City of
SACRAMENTO
Community Development

300 Richards Blvd., 3rd Floor
Sacramento, CA 95811

Help Line: 916-264-5011
CityofSacramento.org/dsd

MITIGATED NEGATIVE DECLARATION

The City of Sacramento, California, a municipal corporation, does hereby prepare, declare, and publish this Mitigated Negative Declaration for the following described project:

Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station (P13-017) - The proposed project includes approvals by the City and the LEA for permit amendments to modify the existing facility operations. The modification would include additional processing of materials already accepted at the site, including concrete and asphalt crushing, asphalt shingle grinding, and wood grinding activities, as well as inclusion of an on-site modular office building and a 1.5-acre material sales yard. The 1.5-acre material sales yard is proposed as an ancillary operation and would be located outside, but adjacent to, the existing 10-acre CUP boundary, for a total project area of 11.5 acres. The material sales yard is a permitted use in the M-1 zone, and, thus, a modification to the boundaries of the CUP is not required. Because wood products (e.g., lumber, branches, logs, stumps, etc.) that would be processed on-site are classified per the City's Zoning and Development Code as green waste, a new CUP for the processing of green waste is being requested for the proposed wood grinding activities on-site.

The Lead Agency is the City of Sacramento. The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that there is no substantial evidence that the project, with mitigation measures as identified in the attached Initial Study, will have a significant effect on the environment. This Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis. An Environmental Impact Report is not required.

This Mitigated Negative Declaration has been prepared pursuant to the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.), CEQA Guidelines (Title 14, Sections 15000 et seq. of the California Code of Regulations), the Sacramento Local Environmental Regulations (Resolution 91-892), and the Sacramento City Code.

A copy of this document and all supportive documentation may be reviewed or obtained at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA 95811 from 9:00 a.m. to 4:00 p.m. The document is available on the CDD website at:

http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx

Environmental Services Manager, City of Sacramento, California, a municipal corporation

By: _____

Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station Project
Initial Study/Mitigated Negative Declaration

Errata Sheet
July 25, 2016

Introduction

This errata sheet presents, in ~~strike-through~~ and double-underline format, the revisions to the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station Initial Study/Mitigated Negative Declaration (IS/MND). The revisions to the IS/MND reflected in this errata sheet do not affect the adequacy of the previous environmental analysis contained in the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station IS/MND. Because the changes presented below would not result in any new significant impacts or increase in impact significance from what was identified in the IS/MND, recirculation of the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station IS/MND is not required.

Changes to the IS/MND

The discussion on page 6 of the IS/MND is hereby revised as follows:

> The project site is the site of the ~~former~~ Florin Perkins Landfill, which does not currently accept waste and is preparing to undergo closure, and currently consists of an existing MRF/LVTS, operating under a Conditional Use Permit (CUP) (Special Permit Minor Modification Z98-114) issued by the City and a full SWFP No. 34-AA-0221 issued by the LEA.

The above revision is intended to more accurately describe the Florin Perkins Landfill. All subsequent references to the Florin Perkins Landfill in the IS/MND are hereby revised similar to the above. The changes are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

The discussion on page 10 of the IS/MND is hereby revised as follows:

> The amount of materials received at the site would increase as a result of the modification by an additional 500 tons (primarily concrete and asphalt), for a total of 1,000 TPD. However, in order to ensure that operations associated with the proposed project do not result in problematic conditions, the LEA may require new permits granting increased capacity to be implemented in an incremental fashion. Similar to the current Solid Waste Facilities Permit requirements, incremental increases would require the operator to demonstrate compliance at each step prior to requesting each increase, thereby ensuring full compliance of the operation with the SWFP. The ~~the~~ materials currently accepted at the site would continue to be accepted and a change to the type of materials accepted at the site is not proposed.

The above changes are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

The discussion on page 15 of the IS/MND is hereby revised as follows:

> The concrete and asphalt crushing operations are anticipated to require additional capacity in excess of the 500 TPD currently entitled for the existing MRF/LVTS. Accordingly, the project includes a proposal to ~~add 500 TPD, specifically for concrete and asphalt crushing operations, to the site's total allowable tonnage loading of 500 TPD per the existing permit, for a total of 1,000 TPD.~~ allow 500 TPD of additional concrete and asphalt capacity, while simultaneously maintaining the existing permitted tonnage loading limit of 500 TPD for all other waste. As a result, the proposed project would have a combined permitted total of 1,000 TPD, but the proposed project would be limited to accepting a maximum of 500 TPD of inert material (concrete and asphalt), independently from the concurrent maximum of 500 TPD for other material. Assuming an average payload of 20 tons per truckload for inbound concrete and asphalt materials, the concrete and asphalt crushing operations would add approximately 25 trucks per day to the overall facility.

The above changes are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

The paragraph on page 17 of the IS/MND with regards to security and screening is hereby revised as follows:

> A chain link fence topped with three-strand barbed wire runs along the boundary of the facility where public access is possible. A double barrier of chain link fence runs along a portion of the west boundary of the existing site along Florin-Perkins Road. The exterior chain link fence along Florin-Perkins Road would be upgraded with wood slats. A 25-foot irrigated landscaped strip runs between the exterior chain link fence line and the interior fence line in accordance with the requirements of the City of Sacramento Zoning Ordinance. The interior chain link fence is continuously slatted and screens the facility from public view from the western approach. A chain link fence also runs on the north boundary of the existing site, along Jackson Road. ~~The exterior chain link fencing along the exposed section of Jackson Road would be upgraded with wood slats to block public views of the site.~~ Distance and terrain ~~also~~ helps to screen views of the facility from the north. In addition, a landscaped strip is provided on the outside of the fence along Jackson Road in accordance with the City's Zoning Ordinance. The fencing also provides a means for litter control.

The above changes are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

The last paragraph on page 31 of the IS/MND is hereby revised as follows:

> Furthermore, the proposed project would include a tree-lined, 10-foot-high berm along the southern and eastern perimeter of the 10-acre portion of the site to help screen views from surrounding areas. In addition, a double barrier of chain link fence runs along a portion of the west boundary of the existing site along Florin-Perkins Road. The exterior chain link fence along Florin-Perkins Road would be upgraded with wood slats. A 25-foot irrigated landscaped strip runs between the exterior chain link fence line and the interior fence line, which would further help to screen views of the site. The interior chain link fence is

continuously slatted and screens the facility from public view from the western approach. A chain link fence also runs on the north boundary of the existing site, along Jackson Road. ~~The chain link fencing along the exposed section of Jackson Road would be upgraded with wood slats to block public views of the site.~~ Distance and terrain ~~also~~ helps to screen views of the facility from the north. The nearest existing residence is located approximately 2,000 feet from the site and is shielded by intervening topography.

The above changes are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

For clarification purposes, Figure 10 on page 34 of the IS/MND is hereby deleted and replaced by the image identified as Figure 11, Proposed View from the Southwest Corner of Property Looking Northeast Towards Site with Berm and Landscaping, on page 36 of the IS/MND. Accordingly, Figure 12 on page 37 of the IS/MND, and all subsequent figures throughout the remainder of the IS/MND, is hereby renumbered accordingly (i.e., Figure 12 is now Figure 11, Figure 13 is now Figure 12, etc.). The changes to the figures are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

The first paragraph on page 35 of the IS/MND is hereby revised as follows:

In addition, a double barrier of chain link fence runs along a portion of the west boundary of the existing site along Florin-Perkins Road. The exterior chain link fence along Florin-Perkins Road would be upgraded with wood slats. The anticipated view from the southwest corner of the property looking northeast towards the project site upon implementation of the proposed project, including the berm, landscaping, and improved fencing, is shown in Figure 11. As show in the figure, the project would be designed to provide substantial screening of the site from views from the west. A 25-foot irrigated landscaped strip runs between the exterior chain link fence line and the interior fence line in accordance with the requirements of the City of Sacramento Zoning Ordinance. The interior chain link fence is continuously slatted and screens the facility from public view from the western approach. A chain link fence also runs on the north boundary of the existing site, along Jackson Road. ~~The exterior chain link fencing along the exposed section of Jackson Road would be upgraded with wood slats to block public views of the site. Figure 12 presents the anticipated view of the site looking southwest from the northeast corner of the property upon implementation of the proposed project, including the berm, landscaping, and improved fencing. As shown in the figure, the project would be designed to provide substantial screening of the site from views from the north.~~ Distance and terrain ~~also~~ helps to screen views of the facility from the north. In addition, a landscaped strip is provided on the outside of the fence along Jackson Road in accordance with the City's Zoning Ordinance.

The above changes are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

The discussion on page 92 of the IS/MND is hereby revised as follows:

As mentioned above, the project operator currently accepts soil on behalf of the adjacent landfill owner for landfill closure purposes. Although the trucks hauling the soil use the same entrance and exit road as the proposed project, the soil hauling trucks do ~~The soil~~

~~does~~ not pass through the proposed project scales or operating areas, nor does the soil or trucks count towards the operator's permitted tonnage or vehicle limits. Because the trucks would not enter the operations area of the proposed project site or enter the on-site scales, the truck traffic associated with the landfill closure activities would not be expected to interfere with on-site operations, as they would occur ~~completely separate~~ independently from the proposed project. In addition, the aforementioned activities are not related to the proposed project operations and are covered under permits associated with the landfill operations. As further landfill closure activities continue to occur, vehicles accessing the overall site may temporarily increase during the landfill closure period; however, such truck trips would cease to occur upon completion of landfill closure. Furthermore, clear signage would be provided on the on-site roadways in order to manage and direct on-site traffic.

The above changes are for clarification purposes only and do not alter the analysis or conclusions of the IS/MND.

The first paragraph under the *Wastewater and Water* section on page 97 of the IS/MND is hereby revised as follows:

Compliance with state and ~~locate~~ local regulations and permit requirements for either option would ensure the wastewater treatment requirements are not exceeded.

The above staff-initiated change has been applied for clarification purposes only. The text change does not alter the analysis or conclusions of the IS/MND.

Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station

Initial Study / Mitigated Negative Declaration

PREPARED FOR THE
CITY OF SACRAMENTO

PREPARED BY RANEY PLANNING & MANAGEMENT, INC.
SACRAMENTO, CALIFORNIA

JULY 2016

FLORIN-PERKINS MATERIALS RECOVERY FACILITY/LARGE VOLUME TRANSFER STATION

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR ANTICIPATED SUBSEQUENT PROJECTS UNDER THE 2035 GENERAL PLAN MASTER EIR

This Initial Study has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, §21000 *et seq.*), CEQA Guidelines (Cal. Code Regs., tit. 14, §15000 *et seq.*) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento. In addition, the Initial Study has been prepared pursuant to the California Integrated Waste Management Board (now known as the California Department of Resources Recycling and Recovery or CalRecycle) regulations (Cal. Code Regs., tit. 27, Environmental Protection, Division 2, Solid Waste, Chapter 4, Subchapter 3, Article 2, §21620).

ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into the following sections:

SECTION I - BACKGROUND: Provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

SECTION II - PROJECT DESCRIPTION: Includes a detailed description of the proposed project.

SECTION III - ENVIRONMENTAL CHECKLIST AND DISCUSSION: Reviews proposed project and states whether the project would have additional significant environmental effects (project-specific effects) that were not evaluated in the Master EIR for the 2035 General Plan.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: Identifies which environmental factors were determined to have additional significant environmental effects.

SECTION V - DETERMINATION: States whether environmental effects associated with development of the proposed project are significant, and what, if any, added environmental documentation may be required.

REFERENCES CITED: Identifies source materials that have been consulted in the preparation of the Initial Study.

APPENDICES: Technical reports or resources that have been prepared for and utilized in the Initial Study.

SECTION I - BACKGROUND

Project Name and File Number:	Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station [Application Number P13-017]
Project Location:	4201 Florin-Perkins Road Sacramento, CA 95826 APNs 061-0151-058 and 061-0150-042
Project Applicant:	Zanker Road Resource Management, Ltd. 1500 Berger Drive San Jose, CA 95112
Project Planner:	Antonio Ablog, Senior Planner
Environmental Planner:	Dana Mahaffey, Associate Planner
Date Initial Study Completed:	May 2016

This Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA) (Pub. Resources Code, §15000 *et seq*.). The Lead Agency is the City of Sacramento.

The City of Sacramento, Community Development Department, has reviewed the proposed project and, on the basis of the whole record before it, has determined that the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR and is consistent with the land use designation and the permissible densities and intensities of use for the project site as set forth in the 2035 General Plan. (See CEQA Guidelines §15176 (b) and (d).)

The City has prepared the attached Initial Study to review the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the 2035 General Plan Master EIR to determine their adequacy for the project (see CEQA Guidelines, §15178(b),(c)) and identify any potential new or additional project-specific significant environmental effects that were not analyzed in the Master EIR and any mitigation measures or alternatives that may avoid or mitigate the identified effects to a level of insignificance, if any.

As part of the Master EIR process, the City is required to incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR (CEQA Guidelines, §15177(d)) Policies included in the 2035 General Plan that reduce significant impacts identified in the Master EIR are identified and discussed. See also the Master EIR for the 2035 General Plan. The mitigation monitoring plan for the 2035 General Plan, which provides references to applicable general plan policies that reduce the environmental effects of development that may occur consistent with the general plan, is included in the adopting resolution for the Master EIR. See City Council Resolution No. 2015-0060, beginning on page 60. The resolution is available at:

http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx.

This analysis incorporates by reference the general discussion portions of the 2035 General Plan Master EIR. (CEQA Guidelines Section 15150(a)). The Master EIR is available for public review at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811, and on the City's web site at:

http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports

The City is soliciting views of interested persons and agencies on the content of the environmental information presented in this document. Written comments should be sent at the earliest possible date, but no later than the 30-day review period ending June 10, 2016.

Please send written responses to:

Dana Mahaffey, Associate Planner
Community Development Department
City of Sacramento
300 Richards Blvd, 3rd Floor
Sacramento, CA 95811
Direct Line: (916) 808-2762
FAX (916) 808-1077
Dmahaffey@cityofsacramento.org

SECTION II - PROJECT DESCRIPTION

Introduction

The Project Description section of the Initial Study provides a description of the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station Project (proposed project) components. The proposed project is intended to add additional processing capabilities to the site to increase marketability of recyclable materials.

Project Permitting Background

The property was previously used as a mining site and then as an unclassified landfill (the Florin Perkins Landfill, which is an existing landfill undergoing closure). To support landfill operations, the 10-acre project site became operational as a Material Recovery Facility/Large Volume Transfer Station (MRF/LVTS). The City of Sacramento issued Special Permit Z93-106 to the prior operator on December 14, 1993 to operate a "Large Recyclable Materials Collection Facility". The Special Permit Z93-106 allowed the prior operator to receive demolition and construction debris, commercial wastes consisting of cardboard, paper, glass, metal, and wood, and household wastes generated by self-haulers. The City of Sacramento granted a "Minor Deviation to a Special Permit" to the prior operator on February 6, 1995, which amended Special Permit Z93-106 to reclassify the facility to a "Large Material Recovery Facility" and allowed an expansion in the scope of the material collection and recycling options.

Although the City has jurisdiction in determining whether the facility is consistent with land use and zoning designations and issues permits associated with such, the responsibility for permitting a MRF/LVTS lies with the Local Enforcement Agency (LEA), a local agency responsible for enforcing state solid waste laws and standards. In Sacramento County, the Sacramento County Environmental Management Department (SCEMD) serves as the LEA. Before Solid Waste Facilities Permits (SWFP) are issued, the California Integrated Waste Management Board (CIWMB), now known as CalRecycle, must review and concur with the findings made by the LEA in a public meeting. CEQA review must be conducted for solid waste permit issuance and revisions. The project site was previously operated as a MRF/LVTS, which was built on 1.5 acres and, per permit requirements, was allowed to accept an average of 200 tons of solid waste per day and a maximum of 250 tons per day. Pursuant to CEQA, Sacramento County prepared an Initial Study/Negative Declaration (IS/ND) for the MRF/LVTS in 1995 (County Control Number 95-PWE-0380), which analyzed the impacts of the MRF/LVTS facility. The MRF/LVTS facility was found to not have any significant impacts to land use, drainage, flooding, transportation (access/circulation and traffic generation), hazardous materials (including dust/PM_{10} emissions), and noise. On November 7, 1995 the LEA found the IS/ND for the MRF/LVTS to be adequate and complete, approved the project, and issued SWFP No. 34-AA-0183 to the prior operator, with concurrence from the CIWMB, on January 24, 1996.

In 1999, the prior operator applied for a permit revision to include the following:

- Relocation of the facility from the southwest to the north-central portion of the Transfer Station Site;
- Expansion of the operations area of the facility from 1.5 acres to 2.5 acres within the Transfer Station Site;
- Increase the permitted daily load from 250 tons per day to 500 tons per day;

- Modification of the access road, internal traffic routing and additional paved surfaces;
- Installation of additional scales and front-end improvements as necessary to accommodate customer traffic; and
- Addition of mechanized processing and sorting equipment to increase recovery efficiency and accommodate increased station capacity.

The 1999 project proposed that recyclable materials would be segregated and containerized for transfer to a Class III solid waste management facility and inert materials would be segregated for transfer into the adjacent landfill area. An IS/ND was prepared for the permit revision (expansion), and, similar to the 1995 project, was found to not have any significant impacts to land use, drainage, flooding, transportation (access/circulation and traffic generation), hazardous materials (including dust [PM10]), and noise. Thus, on February 03, 1999, the City of Sacramento Zoning Administrator determined that the MRF/LVTS was consistent with the Zoning Ordinance and granted the prior operator a Minor Deviation to a Special Permit (Permit No. Z98-114). Conditions of approval of Special Permit Minor Deviation Z98-114 (which supersedes Special Permit Z93-106 issued December 14, 1993 and the February 06, 1995 amendment to Special Permit Z93-106) that govern operations of the MRF/LVTS are summarized as follows:

- MRF/LVTS operations will not be conducted in the setback/landscape areas of the Overall Facility;
- Recycled materials are to be stored in receptacles, within buildings or in such other manners that they are screened from view at the front of the property and do not create a windblown litter nuisance;
- Active composting (including composting of green waste) is not allowed;
- Noise levels from MRF/LVTS operations shall not exceed 70 dB at property lines bounding the Overall Facility, nor 55 dB at residentially zoned or occupied property;
- Allowable hours of operation are 6:00 AM to 6:00 PM; and
- Allowable tonnage loading to the MRF/LVTS shall not exceed 500 tons per day (TPD).
- Special Permit Modification and Plan Review (P94-067) are referenced and acknowledges the approved 2,000 tons per day (TPD) capacity of inert waste acceptance at the overall facility.

While most infrastructure improvements and equipment additions as proposed in the 1999 project were executed by the prior operator, an amendment or revision to the LEA's SWFP No. 34-AA-0183 was not approved to reflect the improvements and the increase in station design capacity afforded by the improvements. Thus, a revised SWFP application was submitted and a revised SWFP No. 34-AA-0183 was issued by the LEA on November 27, 2002 to reflect the improvements and equipment additions.

In February of 2005, the previous operator surrendered its interest in SWFP No. 34-AA-0183 and was evicted from the property by the property owner. In 2008, Zanker Road Resource Management, LTD, the current operator, and project applicant, requested a new SWFP to allow for the operation of a MRF/LVTS on a total of 10 acres, a permitted maximum of 500 tons per day of mixed solid waste, modification of the access road, internal traffic routing, and addition of paved surfaces. An IS/ND was prepared by Sacramento County on behalf of the LEA, lead agency for the project. The LEA determined that the IS/ND adequately and appropriately supported the proposed SWFP for the MRF/LVTS and adopted the IS/ND on April 29, 2008. Accordingly, a new SWFP, permit number 34-AA-0221, was issued to the current operator.

Project Description

Further details regarding the project location, existing conditions, surrounding land uses, and project components are provided below.

Project Location

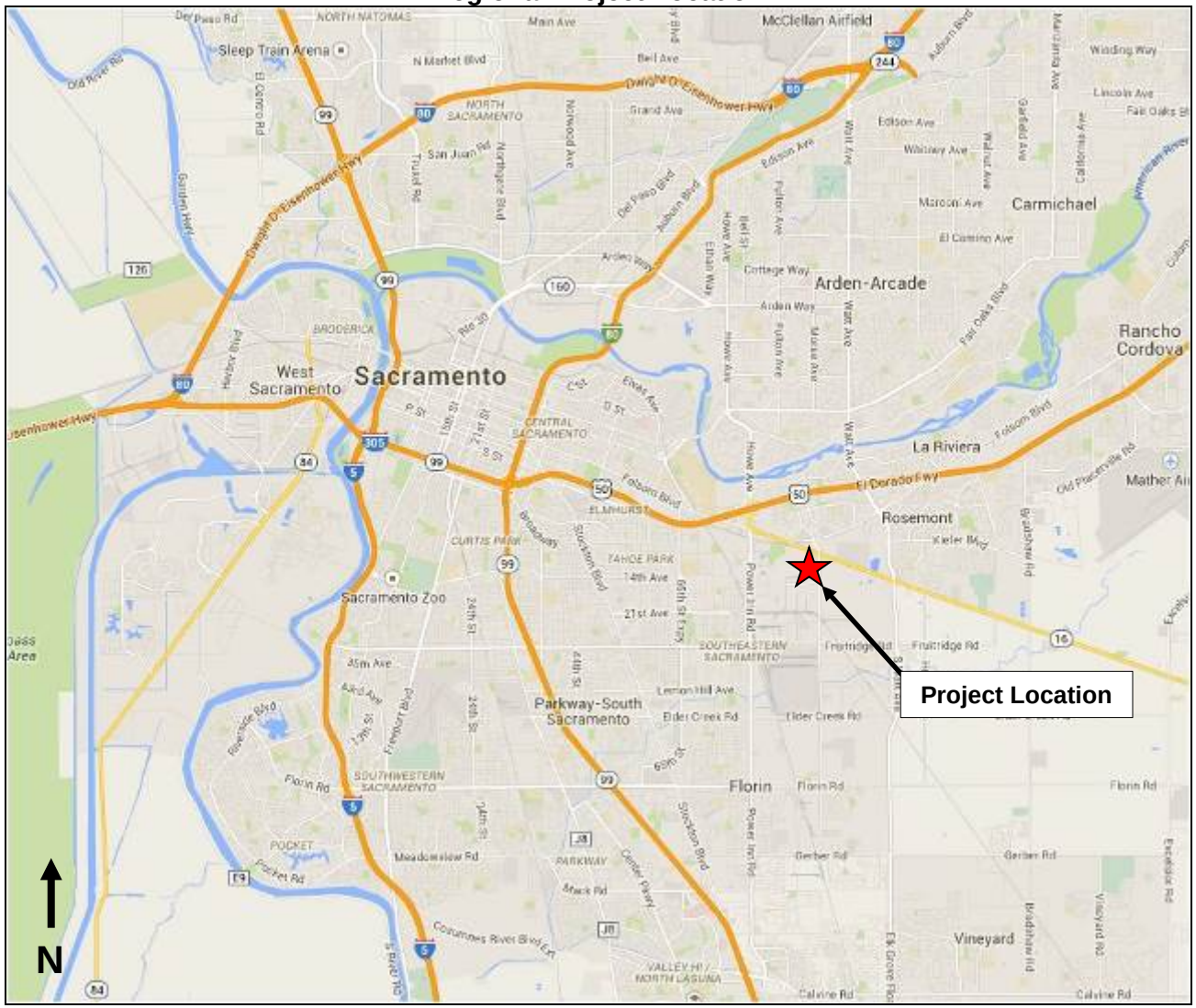
The proposed project is located on a 10-acre portion of a 106-acre site, which constitutes a portion of an approximately 220-acre holding of lands under the same ownership in the southeastern area of the City of Sacramento (see Figure 1, Regional Project Location). The site is approximately six miles from the downtown core of the City, one mile south of State Route (SR) 50, and 4.5 miles east of SR 99. The project site is located at the southeast corner of the intersection of Jackson Road and Florin-Perkins Road (see Figure 2, Project Vicinity Map). Access to the project site is provided via Florin-Perkins Road and an existing internal roadway. The site is identified by Sacramento County Assessor's Parcel Numbers (APNs) 061-0150-058 and 061-0150-042.

Existing Conditions and Surrounding Land Uses

The project site is the site of the ~~former~~ Florin Perkins Landfill, which does not currently accept waste and is preparing to undergo closure, and currently consists of an existing MRF/LVTS, operating under a Conditional Use Permit (CUP) (Special Permit Minor Modification Z98-114) issued by the City and a full SWFP No. 34-AA-0221 issued by the LEA. The existing facility accepts, sorts, and processes recyclable material for bulk resale. Existing operations include receiving of solid non-hazardous and non-putrescible wastes, where such wastes are processed and sorted for recyclable and non-recyclable materials. After processing and sorting, the materials are eventually transferred off-site for recycling and/or disposal. A maximum of 500 tons of material may be received at the existing facility per day. Although the current land use entitlements and permitting allow for up to 500 tons per day, the LEA currently has the site on a tiered system (not to be confused with a tiered solid waste permit) for increasing tonnage to the full amount of 500 tons per day, where a request must be submitted in order to permanently increase the current level of 375 to 500 tons per day, prior to acceptance of waste in excess of 375 tons per day. No such request has been made to date. The accepted materials are processed on approximately 2.5 acres located on the northeast portion of the permitted 10-acre MRF/LVTS boundary. A scale house with two scales utilized for inbound and outbound transactions and a portable break room for staff use are the only existing structures on the site. The entire ingress/egress, maneuvering area, and tipping area of the facility is paved.

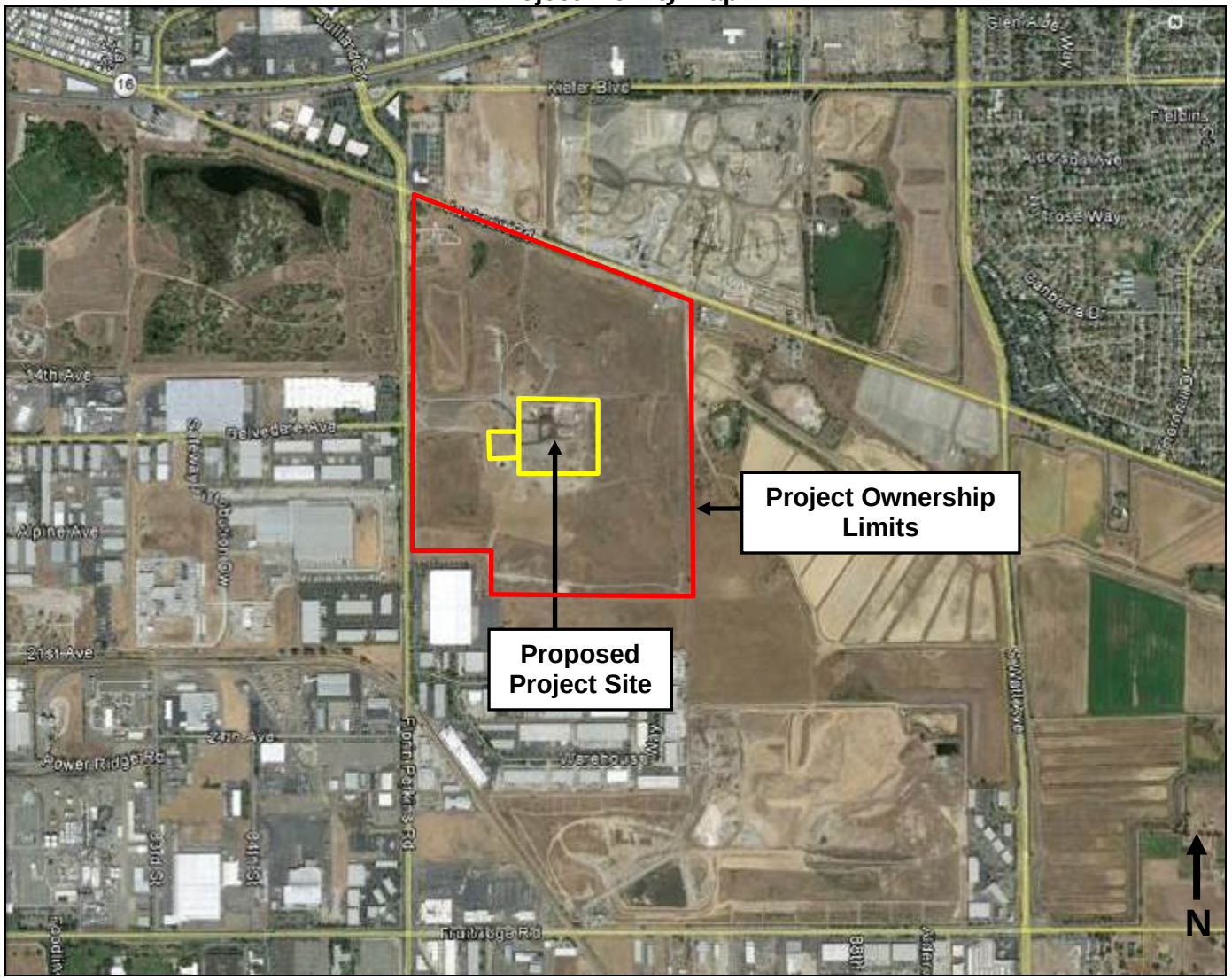
Materials accepted at the facility include a mixture of construction waste (from construction, demolition, and renovation projects) and non-construction waste (e.g., mixed residential, commercial, and industrial waste) from roll-off bins and self-haul loads. All waste accepted at the site is non-hazardous and non-putrescible (e.g., clean wood, concrete, etc.). With the use of a mechanical sortline, rolling stock and facility staff, recyclable materials such as wood, metals, plastics, paper/cardboard, tires, appliances, electronic wastes, carpet, etc. are removed and stored in designated storage areas until shipped off-site to a recycler. All residual wastes (approximately 20 to 25 percent of all incoming waste) are currently being transferred to Kiefer Landfill, located approximately 10.5 miles east of the project site, for disposal. Additional processing of segregated recyclables does not currently occur on-site.

Figure 1
Regional Project Location



Source: Google Earth, 2015.

Figure 2
Project Vicinity Map



Source: Google Earth, 2014.

The restriction of hazardous and putrescible wastes (wastes likely to decay) at the site is enforced by clearly posted signage, as well as a Load Check Program that includes measures for identifying and handling such wastes. Measures include training for personnel in identifying, monitoring, waste screening, and isolation procedures. A hazardous materials storage locker is provided for hazardous materials to be stored separately until removal within 90 days upon reaching specific accumulation limits. Putrescible waste monitoring currently occurs at the site. Per the SWFP, a maximum of two percent per day by weight of putrescible waste is allowed at the facility. However, any incidental putrescible or odorous wastes are removed from the incoming waste stream and transferred off-site immediately with the next available transfer vehicle (typically within the same day) in order to avoid any nuisance issues.

It should be noted that a number of dust suppression measures are currently in place at the project site for the current operations and are incorporated as part of the proposed project. The dust suppression measures include having one full-time employee charged with monitoring and mitigating on-site dust. All surfaces including nearby gravel roads are wetted as required to minimize the creation of dust. All stockpiles and traveled surfaces would be watered as required to minimize the creation of dust. Dust control equipment in the form of water trucks, a street sweeper, spray bars on equipment, and misters on hoppers are currently utilized at the site and would continue to be used as needed with the proposed project. Wetting of wastes is also performed if dust or powder is encountered in a particular load. Sweeping of the operations area is performed at a frequency that precludes the accumulation of dust that could create a dust nuisance condition. The Transfer/Processing Report would be updated as part of the process of revising the facility's SWFP and would take into account the current and proposed dust suppression activities.

Primary routes of delivery to the facility include: 1) SR 50, thence south on Howe Avenue, thence east on Jackson Road, thence south on Florin-Perkins Road to the facility entrance; and 2) SR 99, thence east on Fruitridge Road, thence north on Florin-Perkins Road to the facility entrance. The facility service area is governed by competitive free market and is not defined by an exclusive franchise or license agreement. The primary service area includes, but is not limited to, an approximately 35- to 50-mile radius area, including portions of Sacramento, El Dorado, Placer, and Yolo Counties.

The 2035 General Plan land use designation for the site is Employment Center Low Rise, and the current zoning designation is Light Industrial with Solid Waste Restriction Overlay (M-1SWR). The 10-acre site is within a larger property that is bordered by Jackson Road to the north and Florin-Perkins Road to the west. Due to the regularly disturbed nature of the site associated with the existing uses, the site predominantly consists of ruderal vegetation, and no water features are located on or immediately adjacent to the site. The site is located approximately 10 feet below grade at elevations of approximately 30 feet. The roadway and surrounding properties are at approximately 40 feet. Permanent light fixtures currently exist on-site associated with the ongoing operations.

Immediately east of the property is a former aggregate mining site associated with the Teichert Perkins plant, which is currently proposed for the future development known as the Aspen 1-New Brighton project, which would include residential, commercial, an elementary school, an urban farm, parks, and open space. To the south of the property are industrial buildings. Opposite Jackson Road to the north of the property is the Teichert Perkins plant, an active sand and gravel processing and sales facility. An existing residence is located at the southeast corner of Jackson Road and Florin-Perkins Road, approximately 2,000 feet to the northwest of the existing operations. Opposite from Florin-Perkins Road to the west are industrial uses including a

Safeway distribution center. Granite Regional Park is located across Florin-Perkins Road to the northwest, and to the southeast is the L and D Landfill site (a Class III facility limited to commercial waste and recycling).

Project Components

The proposed project includes approvals by the City and the LEA for permit amendments to modify the existing facility operations. The modification would include additional processing of materials already accepted at the site, including concrete and asphalt crushing, asphalt shingle grinding, and wood grinding activities, as well as inclusion of an on-site modular office building and a 1.5-acre material sales yard (see Figure 3 for the project site overview and Figure 4 for the project site plan). The 1.5-acre material sales yard is proposed as an ancillary operation and would be located outside, but adjacent to, the existing 10-acre CUP boundary, for a total project area of 11.5 acres. The material sales yard is a permitted use in the M-1 zone, and, thus, a modification to the boundaries of the CUP is not required. Because wood products (e.g., lumber, branches, logs, stumps, etc.) that would be processed on-site are classified per the City's Zoning and Development Code as green waste, a new CUP for the processing of green waste is being requested for the proposed wood grinding activities on-site.

The amount of materials received at the site would increase as a result of the modification by an additional 500 tons (primarily concrete and asphalt), for a total of 1,000 TPD. However, in order to ensure that operations associated with the proposed project do not result in problematic conditions, the LEA may require new permits granting increased capacity to be implemented in an incremental fashion. Similar to the current Solid Waste Facilities Permit requirements, incremental increases would require the operator to demonstrate compliance at each step prior to requesting each increase, thereby ensuring full compliance of the operation with the SWFP. The~~the~~ materials currently accepted at the site would continue to be accepted and a change to the type of materials accepted at the site is not proposed. In general, the proposed project operations with the modification would be similar to the current site operations and would be conducted within the existing 10-acre MRF/LVTS boundary. A summary of the changes to operations that are being proposed as part of the proposed project are presented in Table 1 and are discussed in further detail below.

Table 1
Summary of Operational Changes

	Current Permitted Operations	Proposed Operations
Total Acres	10 (City's CUP) 2.5 (operations area) (SWFP)	11.5 (City's CUP) 4.0 (SWFP)
Maximum Tons Per Day of Mixed Solid Waste	500 TPD	1,000 TPD
Maximum Vehicle Volume	233 trucks per day	258 trucks per day
Operating Days	Up to 361 days per year	Up to 361 days per year
Hours of Operation	6:00 a.m. to 6:00 p.m.	6:00 a.m. to 6:00 p.m.
Maximum Stockpile Height	12 feet	24 feet

Figure 3
Proposed Project Site Overview

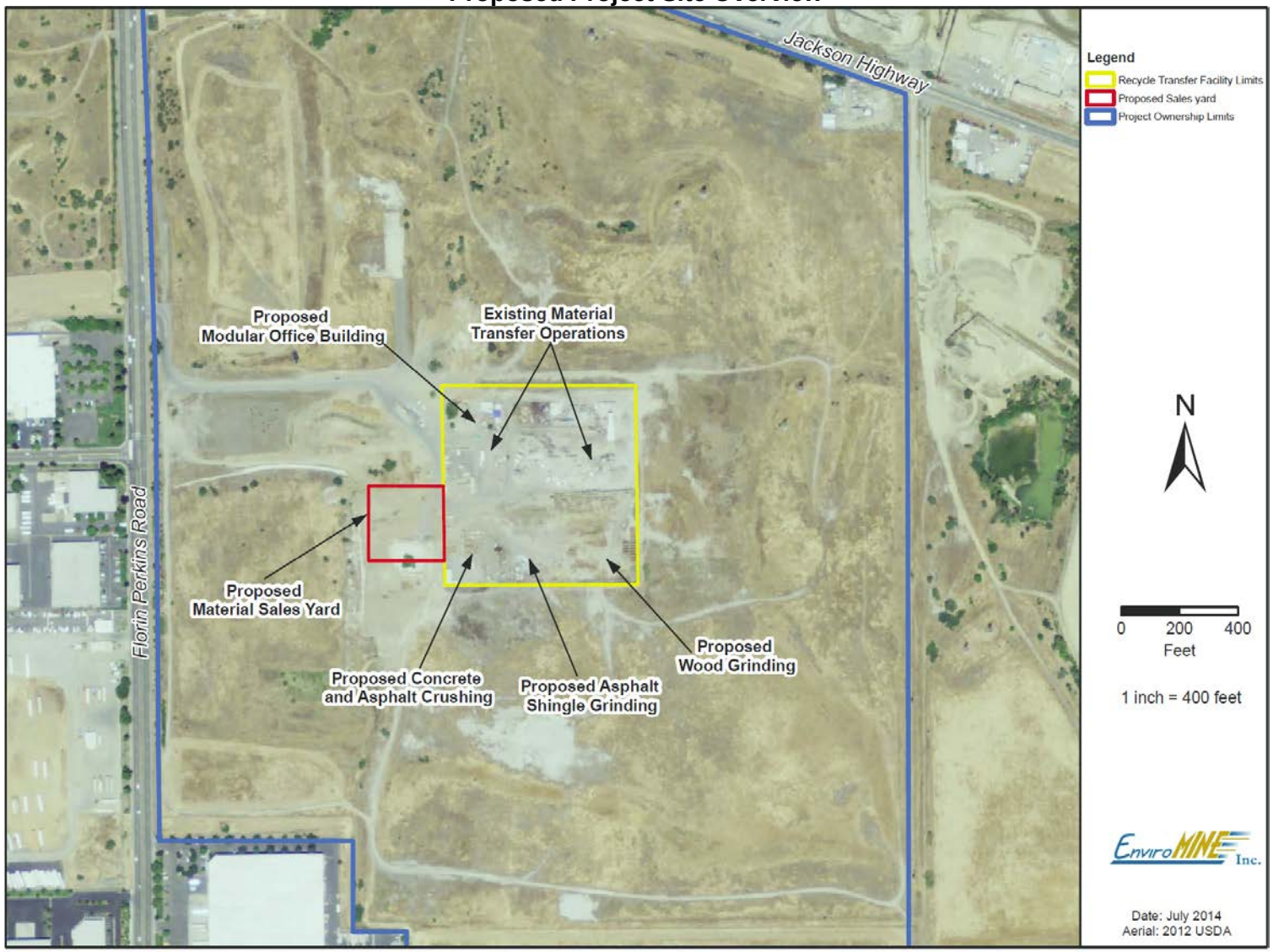
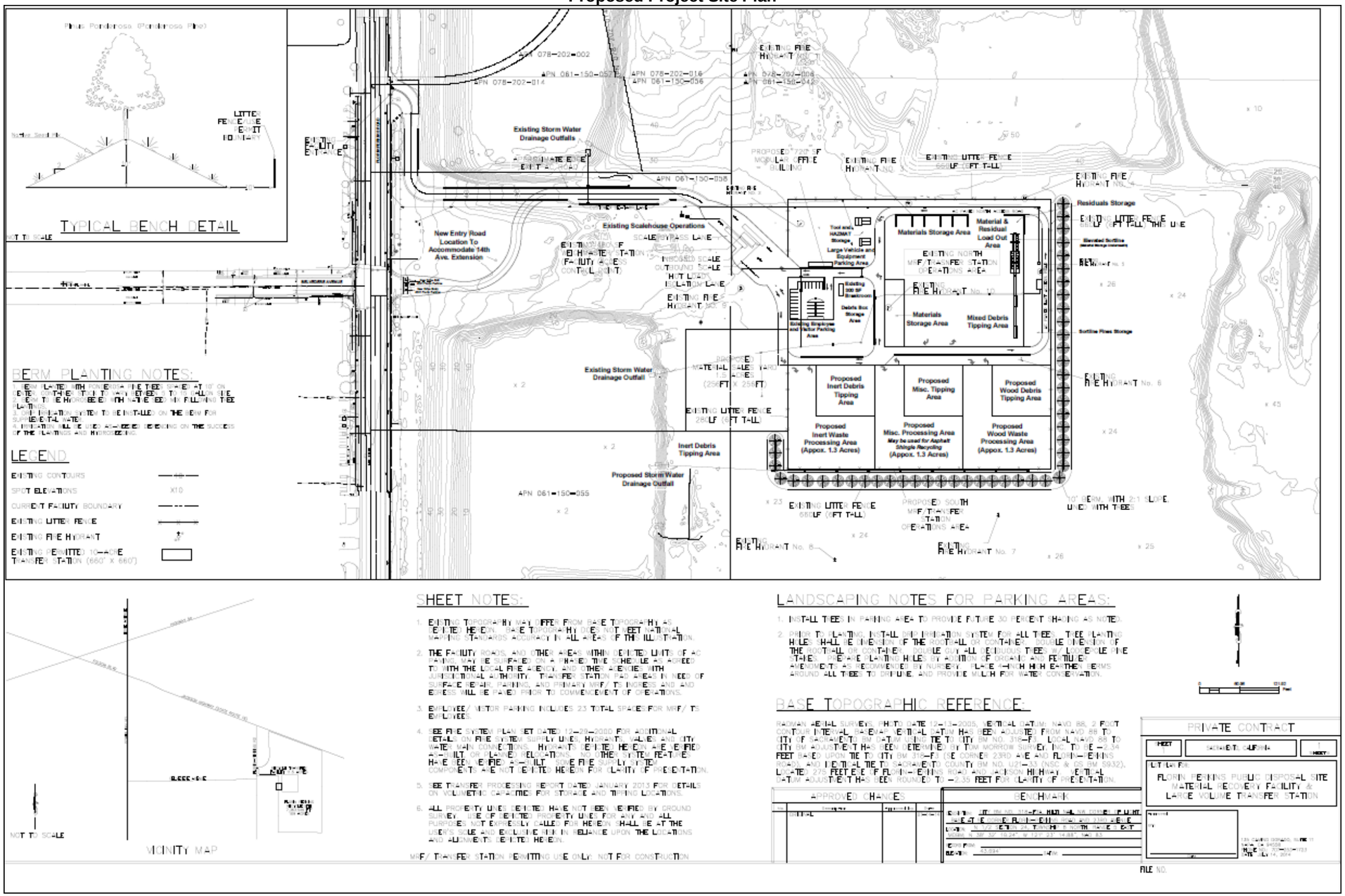


Figure 4
Proposed Project Site Plan



Wood Grinding

The proposed project would include wood grinding as a portion of the on-site operations. Wood grinding would involve the grinding of large woody material such as lumber, branches, logs, stumps and other incoming wood products. Such wood products are classified per the City's Zoning and Development Code as green waste, the processing of which would require a CUP. Notably, such wood products are already received at the site via self-haul loads, and an outside vendor is currently used to haul and grind the wood off-site. The proposed project would allow for grinding of the wood on-site, thereby reducing the additional truck trips for hauling the wood products off-site for grinding. Putrescible wastes are not and would not be accepted at the site. In addition, lawn clippings, leaves, or other green leafy materials are not accepted at the site.

An intake of 80 tons per day is anticipated for wood products, which would be stockpiled in 10-foot high piles on-site temporarily prior to grinding. A 7,020-square-foot area would be required for the raw product intake stockpile. Approximately five days of inventory, or 1,500 cubic yards (CY), could be expected on-site at any one time.

Approximately 95 percent of the wood chips produced from the on-site grinding process would be stockpiled on-site for temporary storage before being loaded into haul trucks and transported to a cogeneration facility to be used for fuel. The remaining five percent would be stored at the material sales yard for contractor sales. A 3,600-square-foot area would be required for the finished wood chips stockpiles. Each stockpile would consist of 130 CY of finished product and would have a height of 15 feet, diameter of 30 feet, and a 2:1 side slope. Approximately 640 CY of finished product with a 48-hour stockpile inventory could be on-site at any one time. Composting of the wood chips is not proposed. In addition, the wood chips would be produced from dry, large, woody materials. As such, the potential for the materials to reach compostable temperatures would be very low. However, daily monitoring (as currently conducted on-site) of stockpile temperatures would be conducted to ensure that piles would not reach compostable temperatures. Should compostable temperatures be detected, the stockpile would be spread with on-site equipment in order to allow release of the heat. The Transfer/Processing Report would be updated upon revision of the proposed project's SWFP and would include details of the stockpile monitoring and associated measures in the event compostable temperatures are reached.

An electric or diesel powered horizontal grinder would be required to grind wood into chips. A Petersen 2750C electric horizontal grinder or similar is proposed to be utilized and operated at the site. However, a diesel grinder was assumed for worst-case analysis purposes throughout this Initial Study/Mitigated Negative Declaration (IS/MND). The 2750C is powered by two 300-horsepower electric motors and is capable of processing approximately 300 CY or 55 tons of material per hour. An excavator or equivalent would be utilized to feed the raw wood products into the grinder. The grinder and excavator would operate within the existing 10-acre permitted area near the southeastern corner of the site, as shown in Figure 3, and are anticipated to operate daily as needed to keep up with the processing of incoming wood products. A loader would be utilized to manage the on-site stockpiles, as well as to load onto haul trucks. Table 2 below presents the equipment anticipated to be used for wood grinding operations at the project site, as well as the anticipated average daily operating time for each piece of equipment.

Table 2 Wood Grinding Equipment		
Equipment	**Model**	**Average Minimum Hours Per Day**
Horizontal Wood Grinder	Peterson 2750 C Electric	8
Excavator Feeding Wood Grinder	Cat 315L-Excavator	8
Loader to Manage Stockpiles	Cat 950F- Front End Loader	8

Concrete and Asphalt Crushing

The proposed project includes concrete and asphalt crushing in order to recycle the concrete and asphalt generated from demolition of buildings and infrastructure that would be accepted at the site. According to the California Asphalt Pavement Association, asphalt is 100 percent recyclable and is America's number one recycled material. Recycling asphalt and concrete reduces the need for mining of native aggregates from the region's dwindling supply of permitted aggregate resources. Thus, adding the ability to recycle asphalt and concrete at the project site would provide the construction and demolition industry with a suitable location to haul demolished concrete and asphalt for recycling.

Material would be brought to the site by independently owned and operated haul trucks and would be stockpiled within the permitted 10-acre boundary near the southwest corner of the site, which would be located over 1,000 feet away from any adjacent properties. Trucks would haul material to the site during normal business hours at random intervals based on need. A set delivery schedule is not anticipated; however, the number of trucks and tonnage of material would remain within the permitted limits. A portion of the trucks that would drop off concrete and asphalt rubble are anticipated to pick up finished materials for construction needs as well.

