

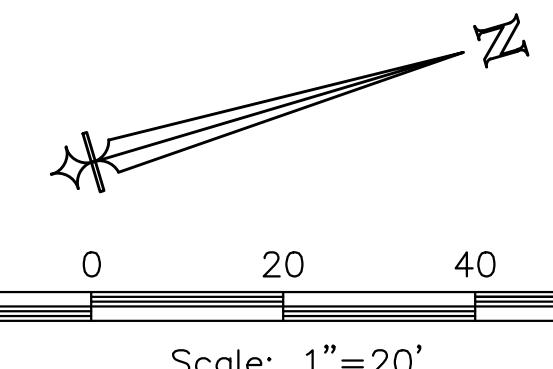
MARINA BLVD.

LEGEND

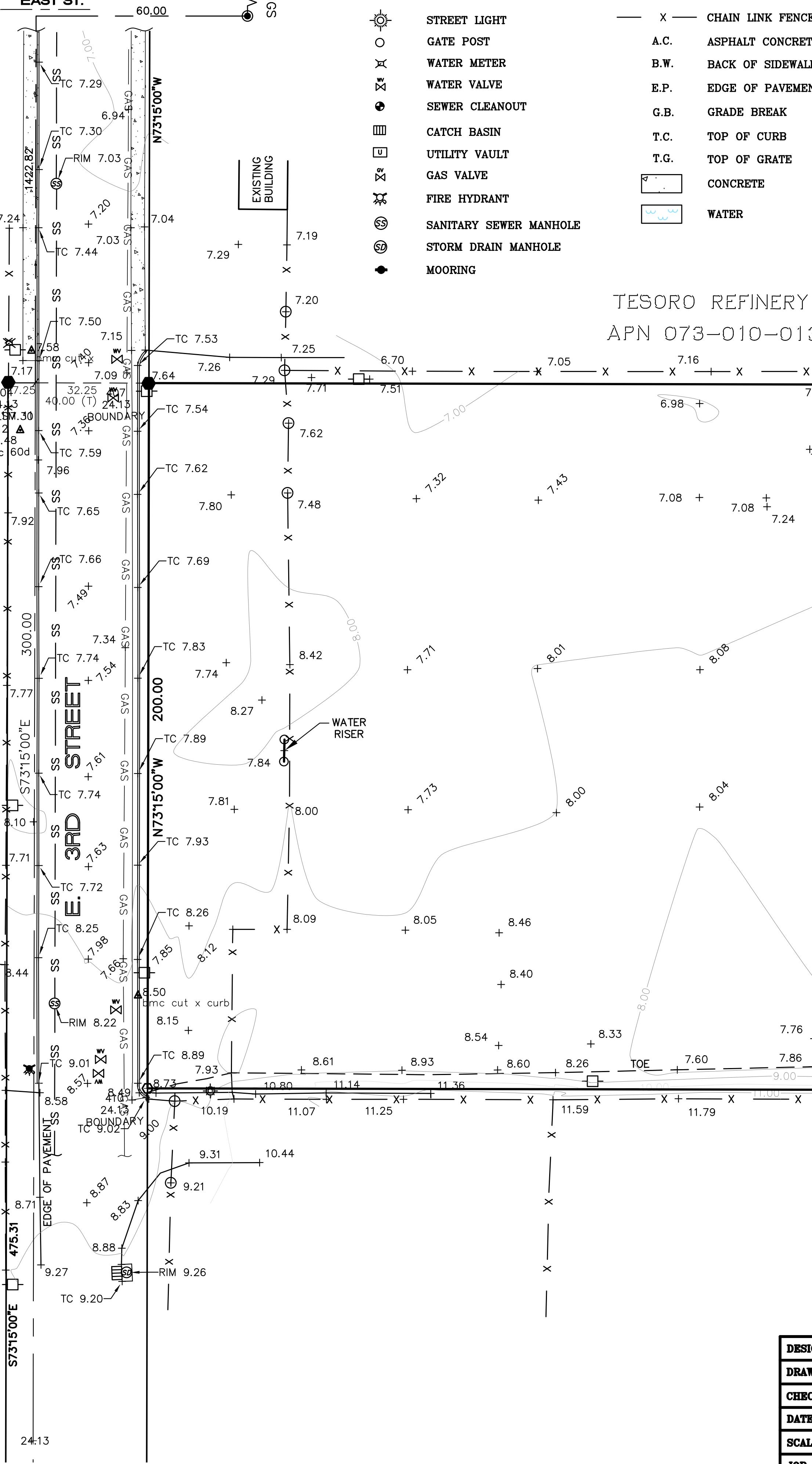
●	FOUND 1 1/2" IP PER 93 LSM 11	SS	SANITARY SEWER LINE
●	FOUND STREET MONUMENT	—	STORM DRAIN LINE
□	POWER POLE	—	WOOD FENCE LINE
○	STREET LIGHT	X	CHAIN LINK FENCE
×	GATE POST	A.C.	ASPHALT CONCRETE
×	WATER METER	B.W.	BACK OF SIDEWALK
×	WATER VALVE	E.P.	EDGE OF PAVEMENT
●	SEWER CLEANOUT	G.B.	GRADE BREAK
■	CATCH BASIN	T.C.	TOP OF CURB
■	UTILITY VAULT	T.G.	TOP OF GRATE
●	GAS VALVE	CONCRETE	
●	FIRE HYDRANT		
●	SANITARY SEWER MANHOLE		
●	STORM DRAIN MANHOLE		
●	MOORING		

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING OF N73°15'00"W AS SHOWN BETWEEN FOUND STREET MONUMENTS ALONG EAST 3RD STREET BETWEEN EAST ST. AND MARINA BLVD. AS SHOWN PER 68 LSM 19 IN THE OFFICE OF THE COUNTY RECORDER OF CONTRA COSTA COUNTY, STATE OF CALIFORNIA.

**OWNER:**

MARINE EXPRESS
695 E. 3RD STREET
PITTSBURG, CALIFORNIA 94565
(510) 853-7645
APRIL 2008

**BENCHMARK**

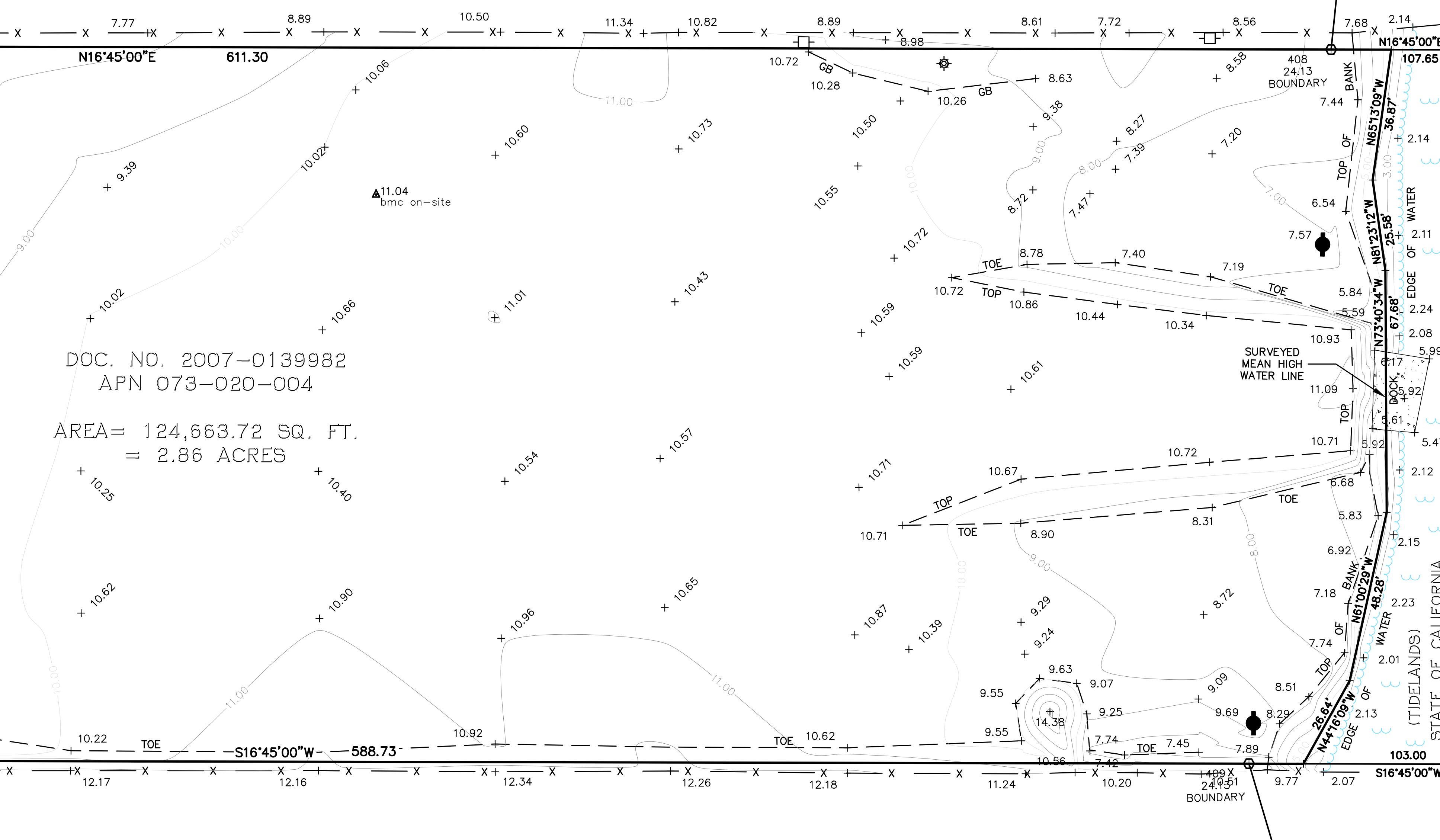
THE ELEVATIONS SHOWN HEREON ARE BASED ON THE ELEVATION OF A USGS BRASS DISK STAMPED "Q376 - RESET" LOCATED ON THE WEST SIDE OF AUTO CENTER DRIVE, APPROXIMATELY 280' NORTH OF THE INTERSECTION OF PITTSBURG-ANTIOCH HIGHWAY (W. 10TH STREET) AND AUTO CENTER DRIVE (SOMERSVILLE ROAD).

ELEVATION = 27.36 AMSL

NOTES:

1. ALL ELEVATIONS ARE GROUND ELEVATION, UNLESS NOTED.
2. THE MEAN HIGH WATER LINE WAS TAKEN AT ELEVATION 3.782 FEET, NGVD 29, PER TIDAL BENCHMARK 941-5096 OF NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (PUBLICATION DATE 4/01/2004).

17 L S M 34

DOC. NO. 2007-0139982
APN 073-020-004AREA = 124,663.72 SQ. FT.
= 2.86 ACRES

ISLE CAPITAL CORP.

