during all phases of the Concert. The plan shall include the following.

- An Emergency Response Plan as identified in Section 3.1.4.
- Posting signs locating Concert setup areas and warning of the presence of equipment used to set up Concert facilities.
- Provision of temporary walkways (with appropriate markings, barriers, and signs to safely separate pedestrians from vehicular traffic) and posing any necessary detour signs where a sidewalk or pedestrian or bicycle path or trail would be closed during Concert set-up or tear-down.

## **4.13 RECREATION ACTIVITIES**

### **4.13.1 Affected Environment**

The Sepulveda Dam Recreational Area consists of the Balboa Sports Center, Hjelte Sports Center, Lake Balboa/Anthony C. Beilenson Park, Sepulveda Garden Center, Sherman Oaks Castle Park, Woodley Park, Encino Golf Course, Balboa Golf Course, and Woodley Lakes Municipal Golf Course. The Proposed Project Site consists of Woodley Park I and associated parking areas as previously described.

It is estimated that on a typical Friday, Saturday and Sunday in the Fall, an average of 1,600 people per day use Woodley Park for a total of 5,000 users during the three (3) -day period, from sunrise to sundown. There are also recreation areas outside of Woodley Park I and the Proposed Project Site. An estimated 167 users per day for a total of 500 people would utilize the cricket fields during the same three (3)-day period. An average of 67 people per day would use the archery range for a total of 200 people, and an average of 100 users per day would be expected to use the model airplane field for a total of 300 people over the three- (3) day period, from sunrise to sundown. The Japanese Garden is closed on Fridays and Saturdays, and on City holidays. Approximately 250 people visit the Japanese Garden specifically on Sundays. It is estimated that on a typical Friday, Saturday, and Sunday, an average of 425 people use the Woodley Lakes Municipal Golf Course per weekend day, or a total of about 1,300 people.

There are both programmed and passive recreational uses within the Sepulveda Dam Reservoir Recreation Area on a daily basis. Programmed recreational uses typically include use of the golf course and use of the archery range and cricket fields. Passive recreation uses include use of playgrounds, picnic areas, and walking paths/trails. In addition to the daily recreational uses that occur at the aforementioned recreational areas, Woodley Park I is used for special events at various times throughout the year.

### **4.13.2 Thresholds of Significance**

The Proposed Action would have a significant impact on recreation and wilderness activities if it would result in:

- The creation of disruption to access of recreation amenities or areas without adequate alternative amenities available;
- Construction or operational activities substantially in conflict with recreation uses; and/or
- Permanent impacts to recreation support amenities as a result of the action.

### **4.13.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur and, therefore, potential for impacts to recreation activities would not occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

### **4.13.4 Proposed Action**

During the setup, breakdown, and three (3) days of the Concert, the Anthony C. Beilenson Park including Lake Balboa, Bull Creek Restoration Area, the Universal Access Playground and



adjacent recreation amenity areas, and the southern portion of the Sepulveda Dam Reservoir Wildlife Area would remain available to the public.

Recreation opportunities at Woodley Park I would be closed to public access eight (8) days prior to the Concert for setup, during the three (3)- day Concert, and four (4) days post-Festival events (total of 15 days). The Japanese Garden is already closed on Fridays and Saturdays and is open from 10:00 a.m. to 4:00 p.m. on Sundays and generally open from 11:00 a.m. to 4:00 p.m. on Mondays but is closed on City holidays (like Labor Day). The Japanese Garden will remain open for normal hours on the Sunday of the Concert weekend but would close about the time attendees would be arriving. Fencing around the Concert grounds would ensure that there is clear separation between the Concert attendees and other recreational patrons who chose to use areas that remain open for use.

Five areas within the Reservoir would be used for 6,620 parking spaces for the Concert, as shown in Table 1 in Section 3.1.17. An additional satellite parking area has been identified for staff and overflow parking at Erwin Street/ Sepulveda Boulevard (1,000 spaces) on the east side of the I-405 (shuttles would be provided). Thus, the total parking available for the Concert would be 7,620. This would comfortably accommodate parking for 25,000 attendees.

The three-day Concert would temporarily conflict with typical daily recreational uses within Woodley Park I and the portion of the Woodley Lakes Municipal Golf Course used for parking in the afternoon and would include more attendees than the number already analyzed for impacts in the Sepulveda Dam Basin Master Plan and EA. In addition, there could be indirect recreational impacts to the other resources in the Reservoir, such as the Anthony C. Beilenson Park including Lake Balboa, Bull Creek Restoration Area, the Universal Access Playground, and the southern portion of the Sepulveda Dam Reservoir Wildlife Area plus the cricket fields, archery range, and model airplane field. Although these resources will remain open and accessible, some recreationalists may be deterred by the Concert. As a result of these conflicting uses, an increased use of other neighborhood and regional parks and/or other recreational facilities in the city or surrounding region may occur during the duration of the Proponent's Preferred Alternative. Many of the users who access these sites would choose not to participate in a recreational activity on the Concert weekend or during the setup and breakdown days. However, those who would still choose to participate would be able to access other parks and recreational facilities within the city and region. Nearby recreation facilities which these users can visit include: Encino Park, Libbit Park, Delano Park, and Louise Park, which are all neighborhood parks under the jurisdiction of RAP located within a two-mile radius of the Site. The Westridge-Canyon Wilderness Park, located in the eastern Santa Monica Mountains, 3.85 miles southwest of the Proposed Project Site, provides more than 1,500 acres of open space with trail access for hikers, mountain bikes, and equestrians. Further, the Hansen Dam Recreation Center is located eight miles northeast of the Proposed Project Site and includes the following facilities: barbecue pits, unlit baseball diamond, children's play area, picnic tables and an unlit soccer field that would serve as an alternative recreational area during the Concert. In addition, the neighboring Encino and Balboa Municipal Golf Courses and the Van Nuys Municipal Golf Course would be open during the Concert weekend.

No permanent restrooms would be used by Concert patrons, which would not contribute to permanent or significant impacts to recreation support amenities. Other recreational support amenities, including picnic tables and turf areas would be interior to the Proposed Project Site

and thus inaccessible to the general public. However, after the Concert and teardown, the entire Proposed Project Site would be returned to pre-Concert conditions or better, including all existing recreational amenities utilized by attendees of the Concert. Therefore, due to the temporary nature of the Concert (including setup and teardown) and the restoration efforts that would be conducted during the post-Festival breakdown, the alternative would not have significant impacts on access to recreation amenity areas or recreation generally.

All impacts would be temporary. Overall impacts would be less than significant and no mitigation is required.

#### **4.14 POPULATION AND HOUSING**

##### **4.14.1 Affected Environment**

The Sepulveda Dam Reservoir is located in a highly urbanized area although there is no housing in the Reservoir itself. Because the Reservoir operates as a flood risk management facility, residential use is prohibited. The nearby areas surrounding the Sepulveda Dam Reservoir Recreational Area is urbanized and contains a mix of commercial and residential uses.

##### **4.14.2 Thresholds of Significance**

The Proposed Action would have a significant impact on population and housing if it would result in:

- An increase in population to the area; and/or
- Require an increase in housing or infrastructure to support the increased population.

##### **4.14.3 No Action Alternative**

The No Action Alternative would leave the concert site in its present conditions, and therefore, there would be no impacts to population or housing.

##### **4.14.4 Proposed Action**

The Proposed Action is a temporary Concert and would not add to the population nor require additional housing or infrastructure. There would be no significant impact to population or housing resources and no mitigation is required.

#### **4.15 SOCIOECONOMICS AND SOCIAL JUSTICE**

##### **4.15.1 Affected Environment**

Data from the U.S. Census Bureau was used to identify minority and/or low-income communities in the City of Los Angeles setting for the Proposed Project. The data includes the 2013-2017 American Community Survey (ACS) 5-year estimates for selected economic characteristics and demographic and housing estimates (U.S. Census Bureau 2019).

The study area includes potentially affected areas immediately surrounding the Proposed Project Site and areas that could potentially be affected by the Concert in the Park, including from traffic, air quality impacts, or closure of recreational amenities. The 2010 census data was used to identify the potential existence of minority and/or low-income communities.

The Council on Environmental Quality (CEQ) identifies minority groups as Asian, American Indian or Alaskan Native, Pacific Islander, Black not of Hispanic origin, and Latino. It defines minority population as any group of minorities that exceed 50 percent of the existing population in an area or where a minority group comprises a meaningfully greater percentage of the local population than in the general population. Additionally, the CEQ identifies low income as individuals living below the poverty level. For the purposes of this study, a low-income population is defined similarly as a local area population with more than 50 percent of people living below the poverty level.

As shown in Table 5, the communities surrounding the Proposed Project Site include large populations of white and Latino with some Asian, Black or African American and other races. There is a small (less than 2 percent) population of American Indian, Alaskan Native and less than 0.5 percent that are Native Hawaiian, or Pacific Islander. The population in these census tracts does not meet the definition of a minority community based on the criteria that the minority population comprises more than 50 percent of the total population. The minority population in each census tract was also compared with the City of Los Angeles average to identify where the minority population is potentially “meaningfully greater” than the minority population in the general population. The comparison identified that the percentage of minority populations is less than the City average.

**Table 5 City of Los Angeles Demographics**

<b>Census Data</b>	<b>City of Los Angeles</b>	<b>Total EJ Study Area<sup>1</sup></b>
Population	3,949,776	74,279
Demographics		
Asian	13.2%	4%
Black or African American	10.0%	4%
Hispanic or Latino	48.6%	33%
American Indian or Alaskan Indian	1.5%	0.4%
Native Hawaiian or Pacific Islander	0.4%	0.02%
White	55.0%	71%
Other	23.9%	12%
Median Household Income	\$54,501	\$65,947
Individuals Living Below Poverty Level <sup>2</sup>	29.2%	14.3%

Notes:

- 1 1277.11, 1283.02, 1284, 1288.01, 1289.01, 1320.02, 1321.01, 1327, 1329, 1390.01, 1392, 1396, 1397, 1413.02, 1414 from 2010 Census
- 2 Unrelated individuals 15 years and over.

Source:

- U.S. Census Bureau, American Fact Finder, ACS Demographic and Housing Estimates: 2013-2017 ACS 5-Year Estimates
- U.S. Census Bureau, American Fact Finder, ACS Selected Economic Characteristics: 2013-2017 ACS 5-Year Estimates
- U.S. Boundary, Census Tract Information, 2015.

The most recent data for income and poverty that is available at the census tract level is from the 2013-2017 American Community Service (ACS) 5-year estimates. The number of individuals living below the poverty level in the surrounding communities is about 14 percent based on 2010 census data. Therefore, the surrounding area does not have a significant minority or low-income population.

#### **4.15.2 Thresholds of Significance**

A significant impact could occur related to socioeconomics and environmental justice if the Proposed Action would result in:

- Negative impacts to a sector of the economy, productivity, competition, prices, or jobs or on the welfare of minority or low-income populations;
- Disproportionately high and adverse impacts on minorities, low income residents, or children; and/or
- A substantial population growth in an area that was induced by the project.

#### **4.15.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur. There are no current socioeconomic or environmental justice concerns and, therefore, no potential for impacts would occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.15.4 Proposed Action**

There are no disproportionate number of minority or low-income populations identified within the adjacent communities. In addition, the Proponent's Preferred Alternative consists of a music festival that would be temporary in nature and would potentially provide an overall economic benefit to the surrounding community through increased visitors and increased local employment opportunities. There would be no permanent population changes that would affect the availability of public services. Additionally, the Proposed Action would not displace existing housing nor result in insufficient housing availability for the existing population. Therefore, the Proposed Action would not have a disproportionate effect on a significant minority or low-income population and no significant impact regarding socioeconomics or environmental justice would occur.

### **4.16 UTILITIES**

#### **4.16.1 Affected Environment**

A variety of utilities such as water, electrical power, heating fuel, and sanitary sewerage services are provided within the Reservoir to the various recreation amenities in the Reservoir. The utility network is also utilized by several other entities for non-recreation purposes including the headquarters for the City's RAP Valley Region, which includes a warehouse and several offices, several Federal armed forces amenities in the Reservoir, which include an armory and a maintenance yard, as well as agricultural plots.

Overhead utilities include electrical and telephone poles and lines. Buried and underground utility corridors include potable and irrigation water, gas, telephone lines, stormwater, and sewer lines. These include the Haskell Ventura storm drain at the U.S. 101 underpass adjacent to the Dam, and a sanitary sewer crossing the Los Angeles River along the Orange Line Bridge.

Water and power are provided to the Reservoir by the Los Angeles Department of Water and Power (LADWP). Sewage services are provided by the City of Los Angeles Bureau of Sanitation (which runs the Tillman Water Reclamation Plant adjacent to Woodley Park I). Stormwater services are provided by Los Angeles Department of Public Works. Natural gas is provided by Southern California Gas Company.

In particular, there are several water lines that run through the Sepulveda Dam Reservoir Recreational Area. According to the Master Plan, Map 26 Utilities, a water line runs along the western border of the Proposed Project Site, parallel to Woodley Creek and turns east to connect to the TWRP, located north of the Proposed Project Site. Another water line runs parallel to the Hayvenhurst Channel and through the Woodley Lakes Golf Course.

#### **4.16.2 Thresholds of Significance**

The Proposed Action would have a significant impact on utilities if it would:

- Require a substantial modification to existing utility amenities that would have an adverse environmental impact on sensitive resources or land uses.

#### **4.16.3 No Action Alternative**

Under the No Action Alternative, the Proposed Project Site would continue in its present condition and a concert would not occur. No impacts to utilities would occur. The Proposed Project Site would continue as an open space and recreational area. The No Action Alternative would not meet the goals of a concert or of providing a music cultural event.

#### **4.16.4 Proposed Action**

Section 3.1 provides a description of various Concert characteristics, including expected use of local utilities. Approximately 300 portable toilets with hand washing stations would be provided for Concert attendees. Daily trash removal services during the three Concert days would also occur in the Concert and parking areas. At the end of each day, waste would be removed from the area and transferred to appropriate waste collection areas. Following the Concert and during the breakdown days, a comprehensive waste collection effort would be conducted throughout the site.

