Appendix A
Applicant Planning Materials

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PROJECT: COLUSA TRIPLE CROWN

Project Title:	**Colusa Triple Crown**
Lead Agency Name and Address:	**City of Colusa Planning Division 425 Webster Street Colusa, CA 95932**
Phone Number:	**(530) 458-4740**
Project Location:	**The project is in the northeast corner of the City of Colusa, along the border of the Sacramento River Levee. D Street is to the west and East Clay Street is to the south**
General Plan Designation(s):	**Low Density Residential and Medium Density Residential**
Zoning:	**Planned Development (P-D) District**
Contact Person:	**Michael S. Olivas 56mikeolivas@gmail.com (530) 400-6092**
Date Prepared:	**January 25, 2018**

Project Description:

The proposed project is a Cannabis Research and Development Business Park and a drainage detention area on 84 gross acres. The proposed project involves the following requested entitlements:

- **A Development Agreement, Special Use Permit, and Regulatory Use Permit to allow a Cannabis Research and Development Business Park.**
- **A General Plan Amendment of approximately 84 acres of the site from Low Density Residential District to Industrial District.**
- **A Rezone of approximately 84 acres of the site from Planned Development (P-D) District to Light Industrial (M-1)District.**
- **A Lot Line adjustment to create four parcels.**
- **General Development Plan to create, and to establish design standards and guidelines for a Cannabis Research and Development Business Park, open space, and related drainage facilities on a collective project site of 84 acres.**

Owner:
Colusa Riverbend Estates LLC
1046 Olive Drive Suite 3
Davis CA 95616

Applicant:
Colusa Triple Crown, LLC
1046 Olive Dr. Suite 3b
Davis, CA 95616

PROJECT:
Colusa Triple Crown

Project Information

The project is in the northeast corner of the City of Colusa. The Sacramento River winds around the project site forming the site's northern boundary. Unincorporated lands of Colusa County border the project to the east, north and south, and the west (excepting limited lands already incorporated.)

Cannabis Research and Development Business Park

The Cannabis Research and Development Business Park will be approximately 1,490,000 square feet on 84 acres and will include energy-efficient greenhouses for cultivation, plant processing spaces, facilities for creating infused products, a testing laboratory, research & development and training centers, distribution center, and corporate offices. Space will be sold or leased to businesses registered under the California Marijuana Program.

Proposed site access will be from Market Street. The developer will use the existing easement from Market and Bridge Street to project boundary to construct a roadway section from the intersection at Market and Bridge Street to the project site.

The project shall consist of the following operations:

Cultivation

As plants mature from seedlings, they are transferred to the cultivation area which covers 900,000 square feet. This area utilizes state of the art greenhouses to harness readily available resources, i.e. the sun, while controlling negative factors such as pests and contaminants. Each greenhouse is optimized for the plant varietal(s) it houses and is controlled via a central computer system that monitors and corrects for humidity, temperature, light, and soil compounds.

Plant management and soil amendments are carried out through the widely accepted "fertigation" method which deploys plant nutrients through the plant's water supply (drip irrigation.) While each greenhouse is optimized for plant health, other factors will be considered. Minimizing environmental impact is important and will be managed through intelligent water reclamation. In addition, each greenhouse will be laid out in a way that allows for farmer access since we believe farm, farmer and plant benefit from regular, hands-on testing and attention.

Processing, Drying, & Storage

Throughout the year, plant flower will be harvested and processed into a commercial-ready product in 149,760 square feet of facilities. In addition to processing recently collected flower, the facilities will also serve as an inventoried storage location where flower will get prepared for testing and packaged for distribution.

The 'curing' process is an important step to ensure proper shelf life and safe consumption by the consumer. While most of this process is manual, it is space intensive to ensure inventory integrity and to store enough product to resist market demand fluctuations. This facility will also contain additional security elements given the quantity of finished product stored on-site.

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Manufacturing and R&D

Once the plant flower is harvested, dried, tested, and packaged, it is ready for sale or further refinement. The manufacturing facility, comprising 44,500 square feet, will house a fractional distillation process that separates out each plant chemical (e.g. terpenes, cannabinoids, etc.) into its purest form. These pure cannabinoids and terpenes can then get mixed together, for example, to provide a specific flavor or effect for the consumer when consumed.