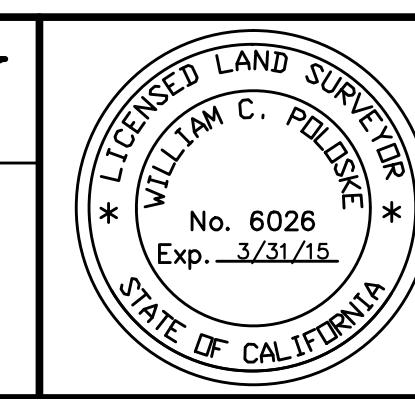
APN 073-020-020

93 L S M 11

DESIGN	W.C.P.
DRAWN	D.H.M.
CHECKED	W.C.P.
DATE	JUNE 2013
SCALE	1"=20'
JOB NO.	08-008

EXISTING SITE SURVEY

FOR:

695 E. 3RD STREET
PITTSBURG, CALIFORNIA

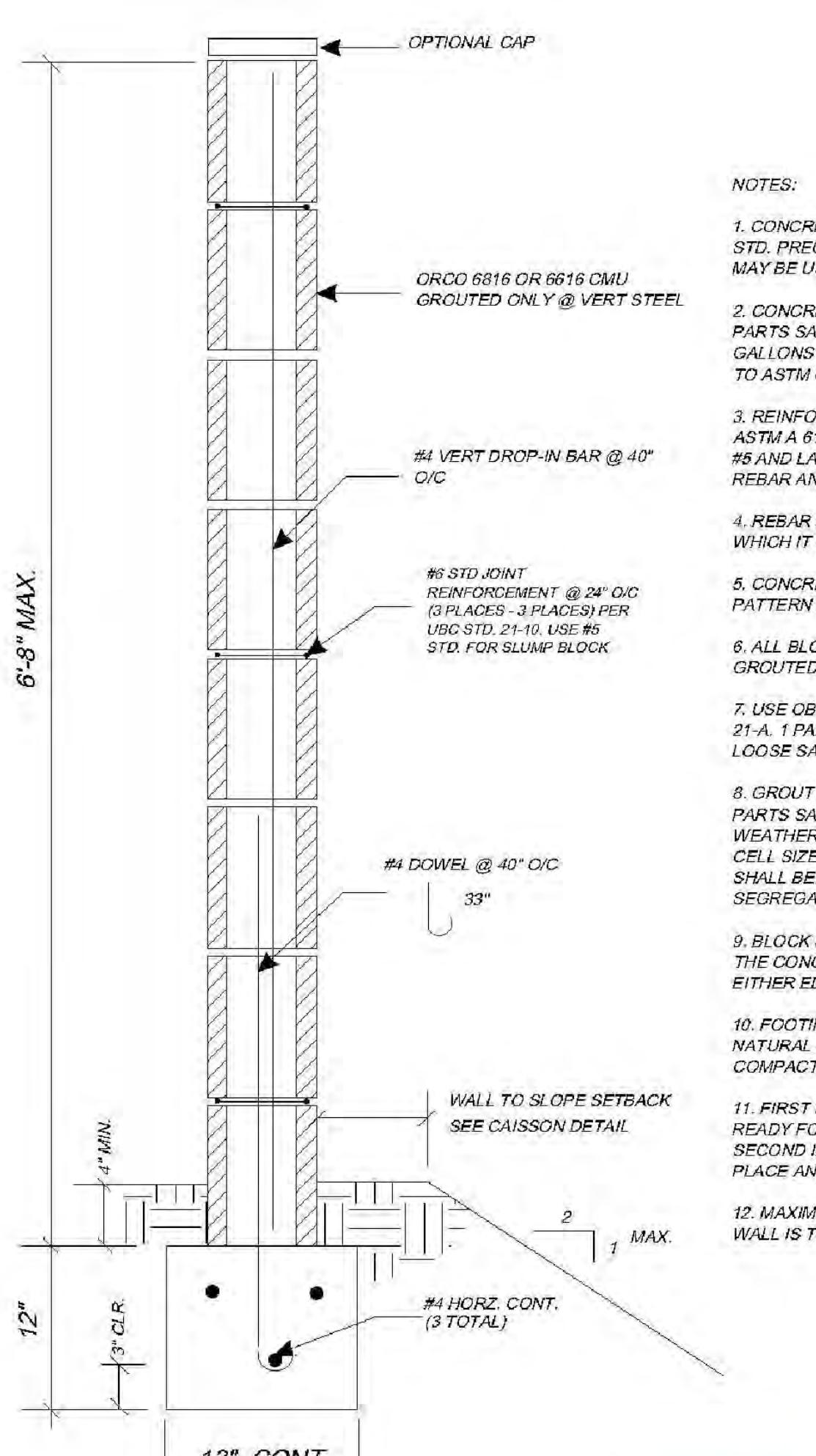
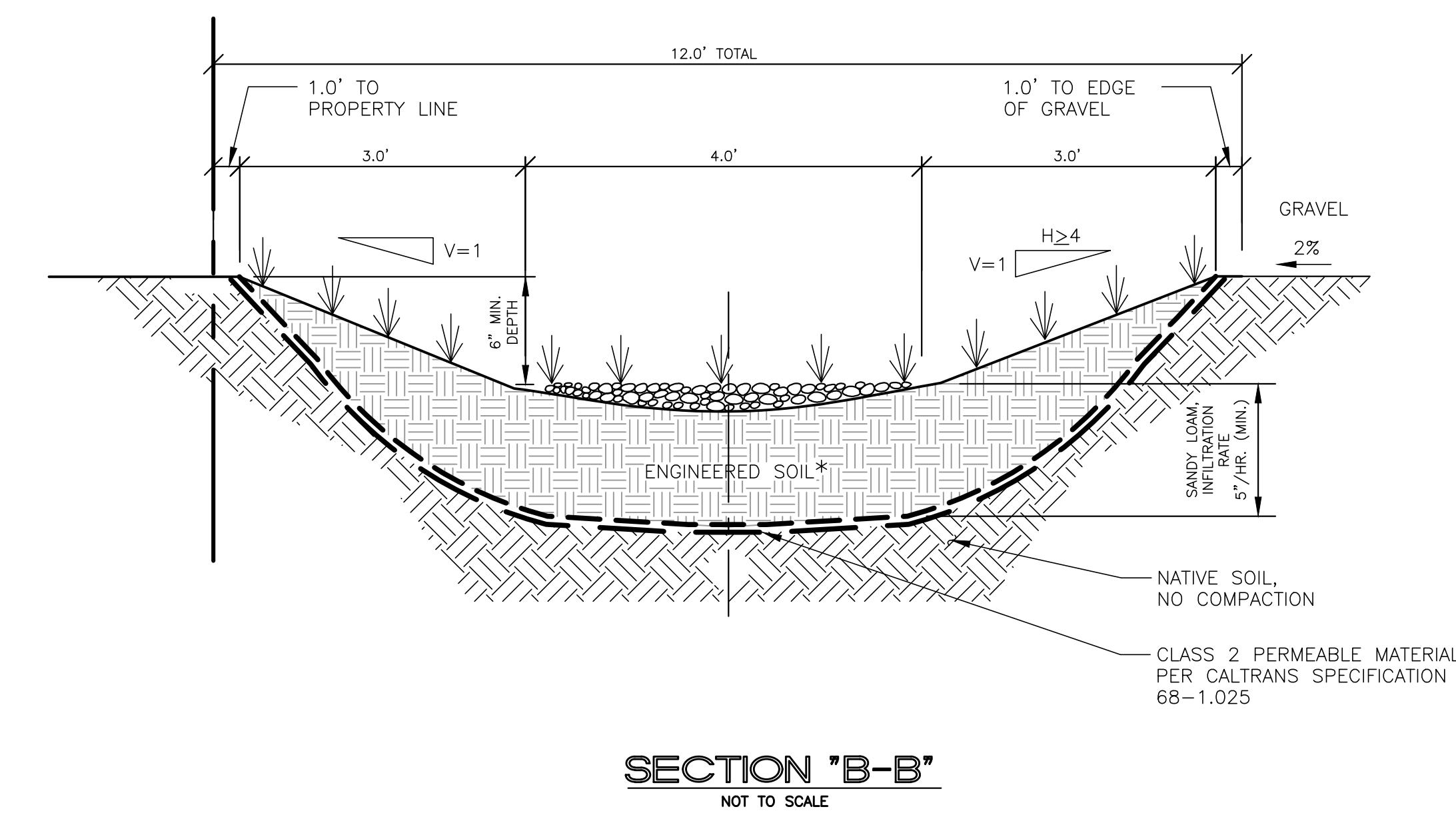
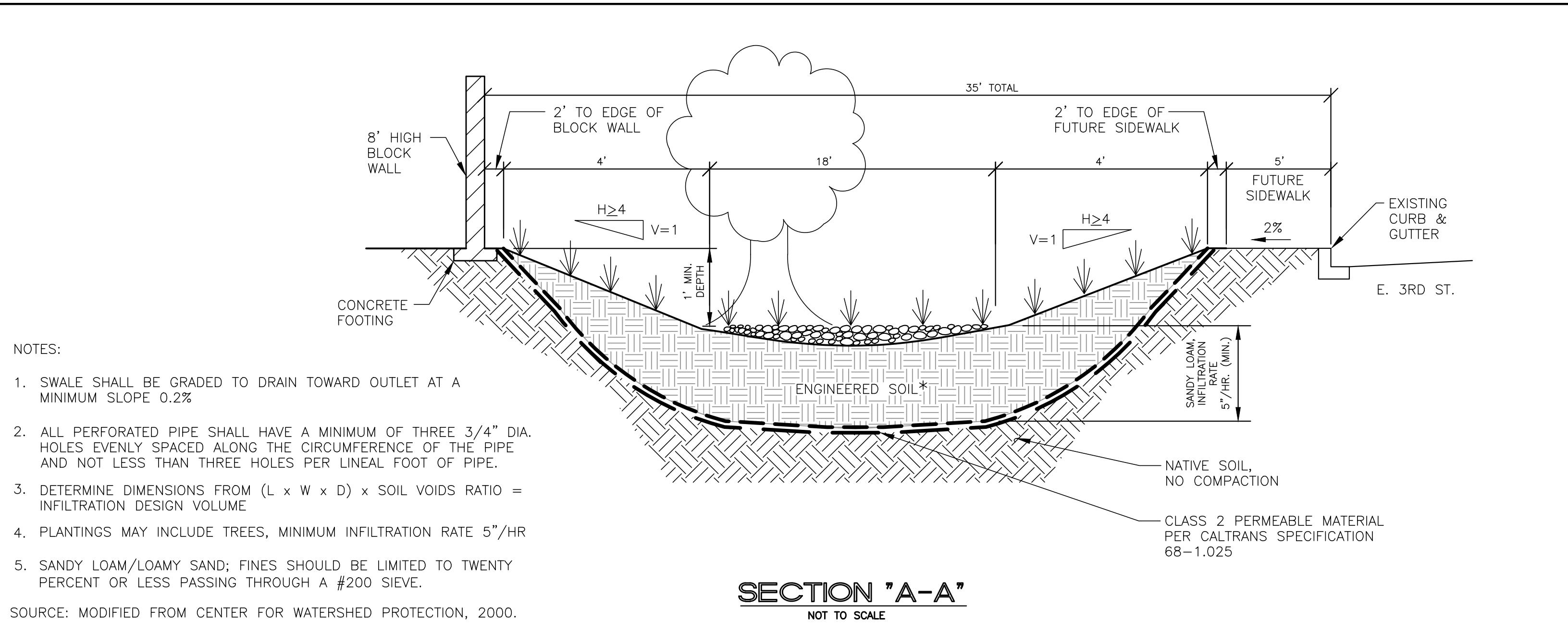
PREPARED UNDER THE DIRECTION OF:

WILLIAM POLOSKE DATE: _____

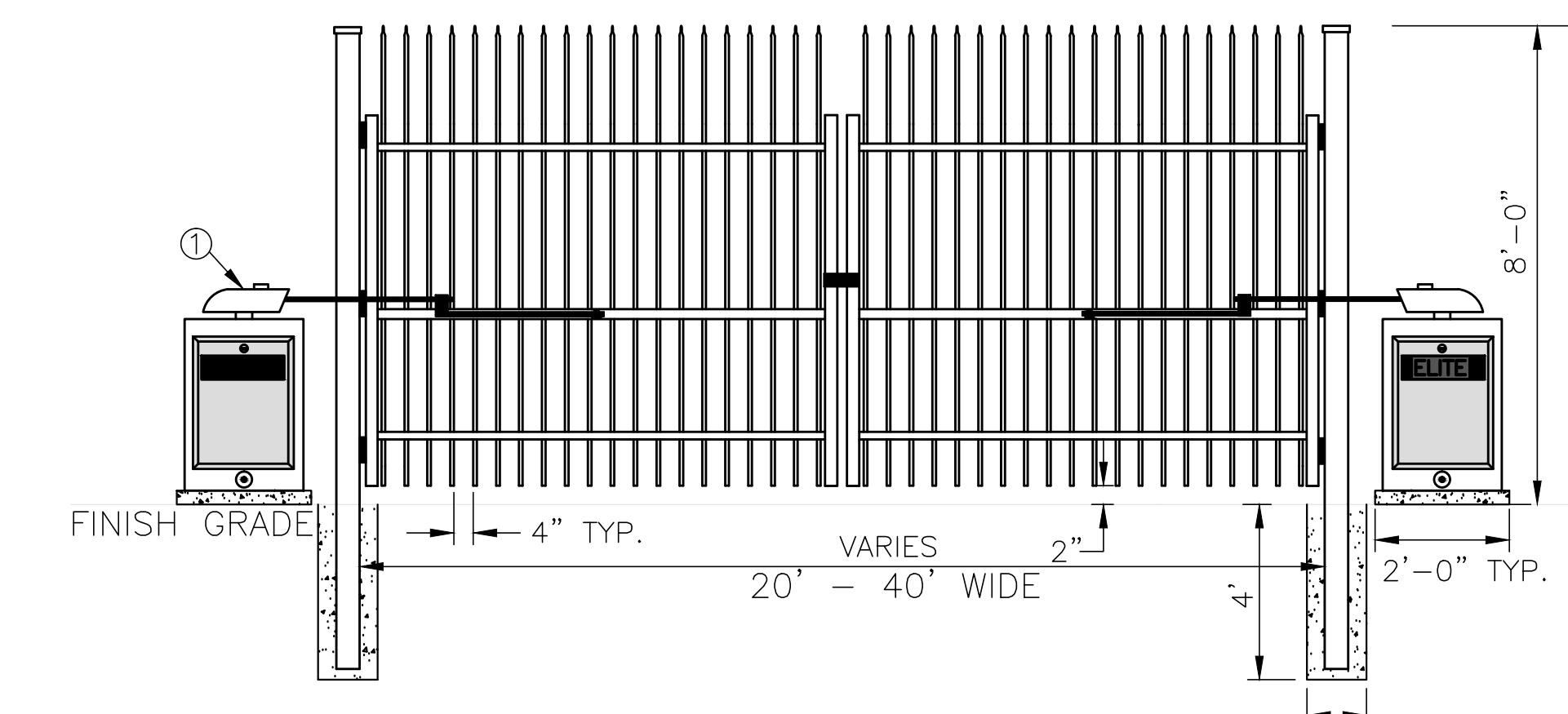
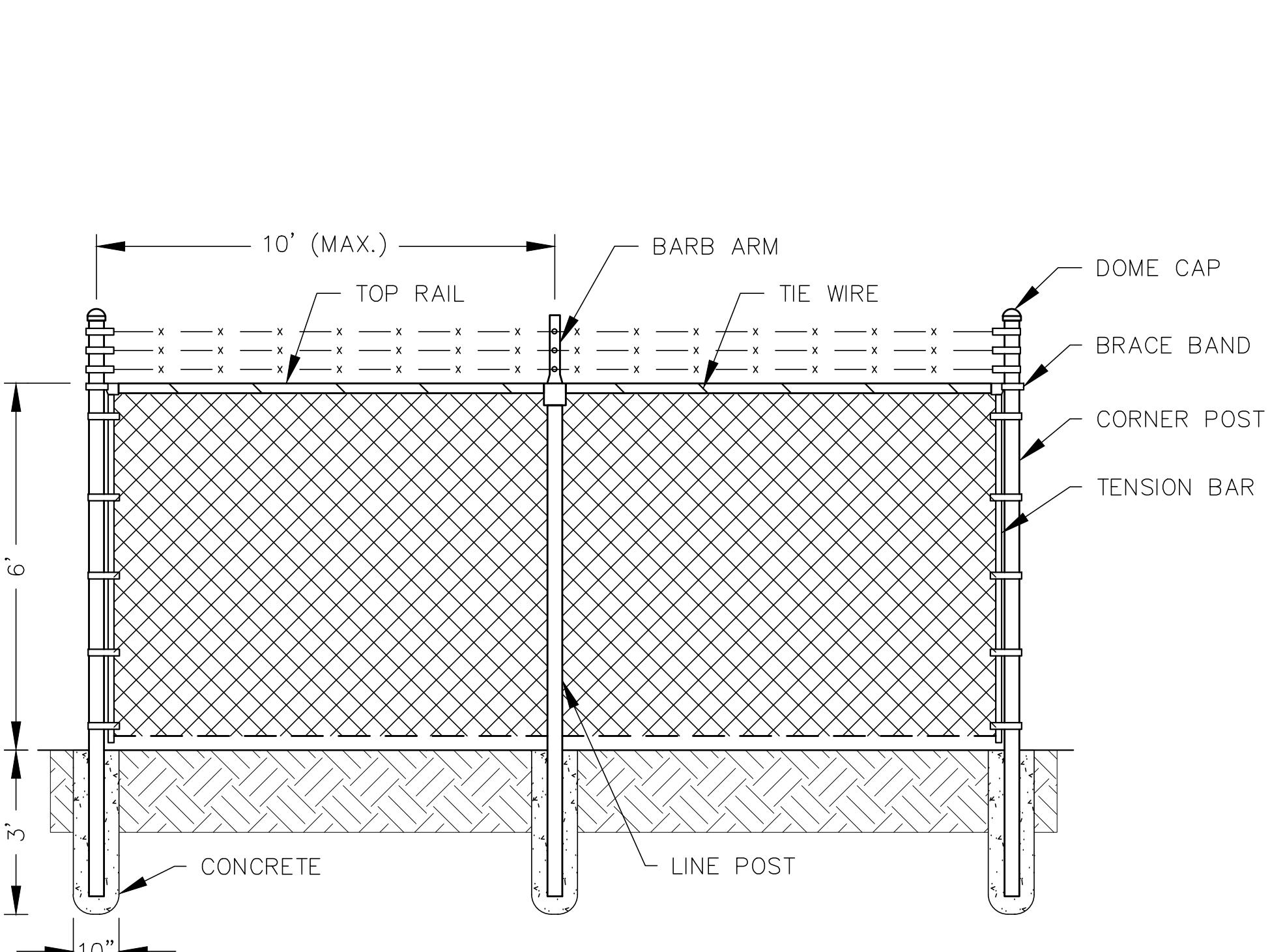
NO.	REVISIONS	DATE	BY

BENCHMARK CONSULTANTS
SURVEYING * MAPPING * ENGINEERING
110 "L" STREET - SUITE 3
ANTIOCH, CALIFORNIA 94509
PHONE (925)757-9035 FAX (925)706-7866

SHEET NO.
P-2
OF SHEETS
3

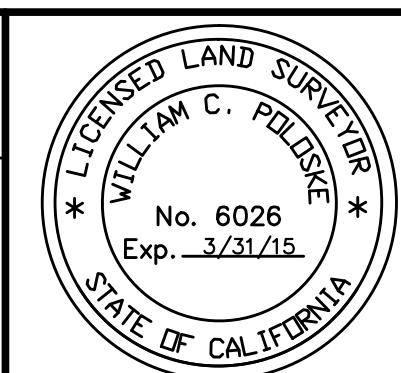


DETAIL "A"
6' HIGH BLOCK WALL DETAIL
NOT TO SCALE



SECTIONS & DETAILS PLAN
FOR:
695 E. 3RD STREET
PITTSBURG, CALIFORNIA

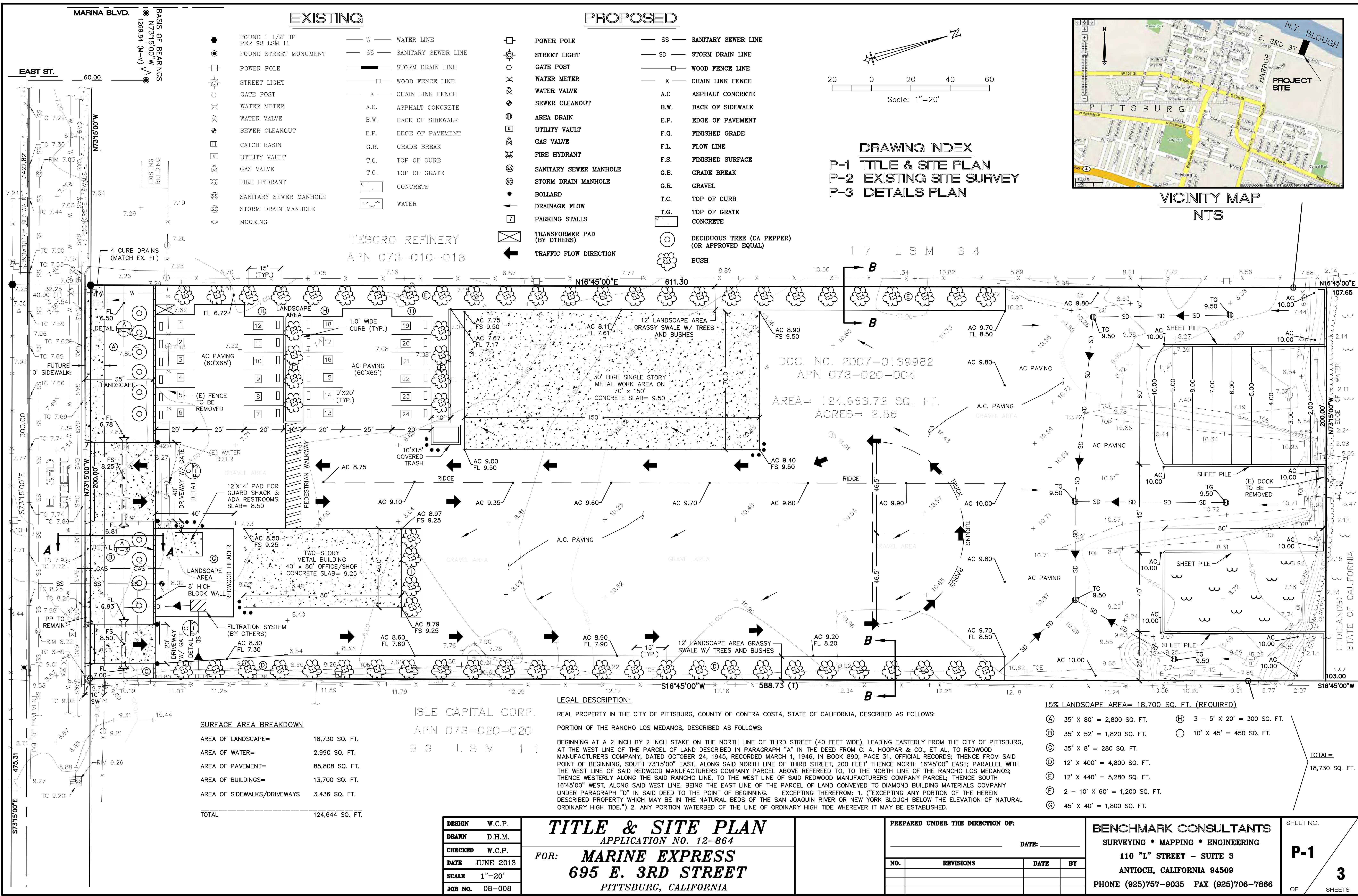
DESIGN W.C.P.
DRAWN D.H.M.
CHECKED W.C.P.
DATE JUNE 2013
SCALE NTS
JOB NO. 08-008



PREPARED UNDER THE DIRECTION OF:
WILLIAM POLOSKE
NO. REVISIONS DATE BY

BENCHMARK CONSULTANTS
SURVEYING * MAPPING * ENGINEERING
110 "L" STREET - SUITE 3
ANTIOCH, CALIFORNIA 94509
PHONE (925)757-9035 FAX (925)706-7866

SHEET NO.
P-3
OF 3 SHEETS









APPENDIX C:

Vicinity Map



March 7, 2013

Mr. Randall Esch
Marine Express, Inc.
2900 Main Street
Alameda, CA 94501

RE: Final Biological Constraint Assessment at 695 East 3rd Street, Pittsburg, CA

Dear Mr. Esch:

This letter summarizes the results of my background information review, site survey, and assessment of biological resources. The project site is located within an industrial area of Pittsburg, CA, with access to the Sacramento and San Joaquin River Delta. Dominant plant species at the site are ruderal species. No special status plant or animal species were identified during the survey, and no additional surveys are recommended. There were no wetlands or riparian areas identified at the site, but certain proposed project related activities that would affect New York Slough are anticipated to require regulatory approvals from federal and state agencies.

Project Location and Description

The project site is located at 695 East 3rd Street in Pittsburg, Contra Costa County, California (Attachment A, Figure 1). The 2.85-acre lot is rectangular with about 200 feet fronting on New York Slough. The project site is across from Brown's Island near the confluence of the Sacramento River and the San Joaquin River. It is within the Antioch North 7.5-minute US Geological Survey quadrangle (quad). The site ranges in elevation from approximately seven feet to 10 feet above mean sea level.

The project site was first developed in the late 1800's and early 1900's for use as a lumber mill storage yard by Redwood Manufacturers Company. Union Oil Company occupied the site in the late 1940's and used it for above ground fuel storage tanks, two storage buildings, a "dispenser island," and an unloading platform that extended offshore into the slough. Between 1974 and 1978 the aboveground storage tanks were removed. Enrico Dredging used the site in the early 1980's for a 10,000 gallon underground diesel-fuel storage tank, a conveyor belt, and truck scale. The site was covered with gravel and used for parking by employees of a nearby power plant in 1990 (Wolfe 2011).

The prior industrial uses resulted in the release of petroleum hydrocarbons, primarily diesel fuel, and some metals, such as chromium, to isolated areas of the site. Remediation has been completed consisting of the demolition of storage buildings and removal of all hazardous materials, excavation of approximately 300 cubic yards of slag-bearing fill from the southeastern portion of the site and backfill with clean fill, excavation of approximately 1,000 cubic yards of petroleum contaminated soil at the western storage building location and backfilled with clean fill, and recovery of groundwater containing dissolved petroleum hydrocarbons that were under the western storage building. The San Francisco Bay Regional Water Quality Control Board has completed a site closure report and ascertained that releases of chemicals of concern (metals and petroleum hydrocarbons) has been addressed and concentrations of these chemicals are below remedial goals (Wolfe 2011). A Covenant

and Environmental Restriction was placed on the property, which prohibits sensitive land uses and restricts soil excavation activities (Wolfe 2011).