As needed to satisfy demand, a portable crushing plant would be transported to the project site to crush the concrete and asphalt. In general, crushing operations would commence once the stockpile of rubble reaches a capacity of 10,000 CY. An independent contractor would be hired to crush the concrete and asphalt materials stockpiled on-site. The contractor would deliver and operate the portable crushing plant, for which he/she would obtain all necessary permits for operation of equipment, for one to two weeks or as needed to process the 10,000 CY stockpile. The frequency at which the portable crusher would be required to operate would be dependent on the volume of concrete and asphalt that is generated from demolition projects in the area and accepted at the site. However, for analysis purposes, the concrete crusher was assumed to operate approximately five times per year for a period of two weeks at a time. Concrete and asphalt hauled to the site would need to be crushed into a generally uniform size in order for the material to be utilized by contractors for construction projects in the surrounding area.

Assuming that half of the asphalt and concrete is stockpiled as rubble and half is crushed, the rubble stockpile is anticipated to consist of 5,000 CY, with a base of 120 feet by 120 feet, for a total area of 14,400 square feet, and would be 15 feet high with a side slope of 2:1. The finished product stockpiles are anticipated to consist of 1,000 CY each, with a diameter of 70 feet, height of 24 feet, and side slopes of 1.2:1, for a total surface area of roughly 20,000 square feet. However, actual stockpile sizes would depend upon the demand for materials and amount of processing occurring at any given time. The materials storage areas identified in Figure 4 are not exact and are intended to delineate the general location of the storage areas. Finished product would also be stored in the material sales yard to accommodate customer's needs. The total surface area required for the concrete stockpiles of approximately 34,400 square feet could be accommodated within the materials storage area and the material sales yard. Further details

regarding stockpiling on the site would be addressed within the Transfer/Processing Report to be updated as part of the process of revising the facility's SWFP.

The concrete and asphalt crushing operations are anticipated to require additional capacity in excess of the 500 TPD currently entitled for the existing MRF/LVTS. Accordingly, the project includes a proposal to ~~add 500 TPD, specifically for concrete and asphalt crushing operations, to the site's total allowable tonnage loading of 500 TPD per the existing permit, for a total of 1,000 TPD.~~allow 500 TPD of additional concrete and asphalt capacity, while simultaneously maintaining the existing permitted tonnage loading limit of 500 TPD for all other waste. As a result, the proposed project would have a combined permitted total of 1,000 TPD, but the proposed project would be limited to accepting a maximum of 500 TPD of inert material (concrete and asphalt), independently from the concurrent maximum of 500 TPD for other material. Assuming an average payload of 20 tons per truckload for inbound concrete and asphalt materials, the concrete and asphalt crushing operations would add approximately 25 trucks per day to the overall facility.

In general, concrete and asphalt crushing requires the use of a portable diesel or electric powered crushing plant, a front end loader, and an excavator. A diesel crushing plant was assumed for analysis purposes throughout this IS/MND. Crushing operations at the project site would be capable of processing 200 to 300 tons per hour and would operate as needed to process incoming concrete and asphalt rubble. Table 3 below presents the equipment anticipated to be used for concrete and asphalt crushing operations at the project site, as well as the anticipated average daily operating time for each piece of equipment. It should be noted that the actual equipment may vary from what is presented in Table 3 depending on the contractor. As stated above, the equipment is anticipated to operate as needed to process a 10,000 CY stockpile of rubble, which is estimated to be able to be completed in approximately 10 working days.

Table 3
Concrete and Asphalt Crushing Equipment

Equipment	Model	Average Minimum Hours Per Day
Portable Crushing Plant	Sandvik	8
Excavator w/ Rock Breaker	Cat 315L-Excavator	8
Loader to Feed Plant	Cat 950F- Front End Loader	8

Asphalt Shingle Grinding

The proposed project includes asphalt shingle grinding in order to recycle asphalt shingles removed by homeowners and contractors from rooftops. Asphalt shingles are currently accepted at the site, and the proposed project would reduce the traffic trips required to haul the shingles off-site for grinding elsewhere. An intake of 1,000 CY of shingles would be stockpiled on-site and processed as needed. The intake stockpile would be six feet in height and would require an area of approximately 1,500 square feet. Asphalt shingles would be ground up mechanically to be used by asphalt producers in asphalt mixes. Recycled Asphalt Shingles (RAS) is a relatively new product utilized by asphalt producers to blend into Hot Mix Asphalt (HMA) that is used for paving of roadways, parking lots, and driveways. RAS is gaining acceptance by Caltrans and local municipalities, and is another way to recycle asphalt and divert material from landfills. The on-site asphalt shingle processing is anticipated to occur in the south central portion of the site as shown in Figure 3, over 1,000 feet away from the nearest property boundary.

Equipment required to grind the asphalt shingles would be the same equipment required for the wood grinding process (see Table 4) and would be shared by both operations. The asphalt shingles would be stockpiled on-site and fed through the grinder as needed to satisfy the market demand. A 2,830-square-foot area would be required for the processed asphalt shingles stockpiles. Each stockpile would consist of 130 CY of finished product and would have a height of 15 feet, diameter of 30 feet, and a 2:1 side slope. Approximately 500 CY of processed asphalt shingles could be on-site at any one time.

Table 4
Asphalt Shingle Grinding Equipment

Equipment	Model	Hours Per Day
Horizontal Wood Grinder	Peterson 2750 C Electric	1
Excavator Feeding Wood Grinder	Cat 315L-Excavator	1
Loader to Manage Stockpiles	Cat 950F- Front End Loader	1

Mulch Coloring

The proposed project would include coloring of the mulch produced from the proposed wood grinding process. Biodegradable dye would be added to the mulch created from on-site grinding of wood in the proposed grinder to give the mulch a uniform color. The mulch coloring process utilizes an electric powered trommel screen to rotate the mulch material in the screen and spray dye onto the mulch. Dry ground wood that was processed at the wood grinder would be fed into the trommel for coloring. Hazardous chemicals would not be utilized in the coloring process. Colored mulch would be stockpiled in the material sales yard and sold to the public or shipped off-site. Stockpile sizes would be minimal and be determined by demand for the product. Mulch coloring would be conducted near the wood grinding operations. A front end loader would be required to feed the wood chips into the trommel and to manage the stockpiled material. Table 5 provides additional details on the anticipated equipment needs for the proposed mulch coloring operations. Because mulch products would be produced from dry lumber, the potential for the materials to reach compostable temperatures would be very low. However, daily monitoring of stockpile temperatures would be conducted to ensure that piles would not reach compostable temperatures.

Table 5
Mulch Coloring Equipment

Equipment	Model	Hours Per Day
Electric Trommel	Re-Tech 6' by 19'	2
Loader to Feed Trommel	Cat 950F- Front End Loader	2

Material Sales Yard

The proposed project includes a 1.5-acre material sales yard as an ancillary operation. The material sales yard would be located outside, but adjacent to the western limits of, the existing 10-acre CUP boundary, as shown in Figure 3. As stated previously, the material sales yard is a permitted use in the M-1 zone, and, thus, a modification to the boundaries of the CUP is not required. The material sales yard area would be set back from the road, and clear signage would be provided on the on-site roadways in order to manage on-site traffic. The material sales yard would be open to the public as a venue for the operator to sell recycled landscape materials in bulk. Materials proposed to be sold at the 1.5-acre yard include the following: base rock; topsoil; wood chips; colored mulch; and other landscaping materials.

From experience at the applicant's existing similar facility located in San Jose, California, very few new trips would result from selling materials on-site. Data shows that approximately 80 to 90 percent of the trips associated with purchasing materials from the material sales yard would dispose of waste at the MRF/LVTS prior to utilizing the sales yard. Because the proposed project is similar to the San Jose facility, the project is anticipated to produce similar traffic characteristics. Thus, vehicle trips generated from the material sales yard would be minimal and would be limited to the traffic associated with the current permitted levels for MRF/LVTS and ancillary operations.

Modular Office Building

A 720-square-foot modular office building is proposed to be located near the northwest corner of the 10-acre MRF/LVTS boundary area, as shown in Figure 3. A detailed plan view of the building and access ramps is shown on Figure 5. The modular office building would be a pre-manufactured structure that would be hauled to the site and set up. The office would be used to manage operations at the site and serve as the main office for the facility. Currently, staff is utilizing the existing scale house as an office; however, additional space is needed to accommodate the needs of the operation. The scale house would remain in-place and continue to be used as a scale house for the on-site operations. The proposed modular office building would connect to the existing electricity supply at the site. A single unisex restroom that would accommodate approximately four employees is proposed.

Hours of Operation and Employment

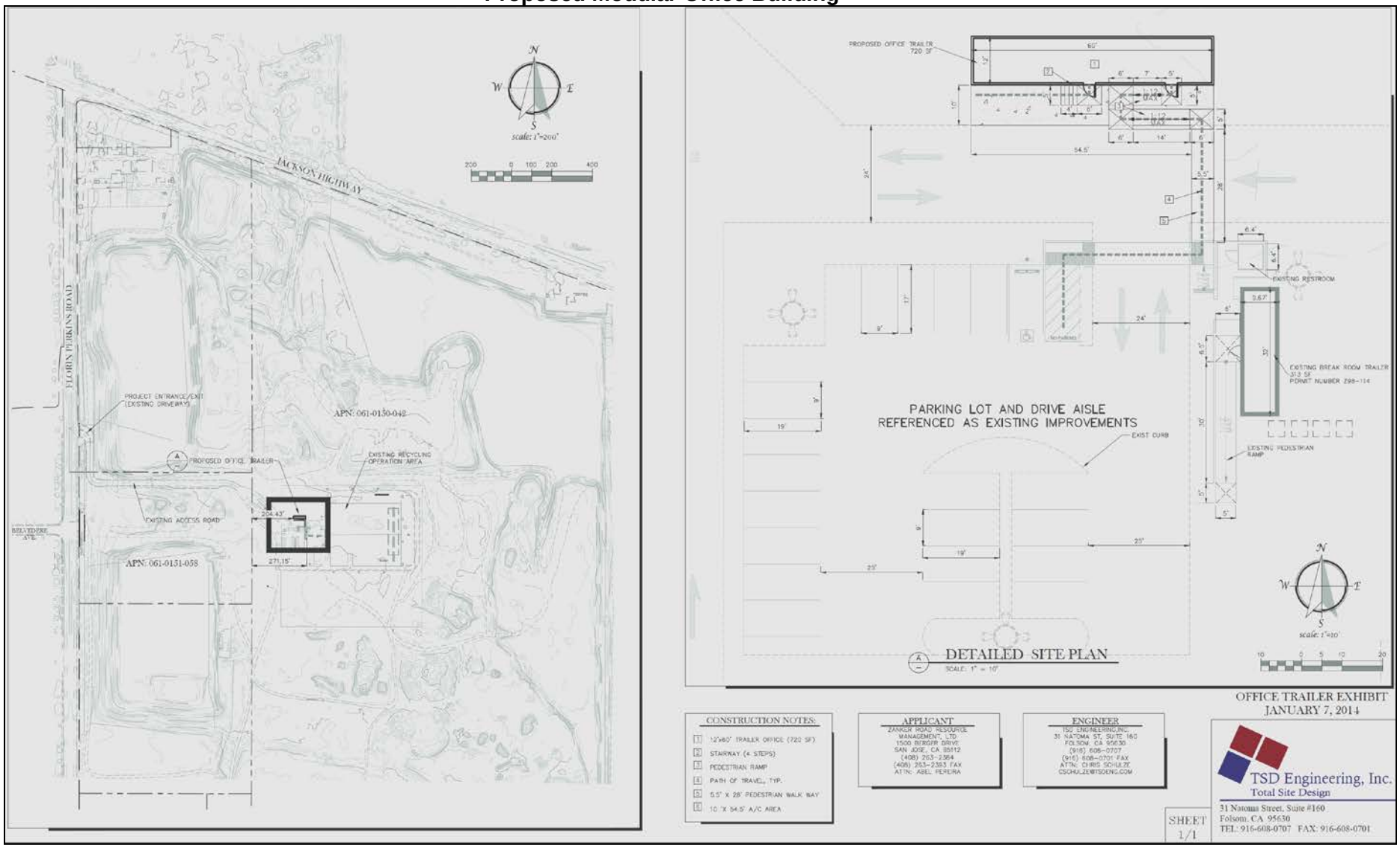
Current hours of operation at the existing site are 6:00 AM to 6:00 PM as allowed under the current CUP. In accordance with the current CUP, operations may be conducted up to 361 days per year, with the facility closed on Easter, Thanksgiving, Christmas Day, and New Year's Day. Changes to the hours of operation are not proposed for the project.

The identity and number of personnel at the existing facility include:

- 1 Operations Manager;
- 1 Weighmaster;
- 1 Station Foreman;
- 1 Lead Worker; and
- 1 (minimum staffing) to 10 (at full loading) Station Laborer(s)/Attendant(s).

The proposed project would result in an increase in employees by approximately five from the existing staffing levels.

Figure 5
Proposed Modular Office Building



Security and Screening

A chain link fence topped with three-strand barbed wire runs along the boundary of the facility where public access is possible. A double barrier of chain link fence runs along a portion of the west boundary of the existing site along Florin-Perkins Road. The exterior chain link fence along Florin-Perkins Road would be upgraded with wood slats. A 25-foot irrigated landscaped strip runs between the exterior chain link fence line and the interior fence line in accordance with the requirements of the City of Sacramento Zoning Ordinance. The interior chain link fence is continuously slatted and screens the facility from public view from the western approach. A chain link fence also runs on the north boundary of the existing site, along Jackson Road. ~~The exterior chain link fencing along the exposed section of Jackson Road would be upgraded with wood slats to block public views of the site.~~ Distance and terrain also helps to screen views of the facility from the north. In addition, a landscaped strip is provided on the outside of the fence along Jackson Road in accordance with the City's Zoning Ordinance. The fencing also provides a means for litter control.

In addition to the existing fencing and landscape buffers described above, an earthen berm is proposed along the southern and eastern perimeter of the currently permitted 10-acre project site. The berm would be 10 feet high with a maximum 2:1 (horizontal:vertical) slope and would be lined with trees. The berm would total approximately 1,400 feet in length and would be 20 feet wide. Fill dirt that is imported to the site from customers through normal operations, as well as from on-site stockpiled fill material that is used as backfill material for the landfill closure process, would be utilized to construct the berm. It should be noted that prior to transferring any soil or inert debris to areas outside of the permitted 10-acre boundary for reuse, the project operator must obtain written approval from the LEA on a case-by-case basis. The berm would be planted with Ponderosa Pines and hydroseeded with a seed mix containing shrubs and grasses for erosion control, which would be irrigated as necessary. The proposed location of the berm is not located over buried waste or any areas that would undergo landfill closure activities or disrupt the landfill cover.

Drainage

A stormwater drainage system currently exists on-site for the existing operations. All areas where waste material is currently tipped, processed, and stored has a concrete and/or asphaltic concrete surface, and the operations area is sloped to prevent ponding of water and to provide positive surface water drainage. The drainage system has been designed to direct stormwater and wash water from station maintenance activities to a series of drain inlets and culverts. Water is filtered prior to entering the drain inlets to remove sediments, debris and hydrocarbons. The water is then transferred by gravity flow to a small sump and subsequently to an underground stormwater detention tank located just west of the existing paved east access road or to the low-lying areas located west of the facility. Excess water in the tank is pumped out for dust suppression. If the tank capacity is exceeded, the excess runoff is directed to a low-lying area west of the facility within the property owner's property boundaries.

The project site and current operations are subject to an existing General Industrial Permit (Waste Discharge Identification [WDID] number 5S34I022555), per the National Pollutant Discharge Elimination System (NPDES), and the associated stormwater pollution prevention plan (SWPPP). All runoff associated with the site is managed in accordance with the best management practices (BMPs) set forth within the SWPPP. Some of the BMPs are described below.

Drainage control structures are inspected regularly for blockages and functionality to ensure continuous functionality. Blockages are removed and repairs completed as necessary to ensure the continuous effectiveness of the drainage system. In preparation of an anticipated storm event, the operator would cover most material stockpiles and consolidate operations to a specific portion of the operations area. Incoming material tipping would occur on a designated portion of the operations area. Pile sizes are minimized during the wet season. The detention tankage is pumped out as needed (within two to three days). Prior to an anticipated storm event, the operator would ensure that the tanks are drained to nearly empty. The water would be used for dust control.

The existing stormwater drainage system would be utilized; however, one additional stormwater outfall structure would be constructed as part of the proposed project to accommodate the increase in stormwater at the site resultant of the increase in impervious surfaces.

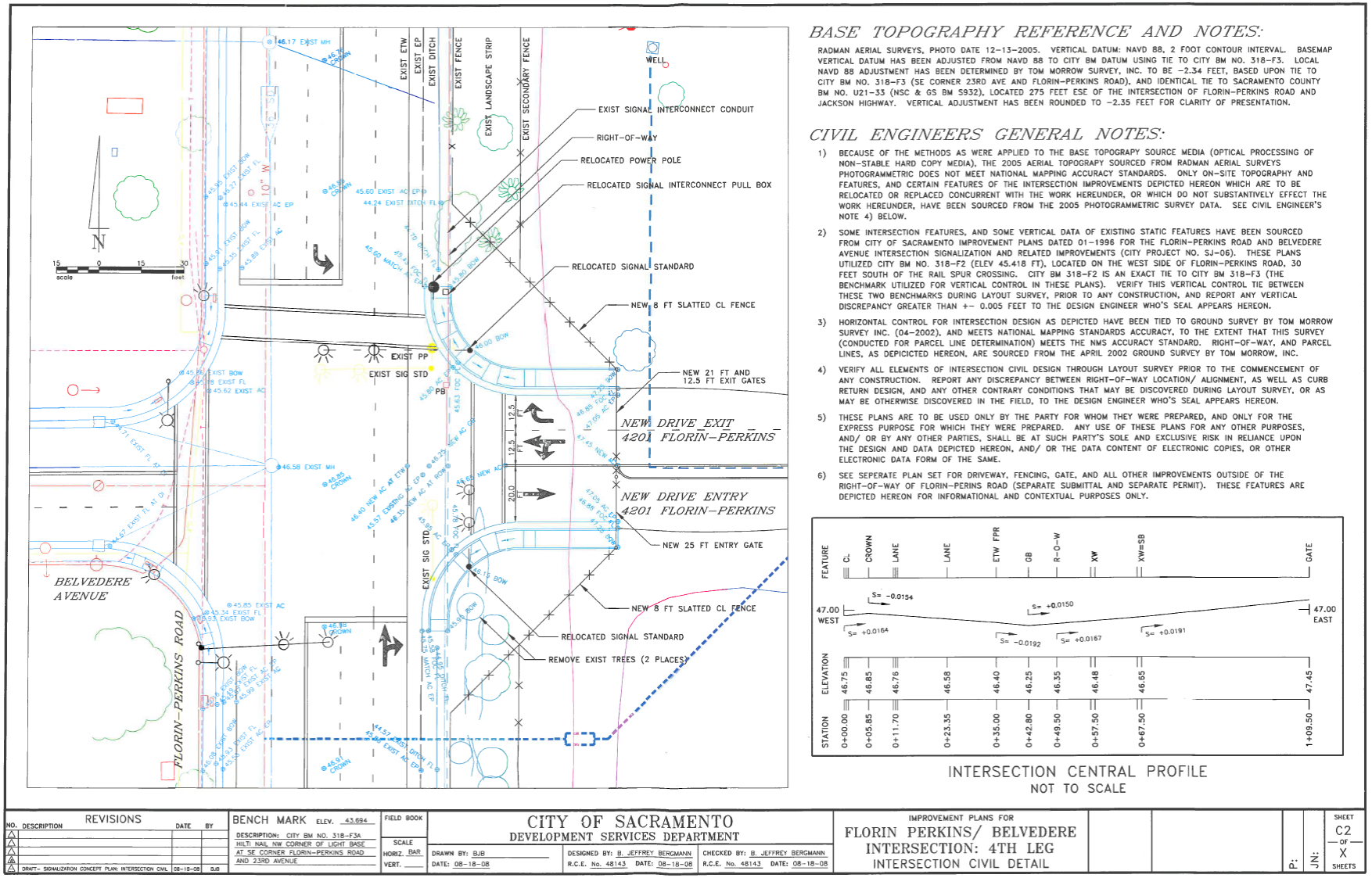
Access Roads and Dust Control

An all-weather access road currently exists from the facility entrance on Florin-Perkins Road to the weigh station, and continues east to the tipping area and south of the tipping area. The road is paved, provides a reasonably smooth surface for access, and is regularly watered/swept to minimize the generation of dust. A total of 23 parking spaces are located on-site for employees and visitors. Turn radii, as well as pavement and pavement base, have been designed to meet emergency vehicle access standards as set forth by the City of Sacramento Fire Department. Pavement continues passed the weigh station, and all areas around the weigh station are furnished with asphaltic concrete pavement (or equivalent). A paved apron to the north and east of the operations area provides for customer maneuvering into the tipping area entirely on paved surface. Accordingly, tracking of mud and generation of dust from site traffic is not anticipated, and tracking of waste material onto adjacent public roads may not be reasonably anticipated.

It should be noted that the City intends to implement the 14th Avenue Extension Project, which would extend and widen 14th Avenue from Power Inn Road to Florin-Perkins Road. The 14th Avenue Extension Project would involve two travel lanes, bike lanes, a landscaped median, a new signal at Florin-Perkins Road, and other roadway improvements.[1] The 14th Avenue Extension Project would provide an east-west connection on 14th Avenue between Power Inn Road and Florin-Perkins Road, which would help to relieve traffic congestion in the area. The proposed project site's access would need to be aligned with the intersection of Belvedere Avenue and Florin-Perkins Road in order to provide safe access to the project site. The Belvedere Avenue / Florin-Perkins Road intersection improvement details are shown in Figure 6. Figure 4 includes the anticipated alignment of the project access realignment. The total surface area anticipated for the access road realignment is 14,589 square feet (or approximately 0.34 acres).

[1] City of Sacramento. *14th Avenue Extension Project – Power Inn Road to Florin Perkins Road*. Available at: http://portal.cityofsacramento.org/Public-Works/Engineering-Services/Projects/Current-Projects/14th-Ave-Extension. Accessed August 4, 2015.

Figure 6
Belvedere Avenue / Florin-Perkins Road Intersection Improvements



BASE TOPOGRAPHY REFERENCE AND NOTES:

RADMAN AERIAL SURVEYS, PHOTO DATE 12-13-2005. VERTICAL DATUM: NAVD 88, 2 FOOT CONTOUR INTERVAL. BASEMAP VERTICAL DATUM HAS BEEN ADJUSTED FROM NAVD 88 TO CITY BM DATUM USING TIE TO CITY BM NO. 318-F3. LOCAL NAVD 88 ADJUSTMENT HAS BEEN DETERMINED BY TOM MORROW SURVEY, INC. TO BE -2.34 FEET, BASED UPON TIE TO CITY BM NO. 318-F3 (SE CORNER 23RD AVE AND FLORIN-PERKINS ROAD), AND IDENTICAL TIE TO SACRAMENTO COUNTY BM NO. U21-33 (NSC & GS BM S932), LOCATED 275 FEET ESE OF THE INTERSECTION OF FLORIN-PERKINS ROAD AND JACKSON HIGHWAY. VERTICAL ADJUSTMENT HAS BEEN ROUNDED TO -2.35 FEET FOR CLARITY OF PRESENTATION.

CIVIL ENGINEERS GENERAL NOTES:

1) BECAUSE OF THE METHODS AS WERE APPLIED TO THE BASE TOPOGRAPY SOURCE MEDIA (OPTICAL PROCESSING OF NON-STABLE HARD COPY MEDIA), THE 2005 AERIAL TOPOGRAPY SOURCED FROM RADMAN AERIAL SURVEYS PHOTOGRAMMETRIC DOES NOT MEET NATIONAL MAPPING ACCURACY STANDARDS. ONLY ON-SITE TOPOGRAPHY AND FEATURES, AND CERTAIN FEATURES OF THE INTERSECTION IMPROVEMENTS DEPICTED HEREON WHICH ARE TO BE RELOCATED OR REPLACED CONCURRENT WITH THE WORK HEREUNDER, OR WHICH DO NOT SUBSTANTIVELY EFFECT THE WORK HEREUNDER, HAVE BEEN SOURCED FROM THE 2005 PHOTOGRAMMETRIC SURVEY DATA. SEE CIVIL ENGINEER'S NOTE 4) BELOW.

2) SOME INTERSECTION FEATURES, AND SOME VERTICAL DATA OF EXISTING STATIC FEATURES HAVE BEEN SOURCED FROM CITY OF SACRAMENTO IMPROVEMENT PLANS DATED 01-1996 FOR THE FLORIN-PERKINS ROAD AND BELVEDERE AVENUE INTERSECTION SIGNALIZATION AND RELATED IMPROVEMENTS (CITY PROJECT NO. SJ-06). THESE PLANS UTILIZED CITY BM NO. 318-F2 (ELEV 45.418 FT), LOCATED ON THE WEST SIDE OF FLORIN-PERKINS ROAD, 30 FEET SOUTH OF THE RAIL SPUR CROSSING. CITY BM 318-F2 IS AN EXACT TIE TO CITY BM 318-F3 (THE BENCHMARK UTILIZED FOR VERTICAL CONTROL IN THESE PLANS). VERIFY THIS VERTICAL CONTROL TIE BETWEEN THESE TWO BENCHMARKS DURING LAYOUT SURVEY, PRIOR TO ANY CONSTRUCTION, AND REPORT ANY VERTICAL DISCREPANCY GREATER THAN +- 0.005 FEET TO THE DESIGN ENGINEER WHO'S SEAL APPEARS HEREON.

3) HORIZONTAL CONTROL FOR INTERSECTION DESIGN AS DEPICTED HAVE BEEN TIED TO GROUND SURVEY BY TOM MORROW SURVEY INC. (04-2002), AND MEETS NATIONAL MAPPING STANDARDS ACCURACY, TO THE EXTENT THAT THIS SURVEY (CONDUCTED FOR PARCEL LINE DETERMINATION) MEETS THE NMS ACCURACY STANDARD. RIGHT-OF-WAY, AND PARCEL LINES, AS DEPICICTED HEREON, ARE SOURCED FROM THE APRIL 2002 GROUND SURVEY BY TOM MORROW, INC.

4) VERIFY ALL ELEMENTS OF INTERSECTION CIVIL DESIGN THROUGH LAYOUT SURVEY PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. REPORT ANY DISCREPANCY BETWEEN RIGHT-OF-WAY LOCATION/ ALIGNMENT, AS WELL AS CURB RETURN DESIGN, AND ANY OTHER CONTRARY CONDITIONS THAT MAY BE DISCOVERED DURING LAYOUT SURVEY, OR AS MAY BE OTHERWISE DISCOVERED IN THE FIELD, TO THE DESIGN ENGINEER WHO'S SEAL APPEARS HEREON.

5) THESE PLANS ARE TO BE USED ONLY BY THE PARTY FOR WHOM THEY WERE PREPARED, AND ONLY FOR THE EXPRESS PURPOSE FOR WHICH THEY WERE PREPARED. ANY USE OF THESE PLANS FOR ANY OTHER PURPOSES, AND/ OR BY ANY OTHER PARTIES, SHALL BE AT SUCH PARTY'S SOLE AND EXCLUSIVE RISK IN RELIANCE UPON THE DESIGN AND DATA DEPICTED HEREON, AND/ OR THE DATA CONTENT OF ELECTRONIC COPIES, OR OTHER ELECTRONIC DATA FORM OF THE SAME.

6) SEE SEPERATE PLAN SET FOR DRIVEWAY, FENCING, GATE, AND ALL OTHER IMPROVEMENTS OUTSIDE OF THE RIGHT-OF-WAY OF FLORIN-PERINS ROAD (SEPARATE SUBMITTAL AND SEPARATE PERMIT). THESE FEATURES ARE DEPICTED HEREON FOR INFORMATIONAL AND CONTEXTUAL PURPOSES ONLY.

INTERSECTION CENTRAL PROFILE
NOT TO SCALE

REVISIONS				BENCH MARK	ELEV. 43.694	FIELD BOOK	CITY OF SACRAMENTO	IMPROVEMENT PLANS FOR			SHEET
NO.	DESCRIPTION	DATE	BY	DESCRIPTION: CITY BM NO. 318-F3A HILTI NAIL NW CORNER OF LIGHT BASE AT SE CORNER FLORIN-PERKINS ROAD AND 23RD AVENUE		SCALE HORIZ. BAR VERT.	DEVELOPMENT SERVICES DEPARTMENT	FLORIN PERKINS/ BELVEDERE INTERSECTION: 4TH LEG		P:	C2 OF X SHEETS
1	DRAFT- SIGNALIZATION CONCEPT PLAN: INTERSECTION CIVIL	08-18-08	BJB				DRAWN BY: BJB DATE: 08-18-08	DESIGNED BY: B. JEFFREY BERGMANN R.C.E. No. 48143 DATE: 08-18-08	CHECKED BY: B. JEFFREY BERGMANN R.C.E. No. 48143 DATE: 08-18-08	INTERSECTION CIVIL DETAIL		JN:	

The entire ingress/egress, maneuvering area, and tipping area are currently paved. The proposed project would involve an additional approximately four acres within the 10-acre permitted boundary to be surfaced with either asphalt or road base to accommodate the additional processing areas. All surfaces including nearby gravel roads, all stockpiles, and all traveled surfaces would be watered as required to minimize the creation of dust. Dust control equipment in the form of water trucks, a street sweeper, spray bars on equipment, and misters on hoppers are currently, and would continue to be, utilized as needed to control fugitive dust. Wetting of wastes would also be performed if a dust or powder problem is encountered in a load. Sweeping of the operations area at a frequency which precludes the accumulation of dust that could give rise to a dust nuisance condition would continue to be performed. All paved and unpaved areas would be wet down with a water truck for dust control as well. The proposed tree-lined berm would assist with reducing wind speed and capturing of fugitive dust. In addition, the proposed processing activities would be performed when wind conditions are favorable.

Water Supply

Given the limited number of employees at the site, potable water would continue to be provided to the on-site employees by means of provision of bottled water supplied by a vendor. The proposed modular office building would be equipped with a single unisex restroom that would accommodate approximately four employees. A City of Sacramento water supply main is located along Florin-Perkins Road. A request to connect to the City of Sacramento's water system would occur at a later date. Until that time, bottled water and the existing on-site portable restrooms would continue to be provided to users and employees of the site. If the City allows for future connection to the water supply main, a two-inch pipe would be installed on the project site as a separate project in order to accommodate the connection. Water lines would not be installed in or below the low permeability layer of the final landfill cover.

Water used for dust suppression is supplied from two on-site groundwater wells, as well as from excess water from the stormwater tank when available. The existing groundwater wells are mainly used for irrigation/industrial uses. The proposed project would increase the existing water consumption of approximately 8,000 gallons per day to an estimated 11,025 gallons per day.

Nine fire hydrants are located on the site with fire supply lines that connect to the City main located at Florin-Perkins Road. A fire access turn-around with a radius of 60 feet is provided along the eastern boundary of the site. A 24-foot-by-75-foot turn-around facility is located northwest of the operations area. Fire extinguishers and a fire hose that fits the hydrants are also provided on the site.

Wastewater

The proposed modular office building would be equipped with a single unisex restroom that would accommodate approximately four employees. The project site is not currently serviced by a public sewage service. Instead, portable restrooms are provided on-site. However, two septic tanks are located on the site. One tank is located west of the existing northern operations area and the other tank is located northwest of the existing operations area. The project applicant has indicated that it is unsure of the specifications of the septic systems; therefore, connections to the septic tanks would not occur immediately following project approval. If the applicant chooses to utilize the existing septic tanks on the site, the applicant would need to contact the SCEMD to determine the requirements and standards for septic tanks and make any necessary improvements to the existing septic system.

Portable restrooms would be utilized by employees; which is the current practice at the existing site. However, if the existing septic systems are determined to be inadequate to handle the wastewater generated from the proposed restroom, the existing septic systems would need to be properly abandoned and/or removed in accordance with applicable regulations prior to installing any new on-site septic system. All necessary permits would be obtained from the SCEMD prior to constructing a new septic system. If a new septic system is installed, the septic system shall be located in an area where waste or landfill cover is not present and would avoid the low permeability layer of the final cover in order to avoid disruption of the integrity of the landfill cover.

Electrical

Electricity is currently supplied to the site for the existing operations from the Sacramento Municipal Utility District (SMUD) overhead power lines and an existing electrical transformer located near the northwest corner of the 10-acre permitted boundary. Sufficient energy is available from SMUD to serve the proposed project with no detriment to other users. A utility line extension would be required in order to supply power to the wood grinding area. It should be noted that any necessary electrical conduit or power poles would avoid the low permeability layer of the final landfill cover. The proposed project would increase the electricity usage at the site from approximately 700 kilowatt-hours (kWh) to an estimated 13,288 kWh per a 30-day billing cycle, assuming operating 361 days per year. A backup diesel generator would be located on-site.

Project Approvals

The proposed project would require the following approvals by the lead agency (i.e., the City of Sacramento):

- Approval/Adoption of the IS/MND and adoption of a Mitigation Monitoring Plan;
- Approval of a CUP to allow the processing of green waste;
- Approval of a CUP Modification; and
- Approval of a Site Plan and Design Review for modifications to the existing site.

In addition, a Liquid Waste Permit would be required from the SCEMD for the on-site septic system.

As discussed above, although the City has jurisdiction in determining whether the facility is consistent with land use and zoning designations and issues permits associated with such, the responsibility for permitting a MRF/LVTS lies with the LEA. As such, the LEA is a Responsible Agency for the proposed project. Revisions to SWFPs are required when significant changes in design or operation are proposed, including:

- An increase in maximum amount of permitted tonnage of all waste received;
- An increase in trucks per day;
- An increase in the facility's permitted acreage; and
- Increase in the permitted hours of operation.

Because the project proposes to increase the tonnage of waste received and the number of trucks per day, and include a 1.5-acre material sales yard outside of the currently permitted 2.5-acre operations area per the existing SWFP, while still allowing full use of the remaining 10 acre

area, the applicant would, after the City's approval of this IS/MND and other entitlements identified above, be required to separately apply for a revision to the SWFP. This separate LEA process would be subject to review and approval by the LEA with CalRecycle concurrence. The LEA will require copies of the record(s) of decision on the project, as well as the City's staff report presented to the decision-making body of the lead agency upon consideration of adoption of this IS/MND and project approval, which will be used in the permitting process for the revised SWFP. As such, this IS/MND has been prepared with the intention to be sufficient for the purposes of the LEA's determination regarding a revised SWFP for the proposed project. Nonetheless, until the LEA receives the project operator's full permit revision application package, the LEA cannot determine whether this IS/MND is sufficient for the purposes of the SWFP revision. It should be noted that CalRecycle staff typically will request notice (at least 10 days in advance) of the date, time, and location of any public hearings or meetings regarding the project proposal, as well as the adopted IS/MND, together with comments on the project upon local approval, if any.

The LEA must make a separate determination of findings for the project and hold a public meeting. Before a revised SWFP can be issued, CalRecycle must review and concur with findings made by the LEA. After receipt of written confirmation of concurrence from CalRecycle, the LEA can issue a revised SWFP.

SECTION III – ENVIRONMENTAL CHECKLIST AND DISCUSSION

LAND USE, POPULATION AND HOUSING, AGRICULTURAL RESOURCES AND ENERGY

Introduction

The California Environmental Quality Act (CEQA) requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable General Plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. However, when a project diverges from an adopted plan, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the IS/MND identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and the effect of the project on these resources.

Discussion

Land Use

The project site has been designated as Employment Center Low Rise in the 2035 General Plan, and is zoned Light Industrial with Solid Waste Restriction Overlay (M-1SWR). The site currently consists of an existing MRF/LVTS, operating under a CUP (Special Permit Minor Modification Z98-114) issued by the City and a SWFP issued by the LEA. The existing and proposed use is consistent with the M-1SWR zoning. Industrial and manufacturing uses are allowed under the Employment Center Low Rise designation within an enclosed building or an enclosed outdoor area and appropriately landscaped setbacks. The proposed project would include a 10-foot berm and landscaping along the southern and eastern perimeters of the processing area.

The proposed project consists of a CUP modification to expand the operations of the existing MRF/LVTS facility to include a 1.5-acre material sales yard as well as an increase in the amount of materials received at the site, thereby increasing the project site to 11.5 acres. The project would also involve the monthly usage of an on-site cement crusher and wood grinder. However, the proposed operations would be conducted within the existing 10-acre MRF/LVTS boundary. Modifications to the type of materials accepted at the site would not occur as a result of the

proposed project, just the manner in which the materials would be processed. New permanent buildings would not be built on-site as part of the proposed project.

The proposed project would not substantially modify the existing land uses of the site, would not involve any amendments to the existing land use or zoning designations, and would include a 10-foot high landscaped berm along the southern and eastern perimeters of the site. The increase in materials received and additional processing at the site would increase the amount of water and power usage at the site; however, the increase would not be considered substantial (see the Public Services and the Utilities and Service Systems sections of this IS/MND for more detailed discussions regarding the project's increase in demand for services). As the site is in the vicinity of other existing industrial uses, such as the Teichert Perkins cement plant and the L and D Landfill site, the proposed project would not be considered an inconsistent use with the surrounding industrial land uses. However, it is noted that the property to the east of the project site, which is currently associated with operations at the Teichert Perkins plant, is proposed for residential uses (i.e., Aspen 1-New Brighton). In addition, the area to the north of the project site is zoned Residential (R-2A); however, an application for development of the area has not been submitted at this time. The analysis of the proposed project throughout this IS/MND takes into consideration the future nearby residential uses and provides measures necessary to reduce any impacts from the proposed project operations on the residences to less-than-significant levels.

In addition, the proposed operations at the site would promote recycling of materials, which would reduce the amount of material being disposed of at a landfill. The number of anticipated trips associated with the site would not be expected to substantially increase from current operations, as truck trips coming to drop off materials would typically leave with recycled materials from the material sales yard as well. Because the project would promote and support recycling of materials within the region, implementation of the proposed project would be considered to provide an overall environmental benefit.

Population and Housing

The proposed project consists of a CUP amendment for the modification of the existing MRF/LVTS facility operations. The modification of the existing facility proposed for the project would not directly or indirectly induce population growth, as only five new employees would be hired due to the proposed project. Housing would not be created or destroyed with implementation of the proposed project, and people or housing would not be displaced. Accordingly, construction or replacement of housing would not be required. Therefore, the proposed project would have no impact associated with population and housing.

Agricultural Resources

The Master EIR discussed the potential impact of development under the 2035 General Plan on agricultural resources. See Master EIR, Chapter 6.2. In addition to evaluating the effect of the general plan on sites within the City, the Master EIR noted that to the extent the 2035 General Plan accommodates future growth within the City limits, the conversion of farmland outside the City limits is minimized. (Master EIR, page 6.2-13) The Master EIR concluded that the impact of the 2035 General Plan on agricultural resources within the City was less than significant.

The proposed project is located on an existing materials recovery and recycling center. Due to the regularly disturbed nature of the site associated with the existing uses, the site consists predominantly of ruderal vegetation and is not utilized for agricultural or timber-harvest operations.

According to the California Department of Conservation's Sacramento County Important Farmland 2012 map, the project site does not contain soils designated as Important Farmland (i.e., Prime Farmland, Unique Farmland or Farmland of Statewide Importance). In addition, the site is not designated or zoned for agricultural uses, nor is the land under a Williamson Act contract. Therefore, the proposed project would have no impact on agricultural resources.

Energy

Structures built would be subject to Titles 20 and 24 of the California Code of Regulations, which reduce demand for electrical energy by implementing energy-efficient standards for residential and non-residential buildings. The 2035 General Plan includes policies (see 2035 General Plan Energy Resources Goal U 6.1.1) and related policies to encourage energy-efficient technology by offering rebates and other incentives to commercial and residential developers, coordination with local utility providers and recruitment of businesses that research and promote energy conservation and efficiency.

The Master EIR discussed energy conservation and relevant general plan policies in section 6.3 (page 6-3). The discussion concluded that with implementation of the general plan policies and energy regulation (e.g., Title 24) development allowed in the general plan would not result in the inefficient, wasteful or unnecessary consumption of energy.

The Master EIR concluded that implementation of state regulation, coordination with energy providers and implementation of general plan policies would reduce the potential impacts from construction of new energy production or transmission facilities to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
1. AESTHETICS Would the proposal: A) Create a source of glare that would cause a public hazard or annoyance?			X
B) Create a new source of light that would be cast onto oncoming traffic or residential uses?			X
C) Substantially degrade the existing visual character of the site or its surroundings?			X

Environmental Setting

The project site is located on the former site of the Florin Perkins Landfill. A scale house with two scales utilized for inbound and outbound transactions and a portable break room for staff use are the only existing structures on the site. The entire ingress/egress, maneuvering area, and tipping area of the facility is paved. The project site is located on flat terrain in a built out urbanized area. The surrounding areas include industrial uses to the north (Teichert Perkins plant, an active sand and gravel processing and sales facility); an industrial building to the south; a former aggregate mining site associated with the Teichert Perkins plant to the east; and industrial uses including a Safeway distribution center to the west. Due to the regularly disturbed nature of the site associated with the existing uses, the site consists predominantly of ruderal vegetation, and water features are not located on or immediately adjacent to the site.

A double barrier of chain link fence currently runs along a portion of the west boundary of the existing site along Florin-Perkins Road. A 25-foot irrigated landscaped strip runs between the exterior chain link fence line and the interior fence line, which also helps to screen views of the site. The interior chain link fence is continuously slatted and screens the facility from public view from the western approach. A chain link fence also currently runs on the north boundary of the existing site, along Jackson Road. Distance and terrain also helps to screen views of the facility from the north.

The project site does not contain scenic resources, is not located in an area designated as a scenic resource or vista, and is not visible from any state-designated scenic highways. The project site is located on flat terrain in a built-out urbanized area. The proposed development would change the appearance of the site as viewed from nearby areas, but would be consistent with the height, bulk, and character of existing uses on site, as well as the surrounding uses. In addition, as discussed in further detail in the Project Description section of this IS/MND and the impact discussions below, the proposed project would improve the existing fencing and include a 10-foot-high, landscaped berm along the southern and eastern perimeter of the 10-acre site to help block public views of the site.

Existing views of the project site from the northeast corner of the property looking southwest towards the site and from the southwest corner of the property looking northeast towards the site are presented in Figure 7 and Figure 8, respectively.

Figure 7
Existing View from the Northeast Corner of Property Looking Southwest Towards Site

Figure 8
Existing View from the Southwest Corner of Property Looking Northeast Towards Site

Standards of Significance

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, thresholds of significance adopted by the City in applicable general plans and previous environmental documents, and professional judgment. A significant impact related to aesthetics would occur if the project would:

- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

The Master EIR described the existing visual conditions in the general plan City of Sacramento, and the potential changes to those conditions that could result from development consistent with the 2035 General Plan. See Master EIR, Chapter 4.13, Visual Resources.

The Master EIR identified potential impacts for light and glare (Impact 4.13-1) and concluded that impacts would be less than significant.

Answers to Checklist Questions

Questions A and B

The project site is the former site of the Florin Perkins Landfill and is located on flat terrain and is surrounded by landfill and mining pits. In general, the proposed operations would be similar to the current site operations and would be conducted within the existing 10-acre MRF/LVTS boundary, with the exception of the expansion of 1.5 acres for the materials storage area. Permanent sources of light or glare may result from the modular office building; however, day or nighttime views in the area would not be affected because the proposed project would be required to adhere to Policy LU 6.1.14 that requires lighting to be shielded and directed downward. In addition, light or glare from the proposed office building would only occur during the hours of operation from 6:00 AM to 6:00 PM.

Furthermore, the proposed project would include a tree-lined, 10-foot-high berm along the southern and eastern perimeter of the 10-acre portion of the site to help screen views from surrounding areas. In addition, a double barrier of chain link fence runs along a portion of the west boundary of the existing site along Florin-Perkins Road. The exterior chain link fence along Florin-Perkins Road would be upgraded with wood slats. A 25-foot irrigated landscaped strip runs between the exterior chain link fence line and the interior fence line, which would further help to screen views of the site. The interior chain link fence is continuously slatted and screens the facility from public view from the western approach. A chain link fence also runs on the north boundary of the existing site, along Jackson Road. ~~The chain link fencing along the exposed section of Jackson Road would be upgraded with wood slats to block public views of the site.~~ Distance and terrain ~~also~~ helps to screen views of the facility from the north. The nearest existing residence is located approximately 2,000 feet from the site and is shielded by intervening topography.

Overall, the proposed project would not create a source of glare or light that would cause a public hazard, annoyance, or be cast onto oncoming traffic or residential uses. As such, the proposed project would result in a ***less-than-significant*** impact associated with light and glare.

Question C

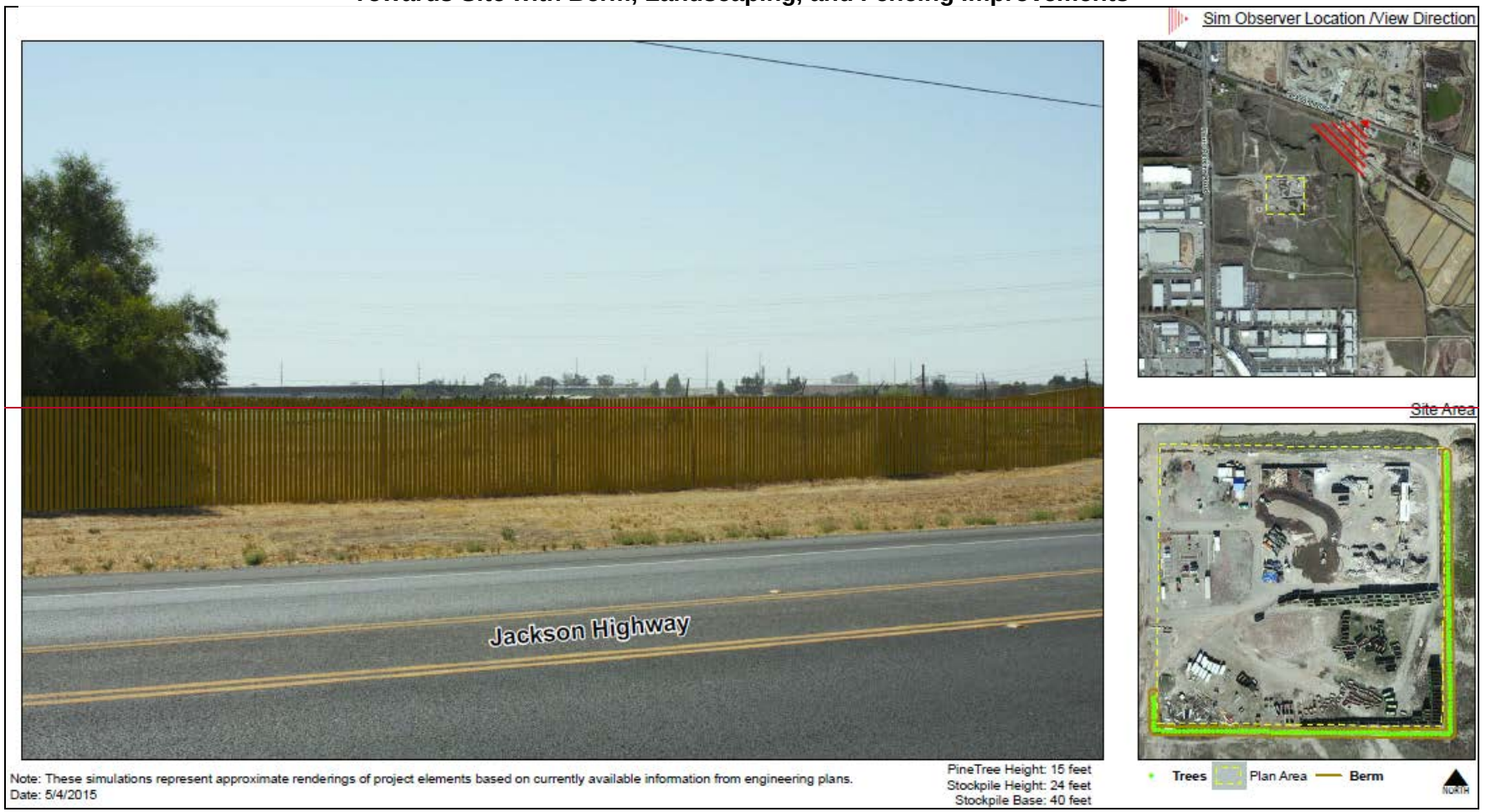
As mentioned above, the proposed project is located on a portion of a larger site that was the former site of the Florin Perkins Landfill and is located near other similar industrial uses, including the Teichert Perkins plant and the L and D Landfill site. The proposed project site consists of an existing MRF/LVTS. The proposed project would continue operation of the existing MRF/LVTS, while adding additional materials processing, increasing the amount of materials allowed at the site, and including an on-site modular office building and a 1.5-acre material sales yard. The additional processing would occur on the currently permitted 10-acre site.