The fractional distillation process does not use a solvent-based approach and is thus a much safer but more expensive process for refining flower into commercial ready cannabis oil.

Distribution

After Triple Crown's products are tested and ready for sale, they move to the 40,000 square foot distribution and warehouse facility. This facility may be operated by Big Moon Sky, an online-only dispensary in California. Big Moon Sky offers curated collections of cannabis products for sale on-line which are then shipped to consumer's homes across the state.

This facility will serve as a distribution center where orders are picked, packed, and then shipped out. Orders are pre-sorted based on delivery location minimizing the need for multiple truck pick-ups throughout the day cutting down on environmental impact and truck congestion.

This state-of-the-art distribution center also relies on local staffing; providing employment opportunities throughout the city and county. The facility operates across a single shift with the opportunity of extending to three shifts if required.

Any product that is not sold direct-to-consumer via Big Moon Sky is then made available to the regulated market and sold in bulk to distributors who hold the required local and state permits to purchase and transport cannabis products.

Nursery

Located on-site will be a 7.55-acre nursery facility where each plant will begin its development from seed to seedling. The nursery serves two purposes: plant incubator and strain/varietal development.

In the initial stages of development, the plant requires a particularly controlled environment free of pests and harmful environments that can take advantage of the fragile state of the infant plant. As the plant starts to mature, it develops natural defenses increasing survivability in its permanent, greenhouse environment. By segregating the immature plants, we increase plant health, ensure the development of natural plant defenses (reducing the reliance on pesticides, for example) and identify/correct potential plant health issues.

In addition to incubation, the nursery provides an environment for strain or varietal development. As with grape vines in the wine world, each plant is a hybrid bred to provide a quality product in a commercially viable quantity. Plant cloning and cross breeding must be carried out in a controlled environment and will thus be part of the nursery facility.

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Project Information

Buildings C-1, C-2, C-5, C-5, C-6, C-7, C-8, C-9, C-10, C-11 and C-12 consist of two separate sections of 37,500 square feet each to accommodate 22,000 square feet of canopy cultivation and include separate areas for processing, drying, control equipment space, employee area and administration.

Building C-3, C-4, C-13 and C-14 consists of one separate section of 37,500 square feet in each building to accommodate the production, cultivation, processing, drying, control equipment space, employee areas, administration and warehouse.

The research & development building (R&D) is a total of 45,500 square feet that includes separate areas for manufacturing facilities for creating infused products, control equipment, testing laboratory, research and development laboratories, training center, warehouse and corporate administration areas. The R&D building also includes an interactive employee center along with food service facilities.

Building D-W, consists of 40,000 square feet for distribution and warehouse and including 11,200 square feet for administration, employee lounge and food service facilities.

Building M, consists of 14,400 square feet for Manufacturing, testing laboratory, control equipment areas and distribution activities, and 11,200 square feet for administration, and employee area.

N-1, N-2 and N-3 represents 7.55 acres of greenhouse production and plant genetics research & development.

The utility services will be provided by the following:

Domestic Water:	**The City of Colusa**
Waste Water:	**The City of Colusa**
Utility power:	**Pacific Gas and Electric PG&E**
Fire protection:	**The City of Colusa**
Police protection:	**The City of Colusa**
Solid Waste:	

The project will be developed in a series of phases in approximately three to five years.

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Project Information

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PROJECT:
Colusa Triple Crown