Currently, the site is unoccupied. On the southwestern end of the site there is a small office trailer, a small pile of gravel, a few small piles of bricks and concrete blocks, two dumpsters, a backhoe, and two mooring fenders. There are two old mooring dolphins in the slough just off-shore from the site. The southern end of the site has a layer of gravel and some areas of bare soil.

Background Data

Prior to conducting the site survey, I collected information on special status species that may be found at the sites. The primary data source was the California Natural Diversity Data Base (CNDDB) (CDFA 2013). This database was searched for all known sightings of sensitive species within the Antioch North, Antioch South, Honker Bay, and Clayton topographic quad maps. The online database of the California Native Plant Society (CNPS), *Inventory of Rare and Endangered Plants (online edition)* (CNPS 2013) also was searched for plant species within the Antioch North, Antioch South, Honker Bay, Clayton, Jersey Island, Birds Landing, Denverton, Rio Vista, and Brentwood quad maps.

The project site is located within the Urban Development Area (UDA)¹ of the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCC HCP/NCCP) (East Contra Costa County Habitat Conservation Plan Association 2006). The purpose of the ECCC HCP/NCCP is to protect natural resources in eastern Contra Costa County to allow streamlining of the environmental permitting process for impacts on special status species. The ECCC HCP/NCCP provides regional permits in the cities of Brentwood, Clayton, Oakley, and Pittsburg and Contra Costa County² to authorize take³ of 28 listed plant and wildlife species under the Federal Endangered Species Act and the State Natural Communities Conservation Planning Act for future urban development within an approved area. Activities that are covered include “all ground-disturbing activities controlled by permit holders via their land use planning process.” Under the ECCC HCP/NCCP guidelines, all projects are required to:

- maintain hydrologic conditions and minimize erosion;
- avoid direct impacts on extremely rare plants, fully protected wildlife species, or covered migratory birds;
- establish stream setbacks; and
- avoid or minimize impacts to wetlands, ponds, and streams.

¹ The Urban Development Area is the area within the urban limit line of Contra Costa County or the boundaries of the participating cities that are covered by the ECCC HCP/NCCP.

² The ECCC HCP/NCP has been adopted by the City of Pittsburg (Ordinance 15.108, Habitat Conservation Plan/ Natural Community Conservation Plan Implementation Ordinance) and Contra Costa County (Ordinance No. 2007 – 53, Adoption of the East Contra Costa County Habitat Conservation Plan/Natural Communities Conservation Plan Fees and Implementation Procedures).

³ Take, as defined by the Endangered Species Act, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the species, including significant habitat modification.” Take, as defined under the California Fish and Game Code, is as any action or attempt to “hunt, pursue, catch, capture, or kill.”

The ECCC HCP/NCCP is referred to in this letter report and associated species occurrence tables (see Appendix C) to demonstrate which species are covered under the permit. Ten special status plant species in Table C-1 and thirteen special status wildlife species in Table C-2 reported in the vicinity (approximately 10 miles) of the project site are covered under the ECCC HCP/NCCP.

Site Survey

Methods

Jane Steven, ecologist at Brezack & Associates, conducted a reconnaissance-level survey on February 7, 2013. The survey was conducted to assess current biological conditions, to identify vegetation communities at the sites that could support special status species, and, if possible, to identify if any special status species were present. The survey was conducted between 10 am and 12 pm. General site conditions, including vegetation and evidence of wildlife, were observed and are summarized below. Photographs of the site are presented in Attachment B.

Results

Vegetation

Vegetation at the site consists mostly of ruderal, non-native, herbaceous species. This weedy grassland extends north to a short slope with rock revetment (rip-rap), and then into the water of the New York Slough (see Photo 6 in Attachment B). The rocky riprap area provides minimal substrate for plants. The water that is adjacent to the site may provide habitat for aquatic and floating plant species. The dominant plants at the site are burclover (*Medicago polymorpha*) and grasses, including ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordaceus*), and Bermuda grass (*Cynodon dactylon*). All of these species are non-native and typical of disturbed urban areas. Other common species include yellow star thistle (*Centaurea solstitialis*), stork's bill (*Erodium botrys*), prickly lettuce (*Lactuca serriola*), dovefoot geranium (*Geranium molle*). Species that may have been planted at the site are ice plant (*Carpobrotus chilensis*) and the only tree at the site, fan palm (*Washingtonia* sp.). A few plants of Himalian blackberry (*Rubus discolor*), a non-native species that grows in moist areas, were observed along the fence on the western property boundary. The common native salt marsh species, saltgrass (*Distichlis spicata*), was observed throughout the project site.

No special status plant species⁴ were observed at the site during the survey. The project site is unlikely or has a low potential to provide habitat for special status plant species because it is within an area of developed industrial land uses and has been continuously disturbed by a variety of intensive uses for over 100 years. The project site is not within any of the plant species' habitats modeled in the ECCC HCP/NCCP (East Contra Costa County Habitat Conservation Association 2006). Furthermore, special status plant species observed within a radius of approximately ten miles from the proposed project site are unlikely to be found at the site because of lack of appropriate habitat such as chaparral, inland dunes, scrub, forests, woodland, prairie, grassland, serpentine soils or rock, or vernal pools, or

⁴ For purposes of this report, special status plant species include federally- and state-listed endangered, threatened, or rare species, plants proposed or candidates for state or federal listing as endangered, threatened, or rare, as well plants on CNPS's List 1B and List 2, and species that meet CEQA Guidelines, Section 15380 criteria for endangered, rare or threatened species.

have most likely been extirpated, as indicated in Table C-1 in Appendix C. Some species are also found at higher elevations or on slopes that are not present at the site. There may have been salt marsh or alkali marsh at the site prior to development, as indicated by the presence of saltgrass, but none of the other typical plant species remain, and some of the soils have been altered during prior development or remediation.

Six special status plant species have a low potential to be found at the site. Three of these species have a low potential to be found on the upland (nonaquatic) portion of the site, and may occur in alkali wetlands, which was the probably plant community at the site along the slough prior to disturbance: hartscale (*Atriplex cordulata*), San Joaquin spearscale (*Atriplex joaquiniana*), and pappose tarplant (*Centromadia parryi* ssp. *parryi*). No *Atriplex* species were observed at the site, and the highly disturbed site provides poor habitat. The pappose tarplant adapts well to disturbance, but was observed far from the site, reducing likelihood of its presence. Delta tule pea (*Lathrus jepsonii* var. *jepsonii*) has a low potential to be found along the edge of the slough and was not observed during the field survey. Eelgrass pond weed (*Potamogeton zosteriformis*) and Sanford's arrowhead rock sanicle (*Sagittaria sanfordii*) have a low potential to be found in the shallow water area along the New York Slough, and were not observed during the field survey. All of these species have only a CNPS listing status of 1B or 2, which include plants that are rare, threatened, or endangered in California, and none have a Federal or State listing status. The San Joaquin spearscale is covered under the ECCC HCP/NCCP, while none of the other species are covered. Based on the field surveys and data review, no additional focused surveys for these species during their blooming time are necessary or recommended.

Wildlife

With only weedy vegetation and a single palm tree at the site, there is little habitat for terrestrial species to exist at the site. During the field survey a black-tailed jackrabbit (*Lepus californicus*) was observed at the site. Flocks of pigeons or rock doves (*Columba livia*) and white-crowned sparrows (*Zonotrichia leucophrys*) were observed in the tree across the street to the south from the site. Other wildlife that may be found at the site and that are common to ruderal habitats that have adapted to urban development include house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), western scrub-jay (*Aphelocoma californica*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), and house mouse (*Mus musculus*). Potential occurrence of "Special Status" wildlife species on the site is discussed below.

No special status wildlife species⁵ were observed during the site survey. The project site is unlikely to provide habitat for most special status wildlife species due to its industrial setting and disturbed nature. With only one palm tree and little cover, the site does not provide good nesting habitat for most species. The project site is not within any of the wildlife species' habitats modeled in the ECCC HCP/NCCP (East Contra Costa County Habitat Conservation Association 2006). Furthermore, as with the plant species, most special status wildlife species observed within a radius of approximately ten miles from the proposed project site are unlikely to be found at the site because of lack of appropriate

⁵ For purposes of this report, special status wildlife species includes federally- and state-listed endangered, threatened, or rare species, those animals proposed or candidates for state or federal listing as endangered, threatened, or rare, as well as species listed by CDFG as a Species of Special Concern, and species that meet CEQA Guidelines, Section 15380 criteria for endangered, rare or threatened species.

habitat such as chaparral, inland dunes, scrub, forests, woodland, prairie, grassland, serpentine soils or rock, or vernal pools, or are most likely extirpated, as indicated in Table C-2 in Appendix C.

Six special status wildlife species have a low to moderate potential to be found at the site. Five of the species that may occur at the site are birds that could use the site for foraging: ferruginous hawk (*Buteo regalis*), white-tailed kite (*Elanus leucurus*), short-eared owl (*Asio flammeus*), saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), and Suisun song sparrow (*Melospiza melodia maxillaris*). Small mammals and birds at the site may be prey for the raptors and owls. The yellowthroat and song sparrow may forage for insects and seeds at the site. The site does not provide good nesting habitat for any bird species. One fish species, Delta smelt (*Hypomesus transpacificus*) may rear young and forage in New York Slough near the site and adults reportedly migrate past the site in December (City of Pittsburg 2012). Of these species only the smelt is federally-threatened and state-endangered and the white-tailed kite is federally protected. The other species have lower rankings of endangerment. None of these species are covered under the ECCC HCP/NCCP. Based on the field surveys and data review no additional focused surveys are required or recommended.

Wetlands and Riparian Habitat

Impacts to wetlands, riparian areas, and waterways are regulated by the US Army Corps of Engineers (Corps), the California Regional Water Resources Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and the California Department of Fish and Wildlife (CDFW). The Corps regulates the discharge of dredged or fill material into “Waters of the US” under Section 404 of the Clean Water Act (33 U.S.C. 1344). Waters of the US includes wetlands as well as “other waters of the US,” which are hydric features that have a defined bed and bank and an ordinary high-water mark (33 CFR 328.4). Examples of other waters of the U.S. include rivers, creeks, intermittent and ephemeral channels, ponds, and lakes. The discharge of fill into a jurisdictional feature requires a permit from the Corps. The Corps issues nationwide permits (NWPs) for projects that have a minimal individual or cumulative adverse effect on the aquatic environment, and individual permits for projects with greater potential impacts. The SWRCB certifies the Corps’ NWPs to protect water quality and the RWQCB provides certification or waiver of water quality for projects that require an Individual Corps permit. The RWQCB also regulates discharge of waste into “Waters of the State” under the Porter-Cologne Water Quality Control Act, California Water Code Section 13260. Activities that divert, obstruct, or alter stream flow, or substantially modify the bed, channel, or bank or a stream, including riparian vegetation, require a Streambed Alteration Agreement from the CDFW pursuant to Section 1602 of the California Fish and Game Code.

New York Slough, which is a navigable tidal waterway, borders the northern boundary of the project site. The Slough would be considered other waters by the Corps under the Clean Water Act. The water boards and CDFW would also regulate certain activities on the bank and open water areas of New York Slough.

Conclusion

Plant and animal species observed or expected to occur at the site are those typical of disturbed habitats in urban areas. The project site is within the area covered by the ECCC HCP/NCCP however this plan did not identify habitat for any special status species at the project site. The site provides little or no habitat for special status species, none were observed during the field survey, and no

further surveys are necessary. There were no wetlands or riparian areas identified at the site, but certain activities that would affect New York Slough would require regulatory actions from federal and state agencies.

Sincerely,

Jane A. Steven
Ecologist

Attachments

References

- California Department of Fish and Wildlife (CDFW). 2011. *California Natural Diversity Database (CNDDB), Rarefind 3.1.0*. Data collected February 2, 2013.
- CDFW. 2011. Special Animals. Online: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/spanimals.pdf>. Accessed February 15, 2013.
- California Native Plant Society (CNPS). 2013. *Inventory of Rare and Endangered Plants of California (online edition, v8-01a)*. Online: <http://www.rareplants.cnps.org/advanced.html>. Accessed on February 4, 2013.
- City of Pittsburg. 2012. *WesPac Pittsburg Energy Infrastructure Project Draft Environmental Impact Report*. Prepared by TRC. June 2012.
- East Contra Costa County Habitat Conservation Plan Association. 2006. *Final East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan*. Prepared by Jones & Stokes with assistance from Economics and Planning Systems Resources Law Group. October 2006.
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D. J. Wilken, editors. 2012. *The Jepson Manual: vascular plants of California*. University of California Press, Berkeley.
- Wolfe, Bruce H. 2011. Letter from Bruce H. Wolfe, San Francisco Bay Regional Water Quality Control Board, to Randall Esch, Marine Express, Inc. regarding “No Further Action – 695 East Third Street, Pittsburg, Contra Costa County” with Site Closure Summary attachment. September 7, 2011.
- United States Fish and Wildlife Service (USFWS). 2013. Contra Costa County Species Report. Online: http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=0601. Website accessed on February 28, 2013.