The primary potable water would come from LADWP. An estimated two gallons per day of potable water per person is anticipated, including water bottle fills, cooking, cleaning, and other concessions. This equates to approximately 180,000 gallons of potable water overall. An estimated 1.7 gallons of recycled (gray) water would be generated per person per day for the three-day Concert. This equates to approximately 153,000 gallons of wastewater. Waste water generated at the Woodley Park I area is currently treated at the TWRP. These facilities have been sufficient in treating waste water generated by recreational activities at Woodley Park I.

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Event lighting and power needs would be provided by generators brought to the site during event set up. No power would be needed from LADWP. While the Proposed Action would substantially increase the number of visitors to Woodley Park I, this increase would be temporary and would be partially offset by the portable restroom facilities provided by the Project Proponent.

No significant impacts to utilities would occur and, therefore, no mitigation is required.

## **5.0 SUMMARY OF MEASURES TO REDUCE IMPACTS**

The following Environmental Commitments would be made by the Project Proponent to ensure no significant impacts to environmental resources as a result of the Proposed Action.

### **Geology/Emergency Response Measure**

**GE-1** Emergency access routes will be identified as part of the development of the emergency response plan based on input from emergency responders to address an emergency such as an earthquake.

### **Water Resources Measures**

**WR-1** To minimize potential impacts should a rain event occur, locations of portable toilets will be located in areas of higher elevations to the extent feasible.

**WR-2** The Concert Proponent or organizer will prepare a final evacuation/emergency response plan in coordination with emergency response providers (LAPD/LAFD) and the Corps' Safety Office. The plan will include rainfall monitoring of the National Oceanic and Atmospheric Administration (NOAA) Quantitative Precipitation Forecast (QPF) with potential for evacuation where forecast events exceed 0.5 inches of rain in a day. The plan will be consistent with Corps' Engineer Manual 385-1-1, where applicable. The plan will address all protocols for response to public safety matters including weather, an accidental hazardous material exposure, earthquakes, early warning intelligence indicating the potential need to evacuate, and other conditions. The plan will be developed during the detailed planning phase of the Concert as directed by the emergency responders. The emergency response plan will include, for example:

- Evacuation details and routes for various emergency scenarios;
- Rain forecast event cancellation details;
- How emergency announcements will be broadcasted;
- How the shuttle system could be utilized as part of the evacuation process;
- Setup and breakdown procedures in the event of a significant emergency; and
- Human health emergency response.

**WR-3** Consistent with the evacuation/emergency response plan to be prepared (EC WR-2), the Concert Proponent will be immediately notified and all activities will be suspended if a rain event is forecast of 0.5 inches or greater in any 24-hour period for any of the event days, including eight (8) days of setup, the three (3) Concert days, or the four (4) breakdown days.

**WR-4** The Proponent will water all unpaved areas to minimize soil erosion as needed. All unpaved areas will be watered down prior to opening for use each day to minimize fugitive dust.

**WR-5** To reduce potential sediment erosion, vegetated areas disturbed by the event would be immediately returned to pre-event conditions by re-vegetating as appropriate.

**WR-6** Assembly of stage components and other Concert-related structures shall not be conducted during a rain event. Workers and equipment shall be removed from the area until the cessation of rain.

**WR-7** Fluids released because of spills, equipment failure (broken hose, punctured tank) or refueling will be immediately controlled, contained and cleaned-up per Federal and state regulations. All contaminated materials will be disposed of promptly and properly to prevent contamination of the site.

### **Air Quality**

**AQ-1** All refuse generated at the Proposed Project Site will be stored in covered containers and removed at regular intervals in compliance with solid waste regulations to ensure no objectionable odors.

**AQ-2** All on-road construction equipment will meet all applicable California on-road emission standards and will be licensed in the State of California. This does not apply to personal vehicles used by project workers.

**AQ-3** Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes; auxiliary power units will be used whenever possible. State law requires drivers of diesel fueled commercial vehicles weighing more than 10,000 pounds to not idle a diesel-fueled auxiliary power system (APS) for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if you have a sleeper berth and you are within 100 feet of a restricted area (homes and schools).

### **Cultural Resources**

**C-1** If previously unknown cultural resources are uncovered, work in the immediate area would cease until the requirements in 36 C.F.R. §800.13 are complied with. The on-site supervisor shall contact an approved archaeological consultant immediately. The on-site supervisor shall additionally divert all project-related activities to other areas until the discovery has been evaluated by the approved archaeological consultant, who will determine if further actions are warranted

### **Noise Measures**

**N-1** All equipment used will be muffled and maintained in good operating condition. All internal combustion engine driven equipment will be fitted with well-maintained mufflers in accordance with manufacturer's recommendations.

**N-2** All equipment shall include noise reduction measures, as applicable. These measures shall include, but may not be limited to, properly operating and maintained mufflers, correct placement of equipment engine covers, and ensuring the small loading equipment is equipped with rubber tires.

**N-3** All measures described in Section 3.1.4 of the Draft EA will be implemented for the applicable sound system.



### **Traffic Measures**

- T-1** Final traffic and parking management plan shall be prepared for the Concert to ensure that significant effects on traffic (including transit and pedestrian) conditions (congestion and safety), are minimized. The plan shall be submitted to LADOT special events division in advance of beginning setup for the Concert, after thorough coordination to ensure it meets the needs of the community, LADOT, transit providers, and safety providers.
- T-2** The final traffic and parking plan, as approved by LADOT, shall be implemented during all phases of the event: setup, the Concert, and breakdown.
- T-3** Public streets shall be kept operational to the extent possible, particularly during the morning and evening peak hours of traffic. If required, any lane closures would be minimized during peak traffic hours.
- T-4** If damage to roads occurs, the Concert Proponent shall coordinate repairs with the affected public agencies to ensure that any impacts to area roads are adequately repaired. Roads disturbed by trucks or equipment shall be properly restored to ensure long-term protection of road surfaces. Such repairs shall occur as part of the active installation and assembly period.
- T-5** The Concert Proponent or organizer (RAP or Valley Music Live LLC) shall obtain all applicable permits and clearances from appropriate agencies for transporting and hauling equipment and debris.

### **Health and Safety Measures**

- HS-1** Compliance with all applicable local, regional, state and Federal laws, policies, and regulations regarding the transportation, storage, handling, management, and disposal of hazardous materials and wastes.
- HS-2** If requested by emergency response providers, a Fire Incident Plan shall be prepared with the LAFD that will describe the LAFD operation conditions and emergency response in case of an accidental spill.
- HS-3** The Proponent shall prepare a plan to maintain public health and safety during all phases of the Concert. The plan shall include the following.
- An Emergency Response Plan as identified in Section 3.1.4.
  - Posting signs locating Concert setup areas and warning of the presence of equipment used to set up Concert facilities.
  - Provision of temporary walkways (with appropriate markings, barriers, and signs to safely separate pedestrians from vehicular traffic) and posing any necessary detour signs where a sidewalk or pedestrian or bicycle path or trail would be closed during Concert set-up or tear-down.

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## **6.0 CUMULATIVE IMPACTS**

A cumulative impact is an “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions” (40 CFR § 1508.7). Cumulative impacts can result from individually minor, but collectively significant, actions taking place over time (40 CFR § 1508.7).

Cumulative impacts of development within and around the Sepulveda Dam Reservoir have adversely affected water quality and quantity, air quality, and noise levels. Dense urbanization has adversely affected the presence of culturally valuable resources, as well as the native fish, wildlife and vegetative habitats that were historically present in the Sepulveda Dam Reservoir. Development both within and around the Sepulveda Dam Reservoir has increased the possibility for introduction of pollutants, toxic materials, wastes, and non-native plant and animal species to the Reservoir. The overall quality of the natural environment at the Sepulveda Reservoir has diminished significantly during industrialization and urbanization of Los Angeles County.

The Reservoir and its internal and surrounding areas have been the location of a number of past and present civil works construction projects, including a variety of developments within the Reservoir, as well as external, high development environment in areas adjacent to the Reservoir. Internal developments include the construction of numerous recreation projects, by the RAP and Corps, including Lake Balboa, the Sepulveda Reservoir Wildlife Lake, the Bull Creek Restoration project, various ball-fields including the Universal Access Ball Field at Anthony C. Beilenson Park and other recreation-based initiatives, as well as the TWRP, several military Reserve unit locations, and a variety of other developments including roadways. An MTA busway traverses the north Reservoir.

The Nowruz event is one of the four largest annual events which have been regularly programmed, at either Woodley or Anthony C. Beilenson Park areas, by City of Los Angeles recreation planners. This requires closure for six days prior and three days after, for a total of ten days. In 2011, Woodley Park hosted the Los Angeles Police Department Children’s Day Concert, which had an attendance of approximately 60,000 people.

The Bull Creek Restoration project was implemented between 2008 and 2009. Construction of the new Sports Complex west of Balboa Boulevard is completed. A Park and Ride location, off Victory Boulevard at the northern edge of the Reservoir was recently re-surfaced with some remodeling.

Taken together with these past impacts, the potential impacts from the Proposed Action would not result in significant cumulative impacts.

## **6.1 PRESENT CONDITIONS**

Approximately 12 to 18 large (greater-than-1,000 persons but usually fewer-than-5,000 person) events are held at Sepulveda Dam Reservoir each year, with four of these events averaging over 10,000 attendees. The majority of special events occur at Woodley Park I, with a smaller number occurring at Anthony C. Beilenson Park. Typical events average one to two days, with additional short periods of set-up and take-down/restoration of the areas (typically up to a week of closure periods). These events reduce opportunity for recreational activities by general park users for

temporary periods with associated temporary impacts. These special events tend to occur on weekends.

The Proponent's Preferred Alternative would not result in the construction or development of any land within the Reservoir. Implementation of the Proponent's Preferred Alternative would not cause significant effects to any resources when combined with anticipated effects from these concurrent activities.

## **6.2 FUTURE ACTIONS**

The Corps will continue to review special event proposals and anticipates that the number of special events annually will remain roughly the same. The Proposed Concert could occur in subsequent years, potentially being a reoccurring annual concert, and would be a factor in determining other special event proposals.

Construction work could occur in the future at the TWRP near the Proposed Project Site. In addition, several proposed, small sports areas, now being utilized in agricultural leases, may be developed by City of Los Angeles in the southeastern area of the Reservoir although these have not yet been designed. This work is subject to oversight by the Corps. The impacts from the Concert, taken together with the impacts from these future actions, is not likely to result insignificant cumulative effects in the Reservoir because if conducted and supervised as described, no significant effects to the environment are foreseen.

## **7.0 PUBLIC INVOLVEMENT AND COORDINATION**

### **7.1 AGENCY COORDINATION**

The Concert organizer (Valley Music Live LLC) met with the Corps prior to applying for a permit from the City RAP to brief the Corps on the Proposed Project. RAP is also continuing coordination with LAFD, LAPD, LADOT, and other City of Los Angeles departments.

### **7.2 LOCAL ORGANIZATION COORDINATION**

Between September 2017 and November 2018, the Concert organizer met with the San Fernando Valley Chapter of the Audubon Society, Sepulveda Wildlife Areas Steering Committee (SBWASC), the Lake Balboa Neighborhood Council (LBNC), and the chair of the Encino Neighborhood Council. The meetings consisted of a presentation and discussion of the Proponent's Preferred Alternative, and the Concert details. In addition, the Concert organizer had a production meeting in March 2017 with RAP, LAPD (Valley Division), LAFD, Classic Parking, A+ Traffic, Valley Cultural Center, RAP Golf, and CSC Security to discuss event logistics from a security, traffic, and safety perspective.

### **7.3 PUBLIC INVOLVEMENT**

Public involvement is a process by which interested parties and affected individuals, organizations, and government agencies (Federal, state and local) are consulted and included in the decision-making process for a planning effort. NEPA, among other Federal laws and regulations mandates public involvement. Federal planning policies and Corps practices and regulations have consistently required and encouraged this practice. All this must occur, however, with the awareness that the Corps cannot relinquish its legislated decision-making responsibility.

The Corps posted a public notice of its intent to prepare this Draft EA on the Corps' public website. A link to the notice was sent to many local stakeholders.

In addition, this Draft EA is being circulated for 30 days and public comments are being solicited. All comments received by the Corps in a timely manner will be actively considered before the EA is finalized and a Finding of No Significant Impact is signed, if appropriate.

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## **8.0 ENVIRONMENTAL LAWS AND COMPLIANCE**

The EA fulfills the requirements of NEPA and of other pertinent laws and regulations discussed below.

### **8.1 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) (42 USC 4321 ET SEQ.)**

NEPA is the nation's primary charter for protection of the environment. It establishes national environmental policy which provides a framework for Federal agencies to minimize environmental damage and requires Federal agencies to evaluate the potential environmental impacts of their proposed actions. Under NEPA, a Federal agency prepares an EA describing the environmental effects of any proposed action and alternatives to that action to determine if there are significant impacts requiring development of an EIS or if a FONSI is appropriate. The EA must identify measures necessary to avoid or minimize adverse impacts, and all impacts must be reduced to a level below significance in order to rely upon a FONSI.

This Draft EA has been prepared to address impacts associated with the Federal action of granting permission for the Proponent's Preferred Alternative and waiving certain conditions of the Sepulveda Dam Basin Master Plan Special Events Policy. This Draft EA is being circulated to the public and relevant agencies for a 30-day period.

### **8.2 U.S. FISH AND WILDLIFE COORDINATION ACT (16 USC 661 ET SEQ)**

This Act requires Federal agencies consult with the U.S. Fish and Wildlife Service (USFWS) and the fish and wildlife agencies of States where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted . . . or otherwise controlled or modified" by any agency under a Federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources," Including through preparation of a Fish and Wildlife Coordination Act Report. The intent is to give fish and wildlife conservation equal consideration with other purposes of water resources development projects.

As described in Section 4.9 of this Draft EA, no stream or body of water would be modified as a result of the Proponent's Preferred Alternative, and coordination is not required.