Sensitive visual receptors in the area would consist of the existing and future single-family residences located in the area. The nearest existing residence is located at the intersection of Jackson Road and Florin-Perkins Road, approximately 2,000 feet to the northwest of the existing and proposed operations. That residential site is shielded from view of the project area by the existing intervening natural topography of the area. The property to the immediate east of the project site, which is currently associated with operations at the Teichert Aggregate's Perkins Plant, is proposed for residential uses. Persons traveling along Jackson Road and Florin-Perkins Road could be considered visually sensitive; however, such receptors would not be subject to permanent views of the site. In addition, Jackson Road and Florin-Perkins Road along the project boundaries are not considered scenic roadways and do not provide views of scenic resources.

As discussed above, the proposed project would include a tree-lined, 10-foot-high berm along the southern and eastern perimeter of the 10-acre portion of the site to help screen views from surrounding areas. Figure 9 ~~and Figure 10~~ represents the anticipated views of the project site from the northeast corner of the property looking southwest towards the site ~~and from the southwest corner of the property looking northeast towards the site, respectively,~~ with implementation of the berm and landscaping. The plantings included in the figures are at a height of 15 feet, which would represent views approximately five to 10 years following the initial plantings. The concrete and asphalt stockpile of 24 feet in height is included in the figures. As shown, the stockpile is completely blocked from view by the berm and landscaping. The berm and landscaping would substantially screen views of the site from the east and south, as well as from the northeast and southwest. As stated above, the site is predominantly shielded from view from the northwest by the existing intervening natural topography of the area.

Figure 9
Proposed View from the Northeast Corner of Property Looking Southwest Towards Site with Berm and Landscaping

~~Figure 10~~
~~Proposed View from the Northeast Corner of Property Looking Southwest Towards Site with Berm, Landscaping, and Fencing Improvements~~



In addition, a double barrier of chain link fence runs along a portion of the west boundary of the existing site along Florin-Perkins Road. The exterior chain link fence along Florin-Perkins Road would be upgraded with wood slats. The anticipated view from the southwest corner of the property looking northeast towards the project site upon implementation of the proposed project, including the berm, landscaping, and improved fencing, is shown in Figure 10~~Figure 11~~. As show in the figure, the project would be designed to provide substantial screening of the site from views from the west. A 25-foot irrigated landscaped strip runs between the exterior chain link fence line and the interior fence line in accordance with the requirements of the City of Sacramento Zoning Ordinance. The interior chain link fence is continuously slatted and screens the facility from public view from the western approach. A chain link fence also runs on the north boundary of the existing site, along Jackson Road. ~~The exterior chain link fencing along the exposed section of Jackson Road would be upgraded with wood slats to block public views of the site. Figure 12 presents the anticipated view of the site looking southwest from the northeast corner of the property upon implementation of the proposed project, including the berm, landscaping, and improved fencing. As shown in the figure, the project would be designed to provide substantial screening of the site from views from the north.~~ Distance and terrain ~~also~~ helps to screen views of the facility from the north. In addition, a landscaped strip is provided on the outside of the fence along Jackson Road in accordance with the City's Zoning Ordinance.

The area to the north of the project site is zoned Residential (R-2A). An application for development of the area has not been submitted at this time. Without specific designs for development of the area, the location of future potential residences is not known. As such, an adequate analysis of views from the future residences to the north cannot be reliably accomplished, as any such analysis would be speculative at this time. However, in accordance with City standards, a minimum six-foot-tall barrier would be required at the southern interface of the residential and industrial properties at such time as development of the multi-family residential uses is proposed. The size of the barrier could be adjusted such that any views of the proposed project site from the residences would be substantially screened. Furthermore, the proposed project would be part of the existing environmental setting (e.g., part of the existing visual character of the area) at the time a future development application is proposed for the property to the north, which would have to be taken into consideration by the future applicant and the City as part of that future project's environmental review process. Accordingly, the proposed project would not substantially degrade the existing visual character of the property to the north or surrounding area at such time the property is proposed for development.

The proposed berm, landscaping, and fencing improvements appear to eliminate any visual impacts from the proposed project operations, reduce the visual impacts from existing operations, and provide an overall improvement to the visual impacts associated with the site, including from Jackson Road. Overall, because the proposed project would be consistent with the existing visual character and quality of the area, would include a number of screening features, would not substantially degrade views from any nearby sensitive visual receptor, and would not block any views of scenic resources, the proposed project would not substantially degrade the existing visual character of the site or its surroundings, and a ***less-than-significant*** impact would occur.

Mitigation Measures

None required.

Figure 10~~Figure 11~~

Proposed View from the Southwest Corner of Property Looking Northeast Towards Site with Berm and Landscaping

~~Figure 12~~
~~Proposed View from the Southwest Corner of Property Looking Northeast~~
~~Towards Site with Berm, Landscaping, and Fencing Improvements~~

Findings

The project would have no additional project-specific environmental effects relating to Aesthetics.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
2. AIR QUALITY *Would the proposal:* A) Result in construction emissions of NO_x above 85 pounds per day?			X
B) Result in operational emissions of NO_x or ROG above 65 pounds per day?			X
C) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X
D) Result in PM_{10} concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard?			X
E) Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm)?			X
F) Exposure sensitive receptors to substantial pollutant concentrations?			X
G) Result in TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources?			X
H) Conflict with the Climate Action Plan?			X

Environmental and Regulatory Setting

The City of Sacramento is within Sacramento County, which is within the boundaries of the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Federal and state air quality standards have been established for six common air pollutants, known as criteria pollutants, because the criteria air pollutants could be detrimental to human health and the environment. The criteria pollutants include particulate matter, ground-level ozone, carbon monoxide, sulfur oxides, nitrogen oxides, and lead. At the federal level, Sacramento County is designated as severe nonattainment for the 8-hour ozone standard, nonattainment for the 24-hour $PM_{2.5}$ standard, and attainment or unclassified for all other criteria pollutants. At the state level, the area is designated as a serious nonattainment area for the 1-hour ozone standard, nonattainment for the 8-hour ozone standard, nonattainment for the PM_{10} and $PM_{2.5}$ standards, and attainment or unclassified for all other state standards.

Nearly all development projects in the Sacramento region have the potential to generate air pollutants that may increase the difficultly of attaining federal and state AAQS. Therefore, for most projects, evaluation of air quality impacts is required to comply with CEQA. In order to help public agencies evaluate air quality impacts, the SMAQMD has developed the *Guide to Air Quality Assessment in Sacramento County*. The SMAQMD's guide includes recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under nonattainment for the federal and state ozone AAQS. The SMAQMD's guide also includes screening criteria for localized carbon monoxide (CO) emissions and thresholds for new stationary sources of toxic air contaminants (TACs).

In addition to criteria air pollutants, TACs are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Public exposure to TACs can result from emissions from normal operations as well as accidental releases. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer include birth defects, neurological damage, and death.

Naturally occurring asbestos (NOA) was identified as a TAC in 1986 by CARB. Earth disturbance activity could result in the release of NOA to the air. NOA is located in many parts of California and is commonly associated with ultramafic rocks. According to mapping prepared by the California Geological Survey, the only area within Sacramento County that is likely to contain NOA is eastern Sacramento County. The project site is not located in an area identified as likely to contain NOA.

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. Existing and future sensitive receptors in the vicinity of the project site include the single-family residences located to the south, southwest, north, and east of the site.

GHG Emissions

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

In September 2006, then-Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, which requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. AB 32 delegated the authority for implementation to the CARB and directs the CARB to enforce the statewide cap. In accordance with AB 32, CARB prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008. The Scoping Plan provides the outline for actions to reduce California's GHG emissions. Based on the reduction goals called for in the 2008 Scoping Plan, a 29 percent reduction in GHG levels relative to a Business As Usual (BAU) scenario would be required to meet 1990 levels by 2020. A BAU scenario is a baseline condition based on what could or would occur on a particular site in the year 2020 without implementation of a proposed project or any required or voluntary GHG reduction measures. A project's BAU scenario is project and site specific, and varies from project to project.

In 2011, the baseline or BAU level for the Scoping Plan was revised to account for the economic downturn and state regulation emission reductions (i.e., Pavley, Low Carbon Fuel Standard [LCFS], and Renewable Portfolio Standard [RPS]). Again, the BAU condition is project site specific and varies. The BAU scenario is based on what could or would occur on a particular site in the year 2020 without implementation of a proposed project or consideration of any state regulation emission reductions or voluntary GHG reduction measures. Accordingly, the Scoping Plan emission reduction target from BAU levels required to meet 1990 levels by 2020 was modified from 29 percent to 21.7 percent (where BAU levels is based on 2010 levels). The amended Scoping Plan was re-approved August 24, 2011.

The City adopted the City of Sacramento Climate Action Plan (CAP) on February 14, 2012 to comply with AB 32. The CAP identified how the City and the broader community could reduce Sacramento's GHG emissions and included reduction targets, strategies, and specific actions. In 2015, the City of Sacramento adopted the 2035 General Plan Update. The update incorporated measures and actions from the CAP into Appendix B, General Plan CAP Policies and Programs, of the General Plan Update. Appendix B includes all City-Wide policies and programs that are supportive of reducing GHG emissions. The General Plan CAP Policies and Programs per the General Plan Update supersede the City's CAP. Rather than compliance and consistency with the CAP, all proposed projects must now be compliant and consistent with the General Plan CAP Policies and Programs outlined in Appendix B of the General Plan Update.

Standards of Significance

For purposes of this IS/MND, air quality impacts may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of 2035 General Plan policies:

- construction emissions of NO_x above 85 pounds per day;
- operational emissions of NO_x or ROG above 65 pounds per day;
- violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- PM_{10} concentrations equal to or greater than five percent of the state ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM_{10} ambient air quality standards;
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or

- exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

A project is considered to have a significant effect relating to greenhouse gas emissions if it fails to satisfy the requirements of the City's Climate Action Plan.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

The Master EIR addressed the potential effects of the 2035 General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthful pollutant concentrations. See Master EIR, Chapter 4.2.

Policies in the 2035 General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the 2035 General Plan. For example, Policy ER 6.1.1 calls for the City to work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet state and federal air quality standards; Policy ER 6.1.12 requires the City to review proposed development projects to ensure that the projects incorporate feasible measures that reduce construction and operational emissions; Policy ER 6.1.11 calls for coordination of City efforts with SMAQMD; and Policy ER 6.1.15 requires the City to give preference to contractors using reduced-emission equipment.

The Master EIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the 2035 general Plan would reduce the effect to a less-than-significant level. The policies include ER 6.1.4, requiring coordination with SMAQMD in evaluating exposure of sensitive receptors to TACs, and impose appropriate conditions on projects to protect public health and safety; as well as Policy LU 2.7.5 requiring extensive landscaping and trees along freeways fronting elevation and design elements that provide proper filtering, ventilation, and exhaust of vehicle air emissions from buildings.

The Master EIR found that greenhouse gas emissions that would be generated by development consistent with the 2035 General Plan would contribute to climate change on a cumulative basis. Policies of the General Plan identified in the Master EIR that would reduce construction related GHG emissions include: ER 6.1.2, ER 6.1.11 requiring coordination with SMAQMD to ensure feasible mitigation measures are incorporated to reduce GHG emissions, and ER 6.1.15. The 2035 General Plan incorporates the GHG reduction strategy of the 2012 Climate Action Plan (CAP), which demonstrates compliance mechanism for achieving the City's adopted GHG reduction target of 15 percent below 2005 emissions by 2020. Policy ER 6.1.8 commits the City to assess and monitor performance of GHG emission reduction efforts beyond 2020, and progress toward meeting long-term GHG emission reduction goals, ER 6.1.9 also commits the City to evaluate the feasibility and effectiveness of new GHG emissions reduction measures in view of the City's longer-term GHG emission reductions goal. The discussion of greenhouse gas emissions and climate change in the 2035 General Plan Master EIR are incorporated by reference in this IS/MND. (CEQA Guidelines Section 15150)

The Master EIR identified numerous policies included in the 2035 General Plan that addressed greenhouse gas emissions and climate change. See Draft Master EIR, Chapter 4.14, and pages 4.14-1 et seq. The Master EIR is available for review at the offices of Development Services Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA during normal business hours, and is also available online at:

http://portal.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports

Answers to Checklist Questions

Questions A through C

In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the SMAQMD has established recommended thresholds of significance, including mass emission thresholds for construction-related and operational ozone precursors, as the area is under nonattainment for ozone. The SMAQMD's recommended thresholds of significance, which are expressed in pounds per day (lbs/day), are presented in Table 6.

Table 6
SMAQMD Thresholds of Significance

Pollutant	Construction Thresholds (lbs/day)	Operational Thresholds (lbs/day)	Cumulative Thresholds (tons/yr)
NO_X	85	65	-
ROG	-	65	-
PM_{10}	80	80	14.6
$PM_{2.5}$	82	82	15

Source: SMAQMD, June 2015.

The proposed project's emissions have been estimated using the California Emissions Estimator Model (CalEEMod) version 2013.2.2 software - a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the ITE Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model (i.e., construction information, anticipated increase in vehicle trips, and proposed processing equipment). The results of emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included in Appendix A to this IS/MND.

Construction Emissions

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction exhaust emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants.

Construction was assumed to occur in 2016 and would consist of berm construction and paving. The future realignment of the project access roadway was also taken into consideration during project modeling. The proposed project is required to comply with all SMAQMD rules and regulations for construction, including, but not limited to, Rule 403 (Fugitive Dust) and Rule 404 (Particulate Matter). In addition, all projects are required to implement the SMAQMD's Basic Construction Emission Control Practices. The proposed project's maximum estimated unmitigated emissions according to CalEEMod are presented in Table 7. As shown in the table, the proposed project's maximum unmitigated construction-related emissions would be below the SMAQMD thresholds of significance. Therefore, development of the proposed project would not violate any air quality standards or contribute to an existing air quality violation (i.e., the region's nonattainment status of ozone or PM) during construction.

Table 7
Maximum Unmitigated Project Construction-Related Emissions

Pollutant	Project Emissions (lbs/day)	SMAQMD Threshold of Significance (lbs/day)
NO_X	74.90	85
PM_{10}	9.80	80
$PM_{2.5}$	6.65	82

Source: CalEEMod, April 2016 (see Appendix A).

Operational Emissions

Operational emissions of criteria pollutants would be generated by the proposed project from both mobile and stationary sources. Day-to-day activities such as employee vehicle trips to and from the project site and trucks dropping off and picking up materials at the project site would make up the majority of the mobile emissions. The project would increase trucks at the site by 25 trucks per day. Emissions would also occur from stationary sources such as the mechanical equipment (e.g., wood grinder, portable crushing machine, and trommel) used on-site for materials processing. It should be noted that the future realignment of the project access roadway was taken into consideration during project modeling.

As stated above, the project is required to comply with all SMAQMD rules and regulations, such as those listed previously for construction, as well as those associated with operations, such as Rule 202 (New Source Review), Rule 402 (Nuisance), and Rule 404 (Particulate Matter). Thus, the modeling performed for the proposed project included compliance with SMAQMD rules and regulations to the extent practicable in CalEEMod. The project's increase of 25 trucks at the site per day was applied to CalEEMod, as well as the anticipated project-specific increase in electricity usage. The horsepower, operational hours, and days of operation of the proposed mechanical equipment was included in CalEEMod, with the assumption that all equipment would be diesel-fueled. It should be noted that in accordance with Rule 202, the project applicant would be required to obtain a Permit to Operate from SMAQMD for each piece of stationary equipment to be operated on the project site. Compliance with the SMAQMD's permitting process would ensure that emissions associated with the processing equipment would be minimized. The proposed project's estimated operational emissions are presented in Table 8. As shown in the table, the proposed project's operational emissions would not be expected to exceed the applicable SMAQMD thresholds of significance.

Table 8 Maximum Unmitigated Project Operational Emissions		
Pollutant	**Project Emissions (lbs/day)**	**SMAQMD Thresholds of Significance (lbs/day)**
NO_X	36.60	65
ROG	4.09	65
PM_{10}	1.95	80
$PM_{2.5}$	1.66	82
Source: CalEEMod, April 2016 (see Appendix A).		

A backup diesel generator would be located at the project site for emergency purposes only. Occasional maintenance and testing of the generator would occur to ensure reliability; however, such testing would be limited to a maximum of 50 hours per year pursuant to the CARB diesel Airborne Toxic Control Measure (ATCM), but would likely be less (e.g., the number of hours necessary to comply with the testing requirements of the National Fire Protection Association).[2] When in use, the emergency generator would contribute emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$. However, the project applicant would be required to obtain a Permit to Operate from SMAQMD for the use of the emergency backup generator, which would set appropriate emissions limits. In addition, in order to obtain the Permit to Operate, the applicant must show that the generator would have a minimum of a Tier 3 engine and would comply with the applicable CARB diesel ATCM. Due to compliance with the Permit to Operate, as well as the anticipated minimal operation of the generator, the emergency backup generator would not result in emissions that would exceed, or cause the total project emissions to exceed, the applicable SMAQMD thresholds of significance.

Overall, the proposed project would not violate any air quality standards or contribute to an existing air quality violation (i.e., the region's nonattainment status of ozone) during operations.

Conclusion

Because the proposed project, including the future realignment of the access roadway, would not result in emissions in excess of applicable thresholds of significance during construction or operation, the project would not violate any air quality standards or contribute to an existing air quality violation. Therefore, impacts would be considered ***less than significant***.

Question D

Project construction, particularly ground-disturbing activities such as grading and excavation result in emissions of fugitive dust, which includes PM emissions. Construction was assumed to occur in 2016 and would consist of berm construction and paving. The proposed project is required to comply with all SMAQMD rules and regulations for construction, including, but not limited to, Rule 403 (Fugitive Dust) and Rule 404 (Particulate Matter).

SMAQMD has recently adopted mass emissions thresholds of significance for PM_{10} and $PM_{2.5}$, which have been included in the proposed project's construction-related and operational emissions analysis as shown above. The proposed project's PM_{10} and $PM_{2.5}$ emissions have also been estimated using CalEEMod for comparison to the cumulative thresholds of significance included in Table 6. According to the CalEEMod results, the proposed project would result in PM_{10}

[2] Sacramento Metropolitan Air Quality Management District. *Stationary Internal Combustion Engine Policy Manual*. January 1, 2001 (last updated May 2012).

and $PM_{2.5}$ emissions as shown in Table 9 below. As presented in the table, the proposed project's estimated emissions of PM_{10} and $PM_{2.5}$ would be well below the applicable thresholds of significance.

Table 9
Maximum Unmitigated Cumulative PM_{10} and $PM_{2.5}$ Emissions

Pollutant	Project Emissions (tons/yr)	SMAQMD Thresholds of Significance (tons/yr)
PM_{10}	0.25	14.6
$PM_{2.5}$	0.20	15

Source: CalEEMod, April 2016 (see Appendix A).

Due to the adoption of mass emissions thresholds of significance, the SMAQMD no longer recommends that construction-related PM_{10} emissions be addressed as a localized pollutant. Nonetheless, according to previous SMAQMD guidance, PM_{10} emissions were considered to be significant if they exceeded the concentration-based thresholds of significance of 50 micrograms per cubic meter ($\mu g/m^3$) (24-hour standard) at an off-site receptor location, or five percent of the threshold of significance in nonattainment areas. Because $PM_{2.5}$ is a subset of PM_{10}, SMAQMD assumes that construction projects that do not generate concentrations of PM_{10} that exceed the concentration-based threshold of significance would also be considered less-than-significant for $PM_{2.5}$ impacts.

Per SMAQMD's previous guidance, for construction-related PM emissions, projects that meet the following two conditions would not have the potential to exceed or contribute to the concentration-based threshold of significance for PM_{10} at an off-site location:

- The project would implement all Basic Construction Emission Control Practices; and
- The maximum daily disturbed area (i.e., grading, excavation, cut and fill) would not exceed 15 acres. (If the maximum daily disturbed area is not known at the time of the analysis, SMAQMD guidance states that users shall assume that up to 25 percent of the total project area would be disturbed in a single day.)

As stated above, all projects within the jurisdictional area of SMAQMD are required to implement the SMAQMD's Basic Construction Emission Control Practices. As the entire project site, including the approximately 0.34 acres for the realignment of the access roadway, would be 11.84 acres, the total or maximum daily disturbed area would not exceed 15 acres. Accordingly, the proposed project would not have the potential to exceed or contribute to the concentration-based threshold of significance for PM_{10} at an off-site location. Because $PM_{2.5}$ is a subset of PM_{10}, SMAQMD assumes that construction projects that do not generate concentrations of PM_{10} that exceed the concentration-based threshold of significance would also be considered less-than-significant for $PM_{2.5}$ impacts. Thus, the project would not result in impacts related to construction PM emissions.

Per SMAQMD's previous guidance, operational vehicle travel-related emissions of PM_{10} and $PM_{2.5}$ could have the potential to exceed their respective standards if a project would generate a high volume of vehicle trips on unpaved roadways. The entire ingress/egress, maneuvering area and tipping area are paved. It should be noted that the proposed project would involve an additional four acres of the site to be surfaced with either asphalt or road base to accommodate the additional processing areas. All surfaces including nearby gravel roads, all stockpiles, and all traveled surfaces would be watered as required to minimize the creation of dust. Dust control

equipment in the form of water trucks, a street sweeper, spray bars on equipment, and misters on hoppers are currently, and would continue to be, utilized as needed to control fugitive dust. Wetting of wastes would also be performed if a dust or powder problem is encountered in a load. Sweeping of the operations area at a frequency which precludes the accumulation of dust that could give rise to a dust nuisance condition would continue to be performed. All paved and unpaved areas would be wet down with a water truck for dust control as well. The proposed tree-lined berm would assist with reducing wind speed and capturing of fugitive dust. In addition, the proposed processing activities would be performed when wind conditions are favorable. Therefore, the proposed project's operational emissions of PM would not be substantial.

Overall, the proposed project, including the future realignment of the project access roadway, is not expected to result in PM_{10} concentrations equal to or greater than five percent of the state AAQS, and impacts would be ***less than significant***.

Questions E through G

The proposed project would not introduce new sensitive receptors to the area. Accordingly, the proposed project would not be considered a sensitive receptor. The nearest existing residence is located at the intersection of Jackson Road and Florin-Perkins Road, approximately 2,000 feet to the northwest of the existing and proposed operations. That residential site is shielded from view of the project area by the existing intervening natural topography of the area. In addition, the property to the immediate east of the project site, which is currently associated with operations at the Teichert Aggregate's Perkins Plant, is proposed for residential uses. The area to the north of the project site is designated for residential uses; however, an application for development of the area has not been submitted at this time. The major pollutant concentrations of concern are localized CO emissions and TAC emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. Concentrations of CO approaching the ambient air quality standards are only expected where background levels are high, and traffic volumes and congestion levels are high. The SMAQMD's preliminary screening methodology for localized CO emissions provides a conservative indication of whether project-generated vehicle trips would result in the generation of CO emissions that contribute to an exceedance of the applicable threshold of significance. The first tier of SMAQMD's recommended screening criteria for localized CO states that a project would result in a less-than-significant impact to air quality for local CO if:

- Traffic generated by the project would not result in deterioration of intersection level of service (LOS) to LOS E or F; and
- The project would not contribute additional traffic to an intersection that already operates at LOS of E or F.

Even if a project would result in either of the above, under the SMAQMD's second tier of localized CO screening criteria, if all of the following criteria are met, the project would still result in a less-than-significant impact to air quality for localized CO:

- The project would not result in an affected intersection experiencing more than 31,600 vehicles per hour;
- The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air would be substantially limited; and
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

The proposed project would generate an additional 25 trucks at the site per day, which would not deteriorate intersection LOS or substantially contribute to an intersection that already operates at an unacceptable LOS. Consequently, the proposed project would not be expected to result in the generation of localized CO emissions that would exceed the state AAQS.

TAC Emissions

The CARB Handbook provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure.

Construction activities have the potential to generate DPM emissions related to the number and types of equipment typically associated with construction. Off-road heavy-duty diesel equipment used for site grading and paving result in the generation of DPM. However, construction associated with the proposed project is minimal (i.e., berm construction and paving of four acres) and temporary, occurring over a relatively short duration in comparison to the operational lifetime of the proposed project. In addition, only portions of the site would be disturbed at a time, with operation of construction equipment regulated by federal, state, and local regulations, including SMAQMD rules and regulations, and occurring intermittently throughout the course of a day. Furthermore, the nearest sensitive receptor is located approximately 2,000 feet from the site and is shielded by intervening topography. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM associated with construction for any extended period of time would be low.

Operations on the project site would involve the use of heavy equipment, which could be related to emissions of TACs attributable to diesel engines. Although the proposed project would likely utilize electricity-powered mechanical equipment on-site, the applicant may choose to utilize a diesel powered grinder and/or portable crushing plant. A back-up diesel generator would be located on the site as well. Similar to the discussion above regarding construction-related DPM, operation of heavy equipment would be regulated by federal, state, and local regulations, including SMAQMD rules, regulations, and permits to operate, as necessary, and would occur only in certain portions of the site for intermittent intervals of time. For example, the crushing plant would only operate for one or two weeks at a time a few times per year. The plant would be operated by a contractor that would obtain all necessary air board permits for the equipment. In addition, as discussed above, the emergency back-up generator would likely be limited in operation to occasional testing and would be subject to a SMAQMD Permit to Operate. As such, the emissions associated with operation of the on-site generator would be relatively low.

CARB recommends safe distances between sensitive receptors and potential sources of TACs, such as more than 500 feet from a freeway or high-traffic road, 1,000 feet from distribution centers, rail yards, and chrome platers, and 300 feet from dry cleaners and gasoline dispensing facilities. Such uses have much higher associated emissions than what would be expected to occur from the proposed operations at the project site. Furthermore, according to CARB, concentrations of DPM are typically reduced by 70 percent at a distance of approximately 500 feet. The nearest sensitive receptor is located approximately 2,000 feet from the site and is shielded by intervening topography. Therefore, due to the distance between the project site and the nearest sensitive receptor, as well as the primarily intermittent operation of diesel equipment at the site, operations are not expected to result in exposure of sensitive receptors to substantial pollutant concentrations.

The CARB's Handbook includes facilities (distribution centers) with associated diesel truck trips of more than 100 trucks per day as a source of substantial TAC emissions and recommends a setback of 1,000 feet from such facilities. The proposed project would only add an additional 25 trucks at the site per day. In addition, the nearest sensitive receptor is located approximately 2,000 feet from the site and is shielded by intervening topography. It should be noted that state law restricts truck idling in excess of five minutes. Thus, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM associated with on-site operations would be low.

As discussed above, the project site is not located in an area identified as likely to contain NOA. Thus, sensitive receptors would not be exposed to NOA as a result of the proposed project.

Overall, the proposed project would not result in TAC exposures that would create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

Conclusion

As discussed above, the proposed project, including the future realignment of the project access roadway, would not cause or be exposed to substantial pollutant concentrations, including localized CO or TAC emissions, including DPM and NOA. Therefore, exposure of sensitive receptors to substantial pollutant concentrations would not occur and a ***less than significant*** impact would occur.

Question H

The proposed project is required to comply with the General Plan CAP Policies and Programs set forth in Appendix B of the General Plan Update. The majority of the policies and programs set forth in Appendix B are city-wide efforts in support of reducing overall city-wide emissions of GHG. However, Policy ER 6.1.5 could be applied at a project-level. Policy ER 6.1.5, Community GHG Reductions, states that, "The City shall reduce community GHG emissions by 15 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 49 and 83 percent by 2035 and 2050, respectively." Therefore, in order to show compliance with the General Plan Update, the proposed project must be capable of reducing project-specific operational emissions of GHG from a 2005 baseline level by 15 percent by 2020, consistent with Policy ER 6.1.5.

The proposed project's operational GHG emissions were estimated using CalEEMod. The 2005 baseline level modeling assumes buildout of the proposed project in the year 2005 (i.e., 2005

equipment load factors and RPS percentage). The 2020 modeling assumes buildout of the proposed project in the year 2020, including compliance with the 2013 California Building Energy Efficiency Standards Code and anticipated SMUD RPS reduction by 2020. The future realignment of the project access roadway has been taken into account during project modeling. All CalEEMod modeling results are included as Appendix A to this document.

Based on the CalEEMod results, as shown in Table 10, the proposed project would result in approximately a 34.53 percent reduction in annual operational GHG emissions from 2005 baseline levels by 2020 ([694.25 $MTCO_2e$ – 454.55 $MTCO_2e$] / 694.25 $MTCO_2e$ x 100% = 34.53%). The reduction in GHG emissions would primarily be attributable to the advancement of vehicle and equipment efficiency as a result of federal and state regulations, as well as more stringent building energy efficiency and green building standards, RPS reductions, and other regulations related to climate change as time progresses. Although a reduction related to such attributes would occur for every development project, CalEEMod takes into consideration how much of each attribute is applied for each specific project based on the size of the project and associated land uses.

Table 10
Proposed Project Percent GHG Reduction From 2005 Baseline Levels by 2020

	Annual GHG Emissions ($MTCO_2e$/yr)
2005 Baseline Levels	694.25
Proposed Project Year 2020	454.55
Total Reduction from 2005 Baseline Levels by 2020	239.70
PERCENT REDUCTION[1]	**34.53%**
Minimum Percent Reduction Required Per Policy ER 6.1.5	**15%**

[1] See calculation in text above.

Source: CalEEMod, April 2016 (see Appendix A).

As shown in Table 10, the project would result in a 34.53 percent reduction in GHG emissions from 2005 baseline levels by 2020, which would meet the minimum reduction requirement of 15 percent set forth in General Plan Policy ER 6.1.5. Accordingly, the proposed project, including the future realignment of the project access roadway, would be considered consistent with the General Plan Update and would not be expected to hinder the City's ability to achieve the General Plan CAP Policies and Programs. Therefore, impacts related to a conflict with the Climate Action Plan would be considered ***less than significant.***

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Air Quality.

Issues:

Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect	
3. BIOLOGICAL RESOURCES Would the proposal result in impacts to: A) Create a potential health hazard, or use, production, or disposal of materials that would pose a hazard to plant or animal populations in the area affected?			X
B) Result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal species?		X	
C) Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands)?			X

Environmental Setting

Prior to human development, the natural habitats within the region included perennial grasslands, riparian woodlands, oak woodlands, and a variety of wetlands including vernal pools, seasonal wetlands, freshwater marshes, ponds, streams, and rivers. Over the last 150 years, agriculture, irrigation, flood control, and urbanization have resulted in the loss or alteration of much of the natural habitat within the City limits. Non-native annual grasses have replaced the native perennial grasslands, many of the natural streams have been channelized, much of the riparian and oak woodlands have been cleared, and most of the marshes have been drained and converted to agricultural or urban uses.

Though the majority of the City is developed with residential, commercial, and other urban development, valuable plant and wildlife habitat still exists. These natural habitats are located primarily outside the city boundaries in the northern, southern and eastern portions of the City, but also occur along river and stream corridors and on a number of undeveloped parcels. Habitats that are present in the City include annual grasslands, riparian woodlands, oak woodlands, riverine, ponds, freshwater marshes, seasonal wetlands, and vernal pools. These habitats and their general locations are discussed briefly below.

Regional

The project site is located within the City of Sacramento. The regional setting is mainly urban with the Sacramento river corridor supporting riparian woodlands composed of cottonwood (*Populus Freemontii*), willow (*Salix* sp.), sycamore (*Platanus occidentalis*) and valley oak (*Quercus lobata*). Agricultural and grassland areas dominate the unincorporated areas of Sacramento County. Native habitats are located primarily outside the City boundaries but also occur along river and stream corridors and on a number of undeveloped parcels. Native habitats in the region include are composed of oak woodlands, riparian woodlands, wetlands, and annual grasslands. The native areas provide homes for a rich variety of wildlife including

migratory birds such as ducks and raptors as well as larger native fauna such as deer (*Odocoileus hemionus*) and coyote (*Canis latrans*).

Local

The project site is the former site of the Florin Perkins Landfill, and currently consists of an existing materials recovery and recycling center. The immediate urban setting is mainly composed of ornamental and landscaped habitat that attracts non-native and very common wildlife species. Most natural habitats have been removed through industrial, commercial, and residential development. The site is less than two miles from the American River. The American River contains stretches of habitat and woodlands that serve as important wildlife habitat and migratory corridors for a variety of species. Some species, like raptors, could utilize urban habitat for nesting and forage along the river corridor. Therefore, while the site is urban in nature, its close proximity to the American River allows for the potential for use by native and sensitive species.

Habitat on and immediately adjacent to the project site mainly consists of ruderal, weedy habitat with trees of various types and sizes. Wetlands, riparian, or other special status habitats are not located on or immediately adjacent to the project site. Due to the project site's previous use as a landfill, the site has historically undergone substantial surface disturbance. In addition, existing development surrounds the project site, including industrial and commercial uses. Consequently, established wildlife communities, suitable habitat, and/or wildlife corridors do not exist on the project site.

The City of Sacramento adopted a Tree Preservation Ordinance to protect trees as an important resource for the community. Due to the lack of potential heritage trees on the project site, a specific tree survey has not been performed for the project site. Heritage trees are likely to provide high quality nesting and roosting sites for wildlife. When circumstances do not allow for retention of trees, permits are required to remove heritage trees that are within the City's jurisdiction. The Ordinance (per Chapter 12.64 of the Sacramento City Code) states that heritage trees are protected in order to "promote scenic beauty, enhance property values, reduce soil erosion, improve air quality, abate noise and provide shade to reduce energy consumption." In addition, the Street Tree Ordinance (12.56.060) states that "No person shall remove, trim, prune, cut or otherwise perform any maintenance on any city street tree without first obtaining a permit from the director pursuant to Section 12.56.070." Any non-heritage street trees planned for removal will require a permit from the City.

Sensitive Biological Resources

Information in the following section is based on a review of relevant documentation for the project area and surrounding area, including:

- California Natural Diversity Database (CNDDB) record search within a five mile radius of the project site (CNDDB 2014)
- Species lists for the "Sacramento East, California" " and "Sacramento West, California" 7.5-minute quadrangle created by the U.S. Fish and Wildlife Service (USFWS) (USFWS 2014)
- Sacramento General Plan 2035 (2015)

Sensitive biological resources evaluated as part of this analysis include special-status species and sensitive natural communities. The CNDDB was used as the primary source to identify previously reported occurrences of special-status species and sensitive natural communities in the project vicinity. The CNDDB is a statewide database, managed by the California Department of Fish and Wildlife (CDFW) that is continually updated with the location and condition of the state's rare and declining species and habitats. Although the CNDDB is the most current and reliable tool available for tracking occurrences of special-status species, the database contains only those records that have been reported to CDFW.

Special-Status Species

Special-status species are plants and animals in the following categories:

- Listed or proposed for listing as threatened or endangered under federal Endangered Species Act (ESA) or candidates for possible future listing (FWS 2013);
- Listed or candidates for listing by the state of California as threatened or endangered under the California Endangered Species Act (CESA);
- Listed as Fully Protected under the California Fish and Game Code;
- Animals identified by CDFW as species of special concern;
- Taxa considered by CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR). The CDFW system includes five rarity and endangerment ranks for categorizing plant species of concern, which are summarized as follows:
    - CRPR 1A Plants presumed to be extinct in California;
    - CRPR 1B Plants that are rare, threatened, or endangered in California and elsewhere;
    - CRPR 2 Plants that are rare, threatened, or endangered in California but more common elsewhere;
    - CRPR 3 Plants about which more information is needed (a review list); and
    - CRPR 4 Plants of limited distribution (a watch list).

Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125[c]) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G); or otherwise meets the definition of rare or endangered under CEQA §15380(b) and (d).

Special-Status Plants

Due to the disturbed nature of the site, protocol-level botanical surveys for any special-status species were not conducted on the project site. However, four special-status plant species have been documented in the CNDDB within a five-mile radius of the project site, including: Sandford's arrowhead (*Sagittaria sanfordii*), Ferris milk-vetch (*Astragalus tener var.* ferrisiae), woolly rose-mallow (*Hibiscus lasiocarpos var*. occidentalis), and Suisun Marsh aster (*Symphyotrichum lentum*). Sandford's arrowhead, woolly rose-mallow, and Suisun Marsh aster were immediately eliminated from further evaluation in this document because wetland, marsh, or swamp habitat does not occur on the site and would not be impacted by activities on the project site. Ferris milk-vetch is found on subalkaline flats on overflow land in the Central Valley, usually on dry, adobe soil. Ferris milk-vetch is usually associated with vernal pool complexes. The one record in the database is from 1954 and is located along the causeway of Interstate 80;

at the edge of the five-mile radius. Because of the old record and location, and the highly disturbed and urban nature of the site, Ferris milk-vetch is eliminated from further evaluation in this document.

Special-Status Wildlife

During a site visit conducted on September 10, 2014 by Raney Planning and Management's in-house biologist, Nick Pappani, the following species were observed on site:

- White-tailed kite (*Elanus leucurus*);
- Mourning dove (*Zenaida macroura*);
- Western meadowlark (*Sturnella neglecta*);
- Killdeer (*Charadrius vociferus*); and
- Brush rabbit (*Sylvilagus bachmani*).

Brush rabbit is not a special-status species. In addition, any brush rabbit on-site would move out of harm's way as construction activities commence. As such, brush rabbit were eliminated from further evaluation in this document. Furthermore, mourning dove, western meadowlark, and killdeer are not special-status species; therefore, they were eliminated from further evaluation in this document. Potential effects on white-tailed kite, observed on-site in September 2014 and documented in the CNDDB, are discussed in further detail below.

Nineteen special-status wildlife species have been documented in the CNDDB five-mile search area. All aquatic or wetland species were eliminated from further evaluation in this document, as such habitat does not exist on the project site. Similarly, the following 11 species were eliminated from further evaluation in this document due to the lack of essential habitat for the species on the project site (e.g., vernal pools, streams, ponds, riparian woodland, forests):

- Vernal pool fairy shrimp (*Branchinecta lynchi*);
- Vernal pool tadpole shrimp (*Lepidurus packardi*);
- Sacramento perch (*Archoplites interruptus*);
- Longfin smelt (*Spirinchus thaleichthys*);
- Chinook salmon – Central Valley spring-run ESU (*Oncorhynchus tshawytscha*);
- Chinook salmon – Sacramento River winter-run ESU (*Oncorhynchus tshawytscha*);
- Steelhead – Central Valley DPS (*Oncorhynchus mykiss irideus*);
- Sacramento splittail (*Pogonichthys macrolepidotus*);
- Bank swallow (*Riparia riparia*);
- Giant garter snake (*Thamnophis gigas*); and
- Least Bell's vireo (*Vireo bellii pusillus*).

Consequently, the above listed special-status wildlife species would not be affected by the proposed project. Additional consideration was given to the following species; however, the determination was made that the species are unlikely to occur on the project site given the variety of factors discussed below for each species:

- Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*);
- American badger (*Taxidea taxus*);
- Purple martin (*Progne subis*);
- Burrowing owl (*Athene cunicularia*);

- Swainson's hawk (*Buteo swainsoni*);
- Song sparrow – "Modesto" population (*Melospiza melodia*); and
- Tricolored blackbird (*Agelaius tricolor*).

The valley elderberry longhorn beetle has had six occurrences within the Sacramento East topographic quadrangle. However, the beetle is associated with elderberry trees, which are not present on the proposed project site. In addition, the project site is disturbed, surrounded by existing development, and predominantly consists of ruderal vegetation. As such, valley elderberry longhorn beetle are not expected to occur on the project site.

The American badger is most abundant in drier open spaces of most shrub, forest, and herbaceous habitats with friable soils. Sufficient food, friable soils, and an open, uncultivated ground are needed for the American badger. Evidence does not exist on-site that the American badger is present. Due to the regularly disturbed nature of the site associated with the existing uses, the site predominantly consists of ruderal vegetation. In addition, the project is surrounded by existing development. Only three occurrences of the American badger were noted during the CNDDB search, the closest of which was at 21st Avenue and Power Inn Road in Sacramento, one mile from the project site. Consequently, the American badger is not expected to occur at the proposed project site.

The purple martin is a migratory bird that is known to nest in tall, isolated trees or snags in low elevation woodlands and riparian areas. In the Sacramento area, the purple martin primarily nests in bridges and overpasses. As such, the proposed project would not represent suitable nesting habitat for the purple martin. The project site is too far from known breeding sites to be considered attractive to the species for foraging. Due to the disturbed nature of the project site, the size of the site compared to other open space areas in the region, and because the site is surrounded by existing development, the project would not be expected to be suitable habitat for foraging. Therefore, the purple martin is not expected to occur at the project site.

The burrowing owl is a migratory bird that prefers open, dry grasslands and scrublands characterized by low-growing vegetation and is dependent upon burrowing mammals such as squirrels. Several occurrences of the burrowing owl have been noted in the project's topographic quadrangle. Burrowing owls use rodent or other types of burrows for roosting and nesting cover, and often nest in human-made earthen mounds created during agricultural or construction activities. The on-site rocks, concrete pieces, and limited soil are not conducive to ground squirrel burrowing which owls could occupy. In addition, the tall height of the ruderal grasses on-site is not conducive for burrowing owl foraging. As such, the proposed project site is not suitable foraging or nesting habitat for burrowing owls. Therefore, the burrowing owl is not expected to occur at the project site.

The CNDDB contains a record of Swainson's hawks nesting on a tree on a mid-channel island in the American River just upstream of the Howe Avenue bridge, 1.5 miles north of the site. A 2006 survey located several nesting pairs within five miles of the project area, including one along Morrison Creek where the creek crosses Jackson Road, three miles east of the site. This nesting territory was determined to be active through surveys conducted in 2009. Another 2006 nest site was near Jackson Road and Excelsior Road, approximately 4.7 miles from the project site. Swainson's hawk prefers foraging in areas such as fields and grasslands that support rodent populations. As such, Swainson's hawk have been known to forage on the nearby open areas of the former landfill to the north, east, and south of the site. However, the project site is currently in operation as an industrial use, would not contain any open fields or grasslands, and

provides low visibility for tracking prey. In addition, given the lack of ideal foraging habitat on the project site, lack of water on-site, and lack of trees on the proposed project site, Swainson's hawks would not likely nest on-site. Therefore, the Swainson's hawk is not expected to occur at the project site.

Moderately dense vegetation for nest sites, a source of standing or running water, semi-open canopies to allow for light, and exposed ground or leaf litter for foraging are ideal conditions for song sparrow. As the area has historically been used as a landfill, which will be undergoing closure over the next 10 years, the site has undergone substantial surface disturbance over the years. Due to the regularly disturbed nature of the site associated with the existing uses, the site predominantly consists of ruderal vegetation, and water features are not located on or immediately adjacent to the site. In addition, the project is surrounded by existing development. Consequently, the song sparrow ("Modesto" population) is not expected to occur at the proposed project site.

The tricolored blackbird is not known to occur within the Sacramento East topographic quadrangle. The tricolored blackbird nests in large colonies established in large, dense thickets of blackberry, bulrush, cattails, willows, and wild roses, usually near wetlands or irrigated pasture. Tricolored blackbird nests were not observed on the project site and conditions appear marginal to support nesting, presumably as a result of routine maintenance that limits development of larger dense patches of Himalayan berry. Thus, nesting sites are not expected on the site. However, the birds forage in large groups on surrounding agricultural fields and grasslands to harvest seeds and insects. The CNDDB contains six recent records of colonies within five miles north of the project site. These nesting colonies occur in blackberry thickets and cattail marshes along natural and artificial drainages surrounded by grassland areas for foraging. Tricolored blackbirds have not been documented using the project site. In August 2009, tricolored blackbirds were observed foraging within the American River Parkway in reclaimed agricultural lands. The birds were commuting from a potential nesting colony within cattails in a pond located across Jackson Road, north of the project site. However, the area where tricolored blackbirds were observed is approximately 2,000 feet north of the area proposed for development as part of the project. Therefore, the tricolored blackbird is not expected to occur at the project site.

Sensitive Habitats and Special-Status Plant Communities

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, Section 404 of the CWA, and the state's Porter-Cologne Act. Sensitive natural habitat may be of special concern to these agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species.

CDFW maintains a list of plant communities that are native to California. Within that list, CDFW identifies special-status plant communities (a.k.a. sensitive natural communities), which are defined as communities that are of limited distribution statewide or within a county or region and often vulnerable to environmental effects of projects (CDFW 2013: ix). The communities may or may not contain special-status species or associated habitat. Special-status plant communities are tracked in the CNDDB.

Native plant communities on CDFW's list of special-status plant communities are not present on the project site. Elderberry savanna and Great Valley cottonwood riparian forest is located within the five-mile radius along the American River, but is not located within or adjacent to the project site. Wetlands or waters of the U.S. are not located on site.

Standards of Significance

For purposes of this environmental document, an impact would be significant if any of the following conditions or potential thereof, would result with implementation of the proposed project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, "special-status" has been defined to include those species, which are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to California Department of Fish and Game (CDFG);
- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

Chapter 4.3 of the Master EIR evaluated the effects of the 2035 General Plan on biological resources within the City. The Master EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special-status birds, through the loss of both nesting and foraging habitat.