Attachment A
Figures



Attachment B
Site Photographs



Photo 1: Looking north at project site



Photo 2: Looking south at project site



Photo 3: Looking east at adjacent industrial uses from project site

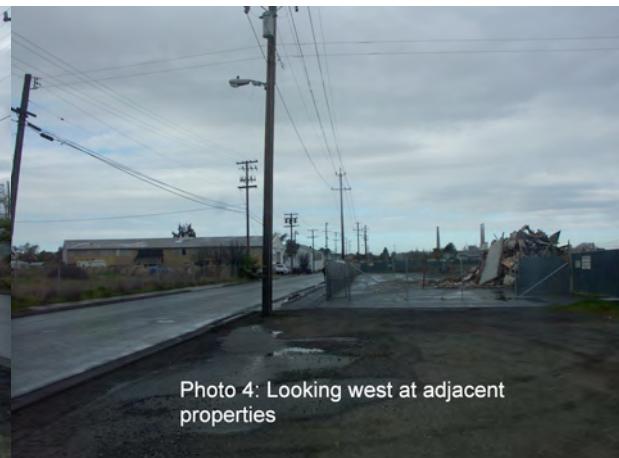


Photo 4: Looking west at adjacent properties



Photo 5: Jackrabbit and palm tree on northeast side of project site



Photo 6: Shoreline of property on New York Slough, looking northeast

Photographs: 625 East 3rd Street, Pittsburg, CA, February 7, 2013

Attachment C
Tables of Special Status Species

Marine Express
Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	7.80	1000sqft	0.18	7,800.00	0
General Light Industry	0.17	1000sqft	0.25	168.00	0
Unrefrigerated Warehouse-No Rail	10.50	1000sqft	0.50	10,500.00	0
Other Asphalt Surfaces	78.00	1000sqft	1.79	78,000.00	0
Other Non-Asphalt Surfaces	3.40	1000sqft	0.08	3,400.00	0
Parking Lot	7.80	1000sqft	0.18	7,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Forecast Climate Zone: 4 (From Appendix F: Zip code 94565 - Pittsburg - Contra Costa County)

Land Use - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : CalEEMod Project Characteristics : Land Use Landscaping accounts for 0.5 acres of the site plan, divided between "Warehouse" and "Guardhouse".

Construction Phase - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases Assumptions for each phase included under "Phase Description".

Off-road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Off-road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Off-road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Off-road Equipment - Trenching anticipated for utilities and landscaping.

Demolition - Site Clear. No demolition required.

Grading - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Accept larger default Total Acres Disturbed (5-acres) to account for larger than default phase duration.

Architectural Coating - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Architectural coating limited to two story building and guard shack interior only. There will be no exterior coating.

Area Coating - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Architectural coating limited to two story building and guard shack interior only. There will be no exterior coating.

Energy Use - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions: Operational-Energy Use

Adjust Nontitle 24 Electricity Energy Intensity for anticipated electrical energy use of 500-MWhr/yr.

Warehouse has no natural gas connection.

Water And Wastewater - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions: Operational-Water Wastewater

Applicant estimate only 1,000,000 gal/yr for entire site. Assume defaults to be conservative.

Solid Waste - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions: Operational-Solid Waste

Assume 20-tons/yr from Two Story Metal Building, and 40 tons/yr from Metal Work Area.

Operational Off-Road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Operations_Equipment.xls

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
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tblConstructionPhase	PhaseEndDate	8/15/2014	7/25/2014
tblConstructionPhase	PhaseEndDate	6/20/2014	6/13/2014
tblConstructionPhase	PhaseStartDate	7/26/2014	7/28/2014

tblConstructionPhase	PhaseStartDate	6/14/2014	6/23/2014
tblConstructionPhase	PhaseStartDate	8/2/2014	7/14/2014
tblConstructionPhase	PhaseStartDate	6/14/2014	6/9/2014
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tblLandUse	LotAcreage	0.24	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	200.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	91.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	183.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	91.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	183.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperHorsePower	226.00	250.00
tblOperationalOffRoadEquipment	OperHorsePower	226.00	120.00
tblOperationalOffRoadEquipment	OperHorsePower	226.00	100.00
tblOperationalOffRoadEquipment	OperHorsePower	89.00	40.00
tblOperationalOffRoadEquipment	OperHorsePower	89.00	60.00
tblOperationalOffRoadEquipment	OperHorsePower	89.00	90.00

tblOperationalOffRoadEquipment	OperHorsePower	84.00	50.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	240.00
tblOperationalOffRoadEquipment	OperHorsePower	122.00	300.00
tblOperationalOffRoadEquipment	OperHorsePower	122.00	225.00
tblOperationalOffRoadEquipment	OperHorsePower	400.00	225.00
tblOperationalOffRoadEquipment	OperHorsePower	400.00	500.00
tblOperationalOffRoadEquipment	OperHorsePower	87.00	15.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	0.20
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	6.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.43
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.43
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.43
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.30
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.30

tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.30
tblOperationalOffRoadEquipment	OperLoadFactor	0.44	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.44	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.38	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.38	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.34	0.62
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblSequestration	NumberOfNewTrees	0.00	70.00
tblSolidWaste	SolidWasteGenerationRate	9.88	20.00
tblSolidWaste	SolidWasteGenerationRate	9.87	40.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	0.1716	0.7260	0.5369	7.3000e-004	0.0421	0.0458	0.0879	0.0194	0.0433	0.0627	0.0000	65.3423	65.3423	0.0143	0.0000	65.6421
Total	0.1716	0.7260	0.5369	7.3000e-004	0.0421	0.0458	0.0879	0.0194	0.0433	0.0627	0.0000	65.3423	65.3423	0.0143	0.0000	65.6421

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					
2014	0.1716	0.7260	0.5369	7.3000e-004	0.0421	0.0458	0.0879	0.0194	0.0433	0.0627	0.0000	65.3423	65.3423	0.0143	0.0000	65.6421
Total	0.1716	0.7260	0.5369	7.3000e-004	0.0421	0.0458	0.0879	0.0194	0.0433	0.0627	0.0000	65.3423	65.3423	0.0143	0.0000	65.6421

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	0.4431	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003
Energy	1.3800e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	168.8492	168.8492	7.2800e-003	1.7000e-003	169.5298
Mobile	0.1653	0.1435	0.6506	1.0500e-003	0.0751	1.9600e-003	0.0771	0.0201	1.8000e-003	0.0219	0.0000	88.1452	88.1452	4.4700e-003	0.0000	88.2391
Offroad	0.2947	2.7214	1.2727	2.1200e-003		0.1558	0.1558		0.1437	0.1437	0.0000	202.3749	202.3749	0.0583	0.0000	203.5985
Waste						0.0000	0.0000		0.0000	0.0000	12.1795	0.0000	12.1795	0.7198	0.0000	27.2950
Water						0.0000	0.0000		0.0000	0.0000	1.3551	6.7234	8.0784	0.1395	3.3500e-003	12.0458
Total	0.9044	2.8775	1.9350	3.2500e-003	0.0751	0.1587	0.2339	0.0201	0.1465	0.1666	13.5345	466.0946	479.6291	0.9293	5.0500e-003	500.7102

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	0.4431	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003	
Energy	1.3800e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	168.8492	168.8492	7.2800e-003	1.7000e-003	169.5298	
Mobile	0.1653	0.1435	0.6506	1.0500e-003	0.0751	1.9600e-003	0.0771	0.0201	1.8000e-003	0.0219	0.0000	88.1452	88.1452	4.4700e-003	0.0000	88.2391	
Offroad	0.2947	2.7214	1.2727	2.1200e-003		0.1558	0.1558		0.1437	0.1437	0.0000	202.3749	202.3749	0.0583	0.0000	203.5985	
Waste						0.0000	0.0000		0.0000	0.0000	12.1795	0.0000	12.1795	0.7198	0.0000	27.2950	
Water						0.0000	0.0000		0.0000	0.0000	1.3551	6.7234	8.0784	0.1395	3.3400e-003	12.0436	
Total	0.9044	2.8775	1.9350	3.2500e-003	0.0751	0.1587	0.2339	0.0201	0.1465	0.1666	13.5345	466.0946	479.6291	0.9293	5.0400e-003	500.7080	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	32.58	94.58	65.78	65.23	0.00	98.16	66.63	0.00	98.12	86.27	0.00	43.42	42.19	6.27	0.20	40.66

2.3 Vegetation

Vegetation

		CO2e
Category	tons	MT
New Trees	49.5600	
Vegetation Land Change	-10.4733	
Total	39.0867	

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	6/2/2014	6/13/2014	5	10	Additional grading anticipated for marine inlet and slipway.
2	Trenching	Trenching	6/9/2014	6/13/2014	5	5	Trenching anticipated for utilities and landscaping.
3	Building Construction	Building Construction	6/23/2014	8/1/2014	5	30	Buildings include simple metal building, a covered metal work area, and a guard shack with restrooms.
4	Paving	Paving	7/14/2014	7/25/2014	5	10	
5	Architectural Coating	Architectural Coating	7/28/2014	8/1/2014	5	5	Architectural coating limited to two story building and guard shack interior only.

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,008; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20

Building Construction	Generator Sets		1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes		1	6.00	97	0.37
Building Construction	Welders		3	8.00	46	0.45
Paving	Cement and Mortar Mixers		1	8.00	9	0.56
Paving	Pavers		1	8.00	125	0.42
Paving	Paving Equipment		1	8.00	130	0.36
Paving	Rollers		2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes		1	8.00	97	0.37
Architectural Coating	Air Compressors		1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	1	3.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	45.00	18.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2014

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					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0149	0.1581	0.1015	1.0000e-004		8.8800e-003	8.8800e-003		8.1700e-003	8.1700e-003	0.0000	9.9218	9.9218	2.9300e-003	0.0000	9.9833	
Total	0.0149	0.1581	0.1015	1.0000e-004	0.0328	8.8800e-003	0.0416	0.0168	8.1700e-003	0.0250	0.0000	9.9218	9.9218	2.9300e-003	0.0000	9.9833	

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	1.0400e-003	3.5000e-004	3.4100e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4401	0.4401	3.0000e-005	0.0000	0.4407	
Total	1.0400e-003	3.5000e-004	3.4100e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4401	0.4401	3.0000e-005	0.0000	0.4407	

3.2 Grading - 2014

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					0.0328	0.0000	0.0328	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0149	0.1581	0.1015	1.0000e-004		8.8800e-003	8.8800e-003		8.1700e-003	8.1700e-003	0.0000	9.9217	9.9217	2.9300e-003	0.0000	9.9833	
Total	0.0149	0.1581	0.1015	1.0000e-004	0.0328	8.8800e-003	0.0416	0.0168	8.1700e-003	0.0250	0.0000	9.9217	9.9217	2.9300e-003	0.0000	9.9833	

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	1.0400e-003	3.5000e-004	3.4100e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4401	0.4401	3.0000e-005	0.0000	0.4407	
Total	1.0400e-003	3.5000e-004	3.4100e-003	1.0000e-005	4.6000e-004	0.0000	4.6000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.4401	0.4401	3.0000e-005	0.0000	0.4407	

3.3 Trenching - 2014

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	1.4400e-003	0.0127	7.0500e-003	1.0000e-005		9.9000e-004	9.9000e-004		9.1000e-004	9.1000e-004	0.0000	0.8332	0.8332	2.5000e-004	0.0000	0.8384	
Total	1.4400e-003	0.0127	7.0500e-003	1.0000e-005		9.9000e-004	9.9000e-004		9.1000e-004	9.1000e-004	0.0000	0.8332	0.8332	2.5000e-004	0.0000	0.8384	

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	1.6000e-004	5.0000e-005	5.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0660	0.0660	0.0000	0.0000	0.0661	
Total	1.6000e-004	5.0000e-005	5.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0660	0.0660	0.0000	0.0000	0.0661	

3.3 Trenching - 2014

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	1.4400e-003	0.0127	7.0500e-003	1.0000e-005		9.9000e-004	9.9000e-004		9.1000e-004	9.1000e-004	0.0000	0.8332	0.8332	2.5000e-004	0.0000	0.8384	
Total	1.4400e-003	0.0127	7.0500e-003	1.0000e-005		9.9000e-004	9.9000e-004		9.1000e-004	9.1000e-004	0.0000	0.8332	0.8332	2.5000e-004	0.0000	0.8384	