### **8.3 ENDANGERED SPECIES ACT (ESA) (AS AMENDED 16 USC 1531 ET SEQ)**

The ESA protects threatened and endangered species, and their designated critical habitat, from unauthorized take. Section 9 of the Act prohibits such take, and defines take as to harm, harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct. Section 7 of the ESA requires Federal agencies to ensure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat. Consultation with the USFWS or National Marine Fisheries Service is required if the Federal action may affect a federally-listed species or designated critical habitat.

Section 4.6 of this EA provides current information on Special Status species occurrences within the Sepulveda Dam Basin Reservoir vicinity. Least Bell's vireo, a federally listed bird, are known to be present within the Reservoir. While the Proposed Action would occur after nesting had been completed, there is a potential for individuals to still be present in the area. The

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Proposed Action would occur within the Woodley Park I area which is commonly used for small and large events. Parking would occur in areas specifically identified for this event and fenced off to prevent accidental damage to adjacent areas. As described in Section 4.6.4, no direct impacts to habitat known to support this listed bird would occur. The Concert would be located in an area that is highly developed. Woodley Park I is located more than 0.5 miles from the wildlife area and riparian habitat such as at Haskell Creek, reducing indirect impacts to least Bell's vireo from Concert-related noise. Environmental measures and commitments to further reduce the potential noise impacts are identified in Sections 3.1.4 and 4.10.5, respectively. There would be no effect to listed species or critical habitat resulting from the Proposed Action.

#### **8.4 MIGRATORY BIRD TREATY ACT (MBTA) (16 USC 703 ET SEQ)**

The MBTA prohibits the taking or harming of any migratory bird, its eggs, nests, or young without an appropriate Federal permit. Almost all native birds are covered by this Act and any bird listed in wildlife treaties between the United States and several countries, including Great Britain, Mexican States, Japan, and countries once part of the former Soviet Socialist Republics. A "migratory bird" includes the living bird, any parts of the bird, its nest, or eggs. The take of all migratory birds is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreation purposes and requiring harvest to be limited to levels that prevent over-utilization. Section 704 of the MBTA states that the Secretary of the Interior is authorized and directed to determine if, and by what means, the take of migratory birds should be allowed and to adopt suitable regulations permitting and governing take. Disturbance of the nest of a migratory bird requires a permit issued by the USFWS pursuant to Title 50 of the CFR.

The Proposed Action would occur approximately two weeks after the conclusion of nesting season for raptors. By late August/early September, nestlings have likely fledged and may still be within the Reservoir but are not likely being subsidized by parents. The Concert would be contained within the Woodley Park I area which is a developed area used throughout the year for large and small events. With implementation of project measures and environmental commitments in Sections 3.1.4 (Sound Systems), 3.1.13 (Security), and 3.1.17 (Parking), there would be no take or harm to raptors or other migratory birds and, therefore, the Proposed Action is in compliance with the MBTA

#### **8.5 CLEAN WATER ACT (CWA) (33 USC 1251 ET SEQ)**

The Proposed Project would occur within Woodley Park I and specific parking areas, and does not involve discharge of pollutants into waters of the US; therefore, a Section 402 permit is not required. Any similar projects to the Proposed Action that may be proposed in the future for development would need to comply with the Act during the planning and implementation process and may require a Storm Water Pollution Prevention Plan (SWPPP) under the NPDES under Section 402 of the Act.

As described in Section 4.9 (Water Resources), the Proposed Project would be located in an area outside waters subject to regulation under Section 404 and does not involve discharge of dredged or fill material in Waters of the U.S. As such, a 404(b)(1) analysis and 404 permit are not required and, therefore, the Project is in compliance with the Clean Water Act.



## **8.6 CLEAN AIR ACT (CAA) OF 1970 (42 USC 7401 ET SEQ)**

The principal air quality regulatory mechanism at the Federal level is the Clean Air Act (CAA) and in particular, the 1990 amendments to the CAA and the NAAQS that it establishes. These standards identify the maximum ambient (background) concentration levels of criteria pollutants that are considered to be safe, with an adequate margin of safety, to protect public health and welfare. The criteria pollutants include ozone, CO, NO<sub>2</sub> (which is a form of NO<sub>x</sub>), SO<sub>2</sub> (which is a form of SO<sub>x</sub>), PM<sub>10</sub>, PM<sub>2.5</sub>, and lead.

As stated in Section 4.3 (Air Quality), the Proponent's Preferred Alternative would not result in emissions in excess of Federal annual *de minimis* thresholds, and therefore no General Conformity Determination is necessary. The action would be consistent with and in full compliance with the CAA.

## **8.7 NOISE CONTROL ACT OF 1972, AS AMENDED (42 USC 4901 ET SEQ)**

Noise generated by any activity, which may affect special status species and human health or welfare on Federal, state, county, local, or private lands, must comply with noise limits specified in the Noise Control Act.

As described in Section 4.10 (Noise), the Proposed Project is limited to an area specifically identified for similar uses and there is a distance separation from habitat known to support a Federally listed bird. In addition, developments also provide a barrier to noise between the Concert and sensitive habitat and human receptors, reducing perceived noise in these areas. Major freeways bracket the Sepulveda Dam Reservoir and present a constant level of noise from traffic that would reduce any perception of noise generated by the Concert and no significant impact from noise in the area would occur. Any potential increases in noise would be temporary and would not conflict with the Noise Control Act.

## **8.8 NATIONAL HISTORIC PRESERVATION ACT (NHPA) (54 USC 300101 ET SEQ.)**

Section 106 of the NHPA requires any Federal agency to take responsibility for the impact of the decisions on historic resources. Under Section 106, Federal agencies are prohibited from approving any Federal "undertaking" (including the issuance of any license, permit, or approval), without 1) taking into account the effects of the undertaking on the historic properties, and 2) affording the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking. The NHPA forces an agency to stop and consider the consequences of its undertakings on any historic property and assures that the agency does so by requiring it to receive comment from the ACHP, or agencies acting in its stead, and from the public before proceeding with any such undertaking. In order to comply with the NHPA, a Federal agency considering an undertaking must go through the process outlined in the ACHP's regulations at 36 CFR Part 800.

As described in Section 4.7 (Cultural Resources), the Proposed Project would take place on previously disturbed areas and is limited to Woodley Park I and event-specific parking within the Reservoir. In addition, no project would be permanently physically implemented and, therefore, the Proposed Project would have no effect on historic properties. A letter documenting this determination was sent to the State Historic Preservation Officer (SHPO) during the week of February 4, 2019. Thus, consultation with interested Tribes and SHPO is being conducted

concurrently with public review of this Draft EA in order to take their comments and concerns into consideration. As such, the Proposed Project is in compliance with Section 306108 (“Section 106”) of the Act and its implementing regulations (36 CFR Part 800). The action would be compliant with the NHPA. If any cultural resources are discovered during implementation of this Proposed Project, they would need to be evaluated for their eligibility for inclusion in the NRHP pursuant to 36 CFR 800.13(b) regarding post-review discoveries.

## **8.9 EXECUTIVE ORDER 11988, FLOODPLAIN MANAGEMENT**

In accordance with this EO, the Corps shall take action to “...avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.”

This EO requires that Federal Agencies take action to manage the risk and/or impacts of floods on human safety, health, and welfare; and restore and preserve natural and beneficial values served by the floodplains. Each agency also has the responsibility to evaluate potential effects of Federal actions that may be made within floodplains.

Compliance with this EO requires proper implementation of Engineering Regulation (ER) 1165-2-26, which states that the policy of the Corps with respect to floodplain management is to formulate projects which, to the extent possible, avoid or minimize adverse impacts associated with use of the base (100-year) floodplain and avoid inducing development in the base floodplain unless there is no practicable alternative.

Since the Proposed Project is limited to Woodley Park I and event-specific parking within the Reservoir with no project to be permanently physically implemented, the Proposed Project would not result in further inducing development in the base floodplain.

There is no practicable alternative to undertaking the Proponent’s Preferred Alternative within the floodplain, as the Proposed Project Site is already established within the floodplain. Other sites were considered but not carried forward, as detailed in Section 2.3. The Proposed Action would occur within land that is already within the floodplain. The Proposed Project is in compliance with the ER 1165-2-26 for implementing EO 11988.

## **8.10 EXECUTIVE ORDER 12898, ENVIRONMENTAL JUSTICE FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS**

EO 12898 is intended to direct each Federal agency “to make achieving environmental justice part of its mission by identifying and addressing... disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the [U.S.] ...”

No minority or low-income communities would be disproportionately affected by implementation of the Proposed Action as detailed in Section 4.15. The Proponent’s Preferred Alternative is in compliance with the EO.

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# APPENDICES





## **APPENDIX A**

### **CORPS POLICY ON SPECIAL EVENTS AT SEPULVEDA DAM BASIN**



## APPENDIX A

### CORPS POLICY ON SPECIAL EVENTS AT SEPULVEDA DAM BASIN

1. Under Corps regulations, special events are subject to the review and approval of the Corps. At Sepulveda Dam Basin (Basin), events less than 1,000 people, subject to the restrictions included in the Master Plan, are within the authority of the City of Los Angeles as stated in paragraph 38(d) of the Lease. Events over 1,000 people are subject to specific review and approval by the District Commander.
2. Pursuant to Title 36, Section 327.21, special events are prohibited unless written permission has been granted by the District Commander. The public shall not be charged any fee by any event sponsor unless the District Commander has approved in writing the proposed schedule of fees. The District Commander shall have authority to revoke permission, require removal of any equipment, and require restoration of an area to pre-event condition, upon failure of the event sponsor to comply with terms and conditions of the permit/permission.
3. The approval of special events over 1,000 people is a “Federal action” requiring compliance with environmental laws including NEPA. Through the Environmental Assessment associated with this Master Plan, the Corps has assessed impacts associated with special events subject to the conditions and limitations below and determined the impacts are less than significant. Generally, no event-specific Environmental Assessment will be required for events that meet these conditions and limitations, after verification by the Corps.
  - a. Events must be held at one of the following locations:
    - i. Woodley Park I, Woodley Park II with parking available at the Woodley Park I and Woodley Park II parking lots or the overflow parking lot, north of the Woodley golf course
    - ii. North of Lake Balboa with parking available at the overflow parking lot, north of the Woodley golf course.
  - b. Events must be assessed on an event-specific basis.
  - c. Events may not obstruct use or access to any other area of the Basin. Recreational users of the adjacent areas may not be impeded.
  - d. Events may not exceed 5,000 people (including vendors, staff and attendees).
  - e. Events may not exceed two days of the event plus two days (48 hours) setup and two days (48 hours) cleanup/takedown. Event areas must remain open to the public during setup and cleanup except where safety and/or logistics is/are a concern.
  - f. No stunts, pyrotechnics, weapons, firearms, fires, aircraft including helicopters, animals other than dogs, and/ or water contact is/are permitted.
  - g. Amplified sound shall not exceed 100 dBl 20 feet from the source. This is considered the equivalent of a loud auto horn at 10 feet.
  - h. No amplified sound shall be permitted after 1:00 pm Monday through Saturday, nor after 7:00 pm on Sunday.
  - i. No ground disturbance (digging, leveling, etc.) of any area is permitted. No physical alteration (cutting of vegetation, moving rocks, etc.) is permitted. Relocation of placed “landscape boulders” are not included, but shall be returned

## APPENDIX A

- to their original position at the direction of the lessee. Staking of tents is permitted, but all holes shall be re-filled and compacted at the close of the event as holes left un-treated may cause people to trip and injure themselves.
- j. All cars shall be parked in designated parking stalls or on dirt shoulder. Cars on shoulder shall be parked parallel to the road. No vehicles may be parked on grass areas. Vehicles may be used at the site for setup and takedown only.
  - k. Cars for demonstration or exhibit shall place an oil pan beneath all vehicles when parked on the grass. All oil and fluid leaks/drips shall be cleaned up by the vehicle's owner at the close of the event. The event proponent shall be responsible for a final inspection and clean-up of the area.
4. Requests for events meeting the above limitations must be submitted to the Corps no less than 30 days prior to the proposed event date for review and confirmation that the event complies with applicable requirements.
  5. Events not meeting the above limitations are subject to a more detailed event-specific evaluation by the Corps, including an Environmental Assessment for NEPA compliance. Requests for such events must be submitted to the Corps no less than 90 days prior to the proposed event date.
    - a. The path around Lake Balboa may not be closed off from public use at any time.
    - b. Walk/runs, marathons, races etc. must be assessed on an event-specific basis.
    - c. Car shows must be assessed on an event-specific basis.
  6. All Special Events, including those assessed in the Master Plan EA, must meet the following requirements:
    - a. The right to charge is subject to the event proponent providing parking assistance, adequate policing for crowd control, and other services required for the health, safety, and welfare of event participants.
    - b. The event proponent must meet bonding, insurance, and other requirements under local laws.
    - c. No costs shall accrue to the Government.
    - d. Use of Project/Basin lands will not preempt public use of project recreational resources. All other Basin areas must remain accessible to non-event Basin users.
    - e. The event proponent shall provide a plot plan showing the proposed layout of the event. A Parking Plan (including plan for disabled parking), Traffic Plan, and Evacuation Plan shall be required. No vehicles may be parked on grassy areas outside designated parking. Event proponents shall encourage the use of public transit, carpooling, and bicycling to the event. Parking limitations for the event shall be posted one week prior to the event.
    - f. Event proponents must coordinate security requirements with the City. Generally, events over 1000 people should have 1 security guard/person for each 500 people.
    - g. The site shall be fully restored to prevent conditions by the event proponent within 48 hours of event closure. The City may require a bond from the event proponent.
    - h. Events longer than four days or over holidays are generally disfavored, requiring a special exception by the District Commander.
    - i. Either the City or the event proponent must submit a Post-Event Report within 30- days following the event containing the number of attendees, funds received

## APPENDIX A

- (see collection cost analysis below), any problems encountered, any damage to the property, and any other issues of concern.
- j. Collection of any funds in connection with the event, including for admission and parking, must be approved by the District Commander prior to the issuance of the City's permit. Collection of entry fees in excess of actual total costs will be paid to the Corps for legal disposal unless surplus proceeds are used for benefit to the project (Sepulveda Basin). A collection cost analysis will be provided by the event proponent within 30 days following the event. The Corps reserves the right to audit the City's records.
  - k. Adequate public restrooms (portable) and first-aid facility (e.g., tent), as applicable, must be provided although publicly available facilities may not be closed to the public during the event.
  - l. Alcohol sales (e.g., beer and wine garden) must be licensed and comply with applicable local laws.
  - m. The event proponent is required to hold the government harmless, accept liability and provision of indemnity and insurance are required.
  - n. The Corps must have access to the special event site at all times.
  - o. At no time may the Universal Access Play Area (south of Lake Balboa) be enclosed as part of any Special Event Area.
7. Events larger than 50 persons may not be held in the Wildlife Area including the area known as Woodley Park III. At no time may the parking lot for the Wildlife Area be closed for other uses, limiting access to the Wildlife Area.
  8. Walk/runs and bicycle rides shall not enter Environmentally Sensitive Areas at any time. Paths and or trails through the Basin for the event may be closed for the time period of the event and one hour before and one hour after the event for clean-up and removal of any and all trash created during the event.
  9. Presence of animals shall be limited to exhibition purposes. All animals shall be enclosed in a secure "pen". Petting zoos shall be continuously monitored and all animal waste and excess feed shall be removed continuously. A final inspection and clean-up of the area shall be the responsibility of the event proponent.