Policies in the 2035 General Plan were identified as mitigating the effects of development that could occur under the provisions of the 2035 General Plan. Policy ER 2.1.5 calls for the City to preserve the ecological integrity of creek corridors and other riparian resources; Policy ER 2.1.10 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate; and Policy ER 2.1.11 requires the City to coordinate its actions with those of the California Department Fish and Wildlife, U.S. Fish and Wildlife Service, and other agencies in the protection of resources.

The Master EIR discussed biological resources in Chapter 4.3. The Master EIR concluded that policies in the general plan, combined with compliance with the California Endangered Species Act, Natomas Basin HCP (when applicable) and CEQA would minimize the impacts on special-status species to a less-than-significant level (see Impact 4.3-1), and that the general plan policies, along with similar compliance with local, state and federal regulation would reduce impacts to a less-than-significant level for habitat for special-status invertebrates, birds, amphibians and reptiles, mammals and fish (Impacts 4.3-3-6).

Given the prevalence of rivers and streams in the incorporated area, impacts to riparian habitat is a common concern. Riparian habitats are known to exist throughout the City, especially along the Sacramento and American rivers and their tributaries. The Master EIR discussed impacts of development adjacent to riparian habitat that could disturb wildlife species that rely on these areas for shelter and food, and could also result in the degradation of these areas through the introduction of feral animals and contaminants that are typical of urban uses. The California Department of Fish and Wildlife (CDFW) regulates potential impacts on lakes, streams, and associated riparian (streamside or lakeside) vegetation through the issuance of Lake or Streambed Alteration Agreements (SAA) (per Fish and Game Code Section 1602), and provides guidance to the City as a resource agency. While there are no federal regulations that specifically mandate the protection of riparian vegetation, federal regulations set forth in Section 404 of the Clean Water Act address areas that potentially contain riparian-type vegetation, such as wetlands.

The general plan calls for the City to preserve the ecological integrity of creek corridors, canals and drainage ditches that support riparian resources (Policy ER 2.1.5) and wetlands (Policy ER 2.1.6) and requires habitat assessments and impact compensation for projects (Policy ER 2.1.10). has adopted a standard that requires coordination with state and federal agencies if a project has the potential to affect other species of special concern or habitats (including regulatory waters and wetlands) protected by agencies or natural resource organizations (Policy 2.1.11).

Implementation of 2035 General Plan Policy ER 2.1.5 would reduce the magnitude of potential impacts by requiring a 1:1 replacement of riparian habitat lost to development. While this would help mitigate impacts on riparian habitat, large open areas of riparian habitat used by wildlife could be lost and/or degraded directly and indirectly through development under the 2035 General Plan. Given the extent of urban development designated in the general plan, the preservation and/or restoration of riparian habitat would likely occur outside of the City limits. The Master EIR concluded that the permanent loss of riparian habitat would be a less-than-significant impact. (Impact 4.3-7)

Answers to Checklist Questions

Question A

In accordance with California Code of Regulations Title 14, Section 17408.4, drugs, cosmetics, foods, beverages, hazardous wastes, poisons, medical wastes, syringes, needles, pesticides and other materials capable of causing public health or safety problems shall not be salvaged at the proposed project site. Accordingly, hazardous materials are not and would not be permitted at the site. Signage indicating that hazardous wastes are not accepted at the site are clearly posted at the facility entry way. Although hazardous wastes or materials are not accepted at the site, incidental hazardous materials are reasonably foreseeable in loads to be processed at the site.

Thus, a load checking program is currently in place and would continue to be conducted at the site to ensure that any such waste or materials are screened and excluded. At the time of check-in and weighing of all loads entering the facility, a preliminary screening for hazardous materials is conducted concurrent with load destination assessment by the weighmaster, who is trained in hazardous waste recognition. If hazardous materials are identified, workers trained in proper hazardous materials handling would follow procedures for appropriate removal, storage, and disposal of the wastes in accordance with regulations. The existing load checking program would continue to ensure that any hazardous materials would not create a significant hazard to the public or the environment.

The proposed project would modify the existing operations to conduct concrete and asphalt crushing, shingle grinding, and wood grinding activities on-site. It should be noted that asphalt shingles contain fiberglass and may contain asbestos, which could become airborne in the vicinity of the shingle grinding process. However, according to the Transfer/Processing Report, dust control measures (e.g., landscaped berm, wetting of roadways and materials, spray bars on equipment, misters on hoppers, etc.) would be taken and employee personal protective equipment policies would be implemented to ensure that such materials do not become airborne and would not affect workers or the environment. In addition, a spill containment plan is already in place at the site for the existing operations and would continue to be applicable for the proposed project. The spill containment plan would ensure that impacts would not occur in the event of an accidental spill or release hazardous materials associated with hazardous materials identified in loads stored temporarily on-site, which would likely be small in quantity, if any. Furthermore, all materials would be stored according to state laws and regulations for storage of hazardous materials.

The use, handling, and storage of hazardous materials is regulated by both the Federal Occupational Safety and Health Administration (Fed/OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA). Cal/OSHA is responsible for developing and enforcing workplace safety regulations. Because routine transport, use, and disposal of hazardous materials are regulated by existing federal, state, and local regulations, and operation of the proposed project would handle limited hazardous materials that would be addressed and disposed of properly, the proposed project would be considered to result in a ***less-than-significant*** impact related to creating a potential health significant hazard to plant or animal populations in the area.

Question B

Out of the 19 potential special-status species that have been documented in the CNDDB five-mile search area, only the white-tailed kite, which was observed on the project site, was determined to required further evaluation due to potential to occur on the project site. The white-tailed kite is most abundant in rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching are needed for the white-tailed kite. As the site has historically been used as a landfill, the site has undergone substantial surface disturbance over the years. Due to the regularly disturbed nature of the site associated with the existing uses, the site predominantly consists of ruderal vegetation, and water features are not located on or immediately adjacent to the site.

Because the project site is surrounded by industrial development, a lack of habitat connectivity exists, which decreases the feasibility of the project site as habitat for special-status species.

However, because white-tailed kite could be present at the site prior to the initiation of construction of the proposed project, the possibility exists for other migratory birds, such as Swainson's hawk, or ground nesting birds, such as burrowing owl, to be on the project site as well. Therefore, a potentially significant impact could result. Implementation of Mitigation Measures 3-1 and 3-2 would reduce this impact to a ***less-than-significant*** level.

Question C

Existing water bodies or features, including rivers, creeks, or natural or manmade ditches, do not exist on the project site or in the immediate vicinity. The closest water body, the American River, is located over 1.5 miles north of the project site. Therefore, the proposed project would have a ***less-than-significant*** impact on other species of special concern to agencies or natural resource organizations, such as regulatory waters and wetlands.

Mitigation Measures

Implementation of the following mitigation measures would reduce impacts related to special-status species to a less-than-significant level.

3-1 *For any construction activities outside of the permitted 10-acre boundary, if construction is scheduled to begin between February 1st and August 31st, white-tailed kite and other migratory bird surveys shall be conducted by a qualified ornithologist a maximum of 14 days prior to the commencement of construction. The white-tailed kite and other migratory bird surveys shall include examination of all trees and shrubs within 750 feet of the entire project site. The survey shall be conducted at the expense of the project applicant. If nesting white-tailed kite or other migratory birds are identified during the survey, within 750 feet of the project site (or 75-feet in the case of passerines), a 750-foot buffer (or 75-feet in the case of passerines) around the nest tree shall be fenced with orange construction fencing. The size of the buffer may be altered if a qualified ornithologist conducts behavioral observations and determines white-tailed kite and other migratory bird are well acclimated to disturbance. If this occurs, the ornithologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting white-tailed kites/migratory birds. Construction or earth-moving activity shall not occur within the established buffer until the determination is made by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, which typically occurs by July 15th. The date may be earlier or later, and would have to be determined by a qualified ornithologist. If a qualified ornithologist is not hired to watch the nesting birds, then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1st.*

If the nesting survey identifies a large stick nest or other type of nest that is inactive at the time of the survey, but that was evidently used in the previous year (as evidenced by condition of the nest and possibly presence of whitewash and/or feathers/down on the nest), a protection buffer (as described above) shall be established around the potential nesting tree if the tree is within 750 feet of the project site. The buffer shall remain until a second follow-up nesting survey can be conducted to determine the status of the nest and eliminate the possibility

that the nest is utilized by a late-spring nesting bird. The second survey shall commence even if construction has commenced. If during the follow-up late season nesting survey a migratory bird is identified utilizing the nest, the protection buffer shall remain until the determination is made by a qualified ornithologist that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If the nest remains inactive, the protection buffer can be removed and construction and earth moving activities can proceed unrestrained.

3-2 *For any construction activities outside of the permitted 10-acre boundary, if construction is scheduled to begin between February 1st and August 31st, in order to avoid impacts to ground-nesting migratory birds, a qualified ornithologist shall conduct walking transects through the project site's grassland habitat to search for nests a maximum of 14 days prior to the commencement of construction. If ground-nesting migratory birds are identified during the surveys within 75 feet of the project site, a 75-foot buffer around the nest site shall be fenced with orange construction fencing. The size of the buffer may be altered if a qualified ornithologist conducts behavioral observations and determines the nesting raptors or passerines are well acclimated to disturbance. If this occurs, the ornithologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting migratory birds. Construction or earth-moving activity shall not occur within the established buffer until the determination is made by a qualified ornithologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, which typically occurs by July 15th. The date may be earlier or later, and would have to be determined by a qualified ornithologist. If a qualified ornithologist is not hired to watch the nesting raptors/passerines, then the buffers shall be maintained in place through the month of August and work within the buffer can commence September 1st.*

Findings

All additional significant environmental effects of the project relating to Biological Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
4. CULTURAL RESOURCES *Would the proposal:* A) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in § 15064.5?		X	
B) Directly or indirectly destroy a unique paleontological resource?		X	
C) Adversely affect tribal cultural resources?		X	

Environmental Setting

The City of Sacramento and the surrounding area are known to have been occupied by Native American groups for thousands of years prior to settlement by non-Native peoples. Archaeological materials, including human burials, have been found throughout the city. Human burials outside of formal cemeteries often occur in prehistoric contexts. Areas of high sensitivity for archaeological resources, as identified in the 2035 General Plan Background Report, are located within close proximity to the Sacramento and American rivers and other watercourses.

The 2035 General Plan land use diagram designates a wide swath of land along the American River as Parks, which limits development and impacts on sensitive prehistoric resources. High sensitivity areas may be found in other areas related to the ancient flows of the rivers, with differing meanders than found today. Recent discoveries during infill construction in downtown Sacramento have shown that the downtown area is highly sensitive for both historic- and prehistoric-period archaeological resources. Native American burials and artifacts were found in 2005 during construction of the New City Hall and historic period archaeological resources are abundant downtown due to the evolving development of the area and, in part, to the raising of the surface street level in the 1860s and 1870s, which created basements out of the first floors of many buildings.

The project site is the former site of the Florin Perkins Landfill and currently consists of an existing materials recovery and recycling center operating under a CUP. Over the years, the project site has been entitled for a variety of uses, primarily dealing with acceptance/processing of waste and recyclable materials. Due to the regularly disturbed nature of the site associated with the existing uses, the site predominantly consists of ruderal vegetation, and water features are not located on or immediately adjacent to the site. In addition, existing development surrounds the project site, including industrial, commercial, and mining uses. As such, the project site and vicinity are highly disturbed. Known historical resources do not exist on the project site or in the immediate vicinity.

Standards of Significance

For purposes of this IS/MND, cultural resource impacts may be considered significant if the proposed project would result in one or more of the following:

- Cause a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- A substantial adverse change in the significance of such resources.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

The Master EIR evaluated the potential effects of development under the 2035 General Plan on prehistoric and historic resources. See Chapter 4.4.

General plan policies identified as reducing such effects call for identification of resources on project sites (Policy HCR 2.1.1), implementation of applicable laws and regulations (Policy HCR 2.1.2), early consultation with owners and land developers to minimize effects (Policy HCR 2.1.10) and encouragement of adaptive reuse of historic resources (Policy HCR 2.1.14). Demolition of historic resources is deemed a last resort. (Policy HCR 2.1.15)

The Master EIR concluded that implementation of the 2035 General Plan would have a significant and unavoidable effect on historic resources and archaeological resources. (Impacts 4.4-1, 2)

Answers to Checklist Questions

Questions A and B

Figure 6.4-1 of the Master EIR shows that the project area is considered to be an area of low sensitivity for historic and pre-historic resources. Paleontological, prehistoric, historic, or archaeological resources are not known or suspected on-site, and unique geologic features do not exist on the project site or in the immediate vicinity. Due to the disturbed nature of the project site, the potential for encountering any significant cultural resources during the on-site improvements, including the future realignment of the project access roadway, associated with the project is relatively low. Although low, the potential does exist for previously unknown or unidentified cultural resources to be encountered below the surface that could be inadvertently damaged or lost during grading and construction of the proposed improvements. Because the possibility exists for previously unknown or unidentified cultural resources to be encountered during implementation of the proposed project, including the future realignment of the project access roadway, a potentially significant impact could occur related to unknown archaeological and paleontological resources as well as to the disruption of human remains during grading and excavation activities. Implementation of Mitigation Measures 4-1 and 4-2 presented below would reduce this impact to a ***less-than-significant*** level.

Mitigation Measures

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

4-1 *If archaeological artifacts or unusual amounts of stone, bone, or shell are uncovered during construction activities, work within 50 feet of the specific construction site at which the suspected resources have been uncovered shall be*

suspended. At that time, the property owner shall retain a qualified professional archaeologist. The archaeologist shall conduct a field investigation of the specific site and recommend mitigation deemed necessary for the protection or recovery of any archaeological resources concluded by the archaeologist to represent significant or potentially significant resources as defined by CEQA. The mitigation shall be implemented by the property owner to the satisfaction of the Planning Division prior to resumption of construction activity.

4-2 *In accordance with Section 7050.5 of the Health and Safety Code and Sections 5097.94 and 5097.98 of the Public Resources Code, if human remains are uncovered during project construction activities, work within 50 feet of the remains shall be suspended immediately, and the City of Sacramento Planning Division and the County Coroner shall be immediately notified. If the remains are determined by the Coroner to be Native American in origin, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The property owner shall also retain a professional archaeological consultant with Native American burial experience. The archaeologist shall conduct a field investigation of the specific site and consult with the Most Likely Descendant identified by the NAHC. As necessary, the archaeological consultant may provide professional assistance to the Most Likely Descendant including the excavation and removal of the human remains. The property owner shall implement any mitigation before the resumption of activities at the site where the remains were discovered.*

Findings

All additional significant environmental effects of the project relating to Cultural Resources can be mitigated to a less-than-significant level.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
6.GEOLOGY AND SOILS Would the project: A) Would the project allow a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards?			X

Environmental Setting

Seismicity

The Sacramento 2035 General Plan Master EIR identifies all of the City of Sacramento as being subject to potential damage from earthquake groundshaking at a maximum intensity of VIII on the Modified Mercalli scale (SGP Master EIR, Table 6.5-6). The closest potentially active faults to the project area include the Foothills Fault System, located approximately 23 miles from Sacramento; the Great Valley fault, located 26 miles from Sacramento; Concord-Green Valley Fault, located approximately 38 miles from Sacramento; and the Hunting Creek-Berryessa Fault, located 38 miles from Sacramento. The Foothills Fault System is considered capable of generating an earthquake with a Richter-Scale magnitude of 6.5; the Great Valley Fault is capable of generating an earthquake with a magnitude of 6.8; the Concord-Green Valley fault is capable of generating an earthquake with a magnitude 6.9, and the Hunting Creek-Berryessa Fault could generate a 6.9 magnitude earthquake. A major earthquake on any of these faults could cause strong groundshaking in the project area.

Topography

Topography of the processing area is generally flat. Due to the relatively flat topography of the processing area, the potential for slope instability at the project site is minor.

Geology

The City of Sacramento is located in the Great Valley of California. The Great Valley is a flat alluvial plain approximately 50 miles wide and 400 miles long in the central portion of California. The northern portion of the Great Valley is the Sacramento Valley drained by the Sacramento River, and its southern part is the San Joaquin Valley drained by the San Joaquin River. The valley is surrounded by the Sierra Nevada to the east, the Tehachapi Mountains to the south, Coastal Range to the west, and Cascade Range to the north.

Project Area Geology

According to the Central Valley Regional Water Quality Control Board (CVRWQCB), the Florin Perkins Landfill site is underlain by the following sedimentary formations:

- Modesto/Riverbank at depths from zero to 125 feet below the ground surface;
- Laguna at depths from 125 to 375 feet below the ground surface; and

- Mehrten at depths greater than 375 feet below the ground surface.

Modesto/Riverbank consists of stream channel and flood basin deposits (e.g., cobble, gravel, coarse sand interspersed with silt, clay, and fine sand). Laguna consists of alluvium (e.g., silt, sand and clay interspersed with gravel lenses). Mehrten consists of alternative sequences of andesitic (dark-colored) alluvium confined by volcanic deposits (e.g., tuff-breccia).[3]

According to the CVRWQCB, the permeability of soils immediately underlying the landfill units is unknown, but has been estimated based on soil type. In areas where the sand sand/gravel/cobble layer was mined out prior to landfilling, or where overburden soil was backfilled or used as foundation material prior to landfilling, the permeability is estimated to range from about 10^{-5} to 10^{-7} centimeters per second (cm/sec). In unmined areas of the site, the permeability of the soil immediately underlying the landfill could be orders of magnitude higher.

In areas of the landfill site undisturbed by mining (e.g., quarry pit rim and southern buffer area), the unsaturated zone typically consists of 10 to 15 feet of silt and/or clay soil underlain by 20 to 30 feet of sand, gravel, and/or cobble. In mined areas within the facility boundary, most or all of the sand/gravel and/or cobble layers have been removed from the unsaturated zone and partially backfilled with overburden soil and/or landfill waste. In mined areas beyond the facility boundary, the height of the soil column in the unsaturated zone soil has been reduced by the depth of the quarry pit.

Standards of Significance

For the purposes of this IS/MND, an impact is considered significant if it allows a project to be built that will either introduce geologic or seismic hazards by allowing the construction of the project on such a site without protection against those hazards.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

Chapter 4.5 of the Master EIR evaluated the potential effects related to seismic hazards, underlying soil characteristics, slope stability, erosion, existing mineral resources and paleontological resources in the City. Implementation of identified policies in the 2035 General Plan reduced all effects to a less-than-significant level. Policy EC 1.1.1 requires regular review of the City's seismic and geologic safety standards, and Policy EC 1.1.2 requires geotechnical investigations for project sites to identify and respond to geologic hazards, when present.

Answers to Checklist Questions

Question A

Impacts related to seismic hazards and geologic hazards such as erosion, unstable soils, and expansive soils are discussed below.

[3] California Regional Water Quality Control Board, Central Valley Region. *Waste Discharge Requirements Order No. R5-2013-0042*. 2013.

Seismic Hazards

The City of Sacramento's topography is relatively flat, the City is not located within an Alquist-Priolo Earthquake Fault Zone, and the City is not located in the immediate vicinity of an active fault. However, the 2035 General Plan indicates that ground shaking would occur periodically in Sacramento as a result of distant earthquakes. The 2035 General Plan further states that the earthquake resistance of any building is dependent on an interaction of seismic frequency, intensity, and duration with the structure's height, condition, and construction materials. Although the project site is not located near any active or potentially active faults, strong ground shaking could occur at the project site during a major earthquake on any of the major regional faults.

One modular office building would be developed as part of the proposed project. However, due to the seismic activity in the state, construction is required to comply with Title 24 of the Uniform Building Code (UBC). Chapter 15.20 of the Sacramento City Code adopts the UBC and mandates compliance. All new construction and modifications to existing structures within the City are subject to the requirements of the UBC. The UBC contains standards to ensure that all structures and infrastructure are constructed to minimize the impacts from seismic activity, to the extent feasible, including exposure of people or structures to substantial, adverse effects as a result of strong ground shaking, seismic-related ground failure, liquefaction, lateral spreading, landslides, or lurch cracking. As a result, seismic activity in the area of the proposed development would not expose people or structures to substantial, adverse effects as a result of strong ground shaking and seismic-related ground failure.

In addition, issues related to fault rupture, seismic ground shaking and seismically induced ground failures are addressed in the City's adopted Standard Specifications for Public Works Construction (2007), which requires construction contractors to build to City standards related to structural integrity, thus, ensuring that erosion and unstable soil conditions do not occur as a result of construction. The construction specification document contains provisions that require contractors to be responsible for damage caused during construction and to be responsible for the repair of such damages (e.g., settling of adjacent land and structures). The proposed project would require minor construction, and individual components used in the construction of the project would be constructed to industry-provided design specifications and requirements, including the American Society for Testing and Materials (ASTM) standards. Therefore, impacts related to seismic hazards would be less than significant, and the project would not create impacts outside of those anticipated within the General Plan Master EIR.

Geologic Hazards

A new modular office building is proposed; however, although the project would result in a slight increase in impervious surfaces due to the office building, the slight increase would not increase the erosion rate at the site. In addition, dust control equipment (i.e., water trucks, a street sweeper, spray bars on equipment, and misters on hoppers) are currently, and would continue to be, utilized as needed to control fugitive dust and erosion. Sweeping of the operations area would occur multiple times per day to help ensure that dust does not accumulate on-site. The proposed tree-lined berm would assist with reducing wind speed on-site. Thus, erosion is expected to be adequately controlled during project operations.

During the minor construction activities required for the proposed project, including the future realignment of the project access roadway, topsoil would be moved, leading to disturbed soils

that do not have as much connectivity to the ground as undisturbed soils. The disturbed soils may be subject to erosion from a variety of sources, such as wind, rainfall, and on-site equipment. The City of Sacramento has adopted standard measures to control erosion and sediment during construction. All projects in the City of Sacramento are required to comply with the City's Standard Construction Specifications for Erosion and Sediment Control. The proposed project would comply with the City's standards set forth in the "Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control." The City's grading ordinance (Chapter 15.88 of Sacramento City Code) specifies construction standards to minimize erosion and runoff, with which the project would comply.

Therefore, the potential for erosion and/or unstable soil conditions at the project site would not occur after construction of the site and would be minimized during construction through compliance with the City's standards and codes.

Conclusion

Based on the above, impacts associated with geologic or seismic hazards would be ***less than significant***.

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Geology and Soils.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
7. HAZARDS Would the project: A) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities?			X
B) Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials?			X
C) Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities?			X

Environmental and Regulatory Setting

The project site is the former site of the Florin Perkins Landfill, and currently consists of an existing materials recovery and recycling center, operating under a CUP. Due to the regularly disturbed nature of the site associated with the existing uses, the site predominantly consists of ruderal vegetation, and water features are not located on or immediately adjacent to the site. Existing development surrounds the project site, including commercial and industrial uses.

Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the SMAQMD and civil penalties under state and/or federal law, in addition to possible action by U.S. EPA under federal law. Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145). Demolition would not be required for implementation of the proposed project.

Standards of Significance

For the purposes of this IS/MND, an impact is considered significant if the proposed project would:

- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- Expose people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials or other hazardous materials; or
- Expose people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during dewatering activities.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

The Master EIR evaluated effects of development on hazardous materials, emergency response and aircraft crash hazards. See Chapter 4.6. Implementation of the General Plan may result in the exposure of people to hazards and hazardous materials during construction activities, and exposure of people to hazards and hazardous materials during the life of the General Plan. Impacts identified related to construction activities and operations were found to be less than significant. Policies included in the 2035 general Plan, including PHS 3.1.1 (investigation of sites for contamination) and PHS 3.1.2 (preparation of hazardous materials actions plans when appropriate) were effective in reducing the identified impacts.

Answers to Checklist Questions

Question A

The site is not included on a list of hazardous materials sites compiled by the County pursuant to Government Code 65962.5. Known contaminated soils do not occur on the project site according to the Department of Toxic Substances Control. In addition, substantial ground-disturbing construction activities, such as excavation or trenching, would not occur as a result of the proposed project. Accordingly, construction activities would not result in exposure of people to existing contaminated soil, and impacts would be ***less than significant***.

Question B

The proposed project would not involve demolition of any structures that may contain asbestos materials or other hazardous materials. As discussed in the Biological Resources section of this IS/MND, the proposed project would modify the existing operations to conduct concrete and asphalt crushing, shingle grinding, and wood grinding activities on-site. Asphalt shingles contain fiberglass and may contain asbestos, which could become airborne in the vicinity of the shingle grinding process. However, according to the Transfer/Processing Report, dust control measures would be taken and employee personal protective equipment policies would be implemented to ensure that such materials do not become airborne and would not affect workers or the environment. In addition, a spill containment plan is already in place at the site for the existing operations and would continue to be applicable for the proposed project. The spill containment plan would ensure that impacts would not occur in the event of an accidental spill or release hazardous materials associated with hazardous materials identified in loads stored temporarily on-site, which would likely be small in quantity, if any. Furthermore, all materials would be stored according to state laws and regulations for storage of hazardous materials.

Because routine transport, use, and disposal of hazardous materials are regulated by existing federal, state, and local regulations, and operation of the proposed project would handle limited hazardous materials that would be addressed and disposed of properly, the proposed project would be considered to result in a ***less-than-significant*** impact related to exposing people to asbestos-containing materials or other hazardous materials.

Question C

As stated above, substantial ground-disturbing construction activities, such as excavation or trenching, would not occur as a result of the proposed project. As such dewatering activities

would not occur. Therefore, construction activities would not result in exposure of people to existing contaminated groundwater, and impacts would be ***less than significant***.

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Hazards.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
8. HYDROLOGY AND WATER QUALITY Would the project: A) Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the project?			X
B) Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood?			X

Environmental Setting

A scale house with two scales utilized for inbound and outbound transactions and a portable break room for staff use are the only existing structures on the site. The entire ingress/ egress, maneuvering area, and tipping area of the facility are paved. The site is located 6.5 miles east of the Sacramento River and 1.5 miles south of the American River; however, the site does not contains any creeks, wetlands or other hydrologic features. The project site is in a highly developed area of Sacramento. Currently the project site has very little impervious surfaces and as a result, storm water is either absorbed on site or drains to the adjacent storm drain system.

The Federal Emergency Management Agency (FEMA) publishes Flood Insurance Rate Maps (FIRM) that delineate flood hazard zones for communities. The project site is located within an area designated as shaded Zone X (Community Panel Number 06067C0195H), which is applied to areas of 0.2% annual chance flood, areas of 1% annual chance flood with average depths of less than one foot, or with drainage areas less than one square mile, and areas protected by levees from 1% annual chance flood. The project site is in an area protected from the one percent annual chance (100-year) flood by levee, dike, or other structures subject to possible failure or overtopping during larger storms. FEMA does not have building regulations for development in areas designated Zone X and would not require mandatory flood insurance for structures in Zone X.

The City's Stormwater Quality Improvement Plan (SQIP) outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management program for 2007-2011. The Program is based on the National Pollutant Discharge Elimination System (NPDES) municipal stormwater discharge permit. The comprehensive Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The Program also includes an extensive public education effort, target pollutant reduction strategy and monitoring program.

The Sacramento City Code Section 13.08.145 addresses mitigation of drainage impacts; design and procedures manual for water, sanitary sewer, storm drainage, and water quality facilities. The code requires that when a property contributes drainage to the storm drain system or combined sewer system, all storm water and surface runoff drainage impacts resulting from the improvement or development must be fully mitigated to ensure that the improvement or

development does not affect the function of the storm drain system or combined sewer system, and that there is no increase in flooding or in water surface elevation that adversely affects individuals, streets, structures, infrastructure, or property. The Sewer Development Fee Fund is used to recover an appropriate share of the capital costs of the City's existing or newer system facilities or the City's existing or new combined sewer system facilities. Revenues are generated from impact fees paid by developers and others whose projects add to the demand on the combined sewer collection systems. In order to connect with the SRCSD wastewater conveyance and treatment system, developers must pay impact fees.

Standards of Significance

For purposes of this IS/MND, hydrology and water quality impacts may be considered significant if construction and/or implementation of the proposed project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan Master EIR:

- substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Specific Plan or
- substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

Chapter 4.7 of the Master EIR evaluates the potential effects of the 2035 General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities (Impacts 4.7-1, 4.7-2), and exposure of people to flood risks (Impacts 4.7-3). Policies included in the 2035 General Plan, including a directive for regional cooperation (Policies ER 1.1.2, EC 2.1.1), comprehensive flood management (Policy EC 2.1.23), and construction of adequate drainage facilities with new development (Policy ER 1.1.1 to ER 1.1.10) were identified that the Master EIR concluded would reduce all impacts to a less-than-significant level.

Answers to Checklist Questions

Question A

The proposed project has the potential to degrade water quality during both construction and operations. Further details regarding the potential effects are provided below.

Construction-Related Impacts

Construction activities associated with the proposed project would create the potential to degrade water quality from increased sedimentation and increased discharge (increased flow and volume of runoff) associated with storm water runoff. Disturbance of site soils would increase the potential for erosion from storm water. The State Water Resources Control Board (SWRCB) adopted a statewide general National Pollutant Discharge Elimination System (NPDES) permit for storm water discharges associated with construction activity. Dischargers whose projects disturb one or more acres of soil are required to obtain coverage under the

General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009- 0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation.

The City's SQIP contains a Construction Element that guides in implementation of the NPDES Permit for Storm Water Discharges Associated with Construction Activity. This General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list best management practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutant to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Compliance with City requirements to protect storm water inlets would require the developer to implement BMPs such as the use of straw bales, sandbags, gravel traps, and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measure such as fences, dams, barriers, berms, traps, and basins. City staff inspects and enforces the erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control ordinance).

Conformance with City regulations and permit requirements along with implementation of BMPs would ensure that construction activities of the proposed project, including the future realignment of the project access roadway, would result in a less-than-significant impact related to water quality.

Operational Impacts

A stormwater drainage system currently exists on-site for the existing operations. All areas where waste material is currently tipped, processed, and stored has a concrete and/or asphaltic concrete surface, and the operations area is sloped to prevent ponding of water and to provide positive surface water drainage. The drainage system has been designed to direct stormwater and wash water from station maintenance activities to a series of drain inlets and culverts. Water is filtered prior to entering the drain inlets to remove sediments, debris and hydrocarbons. The water is then transferred by gravity flow to a small sump and subsequently to an underground stormwater detention tank located just west of the existing paved east access road or to the low-lying areas located west of the facility. Excess water in the tank is pumped out for dust suppression. If the tank capacity is exceeded, the excess runoff is directed to a low-lying area west of the facility within the property owner's property boundaries.

The project site and current operations are under an existing General Industrial Permit (WDID number 5S34I022555), per the NPDES, and the associated SWPPP. All runoff associated with the site is managed in accordance with the BMPs set forth within the SWPPP. For example, drainage control structures are inspected regularly for blockages and functionality to ensure continuous functionality. Blockages are removed and repairs completed as necessary to ensure the continuous effectiveness of the drainage system. In preparation of an anticipated storm event, the operator would cover most material stockpiles and consolidate operations to a specific portion of the operations area. Incoming material tipping would occur on a designated

portion of the operations area. Pile sizes are minimized during the wet season. The detention tankage is pumped out as needed (within two to three days). Prior to an anticipated storm event, the operator would ensure that the tanks are drained to nearly empty. The water would be used for dust control.

The existing stormwater drainage system would be utilized for the proposed project; however, one additional stormwater outfall structure would be constructed as part of the proposed project to accommodate the increase in stormwater at the site resultant of the increase in impervious surfaces. The proposed project would be required to comply with the conditions of the existing General Industrial Permit. Because the proposed project design provides for containment of all runoff water associated with the site, discharge of runoff to surface waters or groundwater would not result from the proposed project.

The proposed project would eventually include connection to an existing on-site septic system or installation of a new on-site septic system, which would have the potential to contribute to a degradation of water quality as a result of accidental upset conditions. The septic system would be required to comply with all waste discharge requirements (WDRs) issued by the CVRWQCB, as well as applicable SCEMD requirements, such as acquiring a Liquid Waste Permit. Although the disposal field does not have "moving parts," the field would need regular checking for potential vandalism, disposal trench malfunction, and periodic checking and recording of monitoring well data that would be required as part of the CVRWQCB's WDRs. Other maintenance work at the disposal field would be periodic clearing of brush and vegetation.

The potential for groundwater contamination exists from the accidental release of hazardous materials identified in loads stored temporarily on-site. However, all materials would be stored according to state laws and regulations for storage of hazardous materials. Potential accidental release of any hazardous material would likely be small in quantity, if at all; however, a spill containment plan is already in place at the site for the existing operations and would continue to be applicable for the proposed project. The spill containment plan would ensure that impacts would not occur in the event of an accidental spill or release.

Conclusion

Overall, design of the project site and conformance with City and state regulations and any permit requirements or conditions set forth by the SCEMD upon procurement of the Liquid Waste Permit would ensure that a substantially degradation to water quality or violation of any water quality objectives due to increases in sediments and other contaminants generated by construction and/or development of the project would not occur. Therefore, impacts would be considered ***less than significant***.

Question B

As described above, the project site is not located within a 100-year flood hazard area. In addition, the proposed project would not involve placement of any permanent buildings or structures on the site and would not introduce new population to the area. As such, the proposed project would not place housing or structures within a 100-year flood hazard area and would not expose people or property to the risk of injury or damage in the event of a 100-year flood. Therefore, impacts related to flooding would be ***less than significant***.

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Hydrology and Water Quality.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
9. NOISE Would the project result in: A) Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases?		X	
B) Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project?		X	
C) Result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance?			X
D) Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction?			X
E) Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations?			X
F) Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic?			X

Environmental Setting

The following section is based on the Environmental Noise and Vibration Assessment prepared for the proposed project by Bollard Acoustical Consultants, Inc. (see Appendix B).

The project site is currently surrounded by commercial, agricultural, and industrial land uses. The nearest existing residence is located at the intersection of Jackson Road and Florin-Perkins Road, approximately 2,000 feet to the northwest of the existing and proposed operations. That residential area is mostly shielded from view of the project area by intervening topography.

The existing ambient noise environment in the project area is defined primarily by traffic on South Watt Avenue and Jackson Road, operations at the Teichert Perkins facility to the north, and existing commercial and industrial operations in the immediate project vicinity, including existing on-site operations. Sources of vibration do not currently exist on or near the project site. As part of the Environmental Noise and Vibration Assessment prepared for the proposed project, long-term ambient noise measurement surveys were conducted at three locations on the project site (see Figure 11~~Figure 13~~, Project Area and Noise Monitoring Locations). The results, as shown in Table 11, indicate that existing noise levels at the project site vary depending on location of the noise monitoring site and the major project area noise sources.

Figure 11~~Figure 13~~
Project Area and Noise Monitoring Locations

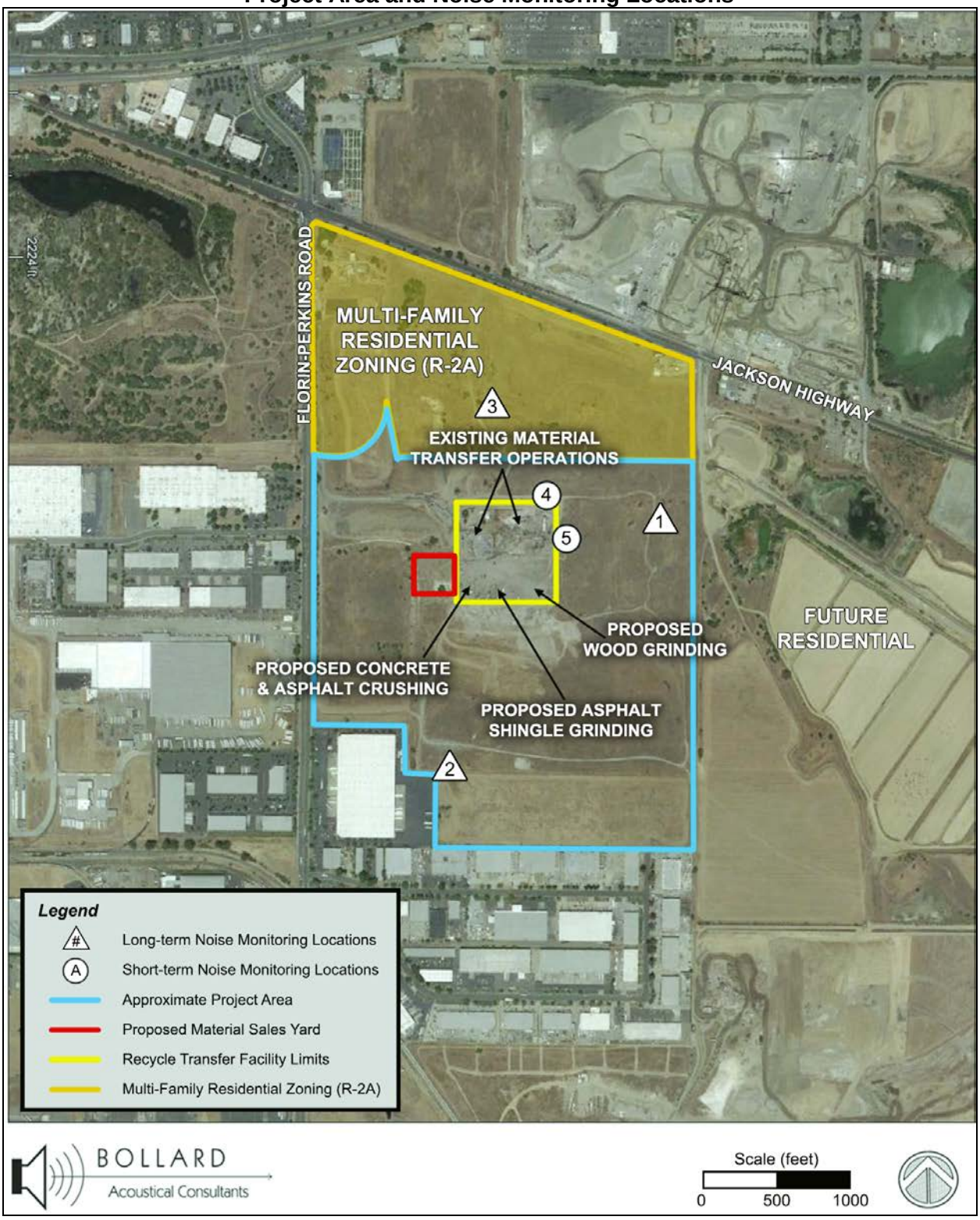


Table 11
Average Measured Ambient Noise Levels

Site[A]	Daytime (7 a.m. to 10 p.m.)		Nighttime (10 p.m. - 7 a.m.)		
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{dn}
1	44-49	56-63	45-49	59-62	52-58
2	60-65	71-74	63-64	74-75	70-71
3	48-54	62-66	46-51	60-63	54-61

Source: Bollard Acoustical Consultants, Inc., 2016.

The elevated noise levels at Site 2 represent commercial and industrial operations to the south, as noise generated at the existing on-site operations were observed to be very faint at that location. Similarly, noise levels associated with the current on-site operations were observed to be inaudible at measurement Site 1 due to shielding provided by intervening topography. Noise levels at Site 3 were found to be most heavily influenced by traffic on Jackson Road and operations at the existing Teichert Perkins aggregate plant, with current on-site operational noise being inaudible at Site 3.

In addition to the long-term noise surveys, short-term noise surveys were also conducted immediately adjacent to the existing facility on April 10, 2014 (the measurement locations also shown in Figure 11~~Figure 13~~). The purpose of the short-term noise surveys was to quantify the noise generation of the existing facility operations without influence from outside noise sources such as traffic or operations of the Teichert Perkins Plant. The measured existing facility noise levels are discussed in further detail below.

Standards of Significance

For purposes of this IS/MND, impacts due to noise may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of general plan policies:

- result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;
- result in construction noise levels that exceed the standards in the City of Sacramento Noise Ordinance;
- permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

The Master EIR evaluated the potential for development under the 2035 General Plan to increase noise levels in the community. New noise sources include vehicular traffic, aircraft, railways, light rail and stationary sources. The general plan policies establish exterior (Policy EC 3.1.1) and interior (Policy EC 3.1.3) noise standards. A variety of policies provide standards for the types of development envisioned in the general plan. Policy EC 3.1.8 requires mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded, and Policy 3.1.9 calls for the City to limit hours of operation for parks and active recreation areas in residential areas to minimize disturbance to residences. Notwithstanding application of the general plan policies, noise impacts for exterior noise levels (Impact 4.8-1) and interior noise levels (Impact 4.8-2), and vibration impacts (Impact 4.8-4) were found to be significant and unavoidable.

Answers to Checklist Questions

Questions A and B

In general, the additional processing of materials proposed for the project is similar in nature to the current on-site operations and would be conducted within the existing 10-acre boundary. However, the project would introduce new sources of noise at the site associated with wood and shingle grinding and periodic asphalt/concrete recycling activities, such as the use and operation of a wood grinder and portable crushing plant. Noise level measurements of existing plant operations, which consist of existing diesel-powered equipment use at the site, file data pertinent to the types of additional operations proposed at the site, and accepted sound propagation algorithms were utilized to quantify the anticipated noise generation of the proposed operations.

As stated previously, the nearest existing residence is located approximately 2,000 feet to the northwest of the existing and proposed operations and is shielded from view of the project area by intervening topography. It should be noted, however, that the property to the immediate east of the project site, which is currently associated with operations at the Teichert Aggregate's Perkins Plant, is proposed for residential uses. As a result, future residential land uses would be located within approximately 1,000 feet of the project operations. While much of the property to the east would be completely shielded from view of the project operations by intervening topography, such shielding is not present for a portion of that property to the east. However, the project proposes to construct a 10-foot-high berm along the eastern and southern boundaries of the site, which would shield the view of project operations from future residences on this property and provide noise attenuation.

Figure 11~~Figure 13~~ also illustrates that the area to the north of the project site is zoned Residential (R-2A). An application for development of the area has not been submitted at this time. Without specific designs for development of the area, the location of future potential residences is not known. As such, a project-specific noise analysis cannot be reliably accomplished, as any data used would be speculative at this time. Nonetheless, the noise consultant for the proposed project attempted to evaluate the potential impacts of the project at the residentially-zoned area to the north.

Because the commercial, agricultural, and industrial land uses in the immediate project vicinity are not noise sensitive uses, the analysis within this IS/MND focuses on the existing residence located to the northwest, on the residentially-zoned area to the north, and on future residences proposed on the adjacent property to the east.

On April 10, 2014, Bollard Acoustical Consultants, Inc. toured the existing facility, observed current operations, and conducted noise level measurements of those operations. The noise level measurements were conducted at two locations around the perimeter of the noisiest operations. In addition to the measurement results for existing operations, additional noise level data was provided by the project applicant for the proposed aspects of the project.

Table 12 presents the reference noise level data for each major project noise source, as well as the level predicted for each source at the nearest existing and proposed residences to the facility. Table 12 data includes a -10 dB offset to account for the substantial shielding of project noise levels by intervening topography and the comparable shielding provided by the proposed 10-foot-high berm in the directions of the nearest existing residence to the northwest, residentially-zoned property to the north, and the future residences to the east. The 10 dB offset is considered a conservative estimate, as evaluation of existing topography indicates that substantial shielding occurs in both the north and easterly directions.

Table 12
Florin-Perkins Material Recovery Facility Noise Generation

Noise Source	Reference Level at 100 feet		Residence	Level predicted at Residence	
	L_{50}	L_{max}		L_{50}	L_{max}
Existing Facility	80	90	Northwest	39	49
			East	47	57
			North	56	66
Concrete/Asphalt Crusher	85	90	Northwest	43	48
			East	49	54
			North	55	60
Wood Grinding	75	85	Northwest	32	42
			East	42	52
			North	45	55
Combined Operations	87	90	Northwest	45	48
			East	50	57
			North	59	63
City of Sacramento Exterior Noise Level Standards:			Daytime	55	75
			Nighttime	50	70

Note: The noise levels predicted at the nearest existing residence to the northwest and the future residences to the east include a 10 dB offset to account for the substantial shielding provided by intervening topography and the proposed berm in these areas.

Source: Bollard Acoustical Consultants, Inc., 2016.

Based on the data in Table 12, the project noise levels at the existing residence to the northwest and at the future residences to the east would be satisfactory relative to City of Sacramento noise standards, and the project would not result in a significant increase in ambient noise conditions at any of these residences. As a result, a noise impact is not identified and additional project-related noise mitigation measures would not be required for these noise-sensitive receptors. However, the Table 12 data also indicates that project noise generation would

exceed the City of Sacramento 50 dB nighttime and 55 dB L_{50} daytime noise level standards at the residentially-zoned area north of the project site. Specifically, the combined noise exposure at that area to the north is predicted to be 59 dB L_{50}. The predicted level is based on general estimates of shielding provided by intervening topography. However, ultimate noise exposure at the noise-sensitive exterior areas of the residentially-zoned property to the north would depend on site grading and site plans that would depict the location of the common outdoor activity areas of the future multi-family residential uses. In addition, a minimum six-foot-tall barrier would be required at the southern interface of the residential and industrial properties at such time as development of the multi-family residential uses is proposed. This barrier would result in an additional reduction in project noise levels on the order of 5+ dBA, reducing overall project noise exposure to approximately 54 dB with all project noise sources occurring simultaneously.

If project operations are limited to daytime hours, the predicted level of approximately 54 dB L_{50} from all project operations would be satisfactory relative to the City's daytime noise level limits. Furthermore, if either wood grinding or concrete/asphalt recycling operations were to occur while the existing operations are not occurring simultaneously, the predicted levels of each would be satisfactory relative to the City of Sacramento 50 dB L_{50} nighttime noise standard. However, if the existing operations were to occur at night, or if the wood grinding and concrete/asphalt recycling operations were to occur together during nighttime hours, then project noise exposure could exceed the City's nighttime noise level limit of 50 dB L_{50} at the residentially-zoned property to the north. In such a case, consideration of additional noise mitigation options would be required.

Due to the additional materials processing proposed at the site, an increase in on-site vehicle traffic would be expected to occur. Table 13 presents average daily vehicle logs for the existing on-site operations for the 2013 calendar year. According to Table 13, the facility generated an average of 102 daily vehicles during the 2013 year, of which approximately 40 percent were heavy trucks.

Table 13
Florin Perkins MRF Average Daily Vehicle Counts - 2013

Quarter[1]	Self-Haul Vehicles	Commercial Trucks	Transfer Trucks	Total
Q1	42	26	6	84
Q2	65	32	7	104
Q3	63	32	8	103
Q4	75	32	7	115
Average	**61**	**31**	**7**	**102**

Source: Bollard Acoustical Consultants, Inc., 2016.

According to existing traffic counts published by the City of Sacramento Public Works Department, existing average daily traffic volumes on Florin-Perkins Road are approximately 10,000 daily vehicles. Relative to the existing Florin-Perkins Road traffic volumes, the project would need to generate approximately five to 10 times the volume generated by existing operations in order to result in a significant (3 dB) increase in off-site traffic volumes. As noted above, expanded project operations are predicted to result in approximately 25 additional heavy trucks at the site per day. Relative to existing off-site traffic noise levels, the increase due to the additional project traffic would relate to noise level increases well below the City's three dB threshold. As a result, appreciable changes in off-site traffic noise levels are not anticipated for the proposed project.