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	1.6000e-004	5.0000e-005	5.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0660	0.0660	0.0000	0.0000	0.0661	
Total	1.6000e-004	5.0000e-005	5.1000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0660	0.0660	0.0000	0.0000	0.0661	

3.4 Building Construction - 2014

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	0.0652	0.4043	0.2607	3.7000e-004		0.0282	0.0282		0.0271	0.0271	0.0000	32.3279	32.3279	8.0600e-003	0.0000	32.4972	
Total	0.0652	0.4043	0.2607	3.7000e-004		0.0282	0.0282		0.0271	0.0271	0.0000	32.3279	32.3279	8.0600e-003	0.0000	32.4972	

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	8.1100e-003	0.0362	0.0451	6.0000e-005	1.7400e-003	6.9000e-004	2.4300e-003	5.0000e-004	6.3000e-004	1.1300e-003	0.0000	5.9626	5.9626	6.0000e-005	0.0000	5.9639	
Worker	0.0141	4.6700e-003	0.0460	7.0000e-005	6.1500e-003	6.0000e-005	6.2000e-003	1.6300e-003	5.0000e-005	1.6900e-003	0.0000	5.9414	5.9414	3.7000e-004	0.0000	5.9492	
Total	0.0222	0.0409	0.0911	1.3000e-004	7.8900e-003	7.5000e-004	8.6300e-003	2.1300e-003	6.8000e-004	2.8200e-003	0.0000	11.9040	11.9040	4.3000e-004	0.0000	11.9131	

3.4 Building Construction - 2014

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	0.0652	0.4043	0.2607	3.7000e-004		0.0282	0.0282		0.0271	0.0271	0.0000	32.3278	32.3278	8.0600e-003	0.0000	32.4972	
Total	0.0652	0.4043	0.2607	3.7000e-004		0.0282	0.0282		0.0271	0.0271	0.0000	32.3278	32.3278	8.0600e-003	0.0000	32.4972	

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	8.1100e-003	0.0362	0.0451	6.0000e-005	1.7400e-003	6.9000e-004	2.4300e-003	5.0000e-004	6.3000e-004	1.1300e-003	0.0000	5.9626	5.9626	6.0000e-005	0.0000	5.9639	
Worker	0.0141	4.6700e-003	0.0460	7.0000e-005	6.1500e-003	6.0000e-005	6.2000e-003	1.6300e-003	5.0000e-005	1.6900e-003	0.0000	5.9414	5.9414	3.7000e-004	0.0000	5.9492	
Total	0.0222	0.0409	0.0911	1.3000e-004	7.8900e-003	7.5000e-004	8.6300e-003	2.1300e-003	6.8000e-004	2.8200e-003	0.0000	11.9040	11.9040	4.3000e-004	0.0000	11.9131	

3.5 Paving - 2014

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	9.9000e-003	0.1019	0.0613	9.0000e-005		6.3700e-003	6.3700e-003		5.8700e-003	5.8700e-003	0.0000	8.3528	8.3528	2.4200e-003	0.0000	8.4037	
Paving	2.5800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0125	0.1019	0.0613	9.0000e-005		6.3700e-003	6.3700e-003		5.8700e-003	5.8700e-003	0.0000	8.3528	8.3528	2.4200e-003	0.0000	8.4037	

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	1.5600e-003	5.2000e-004	5.1100e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6602	0.6602	4.0000e-005	0.0000	0.6610	
Total	1.5600e-003	5.2000e-004	5.1100e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6602	0.6602	4.0000e-005	0.0000	0.6610	

3.5 Paving - 2014

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	9.9000e-003	0.1019	0.0613	9.0000e-005		6.3700e-003	6.3700e-003		5.8700e-003	5.8700e-003	0.0000	8.3528	8.3528	2.4200e-003	0.0000	8.4037	
Paving	2.5800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0125	0.1019	0.0613	9.0000e-005		6.3700e-003	6.3700e-003		5.8700e-003	5.8700e-003	0.0000	8.3528	8.3528	2.4200e-003	0.0000	8.4037	

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	1.5600e-003	5.2000e-004	5.1100e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6602	0.6602	4.0000e-005	0.0000	0.6610	
Total	1.5600e-003	5.2000e-004	5.1100e-003	1.0000e-005	6.8000e-004	1.0000e-005	6.9000e-004	1.8000e-004	1.0000e-005	1.9000e-004	0.0000	0.6602	0.6602	4.0000e-005	0.0000	0.6610	

3.6 Architectural Coating - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	0.0510						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1200e-003	6.9400e-003	4.8000e-003	1.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	0.6383	0.6383	9.0000e-005	0.0000	0.6402	
Total	0.0521	6.9400e-003	4.8000e-003	1.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	0.6383	0.6383	9.0000e-005	0.0000	0.6402	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.7000e-004	1.6000e-004	1.5300e-003	0.0000	2.0000e-004	0.0000	2.1000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.1981	0.1981	1.0000e-005	0.0000	0.1983	
Total	4.7000e-004	1.6000e-004	1.5300e-003	0.0000	2.0000e-004	0.0000	2.1000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.1981	0.1981	1.0000e-005	0.0000	0.1983	

3.6 Architectural Coating - 2014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	0.0510						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.1200e-003	6.9400e-003	4.8000e-003	1.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	0.6383	0.6383	9.0000e-005	0.0000	0.6402	
Total	0.0521	6.9400e-003	4.8000e-003	1.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	0.6383	0.6383	9.0000e-005	0.0000	0.6402	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.7000e-004	1.6000e-004	1.5300e-003	0.0000	2.0000e-004	0.0000	2.1000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.1981	0.1981	1.0000e-005	0.0000	0.1983	
Total	4.7000e-004	1.6000e-004	1.5300e-003	0.0000	2.0000e-004	0.0000	2.1000e-004	5.0000e-005	0.0000	6.0000e-005	0.0000	0.1981	0.1981	1.0000e-005	0.0000	0.1983	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Unmitigated	0.1653	0.1435	0.6506	1.0500e-003	0.0751	1.9600e-003	0.0771	0.0201	1.8000e-003	0.0219	0.0000	88.1452	88.1452	4.4700e-003	0.0000	88.2391	
Mitigated	0.1653	0.1435	0.6506	1.0500e-003	0.0751	1.9600e-003	0.0771	0.0201	1.8000e-003	0.0219	0.0000	88.1452	88.1452	4.4700e-003	0.0000	88.2391	

4.2 Trip Summary Information

		Average Daily Trip Rate			Unmitigated		Mitigated	
Land Use		Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Light Industry		54.37	10.30	5.30	119,879		119,879	
General Light Industry		1.18	0.22	0.12	2,613		2,613	
Other Asphalt Surfaces		0.00	0.00	0.00				
Other Non-Asphalt Surfaces		0.00	0.00	0.00				
Parking Lot		0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail		27.20	27.20	27.20	79,396		79,396	
Total		82.75	37.72	32.61	201,888		201,888	

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		9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Light Industry		9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces		9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces		9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot		9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No		9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.526919	0.065238	0.176274	0.147663	0.036918	0.004962	0.009404	0.019426	0.001222	0.001497	0.006279	0.002142	0.002057

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

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					
NaturalGas Mitigated	1.3800e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.7000	13.7000	2.6000e-004	2.5000e-004	13.7834	
NaturalGas Unmitigated	1.3800e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.7000	13.7000	2.6000e-004	2.5000e-004	13.7834	
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	155.1492	155.1492	7.0200e-003	1.4500e-003	155.7465	
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	155.1492	155.1492	7.0200e-003	1.4500e-003	155.7465	

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	213798	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4091	11.4091	2.2000e-004	2.1000e-004	11.4785	
General Light Industry	4604.88	2.0000e-005	2.3000e-004	1.9000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2457	0.2457	0.0000	0.0000	0.2472	
Other Asphalt Surfaces	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	
Other Non-Asphalt Surfaces	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	
Parking Lot	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	
Unrefrigerated Warehouse-No Rail	38325	2.1000e-004	1.8800e-003	1.5800e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0452	2.0452	4.0000e-005	4.0000e-005	2.0576	
Total		1.3800e-003	0.0126	0.0106	7.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.7000	13.7000	2.6000e-004	2.5000e-004	13.7834	

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	213798	1.1500e-003	0.0105	8.8000e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4091	11.4091	2.2000e-004	2.1000e-004	11.4785	
General Light Industry	4604.88	2.0000e-005	2.3000e-004	1.9000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2457	0.2457	0.0000	0.0000	0.2472	
Other Asphalt Surfaces	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	
Other Non-Asphalt Surfaces	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	
Parking Lot	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	
Unrefrigerated Warehouse-No Rail	38325	2.1000e-004	1.8800e-003	1.5800e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	2.0452	2.0452	4.0000e-005	4.0000e-005	2.0576	
Total		1.3800e-003	0.0126	0.0106	7.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	13.7000	13.7000	2.6000e-004	2.5000e-004	13.7834	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
General Light Industry	164034		47.7194	2.1600e-003	4.5000e-004	47.9031
General Light Industry	3533.04		1.0278	5.0000e-005	1.0000e-005	1.0318
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	6864		1.9968	9.0000e-005	2.0000e-005	2.0045
Unrefrigerated Warehouse-No Rail	358890		104.4052	4.7200e-003	9.8000e-004	104.8071
Total			155.1492	7.0200e-003	1.4600e-003	155.7465

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use		Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	tons/yr	MT/yr			
General Light Industry	164034		47.7194	2.1600e-003	4.5000e-004	47.9031
General Light Industry	3533.04		1.0278	5.0000e-005	1.0000e-005	1.0318
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	6864		1.9968	9.0000e-005	2.0000e-005	2.0045
Unrefrigerated Warehouse-No Rail	358890		104.4052	4.7200e-003	9.8000e-004	104.8071
Total			155.1492	7.0200e-003	1.4600e-003	155.7465

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Unmitigated	0.4431	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003	
Mitigated	0.4431	1.0000e-005	1.0300e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0225						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4205						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000			0.0000	0.0000		0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003
Total	0.4431	1.0000e-005	1.0300e-003	0.0000			0.0000	0.0000		0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0225						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4205						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.0300e-003	0.0000			0.0000	0.0000		0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003
Total	0.4431	1.0000e-005	1.0300e-003	0.0000			0.0000	0.0000		0.0000	0.0000	1.9200e-003	1.9200e-003	1.0000e-005	0.0000	2.0400e-003

7.0 Water Detail

7.1 Mitigation Measures Water

		Total CO2	CH4	N2O	CO2e
Category	tons/yr	MT/yr			
Unmitigated		8.0784	0.1395	3.3500e-003	12.0458
Mitigated		8.0784	0.1395	3.3400e-003	12.0436

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
General Light Industry	1.84306 / 0		3.4859	0.0602	1.4500e-003	5.1979
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Diesel	2.42813 / 0		4.5925	0.0793	1.9000e-003	6.8479
Total			8.0784	0.1395	3.3500e-003	12.0458

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use		Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr	MT/yr			
General Light Industry	1.84306 / 0		3.4859	0.0602	1.4400e-003	5.1969
Other Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Diesel	2.42813 / 0		4.5925	0.0793	1.9000e-003	6.8467
Total			8.0784	0.1395	3.3400e-003	12.0436

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

		Total CO2	CH4	N2O	CO2e
	tons/yr	MT/yr			
Mitigated		12.1795	0.7198	0.0000	27.2950
Unmitigated		12.1795	0.7198	0.0000	27.2950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
General Light Industry	20		4.0598	0.2399	0.0000	9.0983
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Soil	40		8.1196	0.4799	0.0000	18.1966
Total			12.1795	0.7198	0.0000	27.2950

8.2 Waste by Land Use

Mitigated

	Waste Disposed		Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr	MT/yr			
General Light Industry	20		4.0598	0.2399	0.0000	9.0983
Other Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0		0.0000	0.0000	0.0000	0.0000
Parking Lot	0		0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	40		8.1196	0.4799	0.0000	18.1966
Total			12.1795	0.7198	0.0000	27.2950