## **APPENDIX B**

### **PARKING AND TRAFFIC PLAN**







A+ Traffic Management, Inc.  
3208 Royal Street  
Los Angeles, Ca. 90007

March 15, 2018

**Subject: Valley Concert Traffic and Parking Assessment**

This preliminary document was created for the Valley Concert to outline and address the transportation logistics of having a multi-day event at the Woodley Park in the City of Van Nuys. Although area outside the park will be needed to accommodate the volume of vehicles, the attached exhibits focus mainly on the areas in and around the Woodley Park.

**Exhibit A: Vehicle Capacities** details anticipated capacities for individual parking lots using conservative formulas.

**Exhibit B: Valley Concert Transportation Planning Overview** addresses basic key elements associated with the overall vehicle and pedestrian ingress and egress for the event of acknowledging both (insert location area).

Feel free to contact our office if you have any questions or need any additional information.

Sincerely,

Antonio Tolentino  
President  
A+ Traffic Management, Inc.



**Exhibit A: Parking Area Vehicle Capacities**

**CENTRAL BASIN PARKING AREAS:**

<b>GENERAL LOCATION</b>	<b>DESCRIPTION</b>	<b>PARKING SPACES</b>
WOODLEY AVENUE	1. VIP PARKING SOUTH AIR NATIONAL GUARD	130
WOODLEY AVENUE	2. ADA/VIP SOUTH OF WATER PLANT	800
GOLF COURSE PARKING LOT/ DIRT LOT	3. SOUTH OF VICTORY BLVD	4,930
BALBOA BLVD	4. WEST OF LAKE BALBOA	500
BALBOA BLVD & VICTORY BLVD	5. NORTH WEST OF LAKE BALBOA	260
	<b>CENTRAL BASIN PARKING SUBTOTAL</b>	<b>6,620</b>

**SATELLITE PARKING AREAS:**

<b>GENERAL LOCATION</b>	<b>DESCRIPTION</b>	<b>PARKING SPACES</b>
ERWIN STREET / SEPULVEDA BLVD	STAFF / OVER FLOW	1,000
	<b>SATELLITE PARKNG SUBTOTAL</b>	<b>1,000</b>

**Total Parking Count: 7,620**

## Exhibit B: Valley Concert Transportation Planning Overview

**Valley Concert** is a 3-day music, arts and food festival to be held on the Woodley 1 portion of the Sepulveda Basin Recreational Area. The event will be scheduled for a August 31st, September 1st, and September 2nd of 2019.

Transportation Plan Overview based on 25,000 patrons and will require a detailed Transportation Plan to cover the following topics:

1. Parking Capacities
2. LADOT
3. Day Before and Day Of – Changeable Message Signs (CMS)
4. Traffic Ingress
5. Traffic Egress
6. ADA Parking
7. VIP Parking
8. Drop-off Zone
9. Employee Parking
10. Egress Pedestrian Crossing Point

### 1. Parking Capacities

The following formulas are based on typical industry standards for similar events:

25,000 expected attendance.

-1,350 expected mass transit/hired vehicles.

-5,000 rideshare pickup /drop-off program.

(-6,350) combined programs.

18,750 patrons needing parking divided by 3 person per vehicle = 6,150.

6,150 approximated parking spaces needed.

- Of the on-site parking spaces, a minimum of 97 ADA compliant spaces will be needed.
- Grass areas west of Lot 8 will be used for a bike valet.

### 2. LADOT / SPECIAL TRAFFIC DIVISION

- LADOT will be hired to monitor specific traffic intersections in and around the venue.
- Additional planning will also include the assistance and approval from the Los Angeles Special Traffic Operations (Ed Yu).
- 2-way radio communication between traffic and parking operator at all times.
- D.O.T. Locations.
  - Balboa Blvd. / Victory Blvd.
  - Woodley Ave / Victory Blvd.
  - Victory Blvd / 405 Fwy Exit
  - Balboa Blvd. / Burbank Blvd.
  - Burbank Blvd. / Hayvenhurst Ave.
  - Burbank Blvd. / Woodley Ave.
  - Burbank Blvd. / Sepulveda Blvd.
- Special Traffic Engineer & 1 Roaming Traffic Engineer.

### 3. DAY BEFORE AND DAY OF CHANGEABLE MESSAGE SIGNS (CMS)

- Changeable Message Signs (CMS) boards will be placed in advance of the event day to advise residential neighborhoods and business of the upcoming special event. Signage will indicate event name, dates and times.
- Day of event the same CMS boards will include event information and directional information inbound/outbound to and from parking locations.
- CalTrans– CMS boards will also be placed on freeways to direct patrons to use the proper freeway exits to the event location and preferred off ramps. (This will require CalTrans encroachment permits).

### 4. TRAFFIC INGRESS

- Signage and traffic personnel will be used to direct traffic to the preferred off ramps.
- The preferred controlled pattern will be in a clockwise order to minimize traffic congestion.
- Freeway access points will be 405 Fwy / 101 Fwy.
- The preferred off ramps:
  - 405 Fwy - Burbank Blvd.
  - 101 Fwy - Hayvenhurst/ Balboa Blvd.
- The parking lots will be filled in the following order:
  - Lot 2 – 800 spaces
  - Lot 3 – 4,930 spaces
  - Lot 4 – 500 spaces
  - Lot 5 – 260 spaces

### 5. TRAFFIC EGRESS - Parking Lot Exit Plan

- Lots 3 & 1 will exit northbound to Victory Blvd. east to the 405 Fwy.
- Lots 2 will exit southbound to Burbank Blvd. and travel east to the 405 Fwy or west to the 101 Fwy.
- Lot 3 will exit westbound past Lake Balboa onto Balboa Blvd.

### TRAFFIC EGRESS

- Road closures of Burbank Blvd. westbound from Woodley Ave. to Sepulveda Blvd.
- Road closures of Woodley Ave. from Victory Blvd. to Burbank Blvd.

### 6. ADA PARKING

- Is located in Lot 2 off of Woodley Avenue. Valid DMV Placard will be required. If required staff will have ADA approved golf carts to transport patrons to the venue.
- ADA /VIP Lot – 800 space

### 7.VIP Parking

- Color coded VIP parking passes will be given out in advance
- The passes will have directions and traffic patterns printed on the back to assist patrons and event staffing getting VIP patrons into the appropriate lot.
- Lot 1 is located on Woodley Ave. south of Victory Blvd.

#### 8. DROP-OFF ZONE

- Drop-off is located along Woodley Ave. north of Burbank Blvd. estimated 2,810ft. (230 cars) of available drop off space towards lot 3 using the northeast curbside of Woodley Ave.
- Law Enforcement will enforce illegal U-Turns along with parking staff to monitor that no vehicles park in the drop-off zone.

#### 9. EMPLOYEE PARKING

- Will utilize Orange Line to Victory Blvd., shuttles will be in possession of a Pass/Decal that allows them to utilize Orange Line to Victory Blvd. and will be allowed to drop off and pick up utilizing that same route.

#### 10. EGRESS PEDESTRIAN CROSSING POINT

- A pedestrian crossing point will be implemented west of parking Lot 2 to expedite pedestrian egress flow.
- Approved safety devices and safety vehicles will be used to prevent any vehicles from entering the temporary pedestrian crossing point.



## **APPENDIX C**

### **AIR QUALITY AND GREENHOUSE GAS EMISSIONS MODELING**

**Note: Emissions were calculated for a larger project that was never implemented**





## Angel Fest Assumptions

### *PROJECT OPERATIONAL INFORMATION*

#### Operational Mobile Sources

##### Car Trips:

VMT per Capita	24.8 (default)
Service Population	43550 (Project information)
Total VMT	1080040 daily
Car trips	18145.83333 daily (2.4 persons/vehicle)
VMT trip	59.52
Trips/acre	226.8229167 (80 acre park site)

##### Shuttles:

	<i>Daily Trips</i>	<i>Miles/roundtrip</i>	<i>Trips/hour</i>	<i>Hours of Shuttle Operation</i>	<i>Miles/day</i>	<i>Miles/year</i>
Pierce College	56	11.2	4	14	627	1881.6
Van Nuys Field	56	3.00	4.00	14.00	168	504
East of 405 Fwy	56	3	4	14	168	504
Hjelte Complex	56	2.00	4.00	14.00	112	336
Orange Line Pk	56	3.00	4.00	14.00	168	504
Aggregate Miles/trip					<b>4.44</b>	
Total	280					3729.6
trips/acre	3.5					

#### Water and wastewater

##### Assumptions:

No potable water usage from existing permanent site facilities. There is no connection to a water source for the outside booths. Water would be brought in by vendors for sale in bottles. Wash water would be trucked in to the portable restroom facilities.

No wastewater generation at existing site facilities. The outdoor venues would have portable restroom facilities and all waste/wastewater would be removed from site.

**Energy:**

Assumptions:

No electricity from the grid would be used. Electricity for outside stages/booths would be from generators.

1.341 HPh per kWh

**Generators:**

	<b>#</b>	<b>kW</b>	<b>HP</b>
300 kW Generators	2	300	402
125 kW Generators	7	125	168
225 kW Generators	2	225	302
60 kW Generators	6	60	80
40 kW Generators	5	40	54

**Solid Waste:**

3.15 lbs/pers (from Project info)  
65,000 Attendance  
65,000 Total people  
204750 lbs/day  
614250 lbs/event  
307.13 tons/event  
3.84 tons/acre

**Onsite Golf Carts:**

	<b>#</b>
4-passenger golf cart	162
6-passenger golf cart	88
10-passenger golf cart	0

**PROJECT CONSTRUCTION INFORMATION**

**Operational Mobile Sources**

<b>LandUseType</b>	<b>Land Use Unit Amount</b>	<b>Land Use Size Metric</b>
Recreational	80	Acre

**Schedule**

<b>PhaseNumber</b>	<b>PhaseName</b>	<b>PhaseStartDate</b>	<b>PhaseEndDate</b>	<b>NumDaysWeek</b>	<b>NumDays</b>
1	Site Preparation	2016/09/15	2016/09/26	6	10
2	Set-up	2016/09/27	2016/10/13	6	15
3	Breakdown	2016/10/17	2016/10/25	6	8

**Construction Equipment (from Project description where available)**

<b>PhaseName</b>	<b>OffRoadEquipmentT</b>	<b>OffRoadEquipment</b>	<b>UsageHours</b>
Site Preparation	Other Material Hand	2	8
Site Preparation	Skid Steer Loaders	2	8
Set-up	Aerial Lifts	25	10
Set-up	Cranes	1	10
Set-up	Cranes	1	10
Set-up	Forklifts	12	10
Set-up	Generator Sets	6	7
Set-up	Off-Highway Trucks	6	10
Set-up	Rubber Tired Loader	1	10
Set-up	Skid Steer Loaders	2	10
Breakdown	Aerial Lifts	25	10
Breakdown	Cranes	1	10
Breakdown	Cranes	1	10
Breakdown	Forklifts	12	10
Breakdown	Generator Sets	6	7
Breakdown	Off-Highway Trucks	6	10
Breakdown	Rubber Tired Loader	1	10
Breakdown	Skid Steer Loaders	2	10

**Vendor Trips (from Project description)**

Assume 60 total trips during set-up period, and 60 total trips during breakdown period.

**Unmitigated Festival Set-up & Breakdown 2016**

	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
	<b>Tons/Year</b>						
<b>Total</b>	<b>0.414</b>	<b>2.429</b>	<b>7.166</b>	<b>0.003</b>	<b>0.170</b>	<b>0.127</b>	
Diesel-powered equipment and construction worker trips	0.219	2.280	1.602	0.003	0.129	0.105	From CalEEMod outputs
Non-Construction Pre- and Post Festival Employee Mobile Emisions	0.007	0.014	0.141	0.000	0.025	0.007	From CalEEMod outputs
Onsite Gasoline Equip (golf carts)	0.188	0.136	5.423		0.016	0.015	

**Unmitigated Operations 2016**

	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
	<b>Tons/Year</b>						
<b>Total</b>	<b>0.303</b>	<b>1.082</b>	<b>6.792</b>	<b>0.015</b>	<b>1.248</b>	<b>0.359</b>	
Non-mobile Diesel Equipment Onsite	0.061	0.512	0.362	0.001	0.028	0.027	From CalEEMod outputs
On-Road Personal Vehicles (Patrons and Employees)	0.204	0.519	5.351	0.015	1.216	0.329	From CalEEMod outputs
On-Road Shuttle Buses	0.002	0.024	0.017	0.000	0.002	0.001	From CalEEMod outputs
Onsite Gasoline Equip (golf carts)	0.037	0.027	1.061		0.003	0.003	

**Project Unmitigated Construction + Operations 2016:**

ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Tons/Year</b>					
<b>0.717</b>	<b>3.511</b>	<b>13.958</b>	<b>0.019</b>	<b>1.419</b>	<b>0.486</b>

\*\*CalEEMod estimates emissions based on a full years of operation. The project only operates 3 days per year. Therefore the **on-road personal vehicle emissions** are adjusted to account for only 3 days worth of operation.