The proposed project includes installation of a tree-lined berm around the southern and eastern perimeter of the 10-acre permitted boundary. The berm would be a minimum of 10 feet in height and the appropriate variety of coniferous trees and shrubs would be planted. Due to the shielding provided by the proposed 10-foot-high berm along the perimeter of the site, the intervening topography between the project site and the nearest noise-sensitive receptors, and the future barrier that would be required upon development of residential uses to the north, the proposed project would not be expected to result in exterior or interior noise levels in the project area above acceptable levels. However, because the project could generate noise that would exceed the City's 50 dB L_{50} nighttime noise level standard at the property to the north zoned for development of future multi-family residential uses depending on the location of common outdoor activity areas of the future residential uses, future barriers, and potential simultaneous and/or nighttime operations at the project site, impacts could be considered potentially significant. Implementation of Mitigation Measure 9-1 would reduce this impact to a ***less-than-significant*** level.

Question C

The proposed project would result in a temporary increase in noise levels in the vicinity of the proposed project during construction activities. Construction was assumed to occur in 2016 and would consist of berm construction and paving, which typically involve the use of excavators, graders, dozers, tractors, scrapers, pavers, rollers, and paving equipment. In addition, the project access roadway is anticipated to require realignment at some future time, upon implementation of the 14th Avenue Extension Project. Typical construction activities generate noise levels ranging from 70 to 90 dB at a distance of 50 feet. Noise dissipates at a rate of six dB per doubling of distance. The nearest existing residence is located approximately 2,000 feet to the northwest of the existing and proposed operations and is shielded from view of the project area by intervening topography. Therefore, the proposed project, including the future realignment of the project access roadway, would not result in a substantial increase in ambient noise levels in the project vicinity due to construction, and impacts would be ***less than significant***.

Questions D through F

Field inspections of both the project site and neighboring uses revealed that discernable sources of vibration that could adversely affect future sensitive land uses located within the project area do not exist. In addition, the project does not propose any appreciable sources of vibration, and any localized vibration generated in the immediate vicinity of project equipment would dissipate to imperceptible levels of the 1,000 to 2,000 feet between the project site and nearest existing and proposed residential uses. Therefore, the proposed project would not cause any residential or commercial areas, or historic buildings or archaeological sites, to be exposed to excessive vibration peak particle velocities, and impacts would be ***less than significant***.

Mitigation Measures

Implementation of the following mitigation measures would reduce impacts related to operational noise to a *less-than-significant* level.

9-1 *At the time of issuance of the first occupancy permit for any residence located on the property to the north of the project site, a noise survey shall be conducted at the specific location of the proposed residential development to determine if*

project noise generation is satisfactory relative to City of Sacramento nighttime noise standards. If that survey reveals that project operations are resulting in an exceedance of the City's nighttime noise standard, one of the following noise mitigation options shall be implemented at that time, based on coordination with and subject to review and approval by the Community Development Department:

- *Operations of the proposed project shall be limited to daytime hours (i.e., required to begin after 7:00 AM). (Note: Per the approved permit conditions, the allowable hours of operation are 6:00 AM to 6:00 PM [Permit No. Z98-114]); or*
- *Additional source-specific noise control measures shall be implemented for the equipment or operations identifies as being responsible for the exceedance of the City's nighttime noise level standard. Such measures could take the form of construction of additional earthen berms or localized sound barriers, procurement of quieter equipment, or nighttime restrictions on certain processes.*

Findings

The project would have no additional project-specific environmental effects relating to Noise.

Issues:

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
10. PUBLIC SERVICES A) Would the project result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan?			X

Environmental Setting

The project site is located in the southeastern area of Sacramento, approximately six miles from the downtown core of the City, and is served with fire protection, police protection, and parks by the City of Sacramento.

The Sacramento Fire Department (SFD) provides fire protection services to the entire City and some small areas just outside the City boundaries within the County limits. Police protection services are provided by the Sacramento Police Department (SPD) for areas within the City. In addition to the SPD and Sheriff's Department, the California Highway Patrol, UC Davis Medical Center Police Department, and the Regional Transit Police Department provide police protection within the City of Sacramento. The nearest fire station is located approximately 0.33 miles north of the project site.

The project site is within the Sacramento City Unified School District. Sacramento City Unified School District is the 11th largest school district in California and serves 47,900 students on 81 campuses. The nearest school, Hubert Bancroft Elementary School, is located approximately 0.66 miles north of the project site.

Standards of Significance

For the purposes of this IS/MND, an impact would be considered significant if the project resulted in the need for new or altered services related to fire protection, police protection, school facilities, roadway maintenance, or other governmental services beyond what was anticipated in the 2035 General Plan.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

The Master EIR evaluated the potential effects of the 2035 General Plan on various public services. These include police, fire protection, schools, libraries and emergency services (Chapter 4.10).

The general plan provides that adequate staffing levels for police and fire are important for the long-term health, safety and well-being of the community (Goal PHS 1.1, PHS 2.1). The Master EIR concluded that effects of development that could occur under the general plan would be less than significant.

General plan policies that call for the City to consider impacts of new development on schools (see, for example, Policy ERC 1.1.2 setting forth locational criteria, and Policy ERC 1.1.4 that encourages joint-use development of facilities) reduce impacts on schools to a less-than-significant level. (Impacts 4.10-3, 4) Impacts on library facilities were considered less than significant (Impact 4.10-5).

Answers to Checklist Questions

Question A

The proposed project does not involve the creation of housing and would not introduce any new residents to the project area. The proposed project would result in an increase in employees by approximately five from the existing staffing levels. The additional employees would likely come from the surrounding area and would not constitute a substantial increase in population in the area. In addition, the additional processing proposed for the project are similar in nature to the current on-site operations and would be conducted within the existing 10-acre boundary. As such, the proposed project would not result in any increases in demand for fire or police protection services. School, parks, or other public facilities or services would not be necessary for the proposed project. Overall, the proposed project would not result in the need for new or altered services related to fire protection, police protection, school facilities, or other governmental services beyond what was anticipated in the 2035 General Plan, and a ***less-than-significant*** impact related to public services would occur.

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Public Services.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
10. RECREATION Would the project: A) Cause or accelerate substantial physical deterioration of existing area parks or recreational facilities?			X
B) Create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan?			X

Environmental Setting

Two recreational facilities are located in the vicinity of the project site: Jefferson School Park located at 2635 Chestnut Hill Drive, and Granite Park located at 8200 Ramona Avenue. In addition, the project site is within two miles of the American River.

Standards of Significance

For purposes of this IS/MND, impacts to recreational resources are considered significant if the proposed project would do either of the following:

- cause or accelerate substantial physical deterioration of existing area parks or recreational facilities; or
- create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

Chapter 4.9 of the Master EIR considered the effects of the 2035 General Plan on the City's existing parkland, urban forest, recreational facilities and recreational services. The general plan identified a goal of providing an integrated park and recreation system in the City (Goal ERC 2.1). New residential development will be required to dedicate land, pay in-lieu fees or otherwise contribute a fair share to the acquisition and development of parks and recreation facilities (Policy ERC 2.2.5). Impacts were considered less than significant after application of the applicable policies. (Impacts 4.9-1 and 4.9-2)

Answers to Checklist Questions

Questions A and B

The proposed project would modify the existing operations to conduct concrete and asphalt crushing, shingle grinding, and wood grinding activities on-site, and add a modular office building and a 1.5-acre material sales yard. An increase in tonnage of materials received at the facility is also proposed. Because the project would not increase population, an increased demand for new or expansion of any existing recreational facilities would not occur. The project would not cause or accelerate substantial physical deterioration of existing area parks or recreational

facilities, or create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan. Therefore, impacts related to recreation would be ***less than significant***.

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Recreation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
11. TRANSPORTATION AND CIRCULATION Would the project: A) Roadway segments: degrade peak period Level of Service (LOS) from A, B, C or D (without the project) to E or F (with project) or the LOS (without project) is E or F, and projected generated traffic increases the Volume to Capacity Ratio (V/C ratio) by 0.02 or more.			X
B) Intersections: degrade peak period level of service from A, B, C or D (without project) to E or F (with project) or the LOS (without project) is E or F, and project generated traffic increases the peak period average vehicle delay by five seconds or more?			X
C) Freeway facilities: off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway; project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service; project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or the expected ramp queue is greater than the storage capacity?			X
D) Transit: adversely affect public transit operations or fail to adequately provide for access to public?			X
E) Bicycle facilities: adversely affect bicycle travel, bicycle paths or fail to adequately provide for access by bicycle?			X
F) Pedestrian: adversely affect pedestrian travel, pedestrian paths or fail to adequately provide for access by pedestrians?			X

Environmental Setting

An all-weather access road currently exists from the facility entrance on Florin-Perkins Road, to the weigh station, and continues east to the tipping area and south of the tipping area. The road is paved, provides a reasonably smooth surface for access, and is regularly watered/swept to minimize the generation of dust. A total of 23 parking spaces are located on-site for employees and visitors. Turn radii, as well as pavement and pavement base has been designed to meet emergency vehicle access standards as set forth by the City of Sacramento Fire Department. Pavement continues past the weigh station, and all areas around the weigh station are furnished with asphaltic concrete pavement (or equivalent). A paved apron to the north and east

of the operations area provides for customer maneuvering into the tipping area entirely on paved surface. As such, the entire ingress/egress, maneuvering area, and tipping area are paved. Current permits for the existing on-site operations limit the maximum daily vehicle volume to 321 vehicles per day and 642 vehicle trips per day.

It should be noted that the project operator currently accepts soil on behalf of the adjacent landfill owner for landfill closure purposes. The soil does not pass through the proposed project scales or operating areas, nor does the soil or trucks count towards the operator's permitted tonnage or vehicle limits. The aforementioned activities are not related to the current on-site project operations and are covered under permits associated with the landfill operations.

In the Sacramento area, public transit service is provided by Sacramento Regional Transit. Route 61 provides daily transit service in the vicinity of the project site. Route 61 provides connections from the Land Park area, along Fruitridge Road to the Fruitridge Light Rail Station, to Florin-Perkins Road and north to the College Greens Light Rail Station and the Power Inn Light Rail Station.

According to the City of Sacramento's Existing Bikeways Map, bike lanes currently exist along Florin-Perkins Road and Jackson Road in the vicinity of the proposed project. In addition, Belvedere Avenue currently includes a bike route.

In the vicinity of the project site, existing sidewalks occur along the western side of Florin-Perkins Road where existing development occurs. In addition, 23rd Avenue to the south of the site has sidewalks on both sides of the street. Sidewalks do not exist along the portion of Jackson Road north of the site.

Standards of Significance

For purposes of this IS/MND, impacts resulting from changes in transportation or circulation may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan MEIR:

Roadway Segments

A significant traffic impact occurs for roadway segments when:

- The traffic generated by a project degrades peak period Level of Service (LOS) from A, B, C, D (without the project) to E or F (with project); or
- The LOS (without project) is F, and project generated traffic increases the Volume-to-Capacity Ratio (V/C ratio) by 0.02 or more.*

* General Plan Policy M1.2.2 in the Mobility Element exempts six roadway elements from the Level of Service (LOS) standard E-F provided that the project will improve other parts of the transportation system-wide roadway capacity, make intersection improvements, or enhance non-auto travel modes in furtherance of the 2035 General Plan goals.

Intersections

A significant traffic impact occurs for intersections when:

- The traffic generated by a project degrades peak period LOS from A, B, C, D (without project) to E or F (with project); or
- The LOS (without project) F, and project generated traffic increases the peak period average vehicle delay by five seconds or more.

Freeway Facilities

Caltrans considers the following to be significant impacts:

- Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway;
- Project traffic increases that cause any ramp's merge/diverge level of service to be worse than the freeway's level of service;
- Project traffic increases that cause the freeway level of service to deteriorate beyond level of service threshold defined in the Caltrans Route Concept Report for the facility; or
- The expected ramp queue is greater than the storage capacity.

Transit

Impacts to the transit system are considered significant if the proposed project would:

- Adversely affect public transit operations or
- Fail to adequately provide for access to public transit.

Bicycle Facilities

Impacts to bicycle facilities are considered significant if the proposed project would:

- Adversely affect bicycle travel, bicycle paths or
- Fail to adequately provide for access by bicycle.

Pedestrian Circulation

Impacts to pedestrian circulation are considered significant if the proposed project would:

- Adversely affect pedestrian travel, pedestrian paths or
- Fail to adequately provide for access by pedestrians.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

Transportation and circulation were discussed in the Master EIR in Chapter 4.12. Various modes of travel were included in the analysis, including vehicular, transit, bicycle, pedestrian and aviation components. The analysis included consideration of roadway capacity and identification of levels of service, and effects of the 2035 General Plan on the public transportation system. Provisions of

the 2035 General Plan that provide substantial guidance include Mobility Goal 1.1, calling for a transportation system that is effectively planned, managed, operated and maintained, promotion of multimodal choices (Policy M 1.2.1), identification of level of service standards (Policy M 1.2.2), support for state highway expansion and management consistent with the Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy (SACOG MTP/SCS) (Policy M 1.5.6) and development that encourages walking and biking (Policy LU 4.2.1).

While the general plan includes numerous policies that direct the development of the City's transportation system, the Master EIR concluded that the general plan development would result in significant and unavoidable effects. See Impacts 4.12-3 (roadway segments in adjacent communities, and Impact 4.12-4 (freeway segments).

Answers to Checklist Questions

Questions A through C

The property has been historically used as a mining site and then as an unclassified landfill (the Florin Perkins Landfill, which is an existing landfill undergoing closure). As stated above, permits for the current MRF/LVTS operations limit the daily traffic volume to a maximum of 233trucks per day. The proposed project would result in an increase to 258 trucks per day. The increase in truck volume of 25 trucks per day would not be considered substantial considering the historical uses of the site and the associated trips. For example, the landfill operations that occurred on the property attracted a much larger number of both truck and passenger vehicle trips to the site than what is proposed. The increase of 25 trucks per day to the surrounding roadway network would be within what has historically occurred in the area and would not be expected to cause any roadway segments, intersections, or freeway facilities to decrease operations from an acceptable level to an unacceptable level. Accordingly, the City determined that a project-specific traffic impact analysis was not required, and that the City anticipates that the proposed project would not significantly increase traffic on local roadways.

In fact, the proposed project would improve transportation impacts as it would allow for further processing of materials accepted at the site, avoiding the need for hauling and processing of such materials at an off-site location. In addition, the proposed material sales yard would allow for the sale of materials processed on-site, thus, avoiding the need for hauling processed materials off-site for sales. As such, implementation of the proposed project would likely contribute to an overall decrease in VMT.

As mentioned above, the project operator currently accepts soil on behalf of the adjacent landfill owner for landfill closure purposes. Although the trucks hauling the soil use the same entrance and exit road as the proposed project, the soil hauling trucks do ~~The soil does~~ not pass through the proposed project scales or operating areas, nor does the soil or trucks count towards the operator's permitted tonnage or vehicle limits. Because the trucks would not enter the operations area of the proposed project site or enter the on-site scales, the truck traffic associated with the landfill closure activities would not be expected to interfere with on-site operations, as they would occur ~~completely separate~~independently from the proposed project. In addition, the aforementioned activities are not related to the proposed project operations and are covered under permits associated with the landfill operations. As further landfill closure activities continue to occur, vehicles accessing the overall site may temporarily increase during

the landfill closure period; however, such truck trips would cease to occur upon completion of landfill closure. Furthermore, clear signage would be provided on the on-site roadways in order to manage and direct on-site traffic.

It should be noted that the City intends to implement its 14th Avenue Extension Project, which would extend and widen 14th Avenue from Power Inn Road to Florin-Perkins Road. The 14th Avenue Extension Project would involve two travel lanes, bike lanes, a landscaped median, a new signal at Florin-Perkins Road, and other roadway improvements. The 14th Avenue Extension Project would provide an east-west connection on 14th Avenue between Power Inn Road and Florin-Perkins Road, which would help to relieve traffic congestion in the area. The proposed project site's access would need to be aligned with the intersection of Belvedere Avenue and Florin-Perkins Road in order to provide safe access to the project site. The Belvedere Avenue / Florin-Perkins Road intersection improvement details are shown in Figure 6. Figure 4 includes the anticipated alignment of the project access realignment. The total surface area anticipated for the access road realignment is 14,589 square feet (or approximately 0.34 acres).

Overall, the proposed project would not cause a substantial increase in traffic or exceed any level of service standard, and impacts would be considered ***less than significant.***

Question D

As stated above, Sacramento Regional Transit Route 61 provides transit opportunities in the vicinity of the project site. Accordingly, adequate public access would be available to future employees at the site. The addition of five employees to the area would not be expected to substantially increase the number of new transit riders (if at all). Such an increase would not cause any adverse effects to public transit operations. Overall, the proposed project would result in a ***less-than-significant*** impact related to public transit.

Question E

As discussed above, bike lanes currently exist along Florin-Perkins Road and Jackson Road in the vicinity of the proposed project. In addition, Belvedere Avenue includes a bike route. According to the City of Sacramento's Bikeway Master Plan Map, an on-street bikeway is proposed to be located along the future 14th Avenue Extension, and an off-street bikeway is proposed following the nearby railroad tracks to the south of the site. As a result, adequate provisions of access to the site by bicycle would be provided and the project would not affect bicycle travel or paths. Therefore, impacts related to bicycle facilities would be ***less than significant***.

Question F

As stated above, sidewalks currently exist along the western side of Florin-Perkins Road, where existing development occurs, and along both sides of 23rd Avenue to the south of the site. Although sidewalks are somewhat limited in the vicinity of the project site, the site could be adequately accessed by pedestrians. The proposed project would not involve any modifications to the existing roadway network that could adversely affect pedestrian travel or pedestrian paths. Therefore, the proposed project would result in a ***less-than-significant*** impact related to pedestrian access.

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Transportation and Circulation.

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
13. UTILITIES AND SERVICE SYSTEMS Would the project: A) Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments?			X
B) Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts?			X

Environmental Setting

The project site's existing utilities and service systems are discussed below.

Wastewater

The project site is not currently serviced by a public sewage service. Instead, portable restrooms are provided on-site. However, two septic tanks are located on the site. One tank is located west of the existing northern operations area and the other tank is located northwest of the existing operations area. Neither septic system is currently in use.

Water Supply

Potable water is currently provided to the on-site employees by means of provision of bottled water supplied by a vendor. Water used for dust suppression is supplied from two on-site groundwater wells, as well as from excess water from the stormwater tank when available. The existing groundwater wells are mainly used for irrigation/industrial uses. Nine fire hydrants are located on the site with fire supply lines that connect to the City's water supply main located along Florin-Perkins Road.

The project site is located within the South American Groundwater Subbasin of the Sacramento Valley Groundwater Basin. According to the California Department of Water Resources Bulletin 118, little is currently known about the groundwater budget in the South American Groundwater Subbasin, as only 105 wells are currently providing groundwater level data for the entire 248,000-acre Subbasin area.[4] The underlying groundwater table is unconfined. Based on monitoring wells on the Florin-Perkins Landfill site, according to the CVRWQCB, the groundwater elevation at the site typically ranges from about -10 feet mean sea level (MSL) to -16.5 feet MSL with about one foot of seasonal variation from the seasonal average.[5] The uppermost groundwater at the site occurs in Riverbank alluvium at an average depth of about 63 feet below the ground surface or -13 MSL.

[4] California Department of Water Resources. *California's Groundwater Bulletin 118 – Update 2003*. October 2003.
[5] California Regional Water Quality Control Board, Central Valley Region. *Waste Discharge Requirements Order No. R5-2013-0042*. 2013.

Stormwater

A stormwater drainage system currently exists on-site for the existing operations. The drainage system has been designed to direct stormwater and wash water from station maintenance activities to a series of drain inlets and culverts. Water is filtered prior to entering the drain inlets to remove sediments, debris and hydrocarbons. The water is then transferred by gravity flow to a small sump and subsequently to an underground stormwater detention tank located just west of the existing paved east access road or to the low-lying areas located west of the facility. Excess water in the tank is pumped out for dust suppression. If the tank capacity is exceeded, the excess runoff is directed to a low-lying area west of the facility within the property owner's property boundaries.

Solid Waste Disposal

The property has been historically used as a mining site and then as an unclassified landfill (the Florin Perkins Landfill, which is an existing landfill undergoing closure). To support landfill operations, the 10-acre project site became operational as a MRF/LVTS and continues to be utilized as such. The existing facility accepts, sorts, and processes recyclable material for bulk resale. All residual wastes (approximately 20 to 25 percent of all incoming waste) are currently being transferred to Kiefer Landfill, located approximately 10.5 miles east of the project site, for disposal. Kiefer Landfill is permitted to accept a maximum of 10,800 tons per day of solid waste and currently only takes in an average of approximately 6,000 tons per day. According to the Sacramento County Waste Management and Recycling Department, as the landfill has a permitted disposal area of 660 acres and is currently at 250 acres, the landfill is expected to have adequate capacity to serve the regional waste disposal needs for many years to come. The anticipated closure date for the landfill is approximately 2064.

Standards of Significance

For the purposes of this IS/MND, an impact would be considered significant if the project would:

- Result in the determination that adequate capacity is not available to serve the project's demand in addition to existing commitments, or
- Require or result in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental impacts.

Summary of Analysis under the 2035 General Plan Master EIR and Applicable General Plan Policies

The Master EIR evaluated the effects of development under the 2035 General Plan on water supply, sewer and storm drainage, solid waste, electricity, natural gas and telecommunications. See Chapter 4.11.

The Master EIR evaluated the impacts of increased demand for water that would occur with development under the 2035 General Plan. Policies in the general plan would reduce the impact generally to a less-than-significant level (see Impact 4.11-1) but the Master EIR concluded that the potential increase in demand for potable water in excess of the City's existing diversion and treatment capacity, and which could require construction of new water supply facilities, would result in a significant and unavoidable effect (Impact 4.11-2). The potential need for expansion of

wastewater treatment facilities was identified as having a less-than-significant effect (Impact 4.11-4). Impacts on solid waste facilities were less than significant (Impact 4.11-5). Implementation of energy efficient standards as set forth in Titles 20 and 24 of the California Code of Regulations for residential and non-residential buildings, would reduce effects for energy to a less-than-significant level.

Answers to Checklist Questions

Questions A and B

Wastewater and Water

The project site is not currently connected to the City's wastewater services. The proposed project would involve either connecting to one of the two existing on-site septic systems, or abandonment of the existing septic systems and installation of a new septic system. Compliance with state and ~~locate~~local regulations and permit requirements for either option would ensure the wastewater treatment requirements are not exceeded. As the proposed project would utilize a septic system, the proposed project would not connect to the City's wastewater service, and demand on such services would not occur. Thus, construction of new or expansion of existing City water infrastructure would not be required in order to accommodate the proposed project.

The proposed project would continue to utilize bottled water supplied by a vendor as a means of provision of potable water for employees. The proposed modular office building would be equipped with a single unisex restroom that would accommodate approximately four employees. A City of Sacramento water supply main is located along Florin-Perkins Road. A request to connect to the City of Sacramento's water system would occur at a later date. Until that time, bottled water and the existing on-site portable restrooms would continue to be provided to users and employees of the site. If the City allows for future connection to the water supply main, a two-inch pipe would be installed on the project site as a separate project in order to accommodate the connection.

The existing groundwater supply wells at the site would continue to be utilized for the proposed project operations, including industrial processes, irrigation, and dust control. The proposed project would increase the existing total water consumption from approximately 8,000 gallons per day to an estimated 11,025 gallons per day, including the future on-site restroom usage. Water used for irrigation would have the opportunity to seep into on-site soils, which would contribute to the groundwater recharge at the site. In addition, stormwater and wash water on the site would be collected, treated, and conveyed to an on-site detention tank. Water stored in the detention tank would be pumped out and used for dust suppression. Excess stormwater at the site or from the tank would be directed to a low-lying area west of the facility, where water would be allowed to percolate into the soil, contributing to groundwater recharge in the area. Similarly, water used for dust control on any unpaved areas of the site would be allowed to percolate into the soil, contributing to groundwater recharge in the area. Thus, although the project would result in an increase in groundwater consumption at the site, the project intends to recycle the water used at the site to the extent feasible and would contribute to groundwater recharge. As discussed above, little data is currently known regarding the groundwater levels within the underlying groundwater subbasin. However, based on the above, and due to the overall size of the underlying groundwater basin, the proposed project's increase of 3,025

gallons per day would not be expected to cause a substantial depletion of groundwater supplies in the area or at the site.

Because the proposed project would not involve any new connections to the City's water service, or increase demands on such services, construction of new or expansion of existing City infrastructure would not be required for the proposed project. Thus, impacts related to such would not occur.

Overall, the proposed project would not increase demand for City water or wastewater services and would not require the construction of new or expansion of existing such infrastructure or facilities. Therefore, the proposed project would result in a less-than-significant impact associated with such.

Stormwater

The existing stormwater drainage system would be utilized for the proposed project; however, one additional stormwater outfall structure would be constructed to accommodate the increase in stormwater at the site resultant of the increase in impervious surfaces. Because the proposed project design would be sufficient to contain all stormwater runoff associated with the site, an increase in the amount conveyed to the City's system would not be expected to occur. Therefore, impacts would be less than significant.

Solid Waste

The materials received at the site would increase as a result of the modification by an additional 500 tons (primarily concrete and asphalt), for a total of 1,000 TPD. However, the materials currently accepted at the site would continue to be accepted and a change to the type of materials accepted at the site is not proposed. In general, the proposed operations would be similar to the current site operations and would be conducted within the existing 10-acre MRF/LVTS boundary.

All residual wastes (approximately 20 to 25 percent of all incoming waste) are currently being transferred to Kiefer Landfill, located approximately 10.5 miles east of the project site, for disposal. The same would occur for the residual wastes from the proposed project. Using a conservative amount of residual waste based on 25 percent of the maximum amount of materials to be received at the site of 1,000 TPD, residual wastes associated with the proposed project could be expected to be in the order of 250 TPD. Based on the current average acceptance of solid waste and the permitted maximum acceptance of solid waste at Kiefer Landfill, the landfill would be sufficient to accommodate the project's disposal needs.

It should be noted that the proposed project would allow for further processing of materials accepted at the site, avoiding the need for hauling and processing of such materials at an off-site location or potentially disposing of materials at the local landfill. In addition, the nature of the proposed project would result in an overall positive effect related to solid waste services, as the project consists of processing materials for reuse. Thus, the project would be contributing to an overall reduction in the potential amount of waste going to a landfill. Because waste generated by the proposed project would be nominal, the local landfill has sufficient capacity, and the project would positively affect solid waste services, no impact related to solid waste services would occur.

Conclusion

Based on the above, the proposed project would result in an overall ***less-than-significant*** impact related to utilities and service systems.

Mitigation Measures

None required.

Findings

The project would have no additional project-specific environmental effects relating to Utilities and Service Systems.

MANDATORY FINDINGS OF SIGNIFICANCE

Issues:	Effect will be studied in the EIR	Effect can be mitigated less than significant	No additional significant environmental effect
14. MANDATORY FINDINGS OF SIGNIFICANCE A.) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X
B.) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X
C.) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X

Answers to Checklist Questions

Question A

As described in Section 3, Biological Resources, and Section 4, Cultural Resources, of this IS/MND, the proposed project, including the future realignment of the project access roadway, with implementation of the identified mitigation measures, would not have a significant impact on the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Therefore, the proposed project's impact would be ***less than significant***.

Question B

As presented throughout this IS/MND, all potential impacts associated with the project, including the future realignment of the project access roadway, would be reduced to less-than-significant levels with implementation of the identified mitigation measures. Thus, the project would not be expected to result in a considerable cumulative contribution to impacts on the environment. Therefore, the proposed project would also result in a ***less-than-significant*** cumulative impact.

Question C

The only potentially significant impact associated with the proposed project's effects on human beings is related to air quality. However, as discussed in Section 2, Air Quality of this IS/MND, with implementation of the identified mitigation measures, all impacts would be reduced to less-than-significant levels. Therefore, the proposed project's impacts associated with effects on human beings would be ***less than significant***.

SECTION IV - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project.

	Aesthetics		Hazards
	Air Quality	X	Noise
X	Biological Resources		Public Services
X	Cultural Resources		Recreation
	Geology and Soils		Transportation/Circulation
	Hydrology and Water Quality		Utilities and Service Systems
	None Identified		

SECTION V - DETERMINATION

On the basis of the initial study:

I find that (a) the proposed project is an anticipated subsequent project identified and described in the 2035 General Plan Master EIR; (b) the proposed project is consistent with the 2035 General Plan land use designation and the permissible densities and intensities of use for the project site; (c) that the discussions of cumulative impacts, growth inducing impacts, and irreversible significant effects in the Master EIR are adequate for the proposed project; and (d) the proposed project will have additional significant environmental effects not previously examined in the Master EIR. A Mitigated Negative Declaration will be prepared. Mitigation measures from the Master EIR will be applied to the project as appropriate, and additional feasible mitigation measures and alternatives will be incorporated to revise the proposed project before the negative declaration is circulated for public review, to avoid or mitigate the identified effects to a level of insignificance. (CEQA Guidelines Section 15178(b))

Dana Mahaffey
Signature

4/21/16
Date

DANA MAHAFFEY
Printed Name

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APPENDIX A

Florin Perkins Recycling Center

Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	0.72	1000sqft	11.84	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2016
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - utilized size of new modular office building, but included entire site acreage (including future access roadway realignment area)

Construction Phase -

Grading - only 1 acre of grading required related to construction of berm

Vehicle Trips - based on an additional 25 new trucks at site per day (approx. 50 trips)

Energy Use - modified per project specific anticipated electricity usage; no natural gas used on site

Energy Mitigation -

Operational Off-Road Equipment - based on project info and default values

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	5.19	5.50
tblEnergyUse	NT24E	7.20	7.63
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	T24E	4.17	4.42
tblEnergyUse	T24NG	24.61	0.00
tblGrading	AcresOfGrading	75.00	1.00
tblLandUse	LotAcreage	0.02	11.84
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	70.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperHorsePower	81.00	700.00
tblOperationalOffRoadEquipment	OperHorsePower	85.00	500.00
tblOperationalOffRoadEquipment	OperHorsePower	167.00	75.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	1.32	66.67
tblVehicleTrips	SU_TR	0.68	66.67
tblVehicleTrips	WD_TR	6.97	66.67

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2016	6.5596	74.8858	50.1026	0.0637	6.2096	3.5854	9.7949	3.3544	3.2985	6.6529	0.0000	6,574.8668	6,574.8668	1.9427	0.0000	6,615.6637
Total	**6.5596**	**74.8858**	**50.1026**	**0.0637**	**6.2096**	**3.5854**	**9.7949**	**3.3544**	**3.2985**	**6.6529**	**0.0000**	**6,574.8668**	**6,574.8668**	**1.9427**	**0.0000**	**6,615.6637**

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	lb/day										lb/day					
2016	6.5596	74.8858	50.1026	0.0637	6.2096	3.5854	9.7949	3.3544	3.2985	6.6529	0.0000	6,574.8668	6,574.8668	1.9427	0.0000	6,615.6637
Total	**6.5596**	**74.8858**	**50.1026**	**0.0637**	**6.2096**	**3.5854**	**9.7949**	**3.3544**	**3.2985**	**6.6529**	**0.0000**	**6,574.8668**	**6,574.8668**	**1.9427**	**0.0000**	**6,615.6637**

	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	N20	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**

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	lb/day										lb/day					
Area	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
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
Mobile	0.2060	0.3976	2.1263	4.2100e-003	0.2811	5.7200e-003	0.2868	0.0751	5.2600e-003	0.0803		363.3850	363.3850	0.0149		363.6977
Offroad	3.8642	36.1465	20.0629	0.0519		1.6599	1.6599		1.5810	1.5810		5,723.3608	5,723.3608	0.7536		5,739.1870
Total	**4.0883**	**36.5441**	**22.1893**	**0.0561**	**0.2811**	**1.6656**	**1.9467**	**0.0751**	**1.5863**	**1.6614**		**6,086.7460**	**6,086.7460**	**0.7685**	**0.0000**	**6,102.8849**

2.2 Overall Operational

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	lb/day										lb/day					
Area	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
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
Mobile	0.2060	0.3976	2.1263	4.2100e-003	0.2811	5.7200e-003	0.2868	0.0751	5.2600e-003	0.0803		363.3850	363.3850	0.0149		363.6977
Offroad	3.8642	36.1465	20.0629	0.0519		1.6599	1.6599		1.5810	1.5810		5,723.3608	5,723.3608	0.7536		5,739.1870
Total	**4.0883**	**36.5441**	**22.1893**	**0.0561**	**0.2811**	**1.6656**	**1.9467**	**0.0751**	**1.5863**	**1.6614**		**6,086.7460**	**6,086.7460**	**0.7685**	**0.0000**	**6,102.8849**

	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	N20	CO2e
Percent Reduction	**94.52**	**98.91**	**90.42**	**92.49**	**0.00**	**99.66**	**85.27**	**0.00**	**99.67**	**95.16**	**0.00**	**94.03**	**94.03**	**98.06**	**0.00**	**94.04**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2016	2/11/2016	5	30	
2	Paving	Paving	2/12/2016	3/10/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

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
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

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
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.0574	0.0000	6.0574	3.3140	0.0000	3.3140			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.0574**	**3.5842**	**9.6417**	**3.3140**	**3.2975**	**6.6115**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	lb/day										lb/day					
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
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
Worker	0.0802	0.0721	0.9651	1.9500e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		159.8861	159.8861	7.7200e-003		160.0483
Total	**0.0802**	**0.0721**	**0.9651**	**1.9500e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**159.8861**	**159.8861**	**7.7200e-003**		**160.0483**

3.2 Grading - 2016

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	lb/day										lb/day					
Fugitive Dust					6.0574	0.0000	6.0574	3.3140	0.0000	3.3140			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.0574**	**3.5842**	**9.6417**	**3.3140**	**3.2975**	**6.6115**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	lb/day										lb/day					
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
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
Worker	0.0802	0.0721	0.9651	1.9500e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		159.8861	159.8861	7.7200e-003		160.0483
Total	**0.0802**	**0.0721**	**0.9651**	**1.9500e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**159.8861**	**159.8861**	**7.7200e-003**		**160.0483**

3.3 Paving - 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	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	lb/day										lb/day					
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
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
Worker	0.0601	0.0541	0.7239	1.4600e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		119.9145	119.9145	5.7900e-003		120.0362
Total	**0.0601**	**0.0541**	**0.7239**	**1.4600e-003**	**0.1141**	**8.4000e-004**	**0.1149**	**0.0303**	**7.7000e-004**	**0.0310**		**119.9145**	**119.9145**	**5.7900e-003**		**120.0362**

3.3 Paving - 2016

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	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	lb/day										lb/day					
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
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
Worker	0.0601	0.0541	0.7239	1.4600e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		119.9145	119.9145	5.7900e-003		120.0362
Total	**0.0601**	**0.0541**	**0.7239**	**1.4600e-003**	**0.1141**	**8.4000e-004**	**0.1149**	**0.0303**	**7.7000e-004**	**0.0310**		**119.9145**	**119.9145**	**5.7900e-003**		**120.0362**

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	lb/day										lb/day					
Mitigated	0.2060	0.3976	2.1263	4.2100e-003	0.2811	5.7200e-003	0.2868	0.0751	5.2600e-003	0.0803		363.3850	363.3850	0.0149		363.6977
Unmitigated	0.2060	0.3976	2.1263	4.2100e-003	0.2811	5.7200e-003	0.2868	0.0751	5.2600e-003	0.0803		363.3850	363.3850	0.0149		363.6977

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	48.00	48.00	48.00	132,763	132,763
Total	48.00	48.00	48.00	132,763	132,763

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504516	0.068219	0.178179	0.147873	0.044976	0.006346	0.020386	0.015946	0.002304	0.002308	0.006193	0.000574	0.002181

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	lb/day										lb/day					
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

	NaturalGas 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	lb/day										lb/day					
General Light Industry	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
Total		**0.0000**	**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

Mitigated

	NaturalGas 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	lb/day										lb/day					
General Light Industry	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	lb/day										lb/day					
Mitigated	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
Unmitigated	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004

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	lb/day										lb/day					
Architectural Coating	2.7400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
Total	**0.0182**	**0.0000**	**8.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6000e-004**	**1.6000e-004**	**0.0000**		**1.7000e-004**

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	lb/day										lb/day					
Architectural Coating	2.7400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
Total	**0.0182**	**0.0000**	**8.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6000e-004**	**1.6000e-004**	**0.0000**		**1.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Concrete/Industrial Saws	1	8.00	361	700	0.73	Diesel
Crushing/Proc. Equipment	1	8.00	70	500	0.78	Diesel
Excavators	2	8.00	361	162	0.38	Diesel
Other Material Handling Equipment	1	2.00	361	75	0.40	Diesel
Tractors/Loaders/Backhoes	2	8.00	361	97	0.37	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	lb/day										lb/day					
Excavators	0.7764	8.8617	6.8569	0.0106		0.4360	0.4360		0.4012	0.4012		1,099.8362	1,099.8362	0.3318		1,106.8029
Other Material Handling Equipment	0.0680	0.6347	0.4982	6.5000e-004		0.0486	0.0486		0.0447	0.0447		67.1694	67.1694	0.0203		67.5949
Tractors/Loaders/Backhoes	0.6812	6.5101	4.8252	6.2300e-003		0.5012	0.5012		0.4611	0.4611		647.3546	647.3546	0.1953		651.4551
Crushing/Proc. Equipment	2.3387	20.1400	7.8827	0.0344		0.6741	0.6741		0.6741	0.6741		3,909.0007	3,909.0007	0.2064		3,913.3341
Total	**3.8642**	**36.1465**	**20.0629**	**0.0519**		**1.6599**	**1.6599**		**1.5810**	**1.5810**		**5,723.3608**	**5,723.3608**	**0.7536**		**5,739.1870**

10.0 Vegetation

Florin Perkins Recycling Center

Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	0.72	1000sqft	11.84	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2016
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - utilized size of new modular office building, but included entire site acreage (including future access roadway realignment area)

Construction Phase -

Grading - only 1 acre of grading required related to construction of berm

Vehicle Trips - based on an additional 25 new trucks at site per day (approx. 50 trips)

Energy Use - modified per project specific anticipated electricity usage; no natural gas used on site

Energy Mitigation -

Operational Off-Road Equipment - based on project info and default values

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	5.19	5.50
tblEnergyUse	NT24E	7.20	7.63
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	T24E	4.17	4.42
tblEnergyUse	T24NG	24.61	0.00
tblGrading	AcresOfGrading	75.00	1.00
tblLandUse	LotAcreage	0.02	11.84
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	70.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperHorsePower	81.00	700.00
tblOperationalOffRoadEquipment	OperHorsePower	85.00	500.00
tblOperationalOffRoadEquipment	OperHorsePower	167.00	75.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	1.32	66.67
tblVehicleTrips	SU_TR	0.68	66.67
tblVehicleTrips	WD_TR	6.97	66.67

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2016	6.5494	74.9032	50.0086	0.0634	6.2096	3.5854	9.7949	3.3544	3.2985	6.6529	0.0000	6,555.3588	6,555.3588	1.9427	0.0000	6,596.1557
Total	**6.5494**	**74.9032**	**50.0086**	**0.0634**	**6.2096**	**3.5854**	**9.7949**	**3.3544**	**3.2985**	**6.6529**	**0.0000**	**6,555.3588**	**6,555.3588**	**1.9427**	**0.0000**	**6,596.1557**

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	lb/day										lb/day					
2016	6.5494	74.9032	50.0086	0.0634	6.2096	3.5854	9.7949	3.3544	3.2985	6.6529	0.0000	6,555.3587	6,555.3587	1.9427	0.0000	6,596.1557
Total	**6.5494**	**74.9032**	**50.0086**	**0.0634**	**6.2096**	**3.5854**	**9.7949**	**3.3544**	**3.2985**	**6.6529**	**0.0000**	**6,555.3587**	**6,555.3587**	**1.9427**	**0.0000**	**6,596.1557**

	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	N20	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**

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	lb/day										lb/day					
Area	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
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
Mobile	0.1940	0.4539	2.1591	3.7900e-003	0.2811	5.7600e-003	0.2868	0.0751	5.2900e-003	0.0804		328.6985	328.6985	0.0149		329.0114
Offroad	3.8642	36.1465	20.0629	0.0519		1.6599	1.6599		1.5810	1.5810		5,723.3608	5,723.3608	0.7536		5,739.1870
Total	**4.0763**	**36.6004**	**22.2221**	**0.0556**	**0.2811**	**1.6657**	**1.9467**	**0.0751**	**1.5863**	**1.6614**		**6,052.0595**	**6,052.0595**	**0.7685**	**0.0000**	**6,068.1986**

2.2 Overall Operational

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	lb/day										lb/day					
Area	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
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
Mobile	0.1940	0.4539	2.1591	3.7900e-003	0.2811	5.7600e-003	0.2868	0.0751	5.2900e-003	0.0804		328.6985	328.6985	0.0149		329.0114
Offroad	3.8642	36.1465	20.0629	0.0519		1.6599	1.6599		1.5810	1.5810		5,723.3608	5,723.3608	0.7536		5,739.1870
Total	**4.0763**	**36.6004**	**22.2221**	**0.0556**	**0.2811**	**1.6657**	**1.9467**	**0.0751**	**1.5863**	**1.6614**		**6,052.0595**	**6,052.0595**	**0.7685**	**0.0000**	**6,068.1986**

	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	N20	CO2e
Percent Reduction	**94.80**	**98.76**	**90.28**	**93.19**	**0.00**	**99.65**	**85.27**	**0.00**	**99.67**	**95.16**	**0.00**	**94.57**	**94.57**	**98.06**	**0.00**	**94.58**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2016	2/11/2016	5	30	
2	Paving	Paving	2/12/2016	3/10/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

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
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

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
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 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	lb/day										lb/day					
Fugitive Dust					6.0574	0.0000	6.0574	3.3140	0.0000	3.3140			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.0574**	**3.5842**	**9.6417**	**3.3140**	**3.2975**	**6.6115**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	lb/day										lb/day					
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
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
Worker	0.0699	0.0895	0.8712	1.7100e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		140.3780	140.3780	7.7200e-003		140.5402
Total	**0.0699**	**0.0895**	**0.8712**	**1.7100e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**140.3780**	**140.3780**	**7.7200e-003**		**140.5402**

3.2 Grading - 2016

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	lb/day										lb/day					
Fugitive Dust					6.0574	0.0000	6.0574	3.3140	0.0000	3.3140			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**6.0574**	**3.5842**	**9.6417**	**3.3140**	**3.2975**	**6.6115**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	lb/day										lb/day					
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
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
Worker	0.0699	0.0895	0.8712	1.7100e-003	0.1521	1.1200e-003	0.1533	0.0404	1.0300e-003	0.0414		140.3780	140.3780	7.7200e-003		140.5402
Total	**0.0699**	**0.0895**	**0.8712**	**1.7100e-003**	**0.1521**	**1.1200e-003**	**0.1533**	**0.0404**	**1.0300e-003**	**0.0414**		**140.3780**	**140.3780**	**7.7200e-003**		**140.5402**

3.3 Paving - 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	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	lb/day										lb/day					
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
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
Worker	0.0524	0.0671	0.6534	1.2800e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		105.2835	105.2835	5.7900e-003		105.4052
Total	**0.0524**	**0.0671**	**0.6534**	**1.2800e-003**	**0.1141**	**8.4000e-004**	**0.1149**	**0.0303**	**7.7000e-004**	**0.0310**		**105.2835**	**105.2835**	**5.7900e-003**		**105.4052**

3.3 Paving - 2016

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	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0898**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

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	lb/day										lb/day					
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
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
Worker	0.0524	0.0671	0.6534	1.2800e-003	0.1141	8.4000e-004	0.1149	0.0303	7.7000e-004	0.0310		105.2835	105.2835	5.7900e-003		105.4052
Total	**0.0524**	**0.0671**	**0.6534**	**1.2800e-003**	**0.1141**	**8.4000e-004**	**0.1149**	**0.0303**	**7.7000e-004**	**0.0310**		**105.2835**	**105.2835**	**5.7900e-003**		**105.4052**

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	lb/day										lb/day					
Mitigated	0.1940	0.4539	2.1591	3.7900e-003	0.2811	5.7600e-003	0.2868	0.0751	5.2900e-003	0.0804		328.6985	328.6985	0.0149		329.0114
Unmitigated	0.1940	0.4539	2.1591	3.7900e-003	0.2811	5.7600e-003	0.2868	0.0751	5.2900e-003	0.0804		328.6985	328.6985	0.0149		329.0114

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	48.00	48.00	48.00	132,763	132,763
Total	48.00	48.00	48.00	132,763	132,763

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504516	0.068219	0.178179	0.147873	0.044976	0.006346	0.020386	0.015946	0.002304	0.002308	0.006193	0.000574	0.002181

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	lb/day										lb/day					
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

	NaturalGas 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	lb/day										lb/day					
General Light Industry	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
Total		**0.0000**	**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

Mitigated

	NaturalGas 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	lb/day										lb/day					
General Light Industry	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	lb/day										lb/day					
Mitigated	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
Unmitigated	0.0182	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004

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	lb/day										lb/day					
Architectural Coating	2.7400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
Total	**0.0182**	**0.0000**	**8.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6000e-004**	**1.6000e-004**	**0.0000**		**1.7000e-004**

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	lb/day										lb/day					
Architectural Coating	2.7400e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	8.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.6000e-004	1.6000e-004	0.0000		1.7000e-004
Total	**0.0182**	**0.0000**	**8.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.6000e-004**	**1.6000e-004**	**0.0000**		**1.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Concrete/Industrial Saws	1	8.00	361	700	0.73	Diesel
Crushing/Proc. Equipment	1	8.00	70	500	0.78	Diesel
Excavators	2	8.00	361	162	0.38	Diesel
Other Material Handling Equipment	1	2.00	361	75	0.40	Diesel
Tractors/Loaders/Backhoes	2	8.00	361	97	0.37	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	lb/day										lb/day					
Excavators	0.7764	8.8617	6.8569	0.0106		0.4360	0.4360		0.4012	0.4012		1,099.8362	1,099.8362	0.3318		1,106.8029
Other Material Handling Equipment	0.0680	0.6347	0.4982	6.5000e-004		0.0486	0.0486		0.0447	0.0447		67.1694	67.1694	0.0203		67.5949
Tractors/Loaders/Backhoes	0.6812	6.5101	4.8252	6.2300e-003		0.5012	0.5012		0.4611	0.4611		647.3546	647.3546	0.1953		651.4551
Crushing/Proc. Equipment	2.3387	20.1400	7.8827	0.0344		0.6741	0.6741		0.6741	0.6741		3,909.0007	3,909.0007	0.2064		3,913.3341
Total	**3.8642**	**36.1465**	**20.0629**	**0.0519**		**1.6599**	**1.6599**		**1.5810**	**1.5810**		**5,723.3608**	**5,723.3608**	**0.7536**		**5,739.1870**

10.0 Vegetation

Florin Perkins Recycling Center

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	0.72	1000sqft	11.84	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2016
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	590.31	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - utilized size of new modular office building, but included entire site acreage (including future access roadway realignment area)

Construction Phase -

Grading - only 1 acre of grading required related to construction of berm

Vehicle Trips - based on an additional 25 new trucks at site per day (approx. 50 trips)