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Cranes	1	2.00	250	250	0.43	Diesel
Cranes	1	2.00	250	120	0.43	Diesel
Cranes	1	2.00	250	100	0.43	Diesel
Forklifts	1	4.00	250	40	0.30	Diesel
Forklifts	1	1.00	260	60	0.30	Diesel
Forklifts	1	1.00	260	90	0.30	Diesel
Generator Sets	1	1.00	200	50	0.74	Diesel
Generator Sets	1	0.20	250	240	0.74	Diesel
Off-Highway Tractors	1	4.00	91	300	0.57	Diesel
Off-Highway Tractors	1	2.00	183	225	0.57	Diesel
Off-Highway Trucks	1	4.00	91	225	0.57	Diesel
Off-Highway Trucks	1	2.00	183	500	0.57	Diesel
Other General Industrial Equipment	1	2.00	260	15	0.62	Diesel
Other General Industrial Equipment	1	6.00	250	87	0.34	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0382	0.1678	0.1495	1.3000e-004		0.0161	0.0161		0.0148	0.0148	0.0000	12.9393	12.9393	3.8200e-003	0.0000	13.0196
Generator Sets	0.0147	0.0806	0.0493	1.2000e-004		4.2600e-003	4.2600e-003		4.2600e-003	4.2600e-003	0.0000	9.2519	9.2519	1.2000e-003	0.0000	9.2770
Off-Highway Tractors	0.0209	0.2929	0.0843	2.5000e-004		0.0105	0.0105		9.6700e-003	9.6700e-003	0.0000	24.1443	24.1443	7.1300e-003	0.0000	24.2941
Off-Highway Trucks	0.0701	0.8188	0.3380	8.1000e-004		0.0328	0.0328		0.0301	0.0301	0.0000	78.2921	78.2921	0.0231	0.0000	78.7780
Other General Industrial	0.0467	0.3586	0.2336	2.7000e-004		0.0310	0.0310		0.0285	0.0285	0.0000	25.6083	25.6083	7.5700e-003	0.0000	25.7673
Cranes	0.1041	1.0028	0.4182	5.4000e-004		0.0612	0.0612		0.0563	0.0563	0.0000	52.1390	52.1390	0.0154	0.0000	52.4626
Total	0.2946	2.7214	1.2727	2.1200e-003		0.1558	0.1558		0.1437	0.1437	0.0000	202.3749	202.3749	0.0583	0.0000	203.5985

10.0 Vegetation

		Total CO2	CH4	N2O	CO2e
Category	tons	MT			
Unmitigated		39.0867	0.0000	0.0000	39.0867

10.1 Vegetation Land Change

Vegetation Type

	Initial/Final		Total CO2	CH4	N2O	CO2e
	Acres	tons	MT			
Grassland	-2.86 / 0.43		-10.4733	0.0000	0.0000	-10.4733
Total			-10.4733	0.0000	0.0000	-10.4733

10.2 Net New Trees

Species Class

	Number of Trees		Total CO2	CH4	N2O	CO2e
		tons	MT			
Miscellaneous	70		49.5600	0.0000	0.0000	49.5600
Total			49.5600	0.0000	0.0000	49.5600

Marine Express
Contra Costa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	7.80	1000sqft	0.18	7,800.00	0
General Light Industry	0.17	1000sqft	0.25	168.00	0
Unrefrigerated Warehouse-No Rail	10.50	1000sqft	0.50	10,500.00	0
Other Asphalt Surfaces	78.00	1000sqft	1.79	78,000.00	0
Other Non-Asphalt Surfaces	3.40	1000sqft	0.08	3,400.00	0
Parking Lot	7.80	1000sqft	0.18	7,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2014
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Forecast Climate Zone: 4 (From Appendix F: Zip code 94565 - Pittsburg - Contra Costa County)

Land Use - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : CalEEMod Project Characteristics : Land Use Landscaping accounts for 0.5 acres of the site plan, divided between "Warehouse" and "Guardhouse".

Construction Phase - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases Assumptions for each phase included under "Phase Description".

Off-road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Off-road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Off-road Equipment -

Off-road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Off-road Equipment - Trenching anticipated for utilities and landscaping.

Demolition - Site Clear. No demolition required.

Grading - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Accept larger default Total Acres Disturbed (5-acres) to account for larger than default phase duration.

Architectural Coating - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Architectural coating limited to two story building and guard shack interior only. There will be no exterior coating.

Area Coating - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions : Construction Phases

Architectural coating limited to two story building and guard shack interior only. There will be no exterior coating.

Energy Use - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions: Operational-Energy Use

Adjust Nontitle 24 Electricity Energy Intensity for anticipated electrical energy use of 500-MWhr/yr.

Warehouse has no natural gas connection.

Water And Wastewater - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions: Operational-Water Wastewater

Applicant estimate only 1,000,000 gal/yr for entire site. Assume defaults to be conservative.

Solid Waste - For detailed description of assumptions, see 20131007_CalEEMod_Emission_Assumptions: Operational-Solid Waste

Assume 20-tons/yr from Two Story Metal Building, and 40 tons/yr from Metal Work Area.

Operational Off-Road Equipment - For detailed description of assumptions, see 20131007_CalEEMod_Operations_Equipment.xls

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	50,051.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	150,153.00	22,008.00
tblAreaCoating	Area_Nonresidential_Exterior	50051	0
tblAreaCoating	Area_Nonresidential_Interior	150153	22008
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	220.00	30.00

tblConstructionPhase	NumDays	6.00	10.00
tblConstructionPhase	PhaseEndDate	7/25/2014	8/1/2014
tblConstructionPhase	PhaseEndDate	8/15/2014	7/25/2014
tblConstructionPhase	PhaseEndDate	6/20/2014	6/13/2014
tblConstructionPhase	PhaseStartDate	7/26/2014	7/28/2014
tblConstructionPhase	PhaseStartDate	6/14/2014	6/23/2014
tblConstructionPhase	PhaseStartDate	8/2/2014	7/14/2014
tblConstructionPhase	PhaseStartDate	6/14/2014	6/9/2014
tblEnergyUse	NT24E	3.70	15.70
tblEnergyUse	NT24E	1.07	31.40
tblLandUse	LandUseSquareFeet	170.00	168.00
tblLandUse	LotAcreage	0.00	0.25
tblLandUse	LotAcreage	0.24	0.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	200.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	91.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	183.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	91.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	183.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	250.00
tblOperationalOffRoadEquipment	OperHorsePower	226.00	250.00
tblOperationalOffRoadEquipment	OperHorsePower	226.00	120.00
tblOperationalOffRoadEquipment	OperHorsePower	226.00	100.00
tblOperationalOffRoadEquipment	OperHorsePower	89.00	40.00

tblOperationalOffRoadEquipment	OperHorsePower	89.00	60.00
tblOperationalOffRoadEquipment	OperHorsePower	89.00	90.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	50.00
tblOperationalOffRoadEquipment	OperHorsePower	84.00	240.00
tblOperationalOffRoadEquipment	OperHorsePower	122.00	300.00
tblOperationalOffRoadEquipment	OperHorsePower	122.00	225.00
tblOperationalOffRoadEquipment	OperHorsePower	400.00	225.00
tblOperationalOffRoadEquipment	OperHorsePower	400.00	500.00
tblOperationalOffRoadEquipment	OperHorsePower	87.00	15.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	1.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	0.20
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	6.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.43
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.43
tblOperationalOffRoadEquipment	OperLoadFactor	0.29	0.43
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.30
tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.30

tblOperationalOffRoadEquipment	OperLoadFactor	0.20	0.30
tblOperationalOffRoadEquipment	OperLoadFactor	0.44	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.44	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.38	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.38	0.57
tblOperationalOffRoadEquipment	OperLoadFactor	0.34	0.62
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	1.00
tblSequestration	NumberOfNewTrees	0.00	70.00
tblSolidWaste	SolidWasteGenerationRate	9.88	20.00
tblSolidWaste	SolidWasteGenerationRate	9.87	40.00

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						
2014	26.8045	50.0340	36.4811	0.0538	6.6749	3.2051	8.8492	3.4000	3.0251	5.4003	0.0000	5,290.6110	5,290.6110	1.1681	0.0000	5,315.1405	
Total	26.8045	50.0340	36.4811	0.0538	6.6749	3.2051	8.8492	3.4000	3.0251	5.4003	0.0000	5,290.6110	5,290.6110	1.1681	0.0000	5,315.1405	

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						
2014	26.8045	50.0340	36.4811	0.0538	6.6749	3.2051	8.8492	3.4000	3.0251	5.4003	0.0000	5,290.6110	5,290.6110	1.1681	0.0000	5,315.1405	
Total	26.8045	50.0340	36.4811	0.0538	6.6749	3.2051	8.8492	3.4000	3.0251	5.4003	0.0000	5,290.6110	5,290.6110	1.1681	0.0000	5,315.1405	

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	2.3332	1.1000e-004	0.0115	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	7.0000e-005		0.0250	
Energy	7.5900e-003	0.0690	0.0579	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003		82.7487	82.7487	1.5900e-003	1.5200e-003	83.2523	
Mobile	1.0714	0.8833	4.3446	7.4300e-003	0.5113	0.0129	0.5242	0.1366	0.0118	0.1483		684.9099	684.9099	0.0325		685.5913	
Offroad	2.9160	28.1673	12.5669	0.0229		1.5103	1.5103		1.3927	1.3927		2,413.233 5	2,413.233 5	0.6989		2,427.910 8	
Total	6.3282	29.1196	16.9809	0.0308	0.5113	1.5284	2.0397	0.1366	1.4098	1.5463		3,180.915 7	3,180.915 7	0.7330	1.5200e-003	3,196.779 5	

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	2.3332	1.1000e-004	0.0115	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0236	0.0236	7.0000e-005		0.0250	
Energy	7.5900e-003	0.0690	0.0579	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	82.7487	82.7487	1.5900e-003	1.5200e-003	83.2523	
Mobile	1.0714	0.8833	4.3446	7.4300e-003	0.5113	0.0129	0.5242	0.1366	0.0118	0.1483	684.9099	684.9099	0.0325		685.5913	
Offroad	2.9160	28.1673	12.5669	0.0229		1.5103	1.5103		1.3927	1.3927	2,413.2335	2,413.2335	0.6989		2,427.9108	
Total	6.3282	29.1196	16.9809	0.0308	0.5113	1.5284	2.0397	0.1366	1.4098	1.5463	3,180.9157	3,180.9157	0.7330	1.5200e-003	3,196.7795	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	46.08	96.73	74.01	74.51	0.00	98.81	74.04	0.00	98.79	90.07	0.00	75.87	75.87	95.35	0.00	75.95

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	6/2/2014	6/13/2014	5	10	Additional grading anticipated for marine inlet and slipway.
2	Trenching	Trenching	6/9/2014	6/13/2014	5	5	Trenching anticipated for utilities and landscaping.
3	Building Construction	Building Construction	6/23/2014	8/1/2014	5	30	Buildings include simple metal building, a covered metal work area, and a guard shack with restrooms.
4	Paving	Paving	7/14/2014	7/25/2014	5	10	
5	Architectural Coating	Architectural Coating	7/28/2014	8/1/2014	5	5	Architectural coating limited to two story building and guard shack interior only.

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,008; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Trenching	Trenchers	1	8.00	80	0.50
Building Construction	Cranes	1	8.00	226	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	4	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	1	3.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	45.00	18.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	9.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Grading - 2014

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.9828	31.6276	20.3007	0.0206		1.7760	1.7760		1.6340	1.6340	2,187.373 0	2,187.373 0	0.6464			2,200.947 2
Total	2.9828	31.6276	20.3007	0.0206	6.5523	1.7760	8.3284	3.3675	1.6340	5.0014	2,187.373 0	2,187.373 0	0.6464			2,200.947 2

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		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
Worker	0.2037	0.0617	0.7390	1.1800e-003	0.0943	8.5000e-004	0.0952	0.0250	7.7000e-004	0.0258	105.6444	105.6444	6.0700e-003			105.7718
Total	0.2037	0.0617	0.7390	1.1800e-003	0.0943	8.5000e-004	0.0952	0.0250	7.7000e-004	0.0258	105.6444	105.6444	6.0700e-003			105.7718

3.2 Grading - 2014

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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.9828	31.6276	20.3007	0.0206		1.7760	1.7760		1.6340	1.6340	0.0000	2,187.372 9	2,187.372 9	0.6464		2,200.947 2
Total	2.9828	31.6276	20.3007	0.0206	6.5523	1.7760	8.3284	3.3675	1.6340	5.0014	0.0000	2,187.372 9	2,187.372 9	0.6464		2,200.947 2

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	0.2037	0.0617	0.7390	1.1800e-003	0.0943	8.5000e-004	0.0952	0.0250	7.7000e-004	0.0258			105.6444	105.6444	6.0700e-003	105.7718
Total	0.2037	0.0617	0.7390	1.1800e-003	0.0943	8.5000e-004	0.0952	0.0250	7.7000e-004	0.0258			105.6444	105.6444	6.0700e-003	105.7718

3.3 Trenching - 2014

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	0.5772	5.0916	2.8210	3.4600e-003		0.3971	0.3971		0.3654	0.3654		367.3895	367.3895	0.1086		369.6694	
Total	0.5772	5.0916	2.8210	3.4600e-003		0.3971	0.3971		0.3654	0.3654		367.3895	367.3895	0.1086		369.6694	