	CalEEMod Output	Adjusted Annual
Onroad cars:		
ROG	24.70	0.2036
Nox	62.97	0.5190
CO	649.29	5.3514
SOx	1.77	0.0146
PM10	147.48	1.2155
PM2.5	39.86	0.3285
CalEEMod VMT	393129504.8	
Project VMT	3,240,120	
Project % total	0.008241864	

\*\*CalEEMod estimates emissions based on a full years of operation. The project only operates 3 days per year. Therefore the **on-road shuttle bus emissions** are adjusted to account

for only 3 days worth of operation.

		CalEEMod Output	Adjusted Annual
Onroad cars:	ROG	0.23	0.0019
	Nox	2.95	0.0243
	CO	2.10	0.0173
	SOx	0.01	0.0001
	PM10	0.23	0.0019
	PM2.5	0.09	0.0007
CalEEMod VMT	452524.8		
Project VMT	3,730		
Project % total	0.008241758		

**Unmitigated Festival Set-up & Breakdown 2016**

	CO <sub>2</sub>	CH <sub>4</sub>	CH <sub>4</sub> (CO <sub>2</sub> e)	N <sub>2</sub> O	N <sub>2</sub> O (CO <sub>2</sub> e)	CO <sub>2</sub> e	
<b>Metric Tons/Year</b>							
<b>Total</b>	<b>356.197</b>	<b>0.077</b>	<b>1.930</b>	<b>0.000</b>	<b>0.000</b>	<b>358.127</b>	
Diesel-powered equipment and construction worker trips	272.006	0.073	1.813	0.000	0.000	273.818	From CalEEMod outputs
Non-Construction Pre- and Post Festival Employee Mobile Emisions	23.774	0.001	0.033	0.000	0.000	23.807	From CalEEMod outputs
Onsite Gasoline Equip (golf carts)	60.417	0.003	0.084	0.000	0.000	60.502	

**Unmitigated Operations 2016**

	CO <sub>2</sub>	CH <sub>4</sub>	CH <sub>4</sub> (CO <sub>2</sub> e)	N <sub>2</sub> O	N <sub>2</sub> O (CO <sub>2</sub> e)	CO <sub>2</sub> e	
<b>Metric Tons/Year</b>							
<b>Total</b>	<b>1200.435</b>	<b>0.077</b>	<b>1.928</b>	<b>0.000</b>	<b>0.000</b>	<b>1202.363</b>	
Non-mobile Diesel Equipment Onsite	69.633	0.022	0.555	0.000	0.000	70.188	From CalEEMod outputs
On-Road Personal Vehicles (Patrons and Employees)	1114.328	0.054	1.358	0.000	0.000	1115.686	From CalEEMod outputs
On-Road Shuttle Buses	4.653	0.000	0.001	0.000	0.000	4.654	From CalEEMod outputs
Onsite Gasoline Equip (golf carts)	11.821	0.001	0.014	0.000	0.000	11.835	

	CO <sub>2</sub>	CH <sub>4</sub>	CH <sub>4</sub> (CO <sub>2</sub> e)	N <sub>2</sub> O	N <sub>2</sub> O (CO <sub>2</sub> e)	CO <sub>2</sub> e
<b>Metric Tons/Year</b>						
<b>Project Unmitigated Construction + Operations 2016:</b>	<b>1556.632</b>	<b>0.154</b>	<b>3.858</b>	<b>0.000</b>	<b>0.000</b>	<b>1560.490</b>
Amortized Emissions						<b>52.016</b>

\*\*CalEEMod estimates emissions based on a full years of operation. The project only operates 3 days per year. Therefore the **on-road personal vehicle emissions** are adjusted to account for only 3 days worth of operation.

		CalEEMod Output	Adjusted Annual
Onroad cars:	CO2	135,203.36	1114.3277
	CH4	6.59	0.0543
	N2O	0.00	0.0000
CalEEMod VMT	393129504.8		
Project VMT	3,240,120		
Project % total	0.008241864		

\*\*CalEEMod estimates emissions based on a full years of operation. The project only operates 3 days per year. Therefore the **on-road shuttle bus emissions** are adjusted to account for only 3 days worth of operation.

		CalEEMod Output	Adjusted Annual
Onroad cars:	CO2	564.55	4.6529
	CH4	0.00	0.0000
	N2O	0.00	0.0000
CalEEMod VMT	452524.8		
Project VMT	3,730		
Project % total	0.008241758		



## Angel Fest Setup-Breakdown Diesel Emissions Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	80.00	Acre	80.00	3,484,800.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	12			<b>Operational Year</b>	2016
<b>Utility Company</b>					
<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0

#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Angel Fest setup-breakdown schedule

Off-road Equipment - Equipmen for Pre-festival site preparation

Off-road Equipment - 6 generators used to power lighttowers during setup period.

Off-road Equipment - Same equipment as setup for breakdown.

Trips and VMT - Worker trips based on CalEEMod's calculation; 60 vendor trucks during 15-day pre-festival period; same amount of trucks expected during breakdown period.

Vehicle Trips - No operation

Area Coating - No operation

Water And Wastewater - No operation

Solid Waste - No operation

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Interior	5227200	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	60.00	10.00
tblConstructionPhase	NumDays	60.00	15.00
tblConstructionPhase	NumDays	60.00	8.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	PhaseEndDate	10/22/2016	10/25/2016
tblConstructionPhase	PhaseStartDate	10/14/2016	10/17/2016
tblOffRoadEquipment	HorsePower	226.00	400.00
tblOffRoadEquipment	HorsePower	84.00	27.00
tblOffRoadEquipment	HorsePower	226.00	400.00
tblOffRoadEquipment	HorsePower	84.00	27.00
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.36	0.36

tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	6.88	0.00
tblTripsAndVMT	VendorTripNumber	0.00	60.00
tblTripsAndVMT	VendorTripNumber	0.00	60.00
tblVehicleTrips	ST_TR	1.59	0.00

tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	OutdoorWaterUseRate	95,318,507.97	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.2191	2.2799	1.6017	2.9700e-003	0.0218	0.1072	0.1290	5.8700e-003	0.0992	0.1050	0.0000	272.0055	272.0055	0.0725	0.0000	273.5278
<b>Total</b>	<b>0.2191</b>	<b>2.2799</b>	<b>1.6017</b>	<b>2.9700e-003</b>	<b>0.0218</b>	<b>0.1072</b>	<b>0.1290</b>	<b>5.8700e-003</b>	<b>0.0992</b>	<b>0.1050</b>	<b>0.0000</b>	<b>272.0055</b>	<b>272.0055</b>	<b>0.0725</b>	<b>0.0000</b>	<b>273.5278</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.2191	2.2799	1.6017	2.9700e-003	0.0218	0.1072	0.1290	5.8700e-003	0.0992	0.1050	0.0000	272.0052	272.0052	0.0725	0.0000	273.5275
<b>Total</b>	<b>0.2191</b>	<b>2.2799</b>	<b>1.6017</b>	<b>2.9700e-003</b>	<b>0.0218</b>	<b>0.1072</b>	<b>0.1290</b>	<b>5.8700e-003</b>	<b>0.0992</b>	<b>0.1050</b>	<b>0.0000</b>	<b>272.0052</b>	<b>272.0052</b>	<b>0.0725</b>	<b>0.0000</b>	<b>273.5275</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/15/2016	9/26/2016	6	10	
2	Set-up	Site Preparation	9/27/2016	10/13/2016	6	15	
3	Breakdown	Site Preparation	10/17/2016	10/25/2016	6	8	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Set-up	Rubber Tired Dozers	0	8.00	255	0.40
Breakdown	Rubber Tired Dozers	0	8.00	255	0.40
Set-up	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Breakdown	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Other Material Handling Equipment	2	8.00	167	0.40
Site Preparation	Skid Steer Loaders	2	8.00	64	0.37
Set-up	Aerial Lifts	25	10.00	62	0.31
Set-up	Cranes	1	10.00	226	0.29
Set-up	Cranes	1	10.00	400	0.29
Set-up	Forklifts	12	10.00	89	0.20
Set-up	Generator Sets	6	7.00	27	0.74

Set-up	Off-Highway Trucks	6	10.00	400	0.38
Set-up	Rubber Tired Loaders	1	10.00	199	0.36
Set-up	Skid Steer Loaders	2	10.00	64	0.37
Breakdown	Aerial Lifts	25	10.00	62	0.31
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	0	8.00	255	0.40
Breakdown	Cranes	1	10.00	226	0.29
Breakdown	Cranes	1	10.00	400	0.29
Breakdown	Forklifts	12	10.00	89	0.20
Breakdown	Generator Sets	6	7.00	27	0.74
Breakdown	Off-Highway Trucks	6	10.00	400	0.38
Breakdown	Rubber Tired Loaders	1	10.00	199	0.36
Breakdown	Skid Steer Loaders	2	10.00	64	0.37

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Set-up	54	135.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Breakdown	54	135.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 Site Preparation - 2016

#### Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					

Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8300e-003	0.0754	0.0536	8.0000e-005		4.0800e-003	4.0800e-003		3.7500e-003	3.7500e-003	0.0000	7.2585	7.2585	2.1900e-003	0.0000	7.3045
<b>Total</b>	<b>6.8300e-003</b>	<b>0.0754</b>	<b>0.0536</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>4.0800e-003</b>	<b>4.0800e-003</b>	<b>0.0000</b>	<b>3.7500e-003</b>	<b>3.7500e-003</b>	<b>0.0000</b>	<b>7.2585</b>	<b>7.2585</b>	<b>2.1900e-003</b>	<b>0.0000</b>	<b>7.3045</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	3.2000e-004	3.3300e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5346	0.5346	3.0000e-005	0.0000	0.5353
<b>Total</b>	<b>2.2000e-004</b>	<b>3.2000e-004</b>	<b>3.3300e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5346</b>	<b>0.5346</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5353</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8300e-003	0.0754	0.0536	8.0000e-005		4.0800e-003	4.0800e-003		3.7500e-003	3.7500e-003	0.0000	7.2585	7.2585	2.1900e-003	0.0000	7.3045
<b>Total</b>	<b>6.8300e-003</b>	<b>0.0754</b>	<b>0.0536</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>4.0800e-003</b>	<b>4.0800e-003</b>	<b>0.0000</b>	<b>3.7500e-003</b>	<b>3.7500e-003</b>	<b>0.0000</b>	<b>7.2585</b>	<b>7.2585</b>	<b>2.1900e-003</b>	<b>0.0000</b>	<b>7.3045</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e-004	3.2000e-004	3.3300e-003	1.0000e-005	5.5000e-004	1.0000e-005	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5346	0.5346	3.0000e-005	0.0000	0.5353
<b>Total</b>	<b>2.2000e-004</b>	<b>3.2000e-004</b>	<b>3.3300e-003</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.0000e-005</b>	<b>5.5000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5346</b>	<b>0.5346</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.5353</b>

**3.3 Set-up - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1298	1.3899	0.8866	1.6400e-003		0.0665	0.0665		0.0616	0.0616	0.0000	152.5272	152.5272	0.0452	0.0000	153.4752
<b>Total</b>	<b>0.1298</b>	<b>1.3899</b>	<b>0.8866</b>	<b>1.6400e-003</b>	<b>0.0000</b>	<b>0.0665</b>	<b>0.0665</b>	<b>0.0000</b>	<b>0.0616</b>	<b>0.0616</b>	<b>0.0000</b>	<b>152.5272</b>	<b>152.5272</b>	<b>0.0452</b>	<b>0.0000</b>	<b>153.4752</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0500e-003	0.0412	0.0535	1.0000e-004	2.7600e-003	6.2000e-004	3.3800e-003	7.9000e-004	5.7000e-004	1.3600e-003	0.0000	8.9588	8.9588	7.0000e-005	0.0000	8.9602
Worker	4.4200e-003	6.4600e-003	0.0674	1.4000e-004	0.0111	1.1000e-004	0.0112	2.9500e-003	1.0000e-004	3.0500e-003	0.0000	10.8265	10.8265	6.1000e-004	0.0000	10.8394
<b>Total</b>	<b>8.4700e-003</b>	<b>0.0476</b>	<b>0.1208</b>	<b>2.4000e-004</b>	<b>0.0139</b>	<b>7.3000e-004</b>	<b>0.0146</b>	<b>3.7400e-003</b>	<b>6.7000e-004</b>	<b>4.4100e-003</b>	<b>0.0000</b>	<b>19.7852</b>	<b>19.7852</b>	<b>6.8000e-004</b>	<b>0.0000</b>	<b>19.7996</b>

**Mitigated Construction On-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1298	1.3899	0.8866	1.6400e-003		0.0665	0.0665		0.0616	0.0616	0.0000	152.5270	152.5270	0.0452	0.0000	153.4751
<b>Total</b>	<b>0.1298</b>	<b>1.3899</b>	<b>0.8866</b>	<b>1.6400e-003</b>	<b>0.0000</b>	<b>0.0665</b>	<b>0.0665</b>	<b>0.0000</b>	<b>0.0616</b>	<b>0.0616</b>	<b>0.0000</b>	<b>152.5270</b>	<b>152.5270</b>	<b>0.0452</b>	<b>0.0000</b>	<b>153.4751</b>

**Mitigated Construction Off-Site**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.0500e-003	0.0412	0.0535	1.0000e-004	2.7600e-003	6.2000e-004	3.3800e-003	7.9000e-004	5.7000e-004	1.3600e-003	0.0000	8.9588	8.9588	7.0000e-005	0.0000	8.9602
Worker	4.4200e-003	6.4600e-003	0.0674	1.4000e-004	0.0111	1.1000e-004	0.0112	2.9500e-003	1.0000e-004	3.0500e-003	0.0000	10.8265	10.8265	6.1000e-004	0.0000	10.8394