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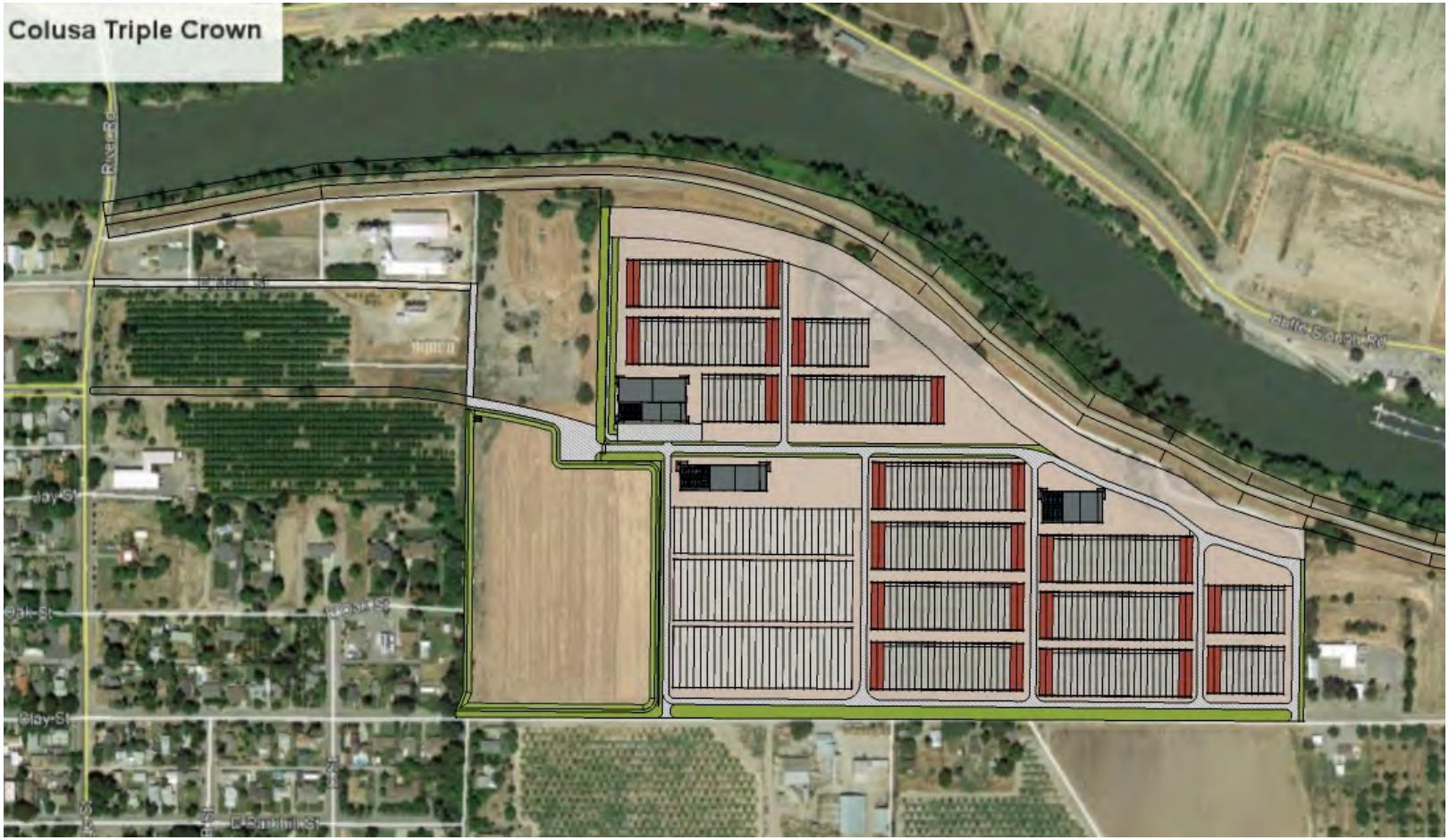

Colusa Triple Crown: Project Information

Project: Colusa Triple Crown Business Park and R&D Agricultural Center
Developer: Colusa Triple Crown, LLC
Owner: Colusa Riverbend Estates, LLC
City of Colusa
Colusa County