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	0.0611	0.0185	0.2217	3.5000e-004	0.0283	2.6000e-004	0.0286	7.5000e-003	2.3000e-004	7.7400e-003		31.6933	31.6933	1.8200e-003		31.7315	
Total	0.0611	0.0185	0.2217	3.5000e-004	0.0283	2.6000e-004	0.0286	7.5000e-003	2.3000e-004	7.7400e-003		31.6933	31.6933	1.8200e-003		31.7315	

3.3 Trenching - 2014

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	0.5772	5.0916	2.8210	3.4600e-003		0.3971	0.3971		0.3654	0.3654	0.0000	367.3895	367.3895	0.1086		369.6694	
Total	0.5772	5.0916	2.8210	3.4600e-003		0.3971	0.3971		0.3654	0.3654	0.0000	367.3895	367.3895	0.1086		369.6694	

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		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	
Worker	0.0611	0.0185	0.2217	3.5000e-004	0.0283	2.6000e-004	0.0286	7.5000e-003	2.3000e-004	7.7400e-003	31.6933	31.6933	1.8200e-003			31.7315	
Total	0.0611	0.0185	0.2217	3.5000e-004	0.0283	2.6000e-004	0.0286	7.5000e-003	2.3000e-004	7.7400e-003	31.6933	31.6933	1.8200e-003			31.7315	

3.4 Building Construction - 2014

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	4.3480	26.9541	17.3783	0.0249		1.8799	1.8799		1.8047	1.8047		2,375.692	2,375.692	0.5925		2,388.135	
Total	4.3480	26.9541	17.3783	0.0249		1.8799	1.8799		1.8047	1.8047		2,375.692	2,375.692	0.5925		2,388.135	

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	0.5086	2.3356	2.4131	4.3000e-003	0.1194	0.0456	0.1650	0.0341	0.0419	0.0760		439.5707	439.5707	4.5400e-003		439.6662	
Worker	0.9169	0.2775	3.3254	5.3000e-003	0.4244	3.8300e-003	0.4282	0.1126	3.4800e-003	0.1160		475.3998	475.3998	0.0273		475.9731	
Total	1.4255	2.6131	5.7386	9.6000e-003	0.5438	0.0494	0.5932	0.1466	0.0454	0.1920		914.9706	914.9706	0.0318		915.6393	

3.4 Building Construction - 2014

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	4.3480	26.9541	17.3783	0.0249			1.8799	1.8799		1.8047	1.8047	0.0000	2,375.692	2,375.692	0.5925		2,388.135
Total	4.3480	26.9541	17.3783	0.0249			1.8799	1.8799		1.8047	1.8047	0.0000	2,375.692	2,375.692	0.5925		2,388.135

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	0.0000	0.0000	
Vendor	0.5086	2.3356	2.4131	4.3000e-003	0.1194	0.0456	0.1650	0.0341	0.0419	0.0760	439.5707	439.5707	4.5400e-003			439.6662	
Worker	0.9169	0.2775	3.3254	5.3000e-003	0.4244	3.8300e-003	0.4282	0.1126	3.4800e-003	0.1160	475.3998	475.3998	0.0273			475.9731	
Total	1.4255	2.6131	5.7386	9.6000e-003	0.5438	0.0494	0.5932	0.1466	0.0454	0.1920	914.9706	914.9706	0.0318			915.6393	

3.5 Paving - 2014

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	1.9808	20.3743	12.2558	0.0176		1.2745	1.2745		1.1738	1.1738	1,841.481 5	1,841.481 5	0.5346			1,852.707 8
Paving	0.5161					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000
Total	2.4969	20.3743	12.2558	0.0176		1.2745	1.2745		1.1738	1.1738	1,841.481 5	1,841.481 5	0.5346			1,852.707 8

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		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
Worker	0.3056	0.0925	1.1085	1.7700e-003	0.1415	1.2800e-003	0.1427	0.0375	1.1600e-003	0.0387	158.4666	158.4666	9.1000e-003			158.6577
Total	0.3056	0.0925	1.1085	1.7700e-003	0.1415	1.2800e-003	0.1427	0.0375	1.1600e-003	0.0387	158.4666	158.4666	9.1000e-003			158.6577

3.5 Paving - 2014

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	1.9808	20.3743	12.2558	0.0176		1.2745	1.2745		1.1738	1.1738	0.0000	1,841.481 5	1,841.481 5	0.5346		1,852.707 8
Paving	0.5161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.4969	20.3743	12.2558	0.0176		1.2745	1.2745		1.1738	1.1738	0.0000	1,841.481 5	1,841.481 5	0.5346		1,852.707 8

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		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
Worker	0.3056	0.0925	1.1085	1.7700e-003	0.1415	1.2800e-003	0.1427	0.0375	1.1600e-003	0.0387	158.4666	158.4666	9.1000e-003			158.6577
Total	0.3056	0.0925	1.1085	1.7700e-003	0.1415	1.2800e-003	0.1427	0.0375	1.1600e-003	0.0387	158.4666	158.4666	9.1000e-003			158.6577

3.6 Architectural Coating - 2014

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					
Archit. Coating	20.4014						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.4462	2.7773	1.9216	2.9700e-003		0.2452	0.2452		0.2452	0.2452		281.4481	281.4481	0.0401		282.2905
Total	20.8476	2.7773	1.9216	2.9700e-003		0.2452	0.2452		0.2452	0.2452		281.4481	281.4481	0.0401		282.2905

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	0.1834	0.0555	0.6651	1.0600e-003	0.0849	7.7000e-004	0.0856	0.0225	7.0000e-004	0.0232		95.0800	95.0800	5.4600e-003		95.1946
Total	0.1834	0.0555	0.6651	1.0600e-003	0.0849	7.7000e-004	0.0856	0.0225	7.0000e-004	0.0232		95.0800	95.0800	5.4600e-003		95.1946

3.6 Architectural Coating - 2014

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					
Archit. Coating	20.4014						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.4462	2.7773	1.9216	2.9700e-003		0.2452	0.2452		0.2452	0.2452	0.0000	281.4481	281.4481	0.0401		282.2905
Total	20.8476	2.7773	1.9216	2.9700e-003		0.2452	0.2452		0.2452	0.2452	0.0000	281.4481	281.4481	0.0401		282.2905

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		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
Worker	0.1834	0.0555	0.6651	1.0600e-003	0.0849	7.7000e-004	0.0856	0.0225	7.0000e-004	0.0232	95.0800	95.0800	5.4600e-003			95.1946
Total	0.1834	0.0555	0.6651	1.0600e-003	0.0849	7.7000e-004	0.0856	0.0225	7.0000e-004	0.0232		95.0800	95.0800	5.4600e-003		95.1946

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					
Unmitigated	1.0714	0.8833	4.3446	7.4300e-003	0.5113	0.0129	0.5242	0.1366	0.0118	0.1483	684.9099	684.9099	0.0325			685.5913	
Mitigated	1.0714	0.8833	4.3446	7.4300e-003	0.5113	0.0129	0.5242	0.1366	0.0118	0.1483	684.9099	684.9099	0.0325			685.5913	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	54.37	10.30	5.30	119,879	119,879
General Light Industry	1.18	0.22	0.12	2,613	2,613
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	27.20	27.20	27.20	79,396	79,396
Total	82.75	37.72	32.61	201,888	201,888

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.526919	0.065238	0.176274	0.147663	0.036918	0.004962	0.009404	0.019426	0.001222	0.001497	0.006279	0.002142	0.002057

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

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	lb/day										lb/day					
NaturalGas Unmitigated	7.5900e-003	0.0690	0.0579	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	82.7487	82.7487	1.5900e-003	1.5200e-003	83.2523	
NaturalGas Mitigated	7.5900e-003	0.0690	0.0579	4.1000e-004		5.2400e-003	5.2400e-003		5.2400e-003	5.2400e-003	82.7487	82.7487	1.5900e-003	1.5200e-003	83.2523	

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	12.6161	1.4000e-004	1.2400e-003	1.0400e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		1.4843	1.4843	3.0000e-005	3.0000e-005	1.4933	
General Light Industry	585.748	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9115	68.9115	1.3200e-003	1.2600e-003	69.3309	
Other Asphalt Surfaces	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	
Other Non-Asphalt Surfaces	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	
Parking Lot	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	
Unrefrigerated Warehouse-No Rail	105	1.1300e-003	0.0103	8.6500e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.3529	12.3529	2.4000e-004	2.3000e-004	12.4281	
Total		7.5900e-003	0.0690	0.0579	4.1000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003		82.7487	82.7487	1.5900e-003	1.5200e-003	83.2523	

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	0.0126161	1.4000e-004	1.2400e-003	1.0400e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		1.4843	1.4843	3.0000e-005	3.0000e-005	1.4933	
General Light Industry	0.585748	6.3200e-003	0.0574	0.0482	3.4000e-004		4.3600e-003	4.3600e-003		4.3600e-003	4.3600e-003		68.9115	68.9115	1.3200e-003	1.2600e-003	69.3309	
Other Asphalt Surfaces	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	
Other Non-Asphalt Surfaces	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	
Parking Lot	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	
Unrefrigerated Warehouse-No Rail	0.105	1.1300e-003	0.0103	8.6500e-003	6.0000e-005		7.8000e-004	7.8000e-004		7.8000e-004	7.8000e-004		12.3529	12.3529	2.4000e-004	2.3000e-004	12.4281	
Total		7.5900e-003	0.0690	0.0579	4.1000e-004		5.2300e-003	5.2300e-003		5.2300e-003	5.2300e-003		82.7487	82.7487	1.5900e-003	1.5200e-003	83.2523	

6.0 Area Detail

6.1 Mitigation Measures Area

No Hearths Installed

	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					
Unmitigated	2.3332	1.1000e-004	0.0115	0.0000		4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0236	0.0236	7.0000e-005		0.0250			
Mitigated	2.3332	1.1000e-004	0.0115	0.0000		4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0236	0.0236	7.0000e-005		0.0250			

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	0.0280					0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Consumer Products	2.3041					0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Landscaping	1.1600e-003	1.1000e-004	0.0115	0.0000		4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0236	0.0236	7.0000e-005		0.0250		
Total	2.3332	1.1000e-004	0.0115	0.0000		4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0236	0.0236	7.0000e-005		0.0250		

6.2 Area by SubCategory

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	0.0280						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Consumer Products	2.3041						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Landscaping	1.1600e-003	1.1000e-004	0.0115	0.0000			4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	7.0000e-005	0.0250	
Total	2.3332	1.1000e-004	0.0115	0.0000			4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0236	0.0236	7.0000e-005		0.0250

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
Cranes	1	2.00	250	250	0.43	Diesel
Cranes	1	2.00	250	120	0.43	Diesel
Cranes	1	2.00	250	100	0.43	Diesel
Forklifts	1	4.00	250	40	0.30	Diesel
Forklifts	1	1.00	260	60	0.30	Diesel
Forklifts	1	1.00	260	90	0.30	Diesel
Generator Sets	1	1.00	200	50	0.74	Diesel
Generator Sets	1	0.20	250	240	0.74	Diesel
Off-Highway Tractors	1	4.00	91	300	0.57	Diesel
Off-Highway Tractors	1	2.00	183	225	0.57	Diesel
Off-Highway Trucks	1	4.00	91	225	0.57	Diesel
Off-Highway Trucks	1	2.00	183	500	0.57	Diesel
Other General Industrial Equipment	1	2.00	260	15	0.62	Diesel
Other General Industrial Equipment	1	6.00	250	87	0.34	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						
Generator Sets	0.1408	0.7270	0.4705	1.0400e-003		0.0404	0.0404		0.0404	0.0404	90.8593	90.8593	0.0126			91.1246	
Off-Highway Tractors	0.2288	3.2012	0.9207	2.7400e-003		0.1149	0.1149		0.1057	0.1057	290.8688	290.8688	0.0860			292.6739	
Off-Highway Trucks	1.0406	12.0420	4.7924	0.0116		0.4919	0.4919		0.4526	0.4526	1,234.7786	1,234.7786	0.3649			1,242.4413	
Other General Industrial Equipment	0.3710	2.8594	1.8582	2.1200e-003		0.2469	0.2469		0.2271	0.2271	224.8823	224.8823	0.0665			226.2778	
Cranes	0.8324	8.0227	3.3457	4.3200e-003		0.4898	0.4898		0.4506	0.4506	459.7876	459.7876	0.1359			462.6409	
Forklifts	0.3025	1.3150	1.1794	1.0500e-003		0.1264	0.1264		0.1163	0.1163	112.0569	112.0569	0.0331			112.7523	
Total	2.9160	28.1673	12.5669	0.0229		1.5103	1.5103		1.3927	1.3927	2,413.2335	2,413.2335	0.6989			2,427.9108	

10.0 Vegetation