Total	8.4700e-003	0.0476	0.1208	2.4000e-004	0.0139	7.3000e-004	0.0146	3.7400e-003	6.7000e-004	4.4100e-003	0.0000	19.7852	19.7852	6.8000e-004	0.0000	19.7996
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### 3.4 Breakdown - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0693	0.7413	0.4729	8.7000e-004		0.0355	0.0355		0.0328	0.0328	0.0000	81.3478	81.3478	0.0241	0.0000	81.8535
<b>Total</b>	<b>0.0693</b>	<b>0.7413</b>	<b>0.4729</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>0.0355</b>	<b>0.0355</b>	<b>0.0000</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0000</b>	<b>81.3478</b>	<b>81.3478</b>	<b>0.0241</b>	<b>0.0000</b>	<b>81.8535</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0220	0.0285	5.0000e-005	1.4700e-003	3.3000e-004	1.8000e-003	4.2000e-004	3.0000e-004	7.2000e-004	0.0000	4.7780	4.7780	4.0000e-005	0.0000	4.7788
Worker	2.3600e-003	3.4500e-003	0.0359	8.0000e-005	5.9200e-003	6.0000e-005	5.9700e-003	1.5700e-003	5.0000e-005	1.6200e-003	0.0000	5.7741	5.7741	3.3000e-004	0.0000	5.7810
<b>Total</b>	<b>4.5200e-003</b>	<b>0.0254</b>	<b>0.0644</b>	<b>1.3000e-004</b>	<b>7.3900e-003</b>	<b>3.9000e-004</b>	<b>7.7700e-003</b>	<b>1.9900e-003</b>	<b>3.5000e-004</b>	<b>2.3400e-003</b>	<b>0.0000</b>	<b>10.5521</b>	<b>10.5521</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>10.5598</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0693	0.7413	0.4729	8.7000e-004		0.0355	0.0355		0.0328	0.0328	0.0000	81.3477	81.3477	0.0241	0.0000	81.8534
<b>Total</b>	<b>0.0693</b>	<b>0.7413</b>	<b>0.4729</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>0.0355</b>	<b>0.0355</b>	<b>0.0000</b>	<b>0.0328</b>	<b>0.0328</b>	<b>0.0000</b>	<b>81.3477</b>	<b>81.3477</b>	<b>0.0241</b>	<b>0.0000</b>	<b>81.8534</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1600e-003	0.0220	0.0285	5.0000e-005	1.4700e-003	3.3000e-004	1.8000e-003	4.2000e-004	3.0000e-004	7.2000e-004	0.0000	4.7780	4.7780	4.0000e-005	0.0000	4.7788
Worker	2.3600e-003	3.4500e-003	0.0359	8.0000e-005	5.9200e-003	6.0000e-005	5.9700e-003	1.5700e-003	5.0000e-005	1.6200e-003	0.0000	5.7741	5.7741	3.3000e-004	0.0000	5.7810
<b>Total</b>	<b>4.5200e-003</b>	<b>0.0254</b>	<b>0.0644</b>	<b>1.3000e-004</b>	<b>7.3900e-003</b>	<b>3.9000e-004</b>	<b>7.7700e-003</b>	<b>1.9900e-003</b>	<b>3.5000e-004</b>	<b>2.3400e-003</b>	<b>0.0000</b>	<b>10.5521</b>	<b>10.5521</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>10.5598</b>

## Angel Fest Pre- and Post-Festival Employee Worker Trips Only Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	80.00	Acre	80.00	3,484,800.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	12			<b>Operational Year</b>	2016

#### Utility Company

<b>CO2 Intensity (lb/MWhr)</b>	0	<b>CH4 Intensity (lb/MWhr)</b>	0	<b>N2O Intensity (lb/MWhr)</b>	0
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#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Accounting for employee trips one week prior to festival and 4 days post festival.

Off-road Equipment - No construction equipment.

Off-road Equipment - No construction equipment.

Off-road Equipment - No construction equipment.

Off-road Equipment - No construction equipment.

Off-road Equipment - No construction equipment.

Off-road Equipment - No construction equipment.

Off-road Equipment - No construction equipment.

Off-road Equipment - No construction equipment.













tblTripsAndVMT	WorkerTripNumber	293.00	108.00
tblTripsAndVMT	WorkerTripNumber	293.00	125.00
tblTripsAndVMT	WorkerTripNumber	293.00	125.00
tblTripsAndVMT	WorkerTripNumber	293.00	125.00
tblTripsAndVMT	WorkerTripNumber	293.00	229.00
tblTripsAndVMT	WorkerTripNumber	293.00	229.00
tblTripsAndVMT	WorkerTripNumber	293.00	125.00
tblTripsAndVMT	WorkerTripNumber	293.00	63.00
tblTripsAndVMT	WorkerTripNumber	293.00	375.00
tblTripsAndVMT	WorkerTripNumber	293.00	333.00
tblTripsAndVMT	WorkerTripNumber	293.00	292.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblTripsAndVMT	WorkerTripNumber	293.00	13.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	LDA	0.53	0.69
tblVehicleEF	LDA	0.53	0.69
tblVehicleEF	LDA	0.53	0.69
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.18	0.23

tbIVehicleEF	LDT2	0.18	0.23
tbIVehicleEF	LDT2	0.18	0.23
tbIVehicleEF	LHD1	0.04	0.00
tbIVehicleEF	LHD1	0.04	0.00
tbIVehicleEF	LHD1	0.04	0.00
tbIVehicleEF	LHD2	6.2830e-003	0.00
tbIVehicleEF	LHD2	6.2830e-003	0.00
tbIVehicleEF	LHD2	6.2830e-003	0.00
tbIVehicleEF	MCY	3.6910e-003	0.00
tbIVehicleEF	MCY	3.6910e-003	0.00
tbIVehicleEF	MCY	3.6910e-003	0.00
tbIVehicleEF	MDV	0.13	0.00
tbIVehicleEF	MDV	0.13	0.00
tbIVehicleEF	MDV	0.13	0.00
tbIVehicleEF	MH	1.6550e-003	0.00
tbIVehicleEF	MH	1.6550e-003	0.00
tbIVehicleEF	MH	1.6550e-003	0.00
tbIVehicleEF	MHD	0.02	0.00
tbIVehicleEF	MHD	0.02	0.00
tbIVehicleEF	MHD	0.02	0.00
tbIVehicleEF	OBUS	2.4530e-003	0.00
tbIVehicleEF	OBUS	2.4530e-003	0.00
tbIVehicleEF	OBUS	2.4530e-003	0.00
tbIVehicleEF	SBUS	5.4300e-004	0.00
tbIVehicleEF	SBUS	5.4300e-004	0.00
tbIVehicleEF	SBUS	5.4300e-004	0.00
tbIVehicleEF	UBUS	3.1570e-003	0.00
tbIVehicleEF	UBUS	3.1570e-003	0.00
tbIVehicleEF	UBUS	3.1570e-003	0.00
tbIVehicleTrips	CC_TL	8.40	59.58

tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	59.58
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	59.58
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	1.24
tblVehicleTrips	SU_TR	1.59	1.24
tblVehicleTrips	WD_TR	1.59	1.24
tblWater	OutdoorWaterUseRate	95,318,507.97	0.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	6.8200e-003	0.0137	0.1410	3.1000e-004	0.0246	2.3000e-004	0.0248	6.5300e-003	2.1000e-004	6.7400e-003	0.0000	23.7742	23.7742	1.3300e-003	0.0000	23.8021
<b>Total</b>	<b>6.8200e-003</b>	<b>0.0137</b>	<b>0.1410</b>	<b>3.1000e-004</b>	<b>0.0246</b>	<b>2.3000e-004</b>	<b>0.0248</b>	<b>6.5300e-003</b>	<b>2.1000e-004</b>	<b>6.7400e-003</b>	<b>0.0000</b>	<b>23.7742</b>	<b>23.7742</b>	<b>1.3300e-003</b>	<b>0.0000</b>	<b>23.8021</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	6.8200e-003	0.0137	0.1410	3.1000e-004	0.0246	2.3000e-004	0.0248	6.5300e-003	2.1000e-004	6.7400e-003	0.0000	23.7742	23.7742	1.3300e-003	0.0000	23.8021
<b>Total</b>	<b>6.8200e-003</b>	<b>0.0137</b>	<b>0.1410</b>	<b>3.1000e-004</b>	<b>0.0246</b>	<b>2.3000e-004</b>	<b>0.0248</b>	<b>6.5300e-003</b>	<b>2.1000e-004</b>	<b>6.7400e-003</b>	<b>0.0000</b>	<b>23.7742</b>	<b>23.7742</b>	<b>1.3300e-003</b>	<b>0.0000</b>	<b>23.8021</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Day 0 Employees	Architectural Coating	9/27/2016	9/27/2016	6	1	
2	Day 1 Employees	Architectural Coating	9/28/2016	9/28/2016	6	1	
3	Day 2 Employees	Architectural Coating	9/29/2016	9/29/2016	6	1	
4	Day 3 Employees	Architectural Coating	9/30/2016	9/30/2016	6	1	
5	Day 4 Employees	Architectural Coating	10/1/2016	10/1/2016	6	1	
6	Day 5 Employees	Architectural Coating	10/3/2016	10/3/2016	6	1	
7	Day 6 Employees	Architectural Coating	10/4/2016	10/4/2016	6	1	
8	Day 7 Employees	Architectural Coating	10/5/2016	10/5/2016	6	1	
9	Day 8 Employees	Architectural Coating	10/6/2016	10/6/2016	6	1	
10	Day 9 Employees	Architectural Coating	10/7/2016	10/7/2016	6	1	
11	Day 10 Employees	Architectural Coating	10/8/2016	10/8/2016	6	1	
12	Day 11 Employees	Architectural Coating	10/10/2016	10/10/2016	6	1	

13	Day 12 Employees	Architectural Coating	10/11/2016	10/11/2016	6	1
14	Day 13 Employees	Architectural Coating	10/12/2016	10/12/2016	6	1
15	Day 14 Employees	Architectural Coating	10/13/2016	10/13/2016	6	1
16	Day 18 Employees	Architectural Coating	10/17/2016	10/17/2016	6	1
17	Day 19 Employees	Architectural Coating	10/18/2016	10/18/2016	6	1
18	Day 20 Employees	Architectural Coating	10/19/2016	10/19/2016	6	1
19	Day 21 Employees	Architectural Coating	10/20/2016	10/20/2016	6	1
20	Day 22 Employees	Architectural Coating	10/21/2016	10/21/2016	6	1

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Day 13 Employees	Air Compressors	0	6.00	78	0.48
Day 8 Employees	Excavators	0	8.00	162	0.38
Day 8 Employees	Concrete/Industrial Saws	0	8.00	81	0.73
Day 10 Employees	Excavators	0	8.00	162	0.38
Day 11 Employees	Cranes	0	7.00	226	0.29
Day 11 Employees	Forklifts	0	8.00	89	0.20
Day 11 Employees	Generator Sets	0	8.00	84	0.74
Day 12 Employees	Pavers	0	8.00	125	0.42
Day 12 Employees	Rollers	0	8.00	80	0.38
Day 8 Employees	Rubber Tired Dozers	0	8.00	255	0.40
Day 10 Employees	Rubber Tired Dozers	0	8.00	255	0.40
Day 11 Employees	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Day 10 Employees	Graders	0	8.00	174	0.41
Day 10 Employees	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Day 12 Employees	Paving Equipment	0	8.00	130	0.36
Day 9 Employees	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Day 9 Employees	Rubber Tired Dozers	0	8.00	255	0.40
Day 10 Employees	Scrapers	0	8.00	361	0.48
Day 11 Employees	Welders	0	8.00	46	0.45
Day 8 Employees	Air Compressors	0	6.00	78	0.48
Day 20 Employees	Air Compressors	0	6.00	78	0.48
Day 21 Employees	Air Compressors	0	6.00	78	0.48
Day 9 Employees	Air Compressors	0	6.00	78	0.48
Day 10 Employees	Air Compressors	0	6.00	78	0.48
Day 11 Employees	Air Compressors	0	6.00	78	0.48
Day 12 Employees	Air Compressors	0	6.00	78	0.48
Day 14 Employees	Air Compressors	0	6.00	78	0.48
Day 18 Employees	Air Compressors	0	6.00	78	0.48
Day 19 Employees	Air Compressors	0	6.00	78	0.48
Day 0 Employees	Air Compressors	0	6.00	78	0.48
Day 1 Employees	Air Compressors	0	6.00	78	0.48
Day 2 Employees	Air Compressors	0	6.00	78	0.48
Day 3 Employees	Air Compressors	0	6.00	78	0.48
Day 4 Employees	Air Compressors	0	6.00	78	0.48
Day 5 Employees	Air Compressors	0	6.00	78	0.48
Day 6 Employees	Air Compressors	0	6.00	78	0.48
Day 7 Employees	Air Compressors	0	6.00	78	0.48
Day 22 Employees	Air Compressors	0	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Day 8 Employees	0	108.00	0.00	0.00	29.40	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Day 9 Employees	0	125.00	0.00	0.00	29.40	6.90	20.00	LD_Mix	HDT_Mix	HHDT







**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**3.3 Day 1 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

### 3.4 Day 2 Employees - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**3.5 Day 3 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**3.6 Day 4 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					



Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

### 3.7 Day 5 Employees - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378

<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**3.8 Day 6 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					



**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**



Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	6.6000e-004	6.7800e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1432	1.1432	6.0000e-005	0.0000	1.1445
<b>Total</b>	<b>3.3000e-004</b>	<b>6.6000e-004</b>	<b>6.7800e-003</b>	<b>1.0000e-005</b>	<b>1.1800e-003</b>	<b>1.0000e-005</b>	<b>1.1900e-003</b>	<b>3.1000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.1432</b>	<b>1.1432</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.1445</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	6.6000e-004	6.7800e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.1432	1.1432	6.0000e-005	0.0000	1.1445
<b>Total</b>	<b>3.3000e-004</b>	<b>6.6000e-004</b>	<b>6.7800e-003</b>	<b>1.0000e-005</b>	<b>1.1800e-003</b>	<b>1.0000e-005</b>	<b>1.1900e-003</b>	<b>3.1000e-004</b>	<b>1.0000e-005</b>	<b>3.2000e-004</b>	<b>0.0000</b>	<b>1.1432</b>	<b>1.1432</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.1445</b>