N

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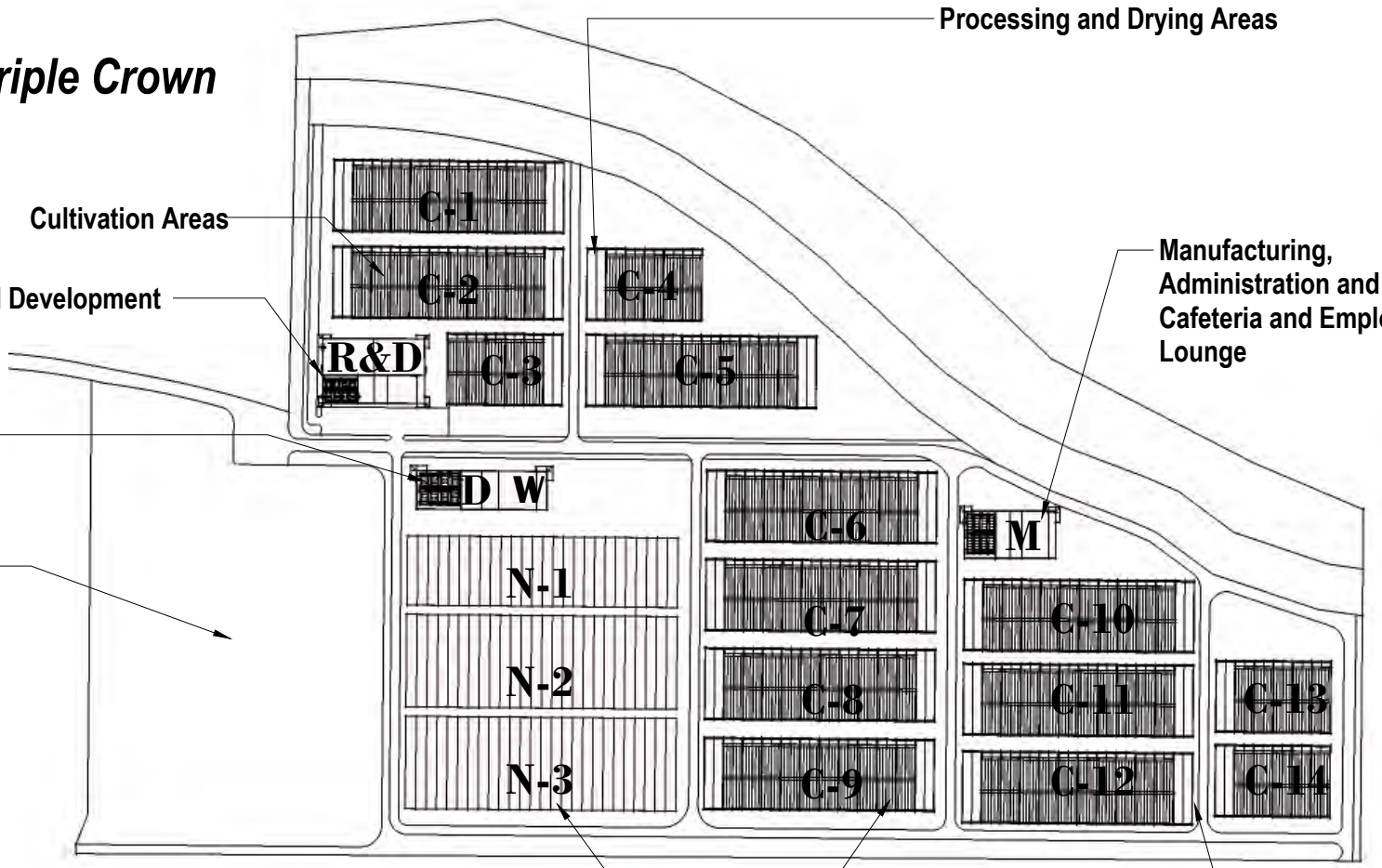
PROJECT:
Colusa Triple Crown

Project Aerial

A.02

Colusa Triple Crown



Agricultural Production Center

Nursery	328,878 sq. ft.
Cultivation	900,000 sq. ft.
Processing / Drying	149,760 sq.ft.
Manufacturing / R & D	45,500 sq. ft.
Distribution and Warehouse	40,000 sq. ft.
Administration	30,000 sq. ft.
Total Building Space	1,493,638 sq. ft.
Total Estimated Employees	310 FTE