Energy Use - modified per project specific anticipated electricity usage; no natural gas used on site

Energy Mitigation -

Operational Off-Road Equipment - based on project info and default values

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	5.19	5.50
tblEnergyUse	NT24E	7.20	7.63
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	T24E	4.17	4.42
tblEnergyUse	T24NG	24.61	0.00
tblGrading	AcresOfGrading	75.00	1.00
tblLandUse	LotAcreage	0.02	11.84
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	70.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperHorsePower	81.00	700.00
tblOperationalOffRoadEquipment	OperHorsePower	85.00	500.00
tblOperationalOffRoadEquipment	OperHorsePower	167.00	75.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	OperationalYear	2014	2016
tblVehicleTrips	ST_TR	1.32	66.67
tblVehicleTrips	SU_TR	0.68	66.67
tblVehicleTrips	WD_TR	6.97	66.67

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	0.1196	1.3479	0.9041	1.1900e-003	0.0942	0.0664	0.1606	0.0506	0.0611	0.1117	0.0000	111.2570	111.2570	0.0328	0.0000	111.9463
Total	**0.1196**	**1.3479**	**0.9041**	**1.1900e-003**	**0.0942**	**0.0664**	**0.1606**	**0.0506**	**0.0611**	**0.1117**	**0.0000**	**111.2570**	**111.2570**	**0.0328**	**0.0000**	**111.9463**

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	0.1196	1.3479	0.9041	1.1900e-003	0.0942	0.0664	0.1606	0.0506	0.0611	0.1117	0.0000	111.2568	111.2568	0.0328	0.0000	111.9462
Total	**0.1196**	**1.3479**	**0.9041**	**1.1900e-003**	**0.0942**	**0.0664**	**0.1606**	**0.0506**	**0.0611**	**0.1117**	**0.0000**	**111.2568**	**111.2568**	**0.0328**	**0.0000**	**111.9462**

	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	N20	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**

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3834	3.3834	1.7000e-004	3.0000e-005	3.3976
Mobile	0.0333	0.0781	0.3608	7.0000e-004	0.0494	1.0400e-003	0.0505	0.0132	9.6000e-004	0.0142	0.0000	55.4365	55.4365	2.4600e-003	0.0000	55.4881
Offroad	0.3572	3.5941	2.4744	4.3600e-003		0.2015	0.2015		0.1873	0.1873	0.0000	421.2123	421.2123	0.0962	0.0000	423.2318
Waste						0.0000	0.0000		0.0000	0.0000	0.1807	0.0000	0.1807	0.0107	0.0000	0.4049
Water						0.0000	0.0000		0.0000	0.0000	0.0589	0.2221	0.2810	2.1000e-004	1.3000e-004	0.3259
Total	**0.3938**	**3.6722**	**2.8352**	**5.0600e-003**	**0.0494**	**0.2026**	**0.2520**	**0.0132**	**0.1883**	**0.2015**	**0.2396**	**480.2543**	**480.4939**	**0.1097**	**1.6000e-004**	**482.8483**

2.2 Overall Operational

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.1278	3.1278	1.5000e-004	3.0000e-005	3.1409
Mobile	0.0333	0.0781	0.3608	7.0000e-004	0.0494	1.0400e-003	0.0505	0.0132	9.6000e-004	0.0142	0.0000	55.4365	55.4365	2.4600e-003	0.0000	55.4881
Offroad	0.3572	3.5941	2.4744	4.3600e-003		0.2015	0.2015		0.1873	0.1873	0.0000	421.2123	421.2123	0.0962	0.0000	423.2318
Waste						0.0000	0.0000		0.0000	0.0000	0.1807	0.0000	0.1807	0.0107	0.0000	0.4049
Water						0.0000	0.0000		0.0000	0.0000	0.0589	0.2221	0.2810	2.1000e-004	1.3000e-004	0.3260
Total	**0.3938**	**3.6722**	**2.8352**	**5.0600e-003**	**0.0494**	**0.2026**	**0.2520**	**0.0132**	**0.1883**	**0.2015**	**0.2396**	**479.9987**	**480.2383**	**0.1097**	**1.6000e-004**	**482.5916**

	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	N20	CO2e
Percent Reduction	**90.70**	**97.87**	**87.27**	**86.17**	**0.00**	**99.49**	**79.98**	**0.00**	**99.49**	**92.95**	**0.00**	**87.76**	**87.72**	**87.69**	**0.00**	**87.71**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2016	2/11/2016	5	30	
2	Paving	Paving	2/12/2016	3/10/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

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
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

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
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 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					0.0909	0.0000	0.0909	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2936	87.2936	0.0263	0.0000	87.8465
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.0909**	**0.0538**	**0.1446**	**0.0497**	**0.0495**	**0.0992**	**0.0000**	**87.2936**	**87.2936**	**0.0263**	**0.0000**	**87.8465**

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	1.2000e-003	0.0126	3.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9664	1.9664	1.1000e-004	0.0000	1.9686
Total	**1.0100e-003**	**1.2000e-003**	**0.0126**	**3.0000e-005**	**2.2000e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9664**	**1.9664**	**1.1000e-004**	**0.0000**	**1.9686**

3.2 Grading - 2016

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					0.0909	0.0000	0.0909	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2935	87.2935	0.0263	0.0000	87.8464
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.0909**	**0.0538**	**0.1446**	**0.0497**	**0.0495**	**0.0992**	**0.0000**	**87.2935**	**87.2935**	**0.0263**	**0.0000**	**87.8464**

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	1.2000e-003	0.0126	3.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9664	1.9664	1.1000e-004	0.0000	1.9686
Total	**1.0100e-003**	**1.2000e-003**	**0.0126**	**3.0000e-005**	**2.2000e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9664**	**1.9664**	**1.1000e-004**	**0.0000**	**1.9686**

3.3 Paving - 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					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	**5.0000e-004**	**6.0000e-004**	**6.2900e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9832**	**0.9832**	**5.0000e-005**	**0.0000**	**0.9843**

3.3 Paving - 2016

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					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	**5.0000e-004**	**6.0000e-004**	**6.2900e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9832**	**0.9832**	**5.0000e-005**	**0.0000**	**0.9843**

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	0.0333	0.0781	0.3608	7.0000e-004	0.0494	1.0400e-003	0.0505	0.0132	9.6000e-004	0.0142	0.0000	55.4365	55.4365	2.4600e-003	0.0000	55.4881
Unmitigated	0.0333	0.0781	0.3608	7.0000e-004	0.0494	1.0400e-003	0.0505	0.0132	9.6000e-004	0.0142	0.0000	55.4365	55.4365	2.4600e-003	0.0000	55.4881

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	48.00	48.00	48.00	132,763	132,763
Total	48.00	48.00	48.00	132,763	132,763

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.504516	0.068219	0.178179	0.147873	0.044976	0.006346	0.020386	0.015946	0.002304	0.002308	0.006193	0.000574	0.002181

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.1278	3.1278	1.5000e-004	3.0000e-005	3.1409
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.3834	3.3834	1.7000e-004	3.0000e-005	3.3976
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	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	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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					
General Light Industry	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
Total		**0.0000**	**0.0000**	**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

Mitigated

	NaturalGas 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					
General Light Industry	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12636	3.3834	1.7000e-004	3.0000e-005	3.3976
Total		**3.3834**	**1.7000e-004**	**3.0000e-005**	**3.3976**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	11681.3	3.1278	1.5000e-004	3.0000e-005	3.1409
Total		**3.1278**	**1.5000e-004**	**3.0000e-005**	**3.1409**

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.3100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.3100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.2810	2.1000e-004	1.3000e-004	0.3260
Unmitigated	0.2810	2.1000e-004	1.3000e-004	0.3259

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.1665 / 0	0.2810	2.1000e-004	1.3000e-004	0.3259
Total		**0.2810**	**2.1000e-004**	**1.3000e-004**	**0.3259**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.1665 / 0	0.2810	2.1000e-004	1.3000e-004	0.3260
Total		**0.2810**	**2.1000e-004**	**1.3000e-004**	**0.3260**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1807	0.0107	0.0000	0.4049
Unmitigated	0.1807	0.0107	0.0000	0.4049

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.89	0.1807	0.0107	0.0000	0.4049
Total		**0.1807**	**0.0107**	**0.0000**	**0.4049**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.89	0.1807	0.0107	0.0000	0.4049
Total		**0.1807**	**0.0107**	**0.0000**	**0.4049**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Concrete/Industrial Saws	1	8.00	361	700	0.73	Diesel
Crushing/Proc. Equipment	1	8.00	70	500	0.78	Diesel
Excavators	2	8.00	361	162	0.38	Diesel
Other Material Handling Equipment	1	2.00	361	75	0.40	Diesel
Tractors/Loaders/Backhoes	2	8.00	361	97	0.37	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					
Excavators	0.1401	1.5995	1.2377	1.9100e-003		0.0787	0.0787		0.0724	0.0724	0.0000	180.0947	180.0947	0.0543	0.0000	181.2355
Other Material Handling Equipment	0.0123	0.1146	0.0899	1.2000e-004		8.7600e-003	8.7600e-003		8.0600e-003	8.0600e-003	0.0000	10.9988	10.9988	3.3200e-003	0.0000	11.0685
Tractors/Loaders/Backhoes	0.1230	1.1751	0.8710	1.1200e-003		0.0905	0.0905		0.0832	0.0832	0.0000	106.0023	106.0023	0.0320	0.0000	106.6737
Crushing/Proc. Equipment	0.0819	0.7049	0.2759	1.2000e-003		0.0236	0.0236		0.0236	0.0236	0.0000	124.1165	124.1165	6.5500e-003	0.0000	124.2541
Total	**0.3572**	**3.5941**	**2.4744**	**4.3500e-003**		**0.2015**	**0.2015**		**0.1873**	**0.1873**	**0.0000**	**421.2123**	**421.2123**	**0.0962**	**0.0000**	**423.2318**

10.0 Vegetation

Florin Perkins Recycling Center

Sacramento County, Mitigation Report

Construction Mitigation Summary

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

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Excavators	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	2	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Excavators	1.16500E-002	1.32920E-001	1.02850E-001	1.60000E-004	6.54000E-003	6.02000E-003	0.00000E+000	1.49663E+001	1.49663E+001	4.51000E-003	0.00000E+000	1.50611E+001
Graders	1.52800E-002	1.55700E-001	7.39100E-002	9.00000E-005	8.75000E-003	8.05000E-003	0.00000E+000	8.83698E+000	8.83698E+000	2.67000E-003	0.00000E+000	8.89296E+000
Pavers	8.02000E-003	9.02600E-002	5.70400E-002	9.00000E-005	4.49000E-003	4.13000E-003	0.00000E+000	8.50987E+000	8.50987E+000	2.57000E-003	0.00000E+000	8.56378E+000
Paving Equipment	6.14000E-003	7.13400E-002	5.08600E-002	8.00000E-005	3.54000E-003	3.26000E-003	0.00000E+000	7.56019E+000	7.56019E+000	2.28000E-003	0.00000E+000	7.60807E+000
Rollers	6.74000E-003	6.22600E-002	4.02700E-002	5.00000E-005	4.58000E-003	4.22000E-003	0.00000E+000	4.94376E+000	4.94376E+000	1.49000E-003	0.00000E+000	4.97507E+000
Rubber Tired Dozers	1.85700E-002	2.08060E-001	1.57270E-001	1.30000E-004	9.68000E-003	8.91000E-003	0.00000E+000	1.25659E+001	1.25659E+001	3.79000E-003	0.00000E+000	1.26455E+001
Scrapers	4.14700E-002	5.27870E-001	3.30640E-001	4.50000E-004	2.12800E-002	1.95700E-002	0.00000E+000	4.21154E+001	4.21154E+001	1.27000E-002	0.00000E+000	4.23822E+001
Tractors/Loaders/ Backhoes	1.02200E-002	9.76500E-002	7.23800E-002	9.00000E-005	7.52000E-003	6.92000E-003	0.00000E+000	8.80905E+000	8.80905E+000	2.66000E-003	0.00000E+000	8.86485E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Excavators	1.16500E-002	1.32920E-001	1.02850E-001	1.60000E-004	6.54000E-003	6.02000E-003	0.00000E+000	1.49663E+001	1.49663E+001	4.51000E-003	0.00000E+000	1.50611E+001
Graders	1.52800E-002	1.55700E-001	7.39100E-002	9.00000E-005	8.75000E-003	8.05000E-003	0.00000E+000	8.83697E+000	8.83697E+000	2.67000E-003	0.00000E+000	8.89295E+000
Pavers	8.02000E-003	9.02600E-002	5.70400E-002	9.00000E-005	4.49000E-003	4.13000E-003	0.00000E+000	8.50986E+000	8.50986E+000	2.57000E-003	0.00000E+000	8.56377E+000
Paving Equipment	6.14000E-003	7.13400E-002	5.08600E-002	8.00000E-005	3.54000E-003	3.26000E-003	0.00000E+000	7.56018E+000	7.56018E+000	2.28000E-003	0.00000E+000	7.60807E+000
Rollers	6.74000E-003	6.22600E-002	4.02700E-002	5.00000E-005	4.58000E-003	4.22000E-003	0.00000E+000	4.94375E+000	4.94375E+000	1.49000E-003	0.00000E+000	4.97507E+000
Rubber Tired Dozers	1.85700E-002	2.08060E-001	1.57270E-001	1.30000E-004	9.68000E-003	8.91000E-003	0.00000E+000	1.25658E+001	1.25658E+001	3.79000E-003	0.00000E+000	1.26454E+001
Scrapers	4.14700E-002	5.27870E-001	3.30640E-001	4.50000E-004	2.12800E-002	1.95700E-002	0.00000E+000	4.21153E+001	4.21153E+001	1.27000E-002	0.00000E+000	4.23821E+001
Tractors/Loaders/Backhoes	1.02200E-002	9.76500E-002	7.23800E-002	9.00000E-005	7.52000E-003	6.92000E-003	0.00000E+000	8.80904E+000	8.80904E+000	2.66000E-003	0.00000E+000	8.86484E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33633E-006	1.33633E-006	0.00000E+000	0.00000E+000	1.32792E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13161E-006	1.13161E-006	0.00000E+000	0.00000E+000	1.12448E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17511E-006	1.17511E-006	0.00000E+000	0.00000E+000	1.16771E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32272E-006	1.32272E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.02275E-006	2.02275E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	7.95808E-007	7.95808E-007	0.00000E+000	0.00000E+000	1.58160E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18721E-006	1.18721E-006	0.00000E+000	0.00000E+000	1.17974E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13520E-006	1.13520E-006	0.00000E+000	0.00000E+000	1.12805E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)			
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Grading	Fugitive Dust	0.09	0.05	0.09	0.05	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.56	7.56	11.76	0.00	7.56
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value

No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				

No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Florin Perkins Recycling Center - YEAR 2020

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	0.72	1000sqft	11.84	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2020
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	449.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - modified intensity factor based on SMUD anticipated RPS reduction by 2020

Land Use - utilized size of new modular office building, but included entire site acreage (including future access roadway realignment area)

Construction Phase -

Grading - only 1 acre of grading required related to construction of berm

Vehicle Trips - based on an additional 25 new trucks at the site

Energy Use - modified per project specific anticipated electricity usage; no natural gas used on site

Energy Mitigation -

Operational Off-Road Equipment - based on project info and default values

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	5.19	5.50
tblEnergyUse	NT24E	7.20	7.63
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	T24E	4.17	4.42
tblEnergyUse	T24NG	24.61	0.00
tblGrading	AcresOfGrading	75.00	1.00
tblLandUse	LotAcreage	0.02	11.84
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	70.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperHorsePower	81.00	700.00
tblOperationalOffRoadEquipment	OperHorsePower	85.00	500.00
tblOperationalOffRoadEquipment	OperHorsePower	167.00	75.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	590.31	449.44
tblProjectCharacteristics	OperationalYear	2014	2020
tblVehicleTrips	ST_TR	1.32	66.67
tblVehicleTrips	SU_TR	0.68	66.67
tblVehicleTrips	WD_TR	6.97	66.67

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	0.1196	1.3479	0.9041	1.1900e-003	0.0942	0.0664	0.1606	0.0506	0.0611	0.1117	0.0000	111.2570	111.2570	0.0328	0.0000	111.9463
Total	**0.1196**	**1.3479**	**0.9041**	**1.1900e-003**	**0.0942**	**0.0664**	**0.1606**	**0.0506**	**0.0611**	**0.1117**	**0.0000**	**111.2570**	**111.2570**	**0.0328**	**0.0000**	**111.9463**

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	0.1196	1.3479	0.9041	1.1900e-003	0.0942	0.0664	0.1606	0.0506	0.0611	0.1117	0.0000	111.2568	111.2568	0.0328	0.0000	111.9462
Total	**0.1196**	**1.3479**	**0.9041**	**1.1900e-003**	**0.0942**	**0.0664**	**0.1606**	**0.0506**	**0.0611**	**0.1117**	**0.0000**	**111.2568**	**111.2568**	**0.0328**	**0.0000**	**111.9462**

	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	N20	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**

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5760	2.5760	1.7000e-004	3.0000e-005	2.5902
Mobile	0.0241	0.0546	0.2611	7.0000e-004	0.0494	8.2000e-004	0.0503	0.0132	7.6000e-004	0.0140	0.0000	48.6352	48.6352	1.8400e-003	0.0000	48.6739
Offroad	0.2413	2.1602	2.3777	4.3500e-003		0.1108	0.1108		0.1032	0.1032	0.0000	400.8063	400.8063	0.0950	0.0000	402.8002
Waste						0.0000	0.0000		0.0000	0.0000	0.1807	0.0000	0.1807	0.0107	0.0000	0.4049
Water						0.0000	0.0000		0.0000	0.0000	0.0589	0.1691	0.2280	2.1000e-004	1.3000e-004	0.2729
Total	**0.2687**	**2.2148**	**2.6388**	**5.0500e-003**	**0.0494**	**0.1117**	**0.1611**	**0.0132**	**0.1039**	**0.1172**	**0.2396**	**452.1867**	**452.4263**	**0.1079**	**1.6000e-004**	**454.7420**

2.2 Overall Operational

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3814	2.3814	1.5000e-004	3.0000e-005	2.3945
Mobile	0.0241	0.0546	0.2611	7.0000e-004	0.0494	8.2000e-004	0.0503	0.0132	7.6000e-004	0.0140	0.0000	48.6352	48.6352	1.8400e-003	0.0000	48.6739
Offroad	0.2413	2.1602	2.3777	4.3500e-003		0.1108	0.1108		0.1032	0.1032	0.0000	400.8063	400.8063	0.0950	0.0000	402.8002
Waste						0.0000	0.0000		0.0000	0.0000	0.1807	0.0000	0.1807	0.0107	0.0000	0.4049
Water						0.0000	0.0000		0.0000	0.0000	0.0589	0.1691	0.2280	2.1000e-004	1.3000e-004	0.2730
Total	**0.2687**	**2.2148**	**2.6388**	**5.0500e-003**	**0.0494**	**0.1117**	**0.1611**	**0.0132**	**0.1039**	**0.1172**	**0.2396**	**451.9921**	**452.2316**	**0.1078**	**1.6000e-004**	**454.5464**

	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	N20	CO2e
Percent Reduction	**89.80**	**97.53**	**90.11**	**86.14**	**0.00**	**99.27**	**68.80**	**0.00**	**99.27**	**88.05**	**0.00**	**88.68**	**88.63**	**88.06**	**0.00**	**88.62**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2016	2/11/2016	5	30	
2	Paving	Paving	2/12/2016	3/10/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

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
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

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
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 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					0.0909	0.0000	0.0909	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2936	87.2936	0.0263	0.0000	87.8465
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.0909**	**0.0538**	**0.1446**	**0.0497**	**0.0495**	**0.0992**	**0.0000**	**87.2936**	**87.2936**	**0.0263**	**0.0000**	**87.8465**

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	1.2000e-003	0.0126	3.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9664	1.9664	1.1000e-004	0.0000	1.9686
Total	**1.0100e-003**	**1.2000e-003**	**0.0126**	**3.0000e-005**	**2.2000e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9664**	**1.9664**	**1.1000e-004**	**0.0000**	**1.9686**

3.2 Grading - 2016

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					0.0909	0.0000	0.0909	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2935	87.2935	0.0263	0.0000	87.8464
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.0909**	**0.0538**	**0.1446**	**0.0497**	**0.0495**	**0.0992**	**0.0000**	**87.2935**	**87.2935**	**0.0263**	**0.0000**	**87.8464**

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	1.2000e-003	0.0126	3.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9664	1.9664	1.1000e-004	0.0000	1.9686
Total	**1.0100e-003**	**1.2000e-003**	**0.0126**	**3.0000e-005**	**2.2000e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9664**	**1.9664**	**1.1000e-004**	**0.0000**	**1.9686**

3.3 Paving - 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					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	**5.0000e-004**	**6.0000e-004**	**6.2900e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9832**	**0.9832**	**5.0000e-005**	**0.0000**	**0.9843**

3.3 Paving - 2016

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					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	**5.0000e-004**	**6.0000e-004**	**6.2900e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9832**	**0.9832**	**5.0000e-005**	**0.0000**	**0.9843**

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	0.0241	0.0546	0.2611	7.0000e-004	0.0494	8.2000e-004	0.0503	0.0132	7.6000e-004	0.0140	0.0000	48.6352	48.6352	1.8400e-003	0.0000	48.6739
Unmitigated	0.0241	0.0546	0.2611	7.0000e-004	0.0494	8.2000e-004	0.0503	0.0132	7.6000e-004	0.0140	0.0000	48.6352	48.6352	1.8400e-003	0.0000	48.6739

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	48.00	48.00	48.00	132,763	132,763
Total	48.00	48.00	48.00	132,763	132,763

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.503605	0.067800	0.178973	0.146934	0.044621	0.006359	0.021238	0.016884	0.002315	0.002275	0.006260	0.000554	0.002182

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.3814	2.3814	1.5000e-004	3.0000e-005	2.3945
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2.5760	2.5760	1.7000e-004	3.0000e-005	2.5902
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	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	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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					
General Light Industry	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
Total		**0.0000**	**0.0000**	**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

Mitigated

	NaturalGas 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					
General Light Industry	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12636	2.5760	1.7000e-004	3.0000e-005	2.5902
Total		**2.5760**	**1.7000e-004**	**3.0000e-005**	**2.5902**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	11681.3	2.3814	1.5000e-004	3.0000e-005	2.3945
Total		**2.3814**	**1.5000e-004**	**3.0000e-005**	**2.3945**

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.3100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.3100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.2280	2.1000e-004	1.3000e-004	0.2730
Unmitigated	0.2280	2.1000e-004	1.3000e-004	0.2729

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.1665 / 0	0.2280	2.1000e-004	1.3000e-004	0.2729
Total		**0.2280**	**2.1000e-004**	**1.3000e-004**	**0.2729**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.1665 / 0	0.2280	2.1000e-004	1.3000e-004	0.2730
Total		**0.2280**	**2.1000e-004**	**1.3000e-004**	**0.2730**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1807	0.0107	0.0000	0.4049
Unmitigated	0.1807	0.0107	0.0000	0.4049

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.89	0.1807	0.0107	0.0000	0.4049
Total		**0.1807**	**0.0107**	**0.0000**	**0.4049**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.89	0.1807	0.0107	0.0000	0.4049
Total		**0.1807**	**0.0107**	**0.0000**	**0.4049**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Concrete/Industrial Saws	1	8.00	361	700	0.73	Diesel
Crushing/Proc. Equipment	1	8.00	70	500	0.78	Diesel
Excavators	2	8.00	361	162	0.38	Diesel
Other Material Handling Equipment	1	2.00	361	75	0.40	Diesel
Tractors/Loaders/Backhoes	2	8.00	361	97	0.37	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					
Excavators	0.0907	0.8930	1.2095	1.9100e-003		0.0433	0.0433		0.0398	0.0398	0.0000	167.9321	167.9321	0.0543	0.0000	169.0727
Other Material Handling Equipment	7.3200e-003	0.0741	0.0857	1.2000e-004		4.3500e-003	4.3500e-003		4.0000e-003	4.0000e-003	0.0000	10.2579	10.2579	3.3200e-003	0.0000	10.3276
Tractors/Loaders/Backhoes	0.0756	0.7600	0.8230	1.1200e-003		0.0481	0.0481		0.0442	0.0442	0.0000	98.4998	98.4998	0.0319	0.0000	99.1688
Crushing/Proc. Equipment	0.0677	0.4331	0.2595	1.2000e-003		0.0152	0.0152		0.0152	0.0152	0.0000	124.1165	124.1165	5.4600e-003	0.0000	124.2312
Total	**0.2413**	**2.1602**	**2.3777**	**4.3500e-003**		**0.1108**	**0.1108**		**0.1032**	**0.1032**	**0.0000**	**400.8063**	**400.8063**	**0.0950**	**0.0000**	**402.8002**

10.0 Vegetation

Florin Perkins Recycling Center - YEAR 2020

Sacramento County, Mitigation Report

Construction Mitigation Summary

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

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Excavators	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	2	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Excavators	1.16500E-002	1.32920E-001	1.02850E-001	1.60000E-004	6.54000E-003	6.02000E-003	0.00000E+000	1.49663E+001	1.49663E+001	4.51000E-003	0.00000E+000	1.50611E+001
Graders	1.52800E-002	1.55700E-001	7.39100E-002	9.00000E-005	8.75000E-003	8.05000E-003	0.00000E+000	8.83698E+000	8.83698E+000	2.67000E-003	0.00000E+000	8.89296E+000
Pavers	8.02000E-003	9.02600E-002	5.70400E-002	9.00000E-005	4.49000E-003	4.13000E-003	0.00000E+000	8.50987E+000	8.50987E+000	2.57000E-003	0.00000E+000	8.56378E+000
Paving Equipment	6.14000E-003	7.13400E-002	5.08600E-002	8.00000E-005	3.54000E-003	3.26000E-003	0.00000E+000	7.56019E+000	7.56019E+000	2.28000E-003	0.00000E+000	7.60807E+000
Rollers	6.74000E-003	6.22600E-002	4.02700E-002	5.00000E-005	4.58000E-003	4.22000E-003	0.00000E+000	4.94376E+000	4.94376E+000	1.49000E-003	0.00000E+000	4.97507E+000
Rubber Tired Dozers	1.85700E-002	2.08060E-001	1.57270E-001	1.30000E-004	9.68000E-003	8.91000E-003	0.00000E+000	1.25659E+001	1.25659E+001	3.79000E-003	0.00000E+000	1.26455E+001
Scrapers	4.14700E-002	5.27870E-001	3.30640E-001	4.50000E-004	2.12800E-002	1.95700E-002	0.00000E+000	4.21154E+001	4.21154E+001	1.27000E-002	0.00000E+000	4.23822E+001
Tractors/Loaders/ Backhoes	1.02200E-002	9.76500E-002	7.23800E-002	9.00000E-005	7.52000E-003	6.92000E-003	0.00000E+000	8.80905E+000	8.80905E+000	2.66000E-003	0.00000E+000	8.86485E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Excavators	1.16500E-002	1.32920E-001	1.02850E-001	1.60000E-004	6.54000E-003	6.02000E-003	0.00000E+000	1.49663E+001	1.49663E+001	4.51000E-003	0.00000E+000	1.50611E+001
Graders	1.52800E-002	1.55700E-001	7.39100E-002	9.00000E-005	8.75000E-003	8.05000E-003	0.00000E+000	8.83697E+000	8.83697E+000	2.67000E-003	0.00000E+000	8.89295E+000
Pavers	8.02000E-003	9.02600E-002	5.70400E-002	9.00000E-005	4.49000E-003	4.13000E-003	0.00000E+000	8.50986E+000	8.50986E+000	2.57000E-003	0.00000E+000	8.56377E+000
Paving Equipment	6.14000E-003	7.13400E-002	5.08600E-002	8.00000E-005	3.54000E-003	3.26000E-003	0.00000E+000	7.56018E+000	7.56018E+000	2.28000E-003	0.00000E+000	7.60807E+000
Rollers	6.74000E-003	6.22600E-002	4.02700E-002	5.00000E-005	4.58000E-003	4.22000E-003	0.00000E+000	4.94375E+000	4.94375E+000	1.49000E-003	0.00000E+000	4.97507E+000
Rubber Tired Dozers	1.85700E-002	2.08060E-001	1.57270E-001	1.30000E-004	9.68000E-003	8.91000E-003	0.00000E+000	1.25658E+001	1.25658E+001	3.79000E-003	0.00000E+000	1.26454E+001
Scrapers	4.14700E-002	5.27870E-001	3.30640E-001	4.50000E-004	2.12800E-002	1.95700E-002	0.00000E+000	4.21153E+001	4.21153E+001	1.27000E-002	0.00000E+000	4.23821E+001
Tractors/Loaders/Backhoes	1.02200E-002	9.76500E-002	7.23800E-002	9.00000E-005	7.52000E-003	6.92000E-003	0.00000E+000	8.80904E+000	8.80904E+000	2.66000E-003	0.00000E+000	8.86484E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33633E-006	1.33633E-006	0.00000E+000	0.00000E+000	1.32792E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13161E-006	1.13161E-006	0.00000E+000	0.00000E+000	1.12448E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17511E-006	1.17511E-006	0.00000E+000	0.00000E+000	1.16771E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32272E-006	1.32272E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.02275E-006	2.02275E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	7.95808E-007	7.95808E-007	0.00000E+000	0.00000E+000	1.58160E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18721E-006	1.18721E-006	0.00000E+000	0.00000E+000	1.17974E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13520E-006	1.13520E-006	0.00000E+000	0.00000E+000	1.12805E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)			
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Grading	Fugitive Dust	0.09	0.05	0.09	0.05	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.56	7.56	11.76	0.00	7.56
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.03
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value

No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				

No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Florin Perkins Recycling Center - 2005 Baseline Levels

Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	0.72	1000sqft	11.84	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2005
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	623.9	**CH4 Intensity (lb/MWhr)**	0.03	**N2O Intensity (lb/MWhr)**	0.007

1.3 User Entered Comments & Non-Default Data

Project Characteristics - intensity factors adjusted to reflect SMUD's approximate RPS levels in 2005

Land Use - utilized size of new modular office building as unit amount, but included entire site acreage (including 14,589 square feet [0.335 acres] for future realignment of access)

Construction Phase -

Grading - only 1 acre of grading required related to construction of berm

Vehicle Trips - based on an additional 25 new trucks at site

Energy Use - modified per project specific anticipated electricity usage; no natural gas used on site

Energy Mitigation -

Operational Off-Road Equipment - based on project info and default values (applied 2005 load factors, as necessary)

Table Name	Column Name	Default Value	New Value
tblEnergyUse	LightingElect	5.65	5.50
tblEnergyUse	NT24E	7.20	7.63
tblEnergyUse	NT24NG	12.42	0.00
tblEnergyUse	T24E	4.47	4.42
tblEnergyUse	T24NG	26.20	0.00
tblGrading	AcresOfGrading	75.00	1.00
tblLandUse	LotAcreage	0.02	11.84
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	70.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	361.00
tblOperationalOffRoadEquipment	OperHorsePower	81.00	700.00
tblOperationalOffRoadEquipment	OperHorsePower	85.00	500.00
tblOperationalOffRoadEquipment	OperHorsePower	167.00	75.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.38	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.40	0.59
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.55
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.03
tblProjectCharacteristics	CO2IntensityFactor	590.31	623.9
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.007

tblProjectCharacteristics	OperationalYear	2014	2005
tblVehicleTrips	ST_TR	1.32	66.67
tblVehicleTrips	SU_TR	0.68	66.67
tblVehicleTrips	WD_TR	6.97	66.67

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	0.1196	1.3479	0.9041	1.1900e-003	0.0942	0.0664	0.1606	0.0506	0.0611	0.1117	0.0000	111.2570	111.2570	0.0328	0.0000	111.9463
Total	**0.1196**	**1.3479**	**0.9041**	**1.1900e-003**	**0.0942**	**0.0664**	**0.1606**	**0.0506**	**0.0611**	**0.1117**	**0.0000**	**111.2570**	**111.2570**	**0.0328**	**0.0000**	**111.9463**

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	0.1196	1.3479	0.9041	1.1900e-003	0.0942	0.0664	0.1606	0.0506	0.0611	0.1117	0.0000	111.2568	111.2568	0.0328	0.0000	111.9462
Total	**0.1196**	**1.3479**	**0.9041**	**1.1900e-003**	**0.0942**	**0.0664**	**0.1606**	**0.0506**	**0.0611**	**0.1117**	**0.0000**	**111.2568**	**111.2568**	**0.0328**	**0.0000**	**111.9462**

	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	N20	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**

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5759	3.5759	1.7000e-004	4.0000e-005	3.5920
Mobile	0.0864	0.2088	0.9613	1.6500e-003	0.0449	5.2300e-003	0.0501	0.0131	5.2300e-003	0.0183	0.0000	67.0141	67.0141	6.0000e-003	0.0000	67.1401
Offroad	1.3247	9.4405	4.2313	0.0680		0.6343	0.6343		0.6343	0.6343	0.0000	620.4995	620.4995	0.1081	0.0000	622.7703
Waste						0.0000	0.0000		0.0000	0.0000	0.1807	0.0000	0.1807	0.0107	0.0000	0.4049
Water						0.0000	0.0000		0.0000	0.0000	0.0589	0.2348	0.2937	2.1000e-004	1.3000e-004	0.3387
Total	**1.4143**	**9.6493**	**5.1926**	**0.0697**	**0.0449**	**0.6395**	**0.6844**	**0.0131**	**0.6395**	**0.6526**	**0.2396**	**691.3243**	**691.5639**	**0.1252**	**1.7000e-004**	**694.2459**

2.2 Overall Operational

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.5759	3.5759	1.7000e-004	4.0000e-005	3.5920
Mobile	0.0864	0.2088	0.9613	1.6500e-003	0.0449	5.2300e-003	0.0501	0.0131	5.2300e-003	0.0183	0.0000	67.0141	67.0141	6.0000e-003	0.0000	67.1401
Offroad	1.3247	9.4405	4.2313	0.0680		0.6343	0.6343		0.6343	0.6343	0.0000	620.4995	620.4995	0.1081	0.0000	622.7703
Waste						0.0000	0.0000		0.0000	0.0000	0.1807	0.0000	0.1807	0.0107	0.0000	0.4049
Water						0.0000	0.0000		0.0000	0.0000	0.0589	0.2348	0.2937	2.1000e-004	1.3000e-004	0.3388
Total	**1.4143**	**9.6493**	**5.1926**	**0.0697**	**0.0449**	**0.6395**	**0.6844**	**0.0131**	**0.6395**	**0.6526**	**0.2396**	**691.3243**	**691.5639**	**0.1252**	**1.7000e-004**	**694.2460**

	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	N20	CO2e
Percent Reduction	**93.66**	**97.84**	**81.49**	**97.63**	**0.00**	**99.18**	**92.68**	**0.00**	**99.18**	**97.19**	**0.00**	**89.76**	**89.72**	**86.37**	**0.00**	**89.70**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	1/1/2016	2/11/2016	5	30	
2	Paving	Paving	2/12/2016	3/10/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1

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
Grading	Excavators	2	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38

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
Grading	8	20.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 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					0.0909	0.0000	0.0909	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2936	87.2936	0.0263	0.0000	87.8465
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.0909**	**0.0538**	**0.1446**	**0.0497**	**0.0495**	**0.0992**	**0.0000**	**87.2936**	**87.2936**	**0.0263**	**0.0000**	**87.8465**

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	1.2000e-003	0.0126	3.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9664	1.9664	1.1000e-004	0.0000	1.9686
Total	**1.0100e-003**	**1.2000e-003**	**0.0126**	**3.0000e-005**	**2.2000e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9664**	**1.9664**	**1.1000e-004**	**0.0000**	**1.9686**

3.2 Grading - 2016

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					0.0909	0.0000	0.0909	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2935	87.2935	0.0263	0.0000	87.8464
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.0909**	**0.0538**	**0.1446**	**0.0497**	**0.0495**	**0.0992**	**0.0000**	**87.2935**	**87.2935**	**0.0263**	**0.0000**	**87.8464**

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	1.2000e-003	0.0126	3.0000e-005	2.2000e-003	2.0000e-005	2.2200e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9664	1.9664	1.1000e-004	0.0000	1.9686
Total	**1.0100e-003**	**1.2000e-003**	**0.0126**	**3.0000e-005**	**2.2000e-003**	**2.0000e-005**	**2.2200e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9664**	**1.9664**	**1.1000e-004**	**0.0000**	**1.9686**

3.3 Paving - 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					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	**5.0000e-004**	**6.0000e-004**	**6.2900e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9832**	**0.9832**	**5.0000e-005**	**0.0000**	**0.9843**

3.3 Paving - 2016

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					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0209**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

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	5.0000e-004	6.0000e-004	6.2900e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9832	0.9832	5.0000e-005	0.0000	0.9843
Total	**5.0000e-004**	**6.0000e-004**	**6.2900e-003**	**1.0000e-005**	**1.1000e-003**	**1.0000e-005**	**1.1100e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9832**	**0.9832**	**5.0000e-005**	**0.0000**	**0.9843**

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	0.0864	0.2088	0.9613	1.6500e-003	0.0449	5.2300e-003	0.0501	0.0131	5.2300e-003	0.0183	0.0000	67.0141	67.0141	6.0000e-003	0.0000	67.1401
Unmitigated	0.0864	0.2088	0.9613	1.6500e-003	0.0449	5.2300e-003	0.0501	0.0131	5.2300e-003	0.0183	0.0000	67.0141	67.0141	6.0000e-003	0.0000	67.1401

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	48.00	48.00	48.00	132,763	132,763
Total	48.00	48.00	48.00	132,763	132,763

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	10.00	5.00	6.50	59.00	28.00	13.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.465089	0.102664	0.228707	0.111728	0.024974	0.009164	0.021256	0.022696	0.001486	0.001192	0.007402	0.000925	0.002717

4.4 Fleet Mix

5.0 Energy Detail

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.5759	3.5759	1.7000e-004	4.0000e-005	3.5920
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	3.5759	3.5759	1.7000e-004	4.0000e-005	3.5920
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	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	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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					
General Light Industry	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
Total		**0.0000**	**0.0000**	**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

Mitigated

	NaturalGas 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					
General Light Industry	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12636	3.5759	1.7000e-004	4.0000e-005	3.5920
Total		**3.5759**	**1.7000e-004**	**4.0000e-005**	**3.5920**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	12636	3.5759	1.7000e-004	4.0000e-005	3.5920
Total		**3.5759**	**1.7000e-004**	**4.0000e-005**	**3.5920**

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	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	3.3100e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.3100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

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	5.0000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**3.3100e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.2937	2.1000e-004	1.3000e-004	0.3388
Unmitigated	0.2937	2.1000e-004	1.3000e-004	0.3387

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.1665 / 0	0.2937	2.1000e-004	1.3000e-004	0.3387
Total		**0.2937**	**2.1000e-004**	**1.3000e-004**	**0.3387**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	0.1665 / 0	0.2937	2.1000e-004	1.3000e-004	0.3388
Total		**0.2937**	**2.1000e-004**	**1.3000e-004**	**0.3388**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1807	0.0107	0.0000	0.4049
Unmitigated	0.1807	0.0107	0.0000	0.4049

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.89	0.1807	0.0107	0.0000	0.4049
Total		**0.1807**	**0.0107**	**0.0000**	**0.4049**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	0.89	0.1807	0.0107	0.0000	0.4049
Total		**0.1807**	**0.0107**	**0.0000**	**0.4049**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Concrete/Industrial Saws	1	8.00	361	700	0.73	Diesel
Crushing/Proc. Equipment	1	8.00	70	500	0.78	Diesel
Excavators	2	8.00	361	162	0.57	Diesel
Other Material Handling Equipment	1	2.00	361	75	0.59	Diesel
Tractors/Loaders/Backhoes	2	8.00	361	97	0.55	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					
Excavators	0.6067	4.6475	2.0295	0.0335		0.2710	0.2710		0.2710	0.2710	0.0000	303.1056	303.1056	0.0496	0.0000	304.1472
Other Material Handling Equipment	0.0575	0.3170	0.1547	2.0800e-003		0.0302	0.0302		0.0302	0.0302	0.0000	18.1563	18.1563	4.7000e-003	0.0000	18.2550
Tractors/Loaders/Backhoes	0.5092	2.8278	1.4334	0.0204		0.2724	0.2724		0.2724	0.2724	0.0000	175.1211	175.1211	0.0416	0.0000	175.9947
Crushing/Proc. Equipment	0.1512	1.6481	0.6137	0.0120		0.0607	0.0607		0.0607	0.0607	0.0000	124.1165	124.1165	0.0122	0.0000	124.3733
Total	**1.3247**	**9.4405**	**4.2313**	**0.0680**		**0.6343**	**0.6343**		**0.6343**	**0.6343**	**0.0000**	**620.4995**	**620.4995**	**0.1081**	**0.0000**	**622.7702**

10.0 Vegetation

Florin Perkins Recycling Center - 2005 Baseline Levels

Sacramento County, Mitigation Report

Construction Mitigation Summary

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

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Excavators	Diesel	No Change	0	2	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	1	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	2	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Excavators	1.16500E-002	1.32920E-001	1.02850E-001	1.60000E-004	6.54000E-003	6.02000E-003	0.00000E+000	1.49663E+001	1.49663E+001	4.51000E-003	0.00000E+000	1.50611E+001
Graders	1.52800E-002	1.55700E-001	7.39100E-002	9.00000E-005	8.75000E-003	8.05000E-003	0.00000E+000	8.83698E+000	8.83698E+000	2.67000E-003	0.00000E+000	8.89296E+000
Pavers	8.02000E-003	9.02600E-002	5.70400E-002	9.00000E-005	4.49000E-003	4.13000E-003	0.00000E+000	8.50987E+000	8.50987E+000	2.57000E-003	0.00000E+000	8.56378E+000
Paving Equipment	6.14000E-003	7.13400E-002	5.08600E-002	8.00000E-005	3.54000E-003	3.26000E-003	0.00000E+000	7.56019E+000	7.56019E+000	2.28000E-003	0.00000E+000	7.60807E+000
Rollers	6.74000E-003	6.22600E-002	4.02700E-002	5.00000E-005	4.58000E-003	4.22000E-003	0.00000E+000	4.94376E+000	4.94376E+000	1.49000E-003	0.00000E+000	4.97507E+000
Rubber Tired Dozers	1.85700E-002	2.08060E-001	1.57270E-001	1.30000E-004	9.68000E-003	8.91000E-003	0.00000E+000	1.25659E+001	1.25659E+001	3.79000E-003	0.00000E+000	1.26455E+001
Scrapers	4.14700E-002	5.27870E-001	3.30640E-001	4.50000E-004	2.12800E-002	1.95700E-002	0.00000E+000	4.21154E+001	4.21154E+001	1.27000E-002	0.00000E+000	4.23822E+001
Tractors/Loaders/ Backhoes	1.02200E-002	9.76500E-002	7.23800E-002	9.00000E-005	7.52000E-003	6.92000E-003	0.00000E+000	8.80905E+000	8.80905E+000	2.66000E-003	0.00000E+000	8.86485E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Excavators	1.16500E-002	1.32920E-001	1.02850E-001	1.60000E-004	6.54000E-003	6.02000E-003	0.00000E+000	1.49663E+001	1.49663E+001	4.51000E-003	0.00000E+000	1.50611E+001
Graders	1.52800E-002	1.55700E-001	7.39100E-002	9.00000E-005	8.75000E-003	8.05000E-003	0.00000E+000	8.83697E+000	8.83697E+000	2.67000E-003	0.00000E+000	8.89295E+000
Pavers	8.02000E-003	9.02600E-002	5.70400E-002	9.00000E-005	4.49000E-003	4.13000E-003	0.00000E+000	8.50986E+000	8.50986E+000	2.57000E-003	0.00000E+000	8.56377E+000
Paving Equipment	6.14000E-003	7.13400E-002	5.08600E-002	8.00000E-005	3.54000E-003	3.26000E-003	0.00000E+000	7.56018E+000	7.56018E+000	2.28000E-003	0.00000E+000	7.60807E+000
Rollers	6.74000E-003	6.22600E-002	4.02700E-002	5.00000E-005	4.58000E-003	4.22000E-003	0.00000E+000	4.94375E+000	4.94375E+000	1.49000E-003	0.00000E+000	4.97507E+000
Rubber Tired Dozers	1.85700E-002	2.08060E-001	1.57270E-001	1.30000E-004	9.68000E-003	8.91000E-003	0.00000E+000	1.25658E+001	1.25658E+001	3.79000E-003	0.00000E+000	1.26454E+001
Scrapers	4.14700E-002	5.27870E-001	3.30640E-001	4.50000E-004	2.12800E-002	1.95700E-002	0.00000E+000	4.21153E+001	4.21153E+001	1.27000E-002	0.00000E+000	4.23821E+001
Tractors/Loaders/Backhoes	1.02200E-002	9.76500E-002	7.23800E-002	9.00000E-005	7.52000E-003	6.92000E-003	0.00000E+000	8.80904E+000	8.80904E+000	2.66000E-003	0.00000E+000	8.86484E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.33633E-006	1.33633E-006	0.00000E+000	0.00000E+000	1.32792E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13161E-006	1.13161E-006	0.00000E+000	0.00000E+000	1.12448E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17511E-006	1.17511E-006	0.00000E+000	0.00000E+000	1.16771E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.32272E-006	1.32272E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.02275E-006	2.02275E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	7.95808E-007	7.95808E-007	0.00000E+000	0.00000E+000	1.58160E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18721E-006	1.18721E-006	0.00000E+000	0.00000E+000	1.17974E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13520E-006	1.13520E-006	0.00000E+000	0.00000E+000	1.12805E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	
No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)			
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Grading	Fugitive Dust	0.09	0.05	0.09	0.05	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.02
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value

No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				

No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	150.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

APPENDIX B

Environmental Noise and Vibration Assessment

Florin Perkins Materials Recovery Facility

City of Sacramento, California

BAC Job #2014-058

Prepared For:

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Paul Bollard, President

March 16, 2016

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Introduction

The Florin Perkins Public Disposal Site Material Recovery and Transfer Station is an existing 10-acre operation located at 4201 Florin Perkins Road in Sacramento, CA. The facility location is shown on Figure 1. The facility accepts, sorts and processes recyclable materials for bulk resale. The proposed project (Project) will add additional processing capabilities to the site and allow for acceptance of a wider variety of materials for recycling. In addition to these changes, a 1.5-acre material sales yard is proposed to be located adjacent to the existing 10-acre special permit boundary, for a total Project area of 11.5 acres.

Existing Operations

Existing operations consist of receipt of solid non-hazardous and non-putrescible wastes, processing/sorting of these wastes to remove recyclable materials and transfer of recyclables and residuals offsite for recycling and/or disposal. Material recovery and transfer operations are currently limited to 500 tons per day of inbound materials and are conducted on approximately 2.5 acres located on the northeast portion of the permitted 10-acre MRF/LVTS boundary. Existing structures on site include a scale house with two scales utilized for processing inbound and outbound transactions and a portable break room for staff use.