### 3.11 Day 9 Employees - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	7.6000e-004	7.8500e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3231	1.3231	7.0000e-005	0.0000	1.3247
<b>Total</b>	<b>3.8000e-004</b>	<b>7.6000e-004</b>	<b>7.8500e-003</b>	<b>2.0000e-005</b>	<b>1.3700e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.3231</b>	<b>1.3231</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.3247</b>

#### Mitigated Construction On-Site







**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	7.6000e-004	7.8500e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3231	1.3231	7.0000e-005	0.0000	1.3247
<b>Total</b>	<b>3.8000e-004</b>	<b>7.6000e-004</b>	<b>7.8500e-003</b>	<b>2.0000e-005</b>	<b>1.3700e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.3231</b>	<b>1.3231</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.3247</b>

**3.13 Day 11 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	7.6000e-004	7.8500e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3231	1.3231	7.0000e-005	0.0000	1.3247
<b>Total</b>	<b>3.8000e-004</b>	<b>7.6000e-004</b>	<b>7.8500e-003</b>	<b>2.0000e-005</b>	<b>1.3700e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.3231</b>	<b>1.3231</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.3247</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Worker	3.8000e-004	7.6000e-004	7.8500e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3231	1.3231	7.0000e-005	0.0000	1.3247
<b>Total</b>	<b>3.8000e-004</b>	<b>7.6000e-004</b>	<b>7.8500e-003</b>	<b>2.0000e-005</b>	<b>1.3700e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.3231</b>	<b>1.3231</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.3247</b>

### 3.14 Day 12 Employees - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	1.4000e-003	0.0144	3.0000e-005	2.5100e-003	2.0000e-005	2.5300e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4240	2.4240	1.4000e-004	0.0000	2.4268
<b>Total</b>	<b>7.0000e-004</b>	<b>1.4000e-003</b>	<b>0.0144</b>	<b>3.0000e-005</b>	<b>2.5100e-003</b>	<b>2.0000e-005</b>	<b>2.5300e-003</b>	<b>6.7000e-004</b>	<b>2.0000e-005</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>2.4240</b>	<b>2.4240</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.4268</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	1.4000e-003	0.0144	3.0000e-005	2.5100e-003	2.0000e-005	2.5300e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4240	2.4240	1.4000e-004	0.0000	2.4268
<b>Total</b>	<b>7.0000e-004</b>	<b>1.4000e-003</b>	<b>0.0144</b>	<b>3.0000e-005</b>	<b>2.5100e-003</b>	<b>2.0000e-005</b>	<b>2.5300e-003</b>	<b>6.7000e-004</b>	<b>2.0000e-005</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>2.4240</b>	<b>2.4240</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.4268</b>

**3.15 Day 13 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>
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**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-004	1.4000e-003	0.0144	3.0000e-005	2.5100e-003	2.0000e-005	2.5300e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4240	2.4240	1.4000e-004	0.0000	2.4268
<b>Total</b>	<b>7.0000e-004</b>	<b>1.4000e-003</b>	<b>0.0144</b>	<b>3.0000e-005</b>	<b>2.5100e-003</b>	<b>2.0000e-005</b>	<b>2.5300e-003</b>	<b>6.7000e-004</b>	<b>2.0000e-005</b>	<b>6.9000e-004</b>	<b>0.0000</b>	<b>2.4240</b>	<b>2.4240</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>2.4268</b>

**3.16 Day 14 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**



	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	2.2900e-003	0.0235	5.0000e-005	4.1100e-003	4.0000e-005	4.1500e-003	1.0900e-003	3.0000e-005	1.1300e-003	0.0000	3.9694	3.9694	2.2000e-004	0.0000	3.9741
<b>Total</b>	<b>1.1400e-003</b>	<b>2.2900e-003</b>	<b>0.0235</b>	<b>5.0000e-005</b>	<b>4.1100e-003</b>	<b>4.0000e-005</b>	<b>4.1500e-003</b>	<b>1.0900e-003</b>	<b>3.0000e-005</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>3.9694</b>	<b>3.9694</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>3.9741</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1400e-003	2.2900e-003	0.0235	5.0000e-005	4.1100e-003	4.0000e-005	4.1500e-003	1.0900e-003	3.0000e-005	1.1300e-003	0.0000	3.9694	3.9694	2.2000e-004	0.0000	3.9741
<b>Total</b>	<b>1.1400e-003</b>	<b>2.2900e-003</b>	<b>0.0235</b>	<b>5.0000e-005</b>	<b>4.1100e-003</b>	<b>4.0000e-005</b>	<b>4.1500e-003</b>	<b>1.0900e-003</b>	<b>3.0000e-005</b>	<b>1.1300e-003</b>	<b>0.0000</b>	<b>3.9694</b>	<b>3.9694</b>	<b>2.2000e-004</b>	<b>0.0000</b>	<b>3.9741</b>

### 3.17 Day 18 Employees - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	2.0400e-003	0.0209	5.0000e-005	3.6500e-003	3.0000e-005	3.6800e-003	9.7000e-004	3.0000e-005	1.0000e-003	0.0000	3.5248	3.5248	2.0000e-004	0.0000	3.5290

<b>Total</b>	<b>1.0100e-003</b>	<b>2.0400e-003</b>	<b>0.0209</b>	<b>5.0000e-005</b>	<b>3.6500e-003</b>	<b>3.0000e-005</b>	<b>3.6800e-003</b>	<b>9.7000e-004</b>	<b>3.0000e-005</b>	<b>1.0000e-003</b>	<b>0.0000</b>	<b>3.5248</b>	<b>3.5248</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>3.5290</b>
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**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	2.0400e-003	0.0209	5.0000e-005	3.6500e-003	3.0000e-005	3.6800e-003	9.7000e-004	3.0000e-005	1.0000e-003	0.0000	3.5248	3.5248	2.0000e-004	0.0000	3.5290
<b>Total</b>	<b>1.0100e-003</b>	<b>2.0400e-003</b>	<b>0.0209</b>	<b>5.0000e-005</b>	<b>3.6500e-003</b>	<b>3.0000e-005</b>	<b>3.6800e-003</b>	<b>9.7000e-004</b>	<b>3.0000e-005</b>	<b>1.0000e-003</b>	<b>0.0000</b>	<b>3.5248</b>	<b>3.5248</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>3.5290</b>

**3.18 Day 19 Employees - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.9000e-004	1.7900e-003	0.0183	4.0000e-005	3.2000e-003	3.0000e-005	3.2300e-003	8.5000e-004	3.0000e-005	8.8000e-004	0.0000	3.0909	3.0909	1.7000e-004	0.0000	3.0945
<b>Total</b>	<b>8.9000e-004</b>	<b>1.7900e-003</b>	<b>0.0183</b>	<b>4.0000e-005</b>	<b>3.2000e-003</b>	<b>3.0000e-005</b>	<b>3.2300e-003</b>	<b>8.5000e-004</b>	<b>3.0000e-005</b>	<b>8.8000e-004</b>	<b>0.0000</b>	<b>3.0909</b>	<b>3.0909</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>3.0945</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					



**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	7.6000e-004	7.8500e-003	2.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.6000e-004	1.0000e-005	3.8000e-004	0.0000	1.3231	1.3231	7.0000e-005	0.0000	1.3247
<b>Total</b>	<b>3.8000e-004</b>	<b>7.6000e-004</b>	<b>7.8500e-003</b>	<b>2.0000e-005</b>	<b>1.3700e-003</b>	<b>1.0000e-005</b>	<b>1.3800e-003</b>	<b>3.6000e-004</b>	<b>1.0000e-005</b>	<b>3.8000e-004</b>	<b>0.0000</b>	<b>1.3231</b>	<b>1.3231</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.3247</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**



Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	3.9000e-004	3.9600e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6669	0.6669	4.0000e-005	0.0000	0.6676
<b>Total</b>	<b>1.9000e-004</b>	<b>3.9000e-004</b>	<b>3.9600e-003</b>	<b>1.0000e-005</b>	<b>6.9000e-004</b>	<b>1.0000e-005</b>	<b>7.0000e-004</b>	<b>1.8000e-004</b>	<b>1.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.6669</b>	<b>0.6669</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6676</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-004	3.9000e-004	3.9600e-003	1.0000e-005	6.9000e-004	1.0000e-005	7.0000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6669	0.6669	4.0000e-005	0.0000	0.6676
<b>Total</b>	<b>1.9000e-004</b>	<b>3.9000e-004</b>	<b>3.9600e-003</b>	<b>1.0000e-005</b>	<b>6.9000e-004</b>	<b>1.0000e-005</b>	<b>7.0000e-004</b>	<b>1.8000e-004</b>	<b>1.0000e-005</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.6669</b>	<b>0.6669</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.6676</b>



**3.21 Day 22 Employees - 2016**  
**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	8.0000e-005	8.2000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1376	0.1376	1.0000e-005	0.0000	0.1378
<b>Total</b>	<b>4.0000e-005</b>	<b>8.0000e-005</b>	<b>8.2000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1376</b>	<b>0.1376</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1378</b>

## Angel Fest - Non-Mobile Operational Emissions Onsite Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	80.00	Acre	80.00	3,484,800.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	12			<b>Operational Year</b>	2016

#### Utility Company

<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0
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#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction

Off-road Equipment - No construction

Trips and VMT - No construction

Architectural Coating - No coatings

Vehicle Trips - No mobile emissions

Area Coating - No coatings

Water And Wastewater - Water to be transported for 3-day festival

Solid Waste - 65,000 service population with an estimated 0.0016 tons/person of solid waste to be diverted to landfills (65,000\*0.0016/80 acres = 1.3 tons/acre/year)

Operational Off-Road Equipment - On-site equipment

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	1,742,400.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	5,227,200.00	0.00
tblAreaCoating	Area_Nonresidential_Interior	5227200	52272000
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	110.00	1.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	3.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Bio-diesel
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Bio-diesel
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Bio-diesel
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Bio-diesel
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Bio-diesel
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Bio-diesel
tblOperationalOffRoadEquipment	OperHorsePower	84.00	402.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	168.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	302.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	80.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	54.00
tblOperationalOffRoadEquipment	OperHorsePower	87.00	11.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	14.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	14.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	14.00

tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	14.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	14.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	7.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.20
tblOperationalOffRoadEquipment	OperLoadFactor	0.31	0.31
tblOperationalOffRoadEquipment	OperLoadFactor	0.34	0.34
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	7.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	6.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	5.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	16.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	11.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	100.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	6.88	1.30
tblTripsAndVMT	WorkerTripNumber	293.00	0.00
tblVehicleTrips	ST_TR	1.59	0.00
tblVehicleTrips	SU_TR	1.59	0.00
tblVehicleTrips	WD_TR	1.59	0.00
tblWater	OutdoorWaterUseRate	95,318,507.97	0.00

## 2.0 Emissions Summary

### 2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0612	0.5120	0.3620	7.5000e-004		0.0278	0.0278		0.0271	0.0271	0.0000	69.3674	69.3674	6.5700e-003	0.0000	69.5054
Waste						0.0000	0.0000		0.0000	0.0000	0.2639	0.0000	0.2639	0.0156	0.0000	0.5914
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>12.6537</b>	<b>0.5120</b>	<b>0.3631</b>	<b>7.5000e-004</b>	<b>0.0000</b>	<b>0.0278</b>	<b>0.0278</b>	<b>0.0000</b>	<b>0.0271</b>	<b>0.0271</b>	<b>0.2639</b>	<b>69.3694</b>	<b>69.6333</b>	<b>0.0222</b>	<b>0.0000</b>	<b>70.0989</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Offroad	0.0612	0.5120	0.3620	7.5000e-004		0.0278	0.0278		0.0271	0.0271	0.0000	69.3674	69.3674	6.5700e-003	0.0000	69.5054
Waste						0.0000	0.0000		0.0000	0.0000	0.2639	0.0000	0.2639	0.0156	0.0000	0.5914
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>12.6537</b>	<b>0.5120</b>	<b>0.3631</b>	<b>7.5000e-004</b>	<b>0.0000</b>	<b>0.0278</b>	<b>0.0278</b>	<b>0.0000</b>	<b>0.0271</b>	<b>0.0271</b>	<b>0.2639</b>	<b>69.3694</b>	<b>69.6333</b>	<b>0.0222</b>	<b>0.0000</b>	<b>70.0989</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.48</b>	<b>100.00</b>	<b>99.71</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>100.00</b>	<b>0.00</b>	<b>100.00</b>	<b>99.62</b>	<b>29.62</b>	<b>0.00</b>	<b>99.15</b>

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.533598	0.058434	0.178244	0.125508	0.038944	0.006283	0.016425	0.031066	0.002453	0.003157	0.003691	0.000543	0.001655

## 5.0 Energy Detail





**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
Mitigated	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003

### 6.2 Area by SubCategory

#### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003

<b>Total</b>	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
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**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
<b>Total</b>	<b>12.5924</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9900e-003</b>	<b>1.9900e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.1000e-003</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated	0.0000	0.0000	0.0000	0.0000
Mitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**Category/Year**

	Total CO2	CH4	N2O	CO2e
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	MT/yr			
Mitigated	0.2639	0.0156	0.0000	0.5914
Unmitigated	0.2639	0.0156	0.0000	0.5914

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.3	0.2639	0.0156	0.0000	0.5914
<b>Total</b>		<b>0.2639</b>	<b>0.0156</b>	<b>0.0000</b>	<b>0.5914</b>

### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.3	0.2639	0.0156	0.0000	0.5914
<b>Total</b>		<b>0.2639</b>	<b>0.0156</b>	<b>0.0000</b>	<b>0.5914</b>