Cultivation Areas

Processing and Drying Areas

Nursery Location
7.55 acres

N

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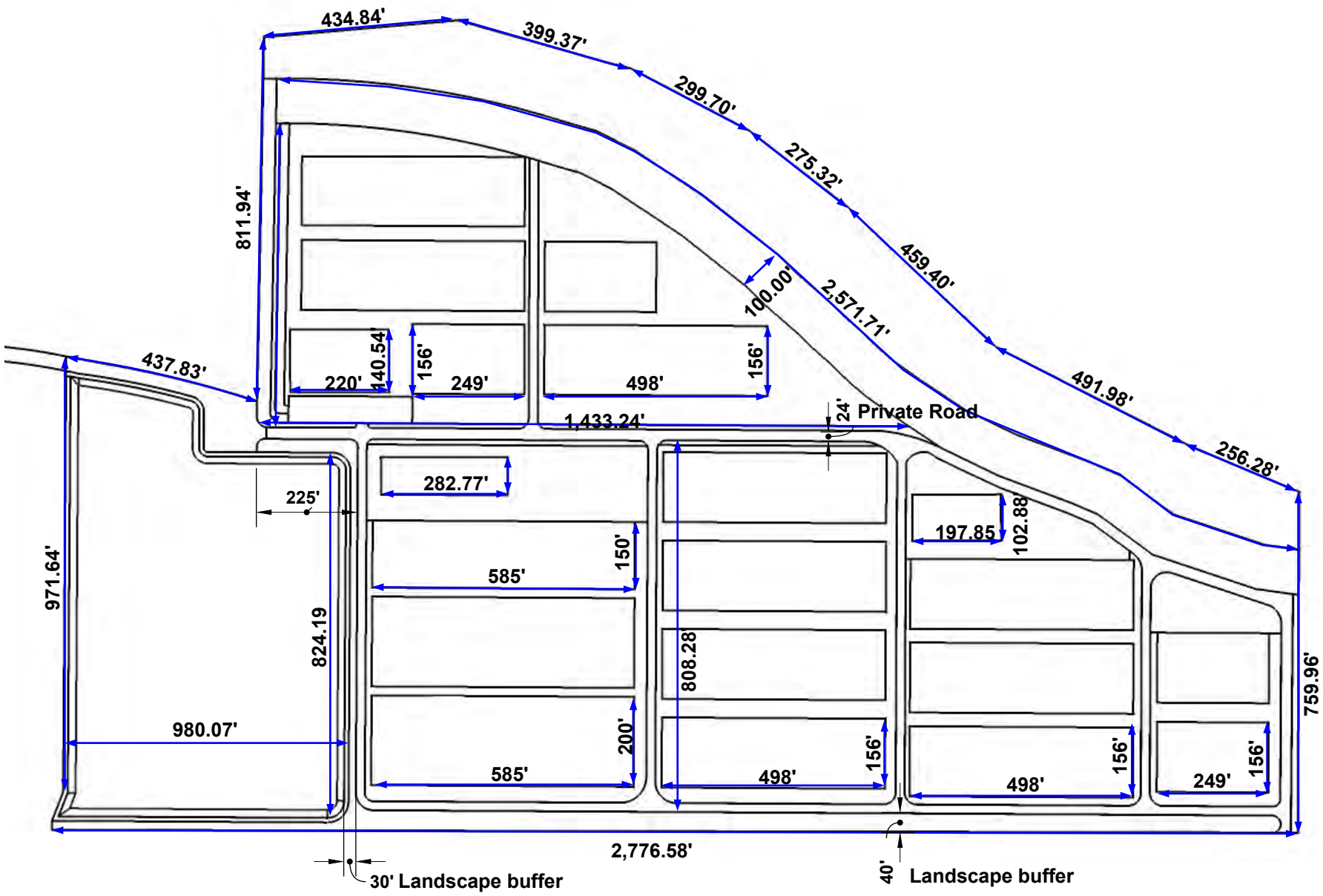
Proposed Project
Cannabis
Manufacturing Buisness Park