Materials accepted at the facility are generally from construction, demolition and renovation projects. With the use of a mechanical sortline, rolling stock and facility staff, recyclable materials such as wood, metals, plastics, paper/cardboard, tires, appliances, electronic wastes, carpet, etc. are removed and stored in designated storage areas until shipped offsite to a recycler. All residual wastes (approximately 20-25% of all incoming waste) are currently being transferred to a local landfill for disposal. No additional processing of segregated recyclables currently occurs onsite.

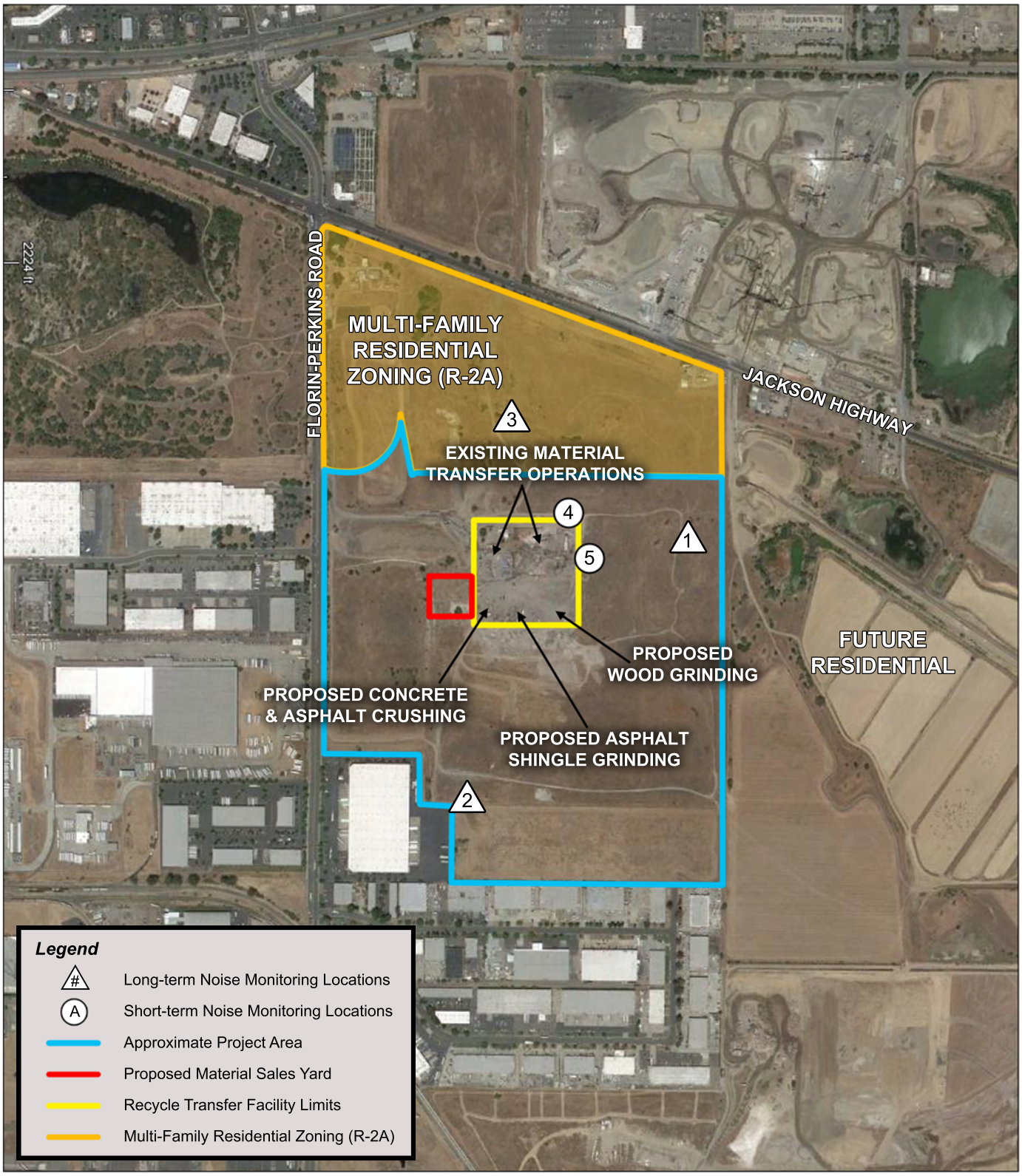
Current hours of operation are 6:00 a.m. to 6:00 p.m. as allowed by Special Permit Minor Deviation Z98-114 issued by the City of Sacramento. Operations may be conducted up to 361 days per year, with the facility closed on Easter, Thanksgiving, Christmas Day and New Year's Day. No change to the hours of operation is proposed.

Proposed Operational Changes

The Project is proposing to add additional processing capabilities to the operation to be able to accept and process a wider variety of materials. In general the proposed operations are similar in nature to the current site operations and will be conducted within the existing 10-acre MRF/LVTS boundary. Note that the Materials Sales Yard is being proposed as an ancillary operation and will be located outside the permitted 10-acre MRF/LVTS boundary. Additionally, a berm of approximately 10 feet in height is proposed to be constructed along the southern and eastern boundaries of the project site. See Figure 2 for an overview of the location of the existing and proposed operations.

Figure 1

Project Area and Noise Measurement Locations
Florin-Perkins Recycle Facility - Sacramento, California



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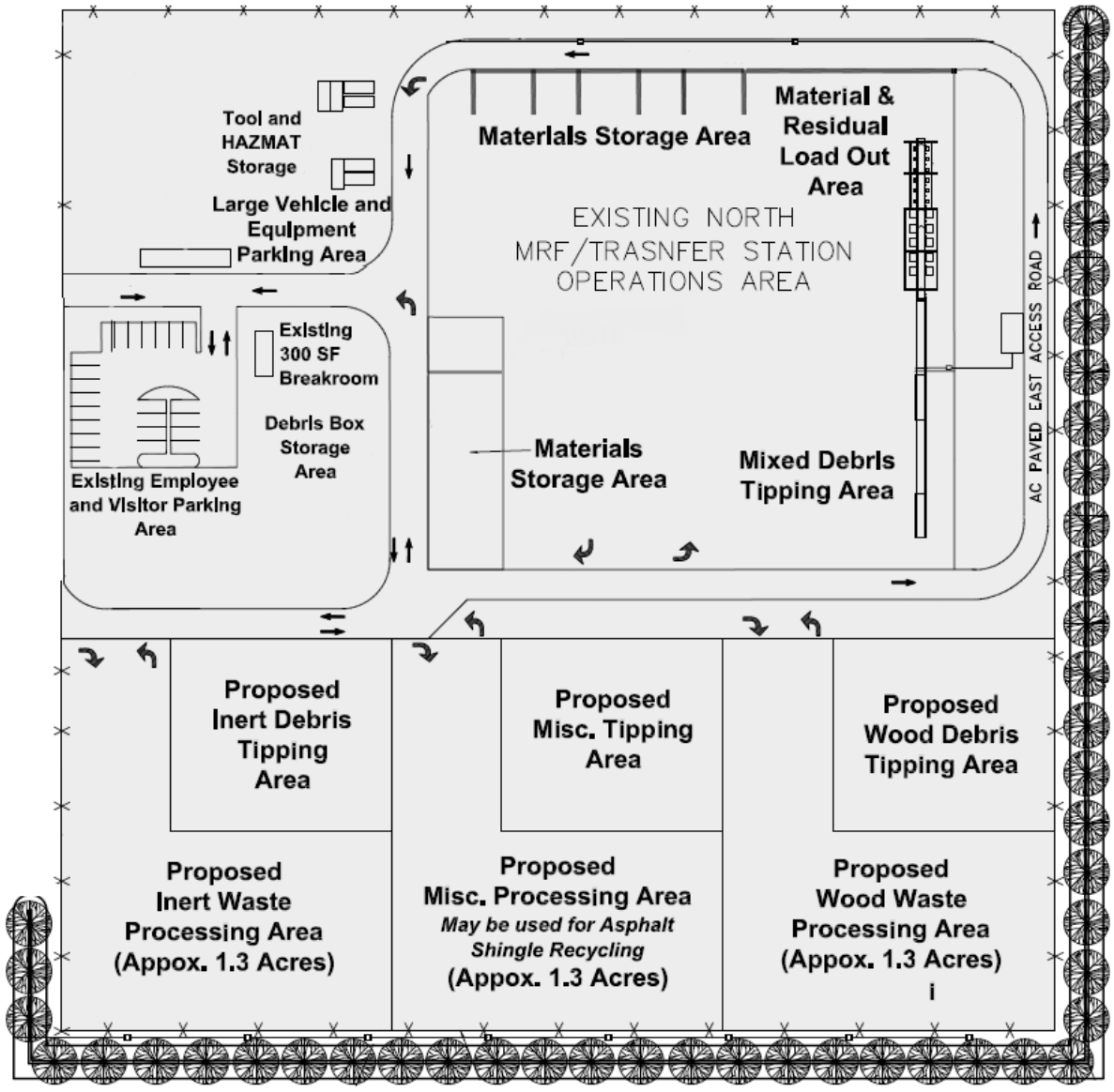
Scale (feet)
0 500 1000

Figure 2
Proposed Florin Perkins Material Recovery Facility Site Plan



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Background and Terminology

Noise

Noise is simply described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. Discussing sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel (dB) scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure), as a point of reference, defined as 0 dB. Other sound pressures are compared to the reference pressure and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB.

To better relate overall sound levels and loudness to human perception, frequency-dependent weighting networks were developed. There is a strong correlation between the way humans perceive sound and A-weighted sound levels. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment for community exposures. All sound levels expressed as dB in this section are A-weighted sound levels, unless noted otherwise. Definitions of acoustical terminology are provided in Appendix A.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptors, day-night average level (L_{dn}) and the community noise equivalent level (CNEL), and shows very good correlation with community response to noise for the average person. The median noise level descriptor, denoted L_{50}, represents the noise level which is exceeded 50% of the hour. In other words, half of the hour ambient conditions are higher than the L_{50} and the other half are lower than the L_{50}.

The L_{dn} is based upon the average noise level over a 24-hour day, with a +10 dB weighting applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment. Where short-term noise sources are an issue, noise impacts may be assessed in terms of maximum noise levels, hourly averages, or other statistical descriptors.

The perceived loudness of sounds and corresponding reactions to noise are dependent upon many factors, including sound pressure level, duration of intrusive sound, frequency of occurrence, time of occurrence, and frequency content. As mentioned above; however, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. Table 1 shows examples of noise levels for several common noise sources and environments.

It is generally recognized that an increase of at least 3 dB of similar sources is usually required before most people will perceive a change in noise levels in the community, and an increase of 5 dB is required before the change will be clearly noticeable. A common practice is to assume that a minimally perceptible increase of 3 dB represents a significant increase in ambient noise levels. This approach is very conservative, however, when applied to noise conditions substantially below levels deemed acceptable in general plan noise elements or in noise ordinances.

Table 1
Typical A-Weighted Sound Levels of Common Noise Sources

Decibels	Description
120	Jet aircraft at 100 feet / Threshold of Pain
110	Riveting machine at operators position
100	Shotgun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior during flight
60	Normal conversation speech at 5 - 10 feet
50	Open office background level
40	Background level within a residence
30	Soft whisper at 2 feet
20	Interior of recording studio

Source: Egan 2007

Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving and operating heavy earth-moving equipment.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities (inches/second). Table 2 shows expected responses to different levels of ground-borne vibration.

Table 2
General Human and Structural Responses to Vibration Levels

Response	Peak Vibration Threshold (in./sec. ppv)
Structural damage to commercial structures	6
Structural damage to residential structures	2
Architectural damage to structures (cracking, etc.)	1
General threshold of human annoyance	0.1
Approximate threshold of human perception	0.01

Source: Survey of Earth-borne Vibrations due to Highway Construction and Highway Traffic, Caltrans

Existing Noise and Vibration Environment in Project Vicinity

Existing Land Uses in the Project Vicinity

The project site is currently surrounded by commercial, agricultural, and industrial land uses. The nearest existing residence is located at the intersection of Jackson Road and Florin Perkins Road, approximately 2,000 feet to the northwest of the existing and proposed operations. That residential area, which is identified on Figure 1, is shielded from view of the project area by intervening topography.

Although the property to the immediate east of the project site is currently associated with operations at Teichert Aggregate's Perkins Plant (located immediately northeast of the project site opposite Jackson Road), residential uses are proposed on that project site. As a result, future residential land uses would be located within approximately 1,000 feet of the project operations. While much of the property to the east would be completely shielded from view of the project operations by intervening topography, such shielding is not present for a portion of that property to the northeast. However, the project proposes to construct a 10-foot berm along the eastern and southern boundaries of the site, which would shield the view of project operations from future residences on this property.

Figure 1 also illustrates that there is an area north of the project site which has been zoned for future residential uses. This analysis evaluates potential impacts of the project at this residentially zoned area as well.

Because there is no noise sensitivity associated with the commercial, agricultural and industrial land uses in the immediate project vicinity, this impact analysis focuses on the existing residence located to the northwest, on the residentially zoned area to the north, and on future residences proposed on the adjacent property to the east.

Existing Noise Sources Affecting the Project Site

The existing ambient noise environment in the project area is defined primarily by traffic on South Watt Avenue and Jackson Road, operations at the Teichert Perkins facility to the north, and on existing commercial and industrial operations in the immediate project vicinity, including existing Florin-Perkins Material Recovery operations.

Existing Vibration Sources Affecting the Project Site

During BAC field inspections, no perceptible vibration was observed on the project site, or near the project site boundaries.

Methodology for Assessing Existing and Future Noise Environments

A combination of visual and noise level measurement surveys, use of existing acoustical literature, and application of accepted noise prediction methodologies were used to quantify the existing and future ambient noise environments in the project vicinity.

General Ambient Noise Environment within the Project Area – Long Term Noise Measurement Survey

To generally quantify the existing ambient noise environment in the project area, long-term (continuous) ambient noise level measurements were conducted at three (3) locations on the project site in April of 2014 for a period of 96 consecutive hours. The locations of the continuous noise monitoring sites are shown on Figure 1.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute.

The results of the long-term ambient noise measurement surveys are summarized in Table 3. Appendix B shows graphs of the long-term monitoring results. The Table 3 data indicate that existing noise levels at the project site vary, depending on location of the noise monitoring site to the major project area noise sources.

Table 3
Average Measured Ambient Noise Levels
Florin-Perkins Material Recovery Facility – April 11-14, 2014

	Daytime (7 a.m. to 10 p.m.)		Nighttime (10 p.m. - 7 a.m.)		
Site[A]	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{dn}
1	44-49	56-63	45-49	59-62	52-58
2	60-65	71-74	63-64	74-75	70-71
3	48-54	62-66	46-51	60-63	54-61

[A] See Figure 1 for noise measurement locations

Source: Bollard Acoustical Consultants, Inc. (BAC)

The elevated noise levels at Site 2 represent commercial and industrial operations to the south, as noise generated at the existing MRF were observed to be very faint at that location. Similarly, MRF noise levels were observed to be inaudible at measurement site 1 due to shielding provided by intervening topography. Noise levels at Site 3 were found to be most heavily influenced by traffic on Jackson Road and operations at the existing Teichert Perkins aggregate plant, with MRF noise being inaudible at Site 3.

Existing MRF Facility Ambient Noise Environment – Short-Term Noise Survey

In addition to the long-term noise surveys described above, short-term noise surveys were also conducted immediately adjacent to the existing MRF facility on April 10, 2014. The purposes of the short-term noise surveys was to quantify the noise generation of the existing MRF operations without influence from outside noise sources such as traffic or operations of the Teichert Perkins Plant. The short-term noise measurement locations are shown on Figure 1 as measurement sites 4 and 5. The measured existing MRF facility noise levels are discussed in the subsequent "Noise Generation of the Florin-Perkins Material Recovery Facility" section of this report.

Criteria for Acceptable Noise & Vibration Exposure

City of Sacramento General Plan

The Noise Element of the City of Sacramento General Plan contains the following policies and noise level standards which would be applicable to the proposed project. The Table labeling conventions used below replicates those used in the City's General Plan.

EC 3.1.1 **Exterior Noise Standards.** The City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in Table EC 1, to the extent feasible.

Table EC 1 - Exterior Noise Compatibility Standards for Various Land Uses

Land Use Type	*Highest Level of Noise Exposure That Is Regarded as "Normally Acceptable" [a] (Ldn [b] or CNEL[c])*
Residential—Low Density Single Family, Duplex, Mobile Homes	60 dBA[d,e]
Residential—Multi-family	65 dBA
Urban Residential Infill[f] and Mixed-Use Projects[g]	70 dBA
Transient Lodging—Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings—Business, Commercial and Professional	70 dBA

SOURCE: Governor's Office of Planning and Research, *State of California General Plan Guidelines 2003*, October 2003
a. As defined in the *Guidelines*, "Normally Acceptable" means that the "specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements."
b. L_{dn} or Day Night Average Level is an average 24-hour noise measurement that factors in day and night noise levels.
c. CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.
d. dBA or A-weighted decibel scale is a measurement of noise levels.
e. The exterior noise standard for the residential area west of McClellan Airport known as McClellan Heights/Parker Homes is 65 dBA.
f. With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High) Urban Center (Low or High), Urban Corridor (Low or High).
g. All mixed-use projects located anywhere in the City of Sacramento

EC 3.1.2 **Exterior Incremental Noise Standards.** The City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in Table EC 2, to the extent feasible.

Table EC 2 - Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA)

Residences and buildings where people normally sleep [a]		Institutional land uses with primarily daytime and evening uses [b]	
Existing L_{dn}	**Allowable Noise Increment**	**Existing Peak Hour L_{eq}**	**Allowable Noise Increment**
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

SOURCE: Federal Transit Administration, *Transit Noise Impact and Vibration Assessment*, May 2006

a. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.

b. This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

EC 3.1.5 **Interior Vibration Standards.** The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

EC 3.1.8 **Operational Noise.** The City shall require mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded.

The City Noise Element policies indicate that, based on measured ambient conditions of approximately 55 dB L_{dn} in the direction of the nearest existing residence to the northwest, a 3 dB increase in noise levels due to the project would be considered significant. In addition, the Noise Element standard applicable to residential developments is 60 dB L_{dn}. Because L_{dn} represents a 24-hour average of noise, it does not provide a good indication of public reaction to noise occurring for shorter durations. For such sources, the City's Noise Ordinance standards would provide a more accurate gauge of potential public reaction to noise generated by the project. The City's Noise Ordinance standards (City Code) are provided below.

Sacramento City Code

The Sacramento City Code Chapter 8.68 Noise Control sets limits for exterior noise levels on designated residential property and interior noise levels pertaining to multiple dwelling units (Table 4). The ordinance states that exterior noise shall not exceed 55 dB during any cumulative 30-minute period in any hour during the day (7 a.m. to 10 p.m.) and 50 dB during any cumulative 30-minute period in any hour during the night (10 p.m. to 7 a.m.). The ordinance sets somewhat higher noise limits for time intervals of shorter duration; however, noise in residential areas must never exceed 75 dB during the day and 70 dB at night.

Table 4
City of Sacramento Noise Ordinance Standards
for Agricultural and Residential Property

Cumulative Period	Standards (dB) Day (7 a.m.-10 p.m.) / Night (10 p.m.-7 a.m.)
Exterior Noise Standards [1, 3]	
30 min/hr	55 / 50
15 min/hr	60 / 55
5 min/hr	65 / 60
1 min/hr	70 / 65
Never to exceed	75 / 70
Interior Noise Standards [2, 4]	
5 min/hr	45
1 min/hr	50
Any period of time	55

1 Noise created over the designated period at any location may not cause the noise levels on a designated agricultural or residential property to exceed these standards.
2 Noise created over the designated period in an apartment, condominium, townhouse, duplex, or multiple dwelling units may not cause the noise level in a neighboring unit to exceed these standards.
3 Exterior noise limits must be reduced by 5 dBA for impulsive or simple tone noises, or for noises consisting of speech or music.
4 If the ambient level exceeds the fifth noise level category for exterior noise standards, the maximum ambient noise level shall be the noise limit for the category.
Source: City of Sacramento Municipal Code

Noise Standards Applied to this Project

The noise standards which would be most applicable to this project are the City's noise level performance standards shown in Table 4. Because the project hours of operation are proposed to begin at 6 a.m., operations between 6-7 a.m. would be subject to the City's nighttime performance standards of Table 4. Operations between 7 a.m. and 6 p.m. would be subject to the City's daytime noise level standards.

More specifically, if daytime and nighttime median noise levels generated by the project exceed 55 and 50 dB L_{50}, respectively, or maximum noise levels exceed 75 and 70 dB L_{max}, respectively, at either the existing residence to the northwest or proposed future residences to the east, then noise mitigation would be required for the project. In addition, if the increase in off-site project generated traffic noise results in a 3 dB or greater increase at the only existing residence in the immediate project vicinity, a similar finding of noise impact would be made.

Vibration Standards Applied to this Project

Although no discernible vibration was observed at the project site, the City of Sacramento Noise Element Policies EC 3.1.5 and EC 3.1.7 pertain to vibration generated by construction as well as impacts on historic structures. On other projects, the City of Sacramento has indicated that an appropriate vibration threshold 0.5 inches/second peak particle velocity for proposed new residential uses and 0.2 inches/second for historic structures and archaeological sites. Although this project does not propose residential development, a standard of 0.5 inches per second is utilized as a threshold of significance at both the existing residence to the northwest and the proposed residences to the east.

Noise Generation of the Florin-Perkins Material Recovery Facility

The Project is proposing to add additional processing capabilities to the operation to be able to increase marketability of recyclable materials. In general the proposed operations are similar in nature to the current site operations and will be conducted within the existing 10-acre MRF/LVTS boundary. Materials currently accepted at the site will continue to be accepted; no change to type of materials accepted at the site is proposed. Note that the Materials Sales Yard is being proposed as an ancillary operation and will be located outside the permitted 10-acre MRF/LVTS boundary. In addition to noise generated by existing operations at the MRF, the project would also introduce noise associated with wood grinding and periodic asphalt/concrete recycling activities. The following specific changes to the operation are being proposed for the facility:

Wood Grinding

This process involves grinding of lumber, branches, logs, stumps and other wood products. To grind the incoming wood products, an electric or diesel powered horizontal grinder would be used to grind wood into chips. An excavator or equivalent would be utilized to feed the raw wood products into the grinder. The grinder and excavator would operate within the existing 10-acre permitted area near the south eastern corner of the site. It is anticipated that the grinder and excavator would operate daily as needed to keep up with processing incoming wood products. Wood chips produced from the grinding process will be stockpiled on-site for temporary storage before being loaded into haul-trucks and removed from the site. A small percentage of the wood chips will be stored at the Material Sales Yard for contractor sales. No putrescible wastes will be accepted and no composting is proposed.

A Petersen 2750C electric horizontal grinder has been identified as a suitable piece of equipment for the project, a grinder similar in nature is proposed to be utilized by the applicant and operated at the site. The 2750C is powered by two 300 horsepower electric motor and is capable of processing approximately 300 Cubic Yards (CY) or 55 tons of material per hour.

Concrete and Asphalt Crushing

Concrete and asphalt generated from demolition of buildings and infrastructure would be accepted at the site and recycled. Concrete and Asphalt hauled to the site will need to be crushed into a generally uniform size so that it can be utilized by contractors for construction projects in the surrounding area. Material will be brought onto the site by independently owned and operated haul trucks and stockpiled within the permitted 10-acre boundary near the south west corner of the site. Trucks will haul material to the site during normal business hours at random intervals based on need, and no set delivery schedule is anticipated. It is anticipated that a portion of the trucks that drop concrete and asphalt rubble off for recycling will be picking up finished materials for construction needs.

As needed to satisfy demand, a portable crushing plant will be transported onto the site to crush the concrete and asphalt. In general, crushing operations will commence once the stockpile of rubble reaches a capacity of approximately 10,000 CY. At this time it is anticipated that an independent contractor will be hired to crush concrete and asphalt materials stockpiled on-site. The contractor will operate the portable crushing plant for one to two weeks or as needed to process the 10,000 CY stockpile. The frequency at which the portable crusher will be required to operate at the site will be dependent on the volume of concrete and asphalt that is generated from demolition projects in the area and accepted at the site.

It is estimated that concrete and asphalt crushing operations will require additional capacity than the 500 tons per day (TPD) that are currently entitled for the MRF/LVTS. This application proposes to add an average of 500 TPD specifically for concrete and asphalt crushing operations. Using an average payload of 20 tons per truckload for inbound concrete and asphalt materials, this project proposes to add approximately 25 truck trips per day to the overall facility.

In general, concrete and asphalt crushing will require the use of a portable diesel or electric powered crushing plant, a front end loader and an excavator. Crushing operations will be capable of processing 200 to 300 tons per hour and will operate as needed to process incoming concrete and asphalt rubble.

Asphalt Shingle Grinding

Asphalt shingles removed by homeowners and contractors from rooftops will be accepted at the site to be recycled as it currently is. Asphalt shingles will be ground up mechanically to be used by asphalt producers in asphalt mixes. Recycled Asphalt Shingles (RAS) is a relatively new product utilized by asphalt producers to blend into Hot Mix Asphalt (HMA) that is used for paving of roadways, parking lots and driveways. RAS is gaining acceptance by Caltrans and local municipalities and is another way to divert material from landfills and recycle it. Asphalt shingle processing is anticipated to occur in the south central portion of the site.

Equipment required to grind the asphalt shingles will be the same as what is required for the wood grinding. It is expected that asphalt shingles will be stockpiled on-site and fed through the grinder as needed to satisfy the market demand.

Noise Generation of Existing and Proposed MRF Equipment

To quantify the noise generation of the proposed operations, BAC utilized noise level measurements of existing plant operations, file data pertinent to the types of additional operations proposed at the project site, and accepted sound propagation algorithms.

On April 10, 2014, BAC toured the existing facility, observed current operations, and conducted noise level measurements of those operations. The noise level measurements were conducted at two locations around the perimeter of the noisiest operations. Figure 1 shows the short-term noise measurement locations. In addition to the measurement results for existing operations, additional noise level data was provided by the project applicant for the proposed aspects of the project.

Table 5 shows the reference noise level data for each major project noise source, as well as the level predicted for each source at the nearest existing and proposed residences to the facility. It should be noted that the Table 5 data include a -10 dB offset to account for the substantial shielding of project noise levels by intervening topography and the comparable shielding provided by the proposed 10-foot berm, in the directions of the nearest existing residence to the north, residentially-zoned property to the north, and the future residences to the east. The 10 dB offset is considered a conservative estimate as evaluation of existing topography indicates that there is substantial shielding in both the north and easterly directions.

Table 5
Florin-Perkins Material Recovery Facility Noise Generation

	Reference Level at 100 feet			Level predicted at Residence	
Noise Source	**L_{50}**	**L_{max}**	**Residence**	**L_{50}**	**L_{max}**
Existing Facility	80	90	Northwest	39	49
			East	47	57
			North	56	66
Concrete/Asphalt Crusher	85	90	Northwest	43	48
			East	49	54
			North	55	60
Wood Grinding	75	85	Northwest	32	42
			East	42	52
			North	45	55
Combined Operations	87	90	Northwest	45	48
			East	50	57
			North	59	63
City of Sacramento Exterior Noise Level Standards:			Daytime	55	75
			Nighttime	50	70

Source: Bollard Acoustical Consultants, Inc. (BAC)
Note: The Table 6 noise levels predicted at the nearest existing residence to the northwest and the future residences to the east include a 10 dB offset to account for the substantial shielding provided by intervening topography and the proposed berm in these areas.

Noise Impact Evaluation

Impacts from On-Site Noise Sources

The Table 5 data indicate that project noise levels at the existing residence to the northwest and at the future residences to the east would be satisfactory relative to City of Sacramento noise standards, and the project would not result in a significant increase in ambient noise conditions at either of these residential locations. As a result, no noise impact is identified and no additional project-related noise mitigation measures would be required for these noise-sensitive receptors.

The Table 5 data also indicate that project noise generation would *exceed* the City of Sacramento 50 dB nighttime and 55 dB L_{50} daytime noise level standards at the residentially-zoned area north of the project site (see Figure 1). Specifically, the combined noise exposure at that area to the north is predicted to be 59 dB L_{50}. This predicted level is based on general estimates of shielding provided by intervening topography. However, ultimate noise exposure at

the noise-sensitive exterior areas of the residentially-zoned property to the north will depend on site grading and site plans which depict the location of the common outdoor activity areas of the future multi-family residential uses. In addition, it is BAC's understanding that a minimum 6-foot tall barrier will be required at the southern interface of the residential and industrial properties at such time as development of the multi-family residential uses is proposed. This barrier would result in an additional reduction in project noise levels on the order of 5+ dBA, reducing overall project noise exposure to approximately 54 dB with all project noise sources occurring simultaneously.

If project operations are limited to daytime hours the predicted level of approximately 54 dB L_{50} from all project operations would be satisfactory relative to the City's daytime noise level limits. Furthermore, if either wood grinding or concrete/asphalt recycling operations were to occur while the existing MRF is not operating the predicted levels of each would be satisfactory relative to the City of Sacramento 50 dB L_{50} nighttime noise standard. However, if the existing MRF were to operate at night, or if the wood grinding and concrete/asphalt recycling operations were to occur together during nighttime hours, then project noise exposure could exceed the City's nighttime noise level limit of 50 dB L_{50} at the residentially-zoned property to the north. In such a case, consideration of additional noise mitigation options would be required.

Impacts from Off-Site Traffic Noise Level Increases

Table 6 presents average daily vehicle logs for the existing Florin-Perkins Material Recovery Facility (MRF) for the 2013 calendar year. According to Table 6, the facility generated an average of 102 daily vehicles during the 2013 year, of which approximately 40% were heavy trucks.

Table 6
Florin Perkins MRF Average Daily Vehicle Counts - 2013

Quarter[1]	Self-Haul Vehicles	Commercial Trucks	Transfer Trucks	Total
Q1	42	26	6	84
Q2	65	32	7	104
Q3	63	32	8	103
Q4	75	32	7	115
Average	**61**	**31**	**7**	**102**

Source: Zanker Road Resource Management, Ltd.

According to existing traffic counts published by the City of Sacramento Public Works Department, existing average daily traffic volumes on Florin-Perkins Road are approximately 10,000 daily vehicles. Relative to those existing Florin Perkins Road traffic volumes, the project would need to generate approximately 5-10 times the volume generated by existing MRF operations in order to result in a significant (3 dB) increase in off-site traffic volumes. As noted

above, expanded project operations are predicted to result in approximately 25 additional heavy truck trips per day. Relative to existing off-site traffic noise levels, the increase due to the additional project traffic would be well below the City's 3 dB threshold. As a result, no appreciable changes in off-site traffic noise levels are anticipated for this project and no noise impact is identified.

Noise Mitigation Measures

Due to shielding provided by the proposed 10-foot berm along the perimeter of the project site, and by intervening topography between the project site and the nearest existing noise-sensitive residence to the northwest and proposed residences to the east, the project is not predicted to generate any significant noise impacts in these areas. As a result, no further noise mitigation measures are required for the existing residence to the northwest and residences proposed on the property to the east.

At the property to the north zoned for development of future multi-family residential uses, cumulative project noise generation could exceed the City of Sacramento's 50 dB L_{50} nighttime noise level standard. As a result, the following specific noise mitigation measures are recommended at such time as multi-family residential development is proposed on the property to the north:

1. A noise survey should be conducted at the specific location of the proposed residential development to determine if project noise generation is satisfactory relative to City of Sacramento nighttime noise standards. If that survey reveals that project operations are resulting in an exceedance of the City's nighttime noise standard, one of the following noise mitigation options should be implemented at that time:

   A. Operations of the MRF should be limited to daytime hours (after 7 am)

      OR

   B. Additional source specific noise control measures should be implemented for the equipment or operations identified as being responsible for the exceedance of the City's nighttime noise level standard. Such measures could take the form of construction of additional earthen berms or localized sound barriers, procurement of quieter equipment, or nighttime restrictions on certain processes.

   Implementation of these measures would reduce this impact to a level of insignificance.

Vibration Impact Evaluation

Field inspections of both the project site and neighboring uses revealed no discernable sources of vibration which would adversely affect future sensitive land uses located within the project area. In addition, the project does not propose any appreciable sources of vibration, and any localized vibration generated in the immediate vicinity of project equipment would dissipate to

imperceptible levels of the 1,000-2,000 feet between the project site and nearest existing and proposed residential uses. As a result, no vibration impacts due to the project are anticipated and no vibration mitigation measures would be warranted for this project.

Conclusions

The Florin-Perkins Material Recovery Facility expansion is not predicted to adversely affect the nearest existing residence to the project site or future residences proposed to the east of the project site. In addition, the project is not expected to result in a significant increase in offsite traffic noise levels or result in any adverse vibration impacts. However, project noise generation at the property to the north of the project site zoned for multi-family residential development could exceed City of Sacramento noise standards for new residential uses. Feasible noise mitigation measures as outlined above, and if determined to be necessary, could be implemented to mitigate such impacts to a level of insignificance.

This concludes BAC's analysis of potential noise and vibration impacts associated with the Florin-Perkins MRF expansion project. Please contact BAC at (916) 663-0500 with any questions or comments pertaining to this analysis.

Appendix A

Acoustical Terminology

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

Ldn Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

Leq Equivalent or energy-averaged sound level.

Lmax The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

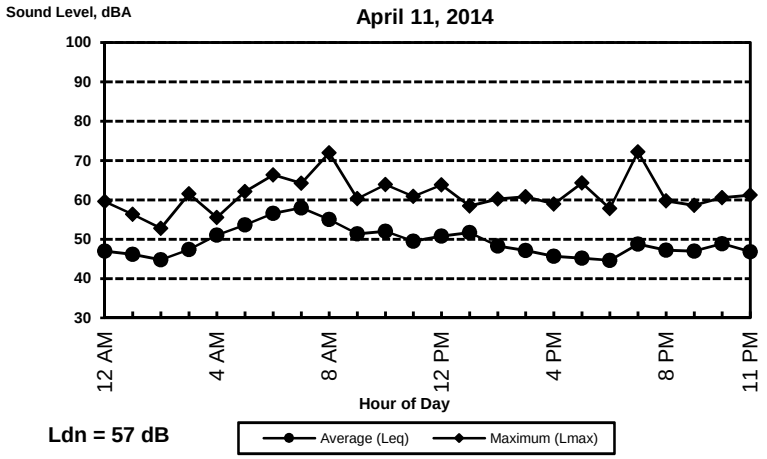
Sabin The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.

SEL A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.

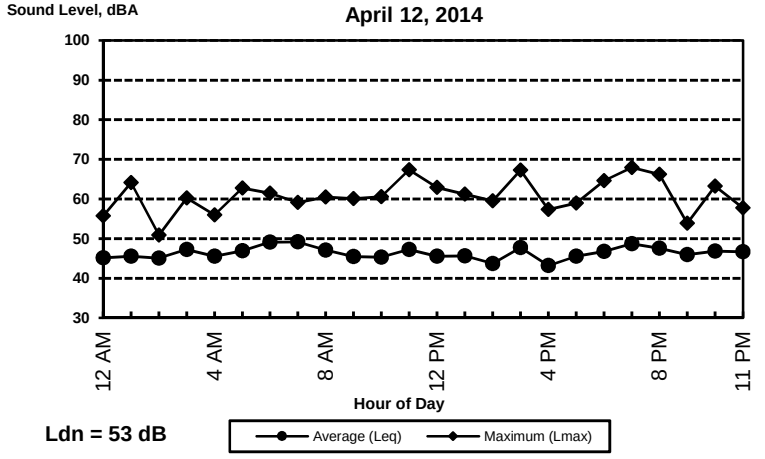
Threshold of Hearing The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.

Threshold of Pain Approximately 120 dB above the threshold of hearing.

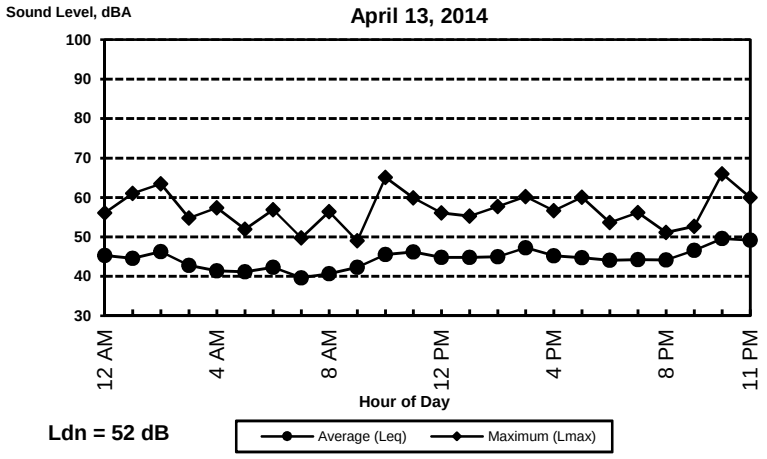
Appendix B-1
Florin Perkins Recycle Facility Ambient Noise Measurement Results
Site 1 - April 11-14, 2014



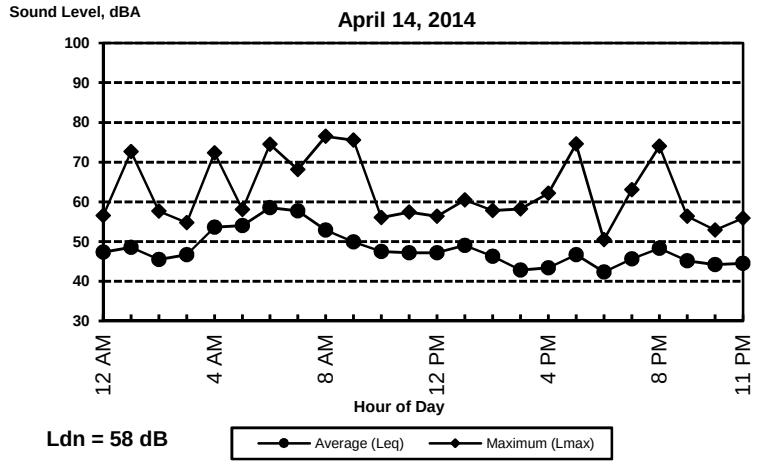
Ldn = 57 dB



Ldn = 53 dB



Ldn = 52 dB



Ldn = 58 dB

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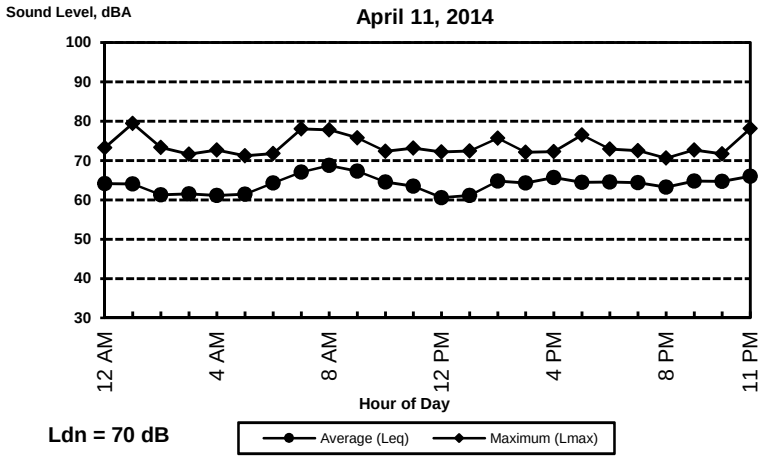
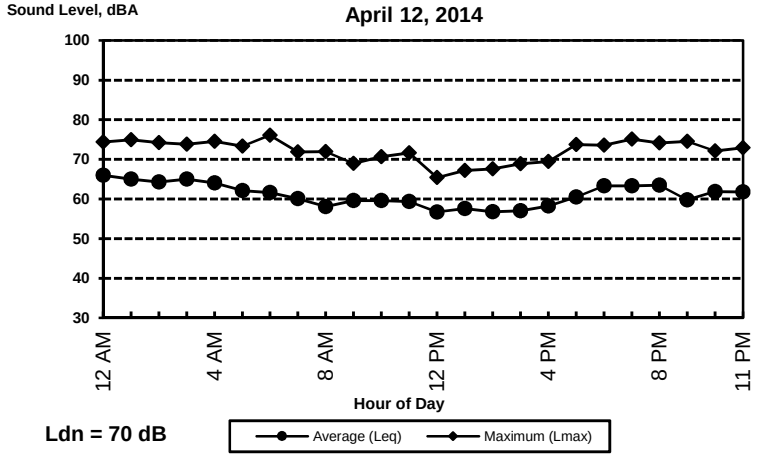
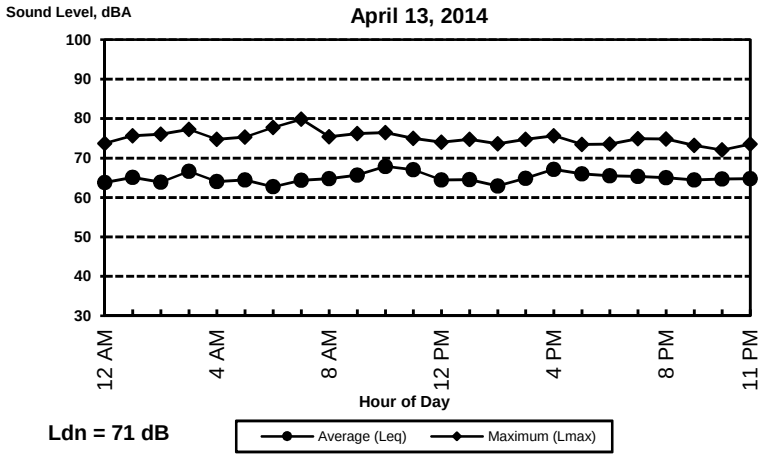
Appendix B-2
Florin Perkins Recycle Facility Ambient Noise Measurement Results
Site 2 - April 11-14, 2014



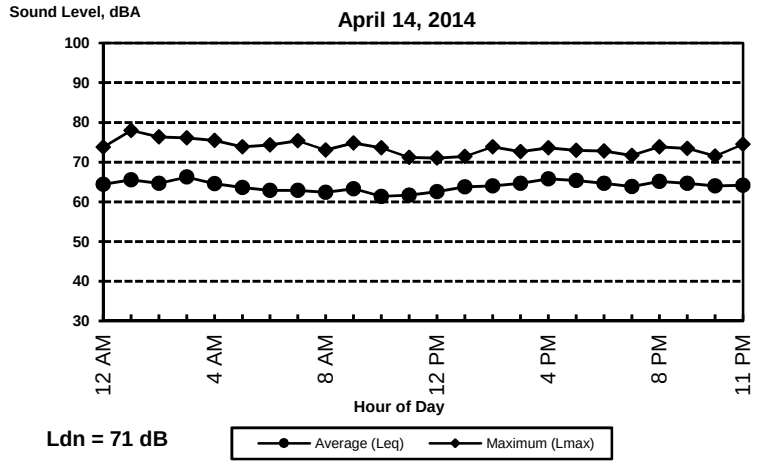
Ldn = 70 dB



Ldn = 70 dB



Ldn = 71 dB



Ldn = 71 dB

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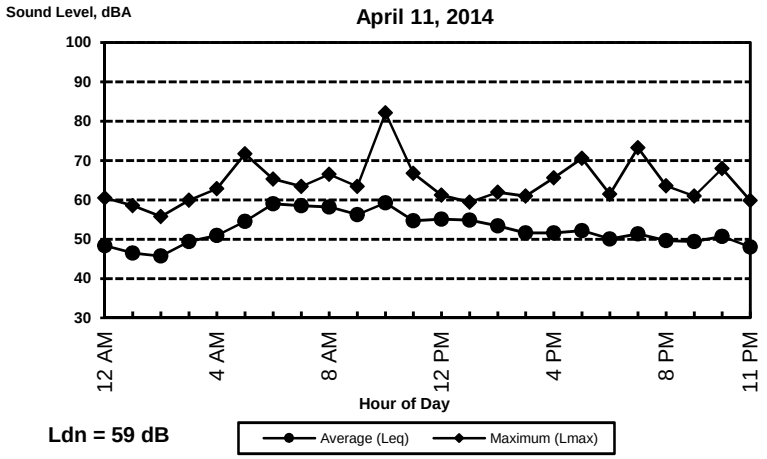
Appendix B-3
Florin Perkins Recycle Facility Ambient Noise Measurement Results
Site 3 - April 11-14, 2014



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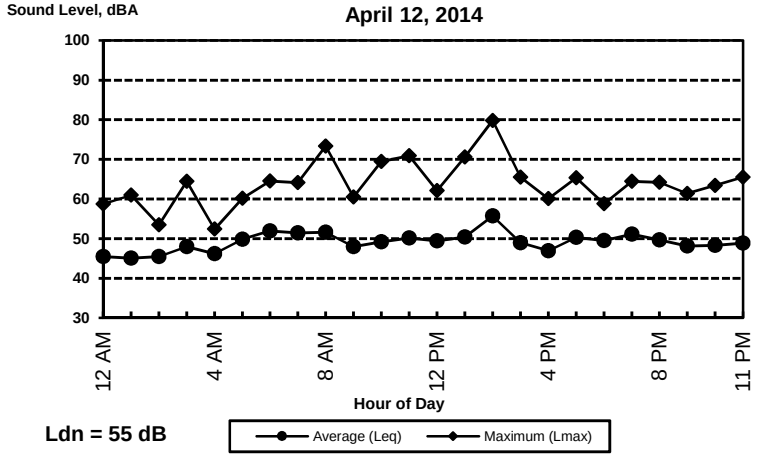

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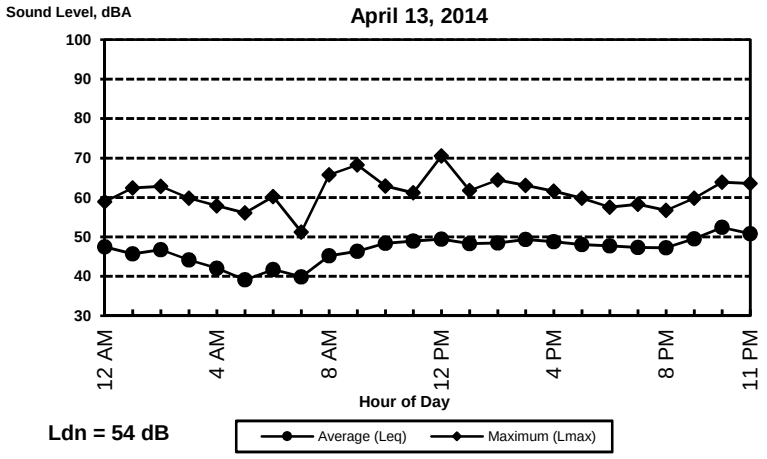

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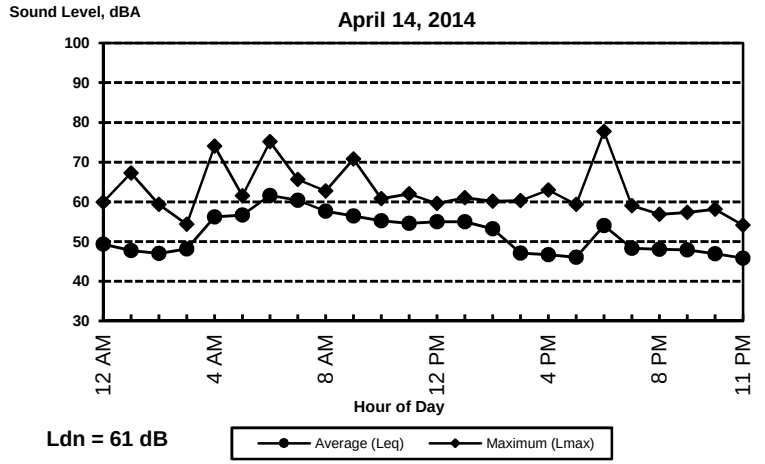


Ldn = 61 dB

BOLLARD
Acoustical Consultants

APPENDIX C

RESPONSE TO COMMENTS

This Response to Comments document contains public and/or agency comments received during the public review period of the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station Project (proposed project) Initial Study/Mitigated Negative Declaration (IS/MND).