## 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Generator Sets	2	14.00	3	402	0.74	Bio-diesel
Generator Sets	7	14.00	3	168	0.74	Bio-diesel
Generator Sets	2	14.00	3	302	0.74	Bio-diesel
Generator Sets	6	14.00	3	80	0.74	Bio-diesel
Generator Sets	5	14.00	3	54	0.74	Bio-diesel
Forklifts	16	8.00	3	89	0.20	Diesel
Aerial Lifts	11	8.00	3	62	0.31	Diesel
Other General Industrial Equipment	100	7.00	3	11	0.34	Bio-diesel

## UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	5.4700e-003	0.0471	0.0305	4.0000e-005		3.9400e-003	3.9400e-003		3.6200e-003	3.6200e-003	0.0000	3.4730	3.4730	1.0500e-003	0.0000	3.4950
Generator Sets	0.0425	0.4027	0.2593	6.4000e-004		0.0188	0.0188		0.0188	0.0188	0.0000	58.8876	58.8876	3.4100e-003	0.0000	58.9592
Other General Industrial	0.0124	0.0471	0.0545	5.0000e-005		4.4100e-003	4.4100e-003		4.0500e-003	4.0500e-003	0.0000	4.4532	4.4532	1.3400e-003	0.0000	4.4814
Aerial Lifts	9.2000e-004	0.0151	0.0178	3.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	2.5536	2.5536	7.7000e-004	0.0000	2.5698
<b>Total</b>	<b>0.0612</b>	<b>0.5120</b>	<b>0.3620</b>	<b>7.6000e-004</b>		<b>0.0278</b>	<b>0.0278</b>		<b>0.0271</b>	<b>0.0271</b>	<b>0.0000</b>	<b>69.3674</b>	<b>69.3674</b>	<b>6.5700e-003</b>	<b>0.0000</b>	<b>69.5055</b>

## 10.0 Vegetation

## Angel Fest - On-Road Vehicle Trip Emissions Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	80.00	Acre	80.00	3,484,800.00	0

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	12			<b>Operational Year</b>	2016

#### Utility Company

<b>CO2 Intensity (lb/MWhr)</b>	0	<b>CH4 Intensity (lb/MWhr)</b>	0	<b>N2O Intensity (lb/MWhr)</b>	0
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#### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - No construction

Off-road Equipment - No construction

Trips and VMT - No construction

Architectural Coating - No construction

Vehicle Trips - Service population: 43550, resulting in 18146 veh trips (2.4 persons/veh); 1,200 out of 43550 would be employees

Vehicle Emission Factors - Personal vehicles only

Vehicle Emission Factors - Personal vehicles only

Vehicle Emission Factors - Personal vehicles only

Area Coating - No coatings

Consumer Products -

Water And Wastewater - No water use required

Solid Waste - No waste

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	1,742,400.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	5,227,200.00	0.00
tblAreaCoating	Area_Nonresidential_Interior	5227200	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	110.00	1.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	6.88	0.00
tblTripsAndVMT	WorkerTripNumber	293.00	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	LDA	0.53	0.69
tblVehicleEF	LDA	0.53	0.69
tblVehicleEF	LDA	0.53	0.69
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT1	0.06	0.08
tblVehicleEF	LDT2	0.18	0.23
tblVehicleEF	LDT2	0.18	0.23
tblVehicleEF	LDT2	0.18	0.23
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD2	6.2830e-003	0.00
tblVehicleEF	LHD2	6.2830e-003	0.00



tblVehicleEF	LHD2	6.2830e-003	0.00
tblVehicleEF	MCY	3.6910e-003	0.00
tblVehicleEF	MCY	3.6910e-003	0.00
tblVehicleEF	MCY	3.6910e-003	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	OBUS	2.4530e-003	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CC_TL	8.40	59.52
tblVehicleTrips	CC_TTP	48.00	78.00
tblVehicleTrips	CNW_TL	6.90	59.52
tblVehicleTrips	CW_TL	16.60	59.52
tblVehicleTrips	CW_TTP	33.00	3.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00

tblVehicleTrips	ST_TR	1.59	226.82
tblVehicleTrips	SU_TR	1.59	226.82
tblVehicleTrips	WD_TR	1.59	226.82
tblWater	OutdoorWaterUseRate	95,318,507.97	0.00

## 2.0 Emissions Summary

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	24.7007	62.9661	649.2931	1.7736	146.3957	1.0863	147.4821	38.8655	0.9975	39.8630	0.0000	135,203.3579	135,203.3579	6.5906	0.0000	135,341.7610
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>37.2931</b>	<b>62.9661</b>	<b>649.2942</b>	<b>1.7736</b>	<b>146.3957</b>	<b>1.0863</b>	<b>147.4821</b>	<b>38.8655</b>	<b>0.9975</b>	<b>39.8630</b>	<b>0.0000</b>	<b>135,203.3579</b>	<b>135,203.3579</b>	<b>6.5906</b>	<b>0.0000</b>	<b>135,341.7631</b>

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003

Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	24.7007	62.9661	649.2931	1.7736	146.3957	1.0863	147.4821	38.8655	0.9975	39.8630	0.0000	135,203.3579	135,203.3579	6.5906	0.0000	135,341.7610
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>37.2931</b>	<b>62.9661</b>	<b>649.2942</b>	<b>1.7736</b>	<b>146.3957</b>	<b>1.0863</b>	<b>147.4821</b>	<b>38.8655</b>	<b>0.9975</b>	<b>39.8630</b>	<b>0.0000</b>	<b>135,203.3599</b>	<b>135,203.3599</b>	<b>6.5906</b>	<b>0.0000</b>	<b>135,341.7631</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	24.7007	62.9661	649.2931	1.7736	146.3957	1.0863	147.4821	38.8655	0.9975	39.8630	0.0000	135,203.3579	135,203.3579	6.5906	0.0000	135,341.7610
Unmitigated	24.7007	62.9661	649.2931	1.7736	146.3957	1.0863	147.4821	38.8655	0.9975	39.8630	0.0000	135,203.3579	135,203.3579	6.5906	0.0000	135,341.7610

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	18,145.60	18,145.60	18,145.60	393,129,505	393,129,505
<b>Total</b>	<b>18,145.60</b>	<b>18,145.60</b>	<b>18,145.60</b>	<b>393,129,505</b>	<b>393,129,505</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	59.52	59.52	59.52	3.00	78.00	19.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.690000	0.080000	0.230000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

#### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### 5.2 Energy by Land Use - NaturalGas

##### Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000

Total		0.0000	0.0000	0.0000	0.0000
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**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
Unmitigated	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
<b>Total</b>	<b>12.5924</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9900e-003</b>	<b>1.9900e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.1000e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
<b>Total</b>	<b>12.5924</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9900e-003</b>	<b>1.9900e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.1000e-003</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			



City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Vegetation**

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**Angel Fest - Shuttles Onroad Only  
Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	80.00	Acre	80.00	3,484,800.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	33
<b>Climate Zone</b>	12			<b>Operational Year</b>	2016
<b>Utility Company</b>					
<b>CO2 Intensity (lb/MW hr)</b>	0	<b>CH4 Intensity (lb/MW hr)</b>	0	<b>N2O Intensity (lb/MW hr)</b>	0

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use -

Construction Phase - No construction

Off-road Equipment - No construction

Trips and VMT - No construction

Architectural Coating - No coatings

Vehicle Trips - Accounting for an estimated daily of 280 shuttles traveling for a total VMT of 3729 over the 3-day festival period.

Vehicle Emission Factors - "Other buses" only

Vehicle Emission Factors - "Other buses" only

Vehicle Emission Factors - "Other buses" only

Area Coating - No coatings

Water And Wastewater - No water use

Solid Waste - No waste

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	1,742,400.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	5,227,200.00	0.00
tblAreaCoating	Area_Nonresidential_Interior	5227200	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstructionPhase	NumDays	110.00	1.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblSolidWaste	SolidWasteGenerationRate	6.88	0.00
tblTripsAndVMT	WorkerTripNumber	293.00	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	HHD	0.03	0.00
tblVehicleEF	LDA	0.53	0.00
tblVehicleEF	LDA	0.53	0.00
tblVehicleEF	LDA	0.53	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD1	0.04	0.00
tblVehicleEF	LHD2	6.2830e-003	0.00
tblVehicleEF	LHD2	6.2830e-003	0.00
tblVehicleEF	LHD2	6.2830e-003	0.00

tblVehicleEF	MCY	3.6910e-003	0.00
tblVehicleEF	MCY	3.6910e-003	0.00
tblVehicleEF	MCY	3.6910e-003	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MDV	0.13	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MH	1.6550e-003	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	MHD	0.02	0.00
tblVehicleEF	OBUS	2.4530e-003	1.00
tblVehicleEF	OBUS	2.4530e-003	1.00
tblVehicleEF	OBUS	2.4530e-003	1.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	SBUS	5.4300e-004	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleEF	UBUS	3.1570e-003	0.00
tblVehicleTrips	CC_TL	8.40	4.44
tblVehicleTrips	CC_TTP	48.00	81.00
tblVehicleTrips	CNW_TL	6.90	4.44
tblVehicleTrips	CW_TL	16.60	4.44
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	ST_TR	1.59	3.50

tblVehicleTrips	SU_TR	1.59	3.50
tblVehicleTrips	WD_TR	1.59	3.50
tblWater	OutdoorWaterUseRate	95,318,507.97	0.00

## 2.0 Emissions Summary

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2342	2.9517	2.1047	6.2300e-003	0.1998	0.0306	0.2304	0.0579	0.0281	0.0861	0.0000	564.5470	564.5470	3.4300e-003	0.0000	564.6191
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>12.8267</b>	<b>2.9518</b>	<b>2.1057</b>	<b>6.2300e-003</b>	<b>0.1998</b>	<b>0.0306</b>	<b>0.2304</b>	<b>0.0579</b>	<b>0.0281</b>	<b>0.0861</b>	<b>0.0000</b>	<b>564.5490</b>	<b>564.5490</b>	<b>3.4400e-003</b>	<b>0.0000</b>	<b>564.6212</b>

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003

Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.2342	2.9517	2.1047	6.2300e-003	0.1998	0.0306	0.2304	0.0579	0.0281	0.0861	0.0000	564.5470	564.5470	3.4300e-003	0.0000	564.6191
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>12.8267</b>	<b>2.9518</b>	<b>2.1057</b>	<b>6.2300e-003</b>	<b>0.1998</b>	<b>0.0306</b>	<b>0.2304</b>	<b>0.0579</b>	<b>0.0281</b>	<b>0.0861</b>	<b>0.0000</b>	<b>564.5490</b>	<b>564.5490</b>	<b>3.4400e-003</b>	<b>0.0000</b>	<b>564.6212</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### 4.0 Operational Detail - Mobile

#### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2342	2.9517	2.1047	6.2300e-003	0.1998	0.0306	0.2304	0.0579	0.0281	0.0861	0.0000	564.5470	564.5470	3.4300e-003	0.0000	564.6191
Unmitigated	0.2342	2.9517	2.1047	6.2300e-003	0.1998	0.0306	0.2304	0.0579	0.0281	0.0861	0.0000	564.5470	564.5470	3.4300e-003	0.0000	564.6191

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	280.00	280.00	280.00	452,525	452,525
<b>Total</b>	<b>280.00</b>	<b>280.00</b>	<b>280.00</b>	<b>452,525</b>	<b>452,525</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	4.44	4.44	4.44	0.00	81.00	19.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000

### 5.0 Energy Detail

#### 4.4 Fleet Mix

Historical Energy Use: N

#### 5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

#### 5.2 Energy by Land Use - NaturalGas

##### Unmitigated



	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000

Total		0.0000	0.0000	0.0000	0.0000
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**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
Unmitigated	12.5924	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
<b>Total</b>	<b>12.5924</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9900e-003</b>	<b>1.9900e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.1000e-003</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.5923					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9900e-003	1.9900e-003	1.0000e-005	0.0000	2.1000e-003
<b>Total</b>	<b>12.5924</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.9900e-003</b>	<b>1.9900e-003</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>2.1000e-003</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Vegetation**

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## Golf Cart Emission Factors

0.46 Load Factor for Gasoline Golf Carts and Speciality Vehicles

Exhaust Emission Factors for G4 (gasoline 4 stroke engines) later than 1998 and > 5 hp (g/bhp-hr)

1.26 HC

36.36 CO

0.91 NOX

0.11 PM

446.2 CO2

Source: *CARB 2013. Attachment C: Emissions Estimation Methodology for Off-Highway Recreational Vehicles. May.*

0.002205 lbs/gram

0.000454 lbs/metric tons





	ROG					CO				
	EF	g/vehicle	g/veh/day	Total (g/day)	Lbs/day	EF	g/vehicle	g/veh/day	Total (g/day)	Lbs/day
4-passenger golf cart	1.26	7.5348	30.1392	4,883	10.76418	36.36	217.4328	869.7312	140,896	310.6235107
6-passenger golf cart	1.26	7.18704	28.74816	2,530	5.577338	36.36	207.39744	829.58976	73,004	160.946047
10-passenger golf cart	1.26	7.18704	28.74816	0	0	36.36	207.39744	829.58976	0	0
Total:					16.34152					471.5695577

	PM10					PM2.5				
	EF	g/vehicle	g/veh/day	Total (g/day)	Lbs/day	EF	g/vehicle	g/veh/day	Total (g/day)	Lbs/day
4-passenger golf cart	0.11	0.6578	2.6312	426	0.93973	0.099	0.59202	2.36808	384	0.845757084
6-passenger golf cart	0.11	0.62744	2.50976	221	0.48691	0.099	0.564696	2.258784	199	0.438219435
10-passenger golf cart	0.11	0.62744	2.50976	0	0	0.099	0.564696	2.258784	0	0
Total:					1.426641					1.283976518

	CO2					
	EF	g/vehicle	g/veh/day	Total (g/day)	MT/day	MT/yr
4-passenger golf cart	446.2	2668.276	10673.1	1,729,043	1.730306	39.797034
6-passenger golf cart	446.2	2545.125	10180.5	895,884	0.896538	20.620382
10-passenger golf cart	446.2	2545.125	10180.5	0	0	0
Total:					2.626844	60.417416