BACKGROUND

The City of Sacramento Community Development Department, as lead agency, released the IS/MND for public review beginning on May 11, 2016 and ending on June 10, 2016 pursuant to CEQA Guidelines Section 15105. The IS/MND and supporting documents were made available at the public counter of the City of Sacramento Community Development Department located at 300 Richards Boulevard, Third Floor, Sacramento, California 95811. According to CEQA Guidelines Sections 15073 and 15074, the lead agency must consider the comments received during consultation and review periods together with the negative declaration. However, unlike with an Environmental Impact Report, comments received on a negative declaration are not required to be attached to the negative declaration, nor must the lead agency make specific written responses to public agencies. Nonetheless, the lead agency has chosen to provide responses to the comments received during the public review process for the IS/MND.

LIST OF COMMENTERS

The City of Sacramento received five comment letters during the open comment period on the IS/MND for the proposed project. The comment letters were authored by the following representatives of the local agencies and groups noted:

Letter 1 ..... Robb Armstrong, Sacramento Regional County Sanitation District
Letter 2 ..... Stephanie Tadlock, Central Valley Regional Water Quality Control Board
Letter 3 ..... Rob Ferrera, Sacramento Municipal Utility District
Letter 4 ..... John Lewis, Sacramento County Environmental Management Department
Letter 5 ..... Tracey Schaal, Power Inn Alliance
Letter 6 ..... Richard Hunn, Sacramento Environmental Commission

RESPONSE TO COMMENTS

The Response to Comments below include responses to the comment letters submitted regarding the proposed project. The letters are numbered and bracketed with assigned comment numbers. The bracketed comment letters are followed by numbered responses corresponding to each bracketed comment. Where revisions to the IS/MND text were made, new text is <u>double underlined</u> and deleted text is ~~struck through~~.

Letter 1

REGIONALSAN
TAKING THE WASTE OUT OF WATER
Sacramento Regional County Sanitation District

Main Office
10060 Goethe Road
Sacramento, CA 95827-3553
Tel: 916.876.6000
Fax: 916.876.6160

Treatment Plant
8521 Laguna Station Road
Elk Grove, CA 95758-9550
Tel: 916.875.9000
Fax: 916.875.9068

May 17, 2016

Ms. Dana Mahaffey, Associate Planner
City of Sacramento, Community Development
Environmental Planning Services
300 Richards Blvd., 3rd Floor
Sacramento, CA 95811

Subject: Notice of Availability/Intent to Approve a Draft Mitigated Negative Declaration for the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station Project (P13-017)

Dear Ms. Mahaffey:

Sacramento Regional County Sanitation District (Regional San) has the following comments regarding the Draft Mitigated Negative Declaration for the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station Project.

1-1 The project proposes to modify the existing facility operations to include additional processing of materials and the inclusion of an on-site modular office building and 1.5-acre materials sales yard. The 1.5-acre material sales yard is proposed as an ancillary operation and would be located outside, but adjacent to the existing 10-acre site for a total project area of 11.5 acres. The proposed project is located at 4201 Florin-Perkins Road.

1-2 Regional San is not a land-use authority. Projects identified within Regional San planning documents are based on growth projections provided by land-use authorities. Sewer studies will need to be completed to assess the impacts of any project that has the potential to increase flow demands. Onsite and offsite impacts associated with constructing sanitary sewer facilities to provide service to the subject project should be included in the Mitigated Negative Declaration.

1-3 Customers receiving service from Regional San are responsible for rates and fees outlined within the latest Regional San ordinances. Fees for connecting to the sewer system are set up to recover the capital investment of sewer and treatment facilities that serves new customers. The Regional San ordinance is located on the Regional San website at http://www.srcsd.com/ordinances.php.

1-4 Local sanitary sewer service for the proposed project site will be provided by the Sacramento Area Sewer District's (SASD) local sewer collection system. Ultimate conveyance to the Sacramento Regional Wastewater Treatment Plant (SRWTP) for treatment and disposal will be provided by Regional San. SASD will respond via separate correspondence.

The SRWTP provides secondary treatment using an activated sludge process. Incoming wastewater flows through mechanical bar screens through a primary sedimentation process. This allows most of the heavy organic solids to settle to the bottom of the tanks. These solids are later delivered to the digesters. Next, oxygen is added to the wastewater to grow naturally occurring microscopic organisms, which consume the organic particles in the wastewater.

Letter 1
Cont'd

1-4
Cont'd

These organisms eventually settle on the bottom of the secondary clarifiers. Clean water pours off the top of these clarifiers and is chlorinated, removing any pathogens or other harmful organisms that may still exist. Chlorine disinfection occurs while the wastewater travels through a two mile "outfall" pipeline to the Sacramento River, near the town of Freeport, California. Before entering the river, sulfur dioxide is added to neutralize the chlorine. The design of the SRWTP and collection system was balanced to have SRWTP facilities accommodate some of the wet weather flows while minimizing idle SRWTP facilities during dry weather. The SRWTP was designed to accommodate some wet weather flows while the storage basins and interceptors were designed to accommodate the remaining wet weather flows.

A NPDES Discharge Permit was issued to Regional San by the Central Valley Regional Water Quality Control Board (Water Board) in December 2010. In adopting the new Discharge Permit, the Water Board required Regional San to meet significantly more restrictive treatment levels over its current levels. Regional San believed that many of these new conditions go beyond what is reasonable and necessary to protect the environment, and appealed the permit decision to the State Water Resources Control Board (State Board). In December 2012, the State Board issued an Order that effectively upheld the Permit. As a result, Regional San filed litigation in California Superior Court. Regional San and the Water Board agreed to a partial settlement in October 2013 to address several issues and a final settlement on the remaining issues were heard by the Water Board in August 2014. Regional San began the necessary activities, studies and projects to meet the permit conditions. The new treatment facilities to achieve the permit and settlement requirements must be completed by May 2021 for ammonia and nitrate and May 2023 for the pathogen requirements

Regional San currently owns and operates a 5-mgd Water Reclamation (WRF) that has been producing Title 22 tertiary recycled since 2003. The WRF is located within the SRWTP property in Elk Grove. A portion of the recycled water is used by Regional San at the SRWTP and the rest is wholesaled to the Sacramento County Water Agency (SCWA). SCWA retails the recycled water, primarily for landscape irrigation use, to select customers in the City of Elk Grove. It should be noted that Regional San currently does not have any planned facilities that could provide recycled water to the proposed project or its vicinity. Additionally, Regional San is not a water purveyor and any potential use of recycled water in the project area must be coordinated between the key stakeholders, e.g. land use jurisdictions, water purveyors, users, and the recycled water producers.

If you have any questions regarding these comments, please contact me at 916-876-6104.

Sincerely,

Robb Armstrong
Regional San Development Services & Plan Check

Cc: SASD Development Services, Sarenna Moore – Policy & Planning-Long Range Planning

Letter 1: Robb Armstrong, Sacramento Regional County Sanitation District, May 17, 2016

Response to Comment 1-1

The comment is an introductory statement and does not address the adequacy of the IS/MND.

Response to Comment 1-2

The potential impacts of the proposed project, both on-site and off-site, have been addressed throughout the IS/MND. The relevant discussion from page 97 of the IS/MND, within the Utilities and Services Systems section, is quoted below. However, it should be noted that a staff-initiated change has been applied to the quoted section of the IS/MND. The staff-initiated change is for clarification purposes only and does not affect the conclusions of the IS/MND.

> The project site is not currently connected to the City's wastewater services. The proposed project would involve either connecting to one of the two existing on-site septic systems, or abandonment of the existing septic systems and installation of a new septic system. Compliance with state and ~~locate~~ local regulations and permit requirements for either option would ensure the wastewater treatment requirements are not exceeded. As the proposed project would utilize a septic system, the proposed project would not connect to the City's wastewater service, and demand on such services would not occur. Thus, construction of new or expansion of existing City water infrastructure would not be required in order to accommodate the proposed project.

As stated in the IS/MND, the proposed project does not include, and would not require the construction of new or expanded sanitary sewer facilities.

Response to Comment 1-3

The comment does not specifically address the adequacy of the IS/MND. As discussed in Response to Comment 1-2 above, the project would not connect to the Sacramento County Regional Sanitation District sewer system, and would, therefore, not be subject to connection fees.

Response to Comment 1-4

The comment provides background information regarding the wastewater treatment services available to the project site by the Sacramento County Regional Sanitation District and the Sacramento Area Sewer District. The comment does not specifically address the adequacy of the IS/MND. In addition, as discussed in Response to Comments 1-2 and 1-3 above, the proposed project would not involve new connections to or increased demand on the local or regional sewer system.

California Water Boards

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for
Environmental Protection

Central Valley Regional Water Quality Control Board

Letter 2

3 June 2016

Dana Mahaffry
City of Sacramento
Community Development Department
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

CERTIFIED MAIL
91 7199 9991 7035 8421 3216

COMMENTS TO REQUEST FOR REVIEW FOR THE PROPOSED MITIGATED NEGATIVE DECLARATION, FLORIN-PERKINS MATERIALS RECOVERY FACILITY/LARGE VOLUME TRANSFER STATION (P13-017) PROJECT, SACRAMENTO COUNTY

2-1 Pursuant to the City of Sacramento Community Development Department's 11 May 2016 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Proposed Mitigated Negative Declaration* for the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station (P13-017) Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

2-2 The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan

Letter 2 Cont'd

2-2 Cont'd

amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

Antidegradation Considerations

2-3

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at:
http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

2-4

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to

Letter 2 Cont'd

2-4 Cont'd

restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

2-5

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Caltrans Phase I MS4 Permit, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/caltrans.shtml.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml.

Industrial Storm Water General Permit

2-6

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Letter 2 Cont'd

Clean Water Act Section 404 Permit

2-7 If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

2-8 If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

Waste Discharge Requirements – Discharges to Waters of the State

2-9 If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

Dewatering Permit

2-10 If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

Letter 2 Cont'd

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2-11

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently $1,084 + $6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Low or Limited Threat General NPDES Permit

2-12

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be

Letter 2 Cont'd

2-12 Cont'd

covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.

Stephanie Tadlock

Stephanie Tadlock
Environmental Scientist

LETTER 2: STEPHANIE TADLOCK, CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD, JUNE 3, 2016

Response to Comment 2-1

The comment is an introductory statement and does not address the adequacy of the IS/MND.

Response to Comment 2-2

The comment provides general background information regarding basin plans. The comment does not address the adequacy of the IS/MND.

Response to Comment 2-3

The comment briefly discusses antidegradation considerations related to wastewater discharges to high quality waters. As discussed on pages 74 and 75 of the Hydrology and Water Quality section of the IS/MND:

> A stormwater drainage system currently exists on-site for the existing operations. All areas where waste material is currently tipped, processed, and stored has a concrete and/or asphaltic concrete surface, and the operations area is sloped to prevent ponding of water and to provide positive surface water drainage. The drainage system has been designed to direct stormwater and wash water from station maintenance activities to a series of drain inlets and culverts. Water is filtered prior to entering the drain inlets to remove sediments, debris and hydrocarbons. The water is then transferred by gravity flow to a small sump and subsequently to an underground stormwater detention tank located just west of the existing paved east access road or to the low-lying areas located west of the facility. Excess water in the tank is pumped out for dust suppression. If the tank capacity is exceeded, the excess runoff is directed to a low-lying area west of the facility within the property owner's property boundaries.
>
> The project site and current operations are under an existing General Industrial Permit (WDID number 5S34I022555), per the NPDES, and the associated SWPPP. All runoff associated with the site is managed in accordance with the BMPs set forth within the SWPPP. For example, drainage control structures are inspected regularly for blockages and functionality to ensure continuous functionality. Blockages are removed and repairs completed as necessary to ensure the continuous effectiveness of the drainage system. In preparation of an anticipated storm event, the operator would cover most material stockpiles and consolidate operations to a specific portion of the operations area. Incoming material tipping would occur on a designated portion of the operations area. Pile sizes are minimized during the wet season. The detention tankage is pumped out as needed (within two to three days). Prior to an anticipated storm event, the operator would ensure that the tanks are drained to nearly empty. The water would be used for dust control.
>
> The existing stormwater drainage system would be utilized for the proposed project; however, one additional stormwater outfall structure would be constructed as part of the proposed project to accommodate the increase in stormwater at the site resultant of the

> increase in impervious surfaces. The proposed project would be required to comply with the conditions of the existing General Industrial Permit. Because the proposed project design provides for containment of all runoff water associated with the site, discharge of runoff to surface waters or groundwater would not result from the proposed project.

Given the above discussion, the project would not discharge wastewater to high quality waters.

Response to Comment 2-4

The comment provides a brief summary of the Construction General Permit. As stated on page 74 of the Hydrology and Water Quality section of the IS/MND:

> The City's SQIP contains a Construction Element that guides in implementation of the NPDES Permit for Storm Water Discharges Associated with Construction Activity. This General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list best management practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutant to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. Compliance with City requirements to protect storm water inlets would require the developer to implement BMPs such as the use of straw bales, sandbags, gravel traps, and filters; erosion control measures such as vegetation and physical stabilization; and sediment control measure such as fences, dams, barriers, berms, traps, and basins. City staff inspects and enforces the erosion, sediment and pollution control requirements in accordance with City codes (Grading, Erosion and Sediment Control ordinance).
>
> Conformance with City regulations and permit requirements along with implementation of BMPs would ensure that construction activities of the proposed project, including the future realignment of the project access roadway, would result in a less-than-significant impact related to water quality.

Therefore, the proposed project would be subject to the General Construction Permit's SWPPP requirements. City staff inspection would further ensure that the proposed project implements all necessary BMPs and, as a result, the proposed project would not result in any impacts related to stormwater discharge from construction activities.

Response to Comment 2-5

The comment provides a brief summary of Phase I and II Municipal Separate Storm Sewer System (MS4) Permits. As discussed on page 72 of the Hydrology and Water Quality section of the IS/MND:

> The City's Stormwater Quality Improvement Plan (SQIP) outlines the priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management program for 2007-2011. The Program is based on the National Pollutant Discharge Elimination System (NPDES) municipal stormwater discharge permit. The comprehensive Program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The Program also includes an extensive public education effort, target pollutant reduction strategy and monitoring program.

As discussed in Response to Comment 2-4, the proposed project would comply with all City regulations and permit requirements, which would ensure the proposed project's compliance with applicable MS4 Permits.

Response to Comment 2-6

The comment briefly discusses the Industrial Storm Water General Permit. Page 19 of the IS/MND states the following:

> The project site and current operations are subject to an existing General Industrial Permit (Waste Discharge Identification [WDID] number 5S34I022555), per the National Pollutant Discharge Elimination System (NPDES), and the associated stormwater pollution prevention plan (SWPPP). All runoff associated with the site is managed in accordance with the best management practices (BMPs) set forth within the SWPPP.

As further stated on page 75:

> The proposed project would be required to comply with the conditions of the existing General Industrial Permit.

Response to Comment 2-7

The comment provides a brief summary of the Clean Water Act Section 404 Permit. Page 60 of the Biological Resources section of the IS/MND includes the following statement:

> Existing water bodies or features, including rivers, creeks, or natural or manmade ditches, do not exist on the project site or in the immediate vicinity. The closest water body, the American River, is located over 1.5 miles north of the project site.

Thus, the IS/MND concluded that the proposed project would have a less-than-significant impact on any federally protected wetlands as defined by Section 404 of the Clean Water Act.

Response to Comment 2-8

The comment provides a brief summary of the Clean Water Act Section 401 Permit and associated Water Quality Certification. As discussed above in Response to Comment 2-7, the proposed project would not involve disturbance of waters of the U.S, such as streams or wetlands. Thus, a Water Quality Certification is not necessary for the proposed project.

Response to Comment 2-9

The comment provides a brief summary of Waste Discharge Requirements for discharges to waters of the State. As discussed in the Hydrology and Water Quality section of the IS/MND and referenced in Response to Comment 2-3 above, the proposed project would not involve any discharges to non-jurisdictional waters of the State, as defined by the California Porter-Cologne Water Quality Control Act, and would include a stormwater drainage system designed in compliance with all applicable stormwater regulations.

Response to Comment 2-10

The comment provides information pertaining to Dewatering Permits. As stated on pages 70 and 71 of the Hazards section of the IS/MND:

> As stated above, substantial ground-disturbing construction activities, such as excavation or trenching, would not occur as a result of the proposed project. As such dewatering activities would not occur.

Therefore, the proposed project would not require a Dewatering Permit as the project does not involve any dewatering activities.

Response to Comment 2-11

The comment briefly discusses requirements for discharges associated with commercially irrigated agricultural land. The comment does not address the adequacy of the IS/MND, as the proposed project would not involve any commercially irrigated agricultural land.

Response to Comment 2-12

The comment briefly discusses the Low or Limited Threat General NPDES Permit. See Response to Comment 2-10 above.

Powering forward. Together.

SMUD™

Letter 3

June 9, 2016

Dana Mahaffey
City of Sacramento
300 Richards Blvd., Third Floor
Sacramento, CA 95811

Subject: Mitigated Negative Declaration (MND), Florin Perkins Materials Recovery Facility/Large Volume Transfer Station

Dear Ms. Mahaffey,

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the MND for the Florin Perkins Materials Recovery Facility/Large Volume Transfer Station Project. SMUD is the primary energy provider for Sacramento County and the proposed project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the MND Florin Perkins Materials Recovery Facility/Large Volume Transfer Station Project will acknowledge any project impacts related to the following:

3-1
- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
  - https://www.smud.org/en/business/customer-service/support-and-services/design-construction-services.htm
  - https://www.smud.org/en/do-business-with-smud/real-estate-services/transmission-right-of-way.htm

3-2
- Electrical load needs/requirements

3-3
- Electrical line routing

3-4
- Energy Efficiency

3-5
- Climate Change

Based on our review of the MND and our understanding of the proposed project, SMUD offers the following input:

3-6
1. SMUD has 230 and 115kV overhead transmission lines and structures located in the proposed project area. Please see the approximate locations of transmission lines and structures shown in the area outlined in red on the map shown on page two.

Letter 3
Cont'd

3-6
Cont'd

2. Project owner shall provide detailed engineering drawings for any improvements that are proposed within the SMUD transmission line easement. SMUD engineering will review the plans and provide comments as required.

3. Under no circumstance shall any grading or construction activities be permitted within SMUD's transmission line easements without the conveyance of rights from SMUD's real estate department. Should applicant be found performing unapproved improvements, the applicant will be responsible for returning the property to its original condition at their expense.

Letter 3 Cont'd

4. SMUD reserves the right to construct new or move existing facilities as necessary within its legal easement. Any developments installed by owner or assignees within this easement may need to be removed or modified as a result of the new or existing installed facilities.

5. SMUD reserves the right to use any portion of its easement and shall not be responsible for any damages to the developed property within said easement.

6. Project Owner or contractor is responsible for assessing any impacts (including but not limited to induced voltage and current effects) to its facilities as a result of constructing and operating their facilities within close proximity to SMUD's high voltage transmission lines.

7. Project Owner or contractor is responsible for ensuring that any subcontractor performing work in the subject right of way is aware and abides by these conditions.

8. Any proposed SMUD transmission facilities modifications/relocations by the project owner shall be performed under an executed cost recovery agreement. Project owner shall provide 18 months' timeframe to allow for design and construction of identified facilities.

3-6 Cont'd

9. There shall be no storage of fuel or combustibles and no fueling of vehicles within the SMUD easement.

10. There shall be no long term staging or storage of construction materials within the SMUD easement, such materials shall be removed from the easement at the completion of the project.

11. All boom-operated construction equipment within SMUD's easement corridor shall be equipped with a mechanical lock-out device to prevent the boom from extending above the Cal-OSHA required clearance distance to SMUD's energized high voltage lines and fiber optic communication lines.

12. Please include the following note on drawings:

WARNING – SMUD OVERHEAD TRANSMISSION LINES ARE LIVE – Electrocution Potential. Project owner or Contractor shall take all appropriate safety measures when working near or under lines, including placement of OSHA-required warning signage. On-site SMUD inspection required when working within 25 feet of SMUD facilities. Contractor shall contact SMUD's Ricky Plaza at (916) 732-5905 or (916) 799-5733 to schedule inspection. 72-hour advance notice is required. Project owner or Contractor shall protect SMUD facilities during construction and notify SMUD immediately if facilities are damaged. Any damage to existing facilities shall be repaired at the project owner or contractor's expense.

Any deviations or revisions to the plans as submitted shall be brought to the attention of SMUD's Real Estate department.

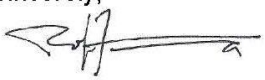
For additional information please visit our website and review our Guide for Transmission Encroachment
https://www.smud.org/assets/documents/pdf/Guide-for-Transimssion-Encroachment.pdf

Letter 3
Cont'd

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed project. Please ensure that the information included in this response is conveyed to the project planners and the appropriate project proponents. **3-7**

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this project. Again, we appreciate the opportunity to provide input on this MND. If you have any questions regarding this letter, please contact Rob Ferrera, SMUD Environmental Specialist at (916) 732-6676.

Sincerely,



Rob Ferrera
Environmental Specialist
Environmental Management
Legislative & Regulatory Affairs
Sacramento Municipal Utility District

Cc: Jose Bodipo-Memba
Rob Ferrera
Pat Durham
Joseph Schofield
Wenjie Chen

LETTER 3: ROB FERRERA, SACRAMENTO MUNICIPAL UTILITY DISTRICT, JUNE 9, 2016

Response to Comment 3-1

The commenter requests that the IS/MND acknowledge any impacts the proposed project may have on overhead and/or underground transmission and distribution line easements. The commenter provides a figure, included in comment 3-6, depicting the approximate location of the overhead transmission lines in the project area. The distribution line and related easement is located approximately 500 feet east from the boundaries of the 10-acre permitted boundary. As shown in Figure 4, Proposed Project Site Plan, on page 12 of the IS/MND, the proposed project does not involve any activities outside of the 10-acre permitted site boundary. Because the 10-acre permitted project area boundaries are 500 feet away from the easement area, project activities are not proposed within the easement area, and the project would not impact the overhead transmission and distribution line easement.

Response to Comment 3-2

The proposed project's electrical load needs and requirements are addressed on page 23 of the IS/MND. As stated on page 23:

> Electricity is currently supplied to the site for the existing operations from the Sacramento Municipal Utility District (SMUD) overhead power lines and an existing electrical transformer located near the northwest corner of the 10-acre permitted boundary. Sufficient energy is available from SMUD to serve the proposed project with no detriment to other users. A utility line extension would be required in order to supply power to the wood grinding area. It should be noted that any necessary electrical conduit or power poles would avoid the low permeability layer of the final landfill cover. The proposed project would increase the electricity usage at the site from approximately 700 kilowatt-hours (kWh) to an estimated 13,288 kWh per a 30-day billing cycle, assuming operating 361 days per year. A backup diesel generator would be located on-site.

Because sufficient energy is available from SMUD, the electrical load needs and requirements of the proposed project would not cause any significant impacts.

Response to Comment 3-3

The project's electrical line routing needs are addressed on page 23 of the IS/MND. As quoted in Response to Comment 3-2 above, power lines currently exist on the project site, but would need to be extended to serve the new operations associated with the proposed project. In accordance with SMUD policy, the project applicant would submit a SMUD application and pay the necessary application fees for the proposed development. The applicant and SMUD would then communicate to complete all planning, site preparations, and work regarding the utility extension. Proper coordination between the applicant and SMUD would ensure that impacts would not result from electrical line routing as part of the proposed project. The comment has been forwarded to the applicant for their considerations.

Response to Comment 3-4

The IS/MND addresses energy impacts on page 27. The IS/MND states:

> The Master EIR discussed energy conservation and relevant general plan policies in section 6.3 (page 6-3). The discussion concluded that with implementation of the general plan policies and energy regulation (e.g., Title 24) development allowed in the general plan would not result in the inefficient, wasteful or unnecessary consumption of energy.

Because the proposed project would be required to comply with all applicable General Plan policies and goals, the project would not result in the inefficient, wasteful or unnecessary consumption of energy.

Response to Comment 3-5

Climate change is addressed in the Air Quality section of the IS/MND, particularly in regard to the potential greenhouse gas (GHG) emissions that could occur as a result of the proposed project. The IS/MND states on page 41 that "all proposed projects must now be compliant and consistent with the General Plan CAP Policies and Programs outlined in Appendix B of the General Plan Update." As discussed in the third paragraph on page 41 of the IS/MND, compliance with the City's CAP is necessary for the City to comply with statewide GHG reductions mandated by Assembly Bill 32. The project's compliance with the Climate Action Plan is addressed under Question H on pages 49 and 50 of the IS/MND. Page 50 of the IS/MND includes the following conclusion:

> Accordingly, the proposed project, including the future realignment of the project access roadway, would be considered consistent with the General Plan Update and would not be expected to hinder the City's ability to achieve the General Plan CAP Policies and Programs. Therefore, impacts related to a conflict with the Climate Action Plan would be considered ***less than significant***.

Based on the analysis within the IS/MND, the proposed project's impacts related to climate change would be considered less than significant.

Response to Comment 3-6

As discussed in Response to Comment 3-1, the proposed project does not include any construction activities within the SMUD easement area. Because construction activities would not occur within the SMUD easement area, the proposed project would not conflict with any SMUD requirements for activities within an easement area and no impact would occur.

Response to Comment 3-7

The City will be sure to include the commenter in any future correspondence with regard to SMUD electricity delivery and infrastructure for the project. The comment will also be forwarded to the applicant. However, the comment does not directly address the adequacy of the IS/MND.

Letter 4

Environmental Management Department
Val F. Siebal, Director

June 9, 2016

Dana Mahaffey
City of Sacramento
Development Services Department, Planning Division
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

Dear Dana Mahaffey:

SUBJECT: LEA COMMENTS ON INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR FLORIN PERKINS PUBLIC DISPOSAL SITE MRF/LVTS 4201 FLORIN PERKINS ROAD, SACRAMENTO, CA 95826 (P13-017) SWIS# 34-AA-0221

Background

The Sacramento County Environmental Management Department (EMD) is certified by the California Department of Resources, Recycling, and Recovery (CalRecycle) to act as the Local Enforcement Agency (LEA) within the cities and county of Sacramento. EMD is authorized by Division 30 of the Public Resources Code (PRC), section 43209 and Title 14 of the California Code of Regulations (14CCR), sections 18051 and 18084, to enforce solid waste laws and regulations.

The Florin Perkins Public Disposal Site MRF/LVTS is operated by Zanker Road Resource Management, LTD under a full Solid Waste Facility Permit (SWFP) issued by the LEA. The facility is located on a portion of the Florin Perkins Landfill which is owned by multiple family trusts represented by Nancy Cleavinger. The operator of the facility is proposing additional processing activities. The operator also wishes to extend operations outside the 2.5 acre operations area specified in section 14 of the SWFP and adding a 1.5 acre material sales yard outside the overall existing 10 acre permitted area specified in section 4 of the SWFP. These changes will require revising the SWFP. With this in mind, an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for this project by the city of Sacramento with the intention of being sufficient for the purpose of the Use Permit, as well as for the LEA's determination regarding the revised SWFP.

Based upon our review of the IS/MND, the following comments are provided.

LEA Comments

4-1 1) The IS/MND refers to Florin Perkins Landfill (FPL) as a "former landfill". Please note that referring to it as a former landfill implies that it has undergone "clean closure" to remove the landfill waste which has not occurred. FPL is a landfill that is no longer accepting waste and is preparing to undergo closure.

4-2 2) In regards to the discussion on page 90 regarding permits associated with landfill operations, we would like to point out that although the Regional Water Quality Control Board (RWQCB) has issued Waste Discharge

10590 Armstrong Avenue • Mather, California 95655 • fax (916) 875-8513
Environmental Compliance (916) 875-8550 • Environmental Health (916) 875-8440
www.saccounty.net • www.emd.saccounty.net

Letter 4
Cont'd

Requirements (WDRs) for FPL, the landfill's Closure Plan has not yet been approved by the RWQCB or the LEA and there is currently no LEA-issued permit for the landfill. The RWQCB is the lead regulatory agency for closure of the FPL.

4-2 Cont'd

3) On page 92, it states that truck traffic associated with landfill closure activities would not be expected to interfere with on-site (transfer station) activities and would occur completely separate from the proposed project. In regards to this statement, LEA staff would like to point out that traffic associated with landfill closure must access the site through the same entrance and road. Although the traffic would bypass the transfer station scales, the road leading to the landfill's south waste management unit – the first landfill unit slated to undergo closure – runs past the scale house and adjacent to the transfer station where it runs between the transfer station and the location of the proposed 1.5 acre material sales area. Furthermore, transfer station staff is diverted from transfer station activities to direct, monitor, and document the incoming soil loads for closure on behalf of the landfill owner. Landfill traffic, therefore, is not completely separate and has the potential to interfere with transfer station traffic and activities.

4-3

4) The current SWFP specifies a maximum tonnage limit of 500 tons per day (TPD) for all waste and the operator is currently at an operating step that allows him to receive 375 TPD. The proposed project would allow receipt of a total maximum of 1000 TPD of waste, an increase of 625 TPD over the current, effective limit. The IS/MND seems to indicate that the increase would apply generically to all waste types but during a conversation on 5/17/2016, the applicant informed LEA staff that it was his intent that the 500 TPD proposed increase would consist only of inert debris (concrete and asphalt) and that all other waste, including wood waste, would be limited to the existing 500 TPD specified in the existing SWFP. In other words, the operator would not, for example, have the option of accepting 600 tons of inert debris and 400 tons of other waste on a given day. This is reflected in the proposed addition of only 25 trucks (based on a capacity of 20 tons each) per day for delivery of inert debris, described on page 15. Likewise, the operator would not have the option of accepting more than 500 TPD of non-inert debris waste. Given that there have been several fires at this facility in last few years and that the bulk of non-inert waste is flammable, it is an important that this distinction be clearly articulated so as to avoid potential accumulations of flammable wastes in excess of what can be stockpiled and managed in a fire-safe manner. LEA staff suggest that the city clarify this in the IS/MND to avoid confusion and to buttress the revised SWFP.

4-4

5) The current SWFP specifies incremental increases to the full tonnage in three steps with the operator demonstrating compliance at each step prior to requesting each increase. This allows the LEA to evaluate the operator's performance at lower than maximum tonnages and provides a means of limiting tonnage increases if conditions indicate that allowing

4-5

Letter 4
Cont'd

4-5 Cont'd operation at full tonnage would be problematic. The LEA may consider writing incremental increases into the revised SWFP to address the proposed 500 TPD of inert debris and suggests that the city clarify this matter in the IS/MND to avoid confusion and to buttress the revised SWFP.

4-6 6) A 720 square foot modular office building is proposed near the northwest corner of the transfer station which is located within 1000' of landfill waste. Please note that 27CCR, section 21190(g) requires that buildings within 1000' of any disposal area be monitored on a periodic basis for the presence of landfill gas and be designed and constructed in accordance with measures specified in the section to prevent gas migration into the building.

4-7 7) The current SWFP allows a maximum of 233 vehicles per day (VPD). Under the proposed project, the vehicles would be increased to 258 trucks per day. There are several points to make regarding this change:

- The Summary of Operational Changes Table on page 10 refers to "trucks per day" instead of "vehicles per day". This may be potentially confusing and lead the reader to wonder if the limits do not apply to non-truck traffic such as cars, station wagons, and cars with trailers. That should not be the case and the IS/MND should clarify that the truck/vehicle per day limit applies to all vehicles.
- Although the IS/MND states that according to the applicant, the material sales yard should not generate many additional (vehicle) trips, the IS/MND should nonetheless clarify that all vehicle trips should count towards the daily vehicle limit, including vehicles that may arrive unloaded for the specific purpose of purchasing material from the sales yard.

Contact If you have any questions regarding this letter, please contact me at (916) 876-7279.

Sincerely,

John Lewis
Environmental Specialist III
Solid Waste Program

LJ:JL:tk

c: Nicholas Oliver, CalRecycle
Todd Del Frate, RWQCB

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LETTER 4: JOHN LEWIS, COUNTY OF SACRAMENTO, SACRAMENTO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT, JUNE 9, 2016

Response to Comment 4-1

Based on the comment and to provide a more accurate description of the Florin Perking Landfill, page 6 of the IS/MND is hereby revised as follows:

> The project site is the site of the ~~former~~ Florin Perkins Landfill, which does not currently accept waste and is preparing to undergo closure, and currently consists of an existing MRF/LVTS, operating under a Conditional Use Permit (CUP) (Special Permit Minor Modification Z98-114) issued by the City and a full SWFP No. 34-AA-0221 issued by the LEA.

All subsequent references to the Florin Perkins Landfill in the IS/MND are hereby revised similar to the above. The above changes are for clarification purposes only and do not change the analysis or conclusions of the IS/MND.

Response to Comment 4-2

The comment provides information pertaining to the Waste Discharge Requirements for the Florin Perkins Landfill and the Local Enforcement Agency (LEA) permitting process. The comment does not address the adequacy of the IS/MND.

Response to Comment 4-3

The commenter expresses concern regarding truck traffic associated with the proposed project and the Florin Perkins Landfill closure activities. The intent of the section of the IS/MND specifically noted by the commenter was to state that the traffic created by the proposed project would be independent from, and would not affect, the traffic related to the Florin Perkins Landfill closure activities. The IS/MND does not assert that the traffic from the two activities would use separate entrances or exits to the site. For clarification purposes, the following section on page 92 of the IS/MND is hereby revised as follows:

> As mentioned above, the project operator currently accepts soil on behalf of the adjacent landfill owner for landfill closure purposes. Although the trucks hauling the soil use the same entrance and exit road as the proposed project, the soil hauling trucks do ~~The soil does~~ not pass through the proposed project scales or operating areas, nor does the soil or trucks count towards the operator's permitted tonnage or vehicle limits. Because the trucks would not enter the operations area of the proposed project site or enter the on-site scales, the truck traffic associated with the landfill closure activities would not be expected to interfere with on-site operations, as they would occur ~~completely separate~~ independently from the proposed project. In addition, the aforementioned activities are not related to the proposed project operations and are covered under permits associated with the landfill operations. As further landfill closure activities continue to occur, vehicles accessing the overall site may temporarily increase during the landfill closure period; however, such

> truck trips would cease to occur upon completion of landfill closure. Furthermore, clear signage would be provided on the on-site roadways in order to manage and direct on-site traffic.

The above changes are for clarification purposes only and do not change the analysis or conclusions of the IS/MND. Furthermore, Florin Perkins Road is an undivided, four-lane road with sufficient capacity to accommodate the increase in traffic anticipated by the proposed project as well as any traffic associated with the Florin Perkins Landfill closure activities. As mentioned in the above quote from the IS/MND, signage would be provided to keep the independent traffic activities from impacting each other. The relatively small increase in traffic induced by the proposed project combined with the existing capacity of Florin Perkins Road and the project site's traffic signage would ensure that the traffic from closure activity of the Florin Perkins Landfill would not affect or be affected by the traffic induced by the proposed project.

Response to Comment 4-4

The comment refers to the discussion on page 15 of the IS/MND regarding the increase in capacity requested as part of the proposed project. The current permitted capacity is 500 tons per day (TPD) and the proposed project includes a request for an increased total permitted capacity of 1,000 TPD. The IS/MND analyzed the worst case scenario, from an environmental impact perspective, that could result from a Conditional Use Permit allowing 1,000 TPD. The worst case scenario, in regards to air quality and traffic, would result if the entire 1,000 TPD capacity would be used for concrete and asphalt because concrete and asphalt would require the greatest amount of truck trips (25) per day to the facility. Therefore, assuming that all 1,000 TPD would be used for concrete and asphalt provides a conservative analysis for the purpose of evaluating potential environmental impacts resulting from the approval of a 1,000 TPD Conditional Use Permit for the proposed project. As a result, the IS/MND provides an adequate analysis of the worst case scenario for compliance with CEQA. Because the IS/MND evaluated the worst case scenario, the City and the LEA would be able to identify appropriate limitations on the type and proportion of material allowed under the total 1,000 TPD limit as needed. Any limit on the proportion of asphalt and concrete placed on the proposed project's total daily capacity would then constitute a potential reduction in environmental impacts. Thus, the analysis provided by the IS/MND provides for flexibility in the approval of the CUP and the LEA permits, without allowing for potential impacts to exceed what was analyzed in the IS/MND. However, as noted in the LEA's comment, the stockpiling of non-inert material in excess of 500 TPD could cause impacts related to fire hazards. Therefore, although the analysis within the IS/MND provides a conservative analysis of the environmental impacts of a 1,000 TPD permit, the following section of the IS/MND, on page 15, is hereby revised as follows:

> The concrete and asphalt crushing operations are anticipated to require additional capacity in excess of the 500 TPD currently entitled for the existing MRF/LVTS. Accordingly, the project includes a proposal to ~~add 500 TPD, specifically for concrete and asphalt crushing operations, to the site's total allowable tonnage loading of 500 TPD per the existing permit, for a total of 1,000 TPD.~~ allow 500 TPD of additional concrete and asphalt capacity, while simultaneously maintaining the existing permitted tonnage loading limit of 500 TPD for all other waste. As a result, the proposed project would have a combined permitted total of

> 1,000 TPD, but the proposed project would be limited to accepting a maximum of 500 TPD of inert material (concrete and asphalt), independently from the concurrent maximum of 500 TPD for other material. Assuming an average payload of 20 tons per truckload for inbound concrete and asphalt materials, the concrete and asphalt crushing operations would add approximately 25 trucks per day to the overall facility.

The above changes are for clarification purposes only and do not change the analysis or conclusions of the IS/MND.

Response to Comment 4-5

The comment has been noted; as discussed above, the IS/MND analyzed the proposed project under an environmental worst case scenario. Such a scenario would result from the proposed project maximizing the allowable TPD immediately following the approval of the project and completion of construction activities. Because the IS/MND assumes full operation of the proposed project, any incremental restrictions mandated by the LEA would result in potential reductions in environmental impacts caused by the proposed project. Therefore, the IS/MND allows the LEA the greatest flexibility in their permitting process. As a result, the comment does not address the adequacy of the IS/MND. For clarification purposes, the following section on page 10 of the IS/MND is hereby revised as follows:

> The amount of materials received at the site would increase as a result of the modification by an additional 500 tons (primarily concrete and asphalt), for a total of 1,000 TPD. However, in order to ensure that operations associated with the proposed project do not result in problematic conditions, the LEA may require new permits granting increased capacity to be implemented in an incremental fashion. Similar to the current Solid Waste Facilities Permit requirements, incremental increases would require the operator to demonstrate compliance at each step prior to requesting each increase, thereby ensuring full compliance of the operation with the SWFP. The ~~the~~ materials currently accepted at the site would continue to be accepted and a change to the type of materials accepted at the site is not proposed.

The above changes are for clarification purposes only and do not change the analysis or conclusions of the IS/MND. Additionally, the comment will be forwarded to the applicant.

Response to Comment 4-6

Current operations at the project site include an existing monitoring plan for all facilities. Monitoring currently includes continuous gas monitors in all structures and quarterly inspections of all facilities using handheld sensors. The continuous gas monitors are inspected weekly and the results recorded. Monitoring activities would continue in compliance with existing practices and be revised where necessary upon approval of the project.

Response to Comment 4-7

The IS/MND was drafted to evaluate the worst case scenario for environmental impacts. In regards to vehicle trips to and from the project site, the worst case scenario would occur if all vehicle trips were made by heavy diesel trucks rather than a mix of vehicles including those indicated by the comment. Therefore, Table 1 on page 10 of the IS/MND assumed that all 25 new trips would be "truck trips" to provide a conservative analysis of the potential impacts caused by the project to traffic and air quality. Similar to Comments 4-5 and 4-4, by adopting a worst case scenario approach, the IS/MND provides a conservative analysis, compliant with CEQA, which also allows the LEA the maximum amount of flexibility when considering further refinement during the permitting process for the proposed project. If a mix of vehicles other than heavy diesel trucks actually visits the proposed project, the impacts would be less severe than what was analyzed by the IS/MND.

Letter 5

June 10, 2016

City of Sacramento Community Development Department
ATTN: Dana Mahaffey
300 Richards Boulevard, 3rd floor
Sacramento, CA 95811

Dear Dana:

5-1 Power Inn Alliance, a Property & Business Improvement District (PBID) representing the southeastern section of the City of Sacramento, does not wish to comment on the Florin-Perkins Materials Recovery Facility/Large Volume Transfer Station (P13-017) mitigated negative declaration at this time but does reserve its right to make additional comments as the project conditions and/or planning continues.

If you have any further questions, please do not hesitate to let me know.

Thanks so much.

Sincerely,

Tracey Schaal

Tracey Schaal
Executive Director
tracey@powerinn.org

LETTER 5: TRACEY SCHAAL, POWER INN ALLIANCE, JUNE 10, 2016

Response to Comment 5-1

The comment does not address the adequacy of the IS/MND.

Letter 6

SACRAMENTO ENVIRONMENTAL COMMISSION

June 27, 2016

Dana Mahaffey
City of Sacramento
Development Services Department, Planning Division
300 Richards Boulevard, 3rd Floor
Sacramento, CA 95811

Subject: SEC Recommendation for the Proposed Florin Perkins Public Disposal Site MRF/LVTS

Dear Ms. Mahaffey:

The Sacramento Environmental Commission ("SEC") is a joint County/City appointed commission chartered to advise the Sacramento County Board of Supervisors and the City Councils of Folsom, Galt, Isleton, Elk Grove and Sacramento on environmental issues facing our communities. The SEC was requested by the project applicant, Zanker Road Resource Management, Ltd. (Zanker), to review the proposed project proposal and offer recommendations for its approval.

6-1

The SEC received a presentation from Zanker at our June 20, 2016 meeting addressing the proposal and findings of the May 2016 City of Sacramento Initial Study/Mitigated Negative Declaration (IS/MND). In addition to this presentation, members of the SEC reviewed the IS/MND and considered comments submitted to your office by the Sacramento County Environmental Management Department (EMD) dated June 9, 2016.

The SEC Commissioners recognize the benefit that the expanded recycling operation brings to the region because processing capacity for construction and demolition material is limited. This project would contribute to meeting the State of California's future 75% solid waste recycling requirement; with the additional processing capacity proposed at this facility being important to meeting the state mandate. We agree with the IS/MND conclusion that

(916) 875-8584 10590 Armstrong Avenue, Mather, CA 95655 sec@saccounty.net

Letter 6
Cont'd

6-1 Cont'd implementation of the proposed project would provide an overall environmental benefit (IS/MND Page 26).

We have noted an item that we request you consider during your review of this proposal. The IS/MND concluded that the noise emission from the operation of the proposed facility would exceed the City's nighttime noise standard as measured at adjacent properties (IS/MND Page 81-82). Restricted operations, avoiding nighttime operations, would avoid this exceedance. We recommend that the permit for this project include a condition that restricts nighttime operations until the time that additional mitigation measures are implemented and proved to reduce noise exposure to acceptable levels. **6-2**

We also recommend that because the existing Solid Waste Facility Permit (SWFP) allows the Local Enforcement Agency (LEA) to consider incremental tonnage increases in the revised SWFP, the City permitted capacity should correspond to the incremental permitted maximums defined by EMD. This coordination would avoid future potential confusion or conflicting permit conditions over this facility. **6-3**

Because the proposed project can be implemented without significant impacts to the environment, the SEC recommends including these two conditions in a permit issued by the City. We appreciate the opportunity to submit this recommendation for your consideration. **6-4**

If you have any questions, please contact Jill Koehn, SEC Secretary at (916) 875-8584 or koehnjill@saccounty.net.

Sincerely,

Richard Hunn

Richard Hunn, Chair
Sacramento Environmental Commission

(916) 875-8584 10590 Armstrong Avenue, Mather, CA 95655 sec@saccounty.net

LETTER 6: RICHARD HUNN, SACRAMENTO ENVIRONMENTAL COMMISSION, JUNE 27, 2016

Response to Comment 6-1

The commenter supports the proposed project and does not comment negatively regarding the adequacy of the IS/MND.

Response to Comment 6-2

The IS/MND analyzed the proposed project's impacts on noise generation and concluded that operations associated with the proposed project had the potential to generate nighttime noise in excess of City standards. To avoid potential impacts caused by such exceedance of City standards, the IS/MND imposed Mitigation Measure 9-1 (pages 83 and 84), which states the following:

> At the time of issuance of the first occupancy permit for any residence located on the property to the north of the project site, a noise survey shall be conducted at the specific location of the proposed residential development to determine if project noise generation is satisfactory relative to City of Sacramento nighttime noise standards. If that survey reveals that project operations are resulting in an exceedance of the City's nighttime noise standard, one of the following noise mitigation options shall be implemented at that time, based on coordination with and subject to review and approval by the Community Development Department:
>
> - Operations of the proposed project shall be limited to daytime hours (i.e., required to begin after 7:00 AM). (Note: Per the approved permit conditions, the allowable hours of operation are 6:00 AM to 6:00 PM [Permit No. Z98-114]); or
> - Additional source-specific noise control measures shall be implemented for the equipment or operations identifies as being responsible for the exceedance of the City's nighttime noise level standard. Such measures could take the form of construction of additional earthen berms or localized sound barriers, procurement of quieter equipment, or nighttime restrictions on certain processes.

The proposed project includes a request for a Conditional Use Permit (CUP) modification and the approval of an additional CUP for the processing of green waste. The mitigation measures identified within the IS/MND would be made Conditions of Approval (COA) for the CUPs requested as part of the proposed project and would also be adopted as part of a Mitigation Monitoring and Reporting Plan. Requiring the mitigation as a COA would ensure that noise exposure would be maintained within acceptable levels, even with the future introduction of sensitive receptors to the area.

Response to Comment 6-3

The comment requests clarification to ensure that the CUPs requested from the City and the Solid Waste Facility Permit (SWFP) requested from the LEA do not conflict. As discussed in Response to Comment 4-5, the IS/MND was intended to provide a conservative analysis of potential

environmental impacts that could result from the granting of permits. By providing an environmental worst-case scenario analysis and assuming a full, immediate permitting of 1,000 TPD, the IS/MND allows the LEA and the City to refine their permitting requirements without the need for further environmental review. As such, the City and the LEA will be able to coordinate during the permitting process to ensure that the CUP and the SWFP do not conflict.

Response to Comment 6-4

The commenter supports the proposed project and does not comment negatively regarding the adequacy of the IS/MND.