A.03



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Dimension Site Map

A.04

Current Existing Conditions						
Total Roads and Sidewalks	-	SQ. FT.	0.00	Acres		
Lot Coverage	47,102	SQ. FT.	1.08	Acres		
Gravel Areas	51,552	SQ. FT.	1.18	Acres		
Farming Area	3,064,020	SQ. FT.	70.34	Acres		
Open Space	400,566	SQ. FT.	9.20	Acres		
Detention/Irrigation Channel	126,759	SQ. FT.	2.91	Acres		
Lot Landscape Areas	-	SQ. FT.	0.00	Acres		
Total Non Porous Surface	47,102	SQ. FT.	1.08	Acres		
Total Porous Surface	3,591,345	SQ. FT.	82.45	Acres		
Total Area	3,689,998	SQ. FT.				
Total Acres	84.71	Acres	84.71			
Colusa Triple Crown Business Park					**Difference**	**Acres**
Public Roads and Sidewalks	26,002	SQ. FT.	0.60	Acres	26,002	0.60
Private Roads and Parking	218,322	SQ. FT.	5.01	Acres	218,322	5.01
Gravel Areas	538,573	SQ. FT.	12.36	Acres		11.18
Parking Areas Gravel	420,578	SQ. FT.	9.66	Acres		
Lot Coverage	1,006,991	SQ. FT.	23.12	Acres	959,889	22.04
Landscape Areas	268,478	SQ. FT.	6.16	Acres	268,478	(64.18)
Open Space	400,566	SQ. FT.	9.20	Acres	-	-
Detention and Landscape Area	490,225	SQ. FT.	11.25	Acres	363,466	8.34
Nursey	320,436	SQ. FT.	7.36	Acres	320,436	
Total Non Porous Surface	1,571,750	SQ. FT.	36.08	Acres	1,524,648	35.00
Total Porous Surface	1,697,842	SQ. FT.	38.98	Acres	(1,893,502)	(43.47)
Total Area	3,690,170	SQ. FT.				
Total Acres	84.71	Acres	84.71	Acres		
Lot Coverage	35.97%					
Floor Area Ratio	0.366					

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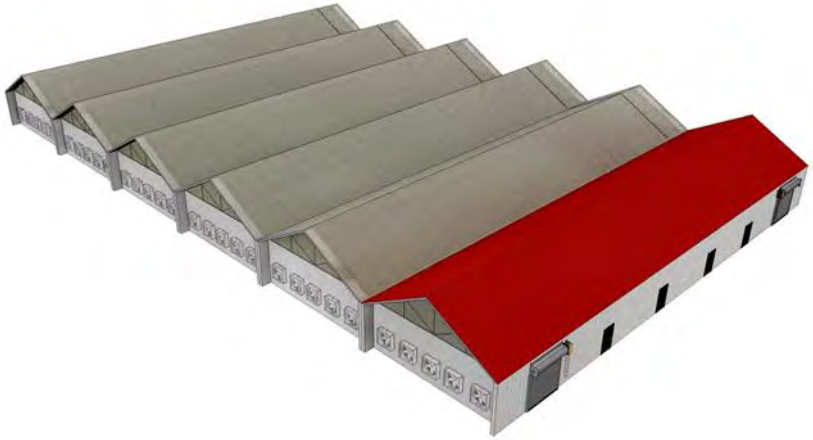
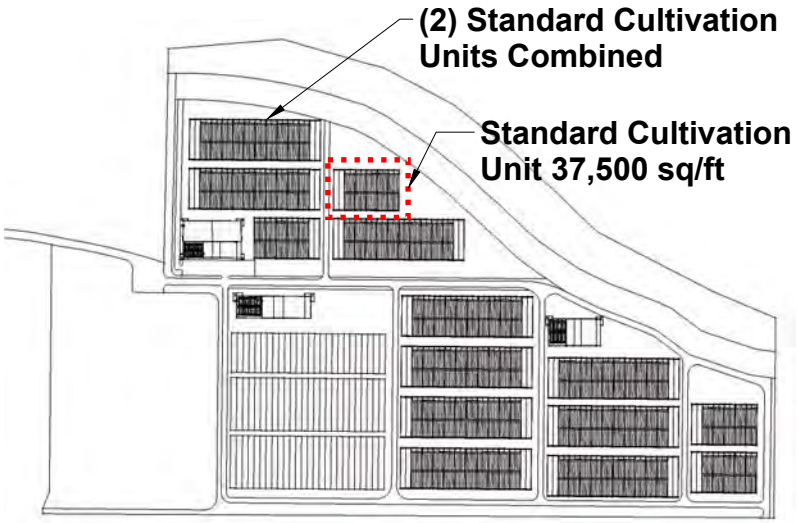
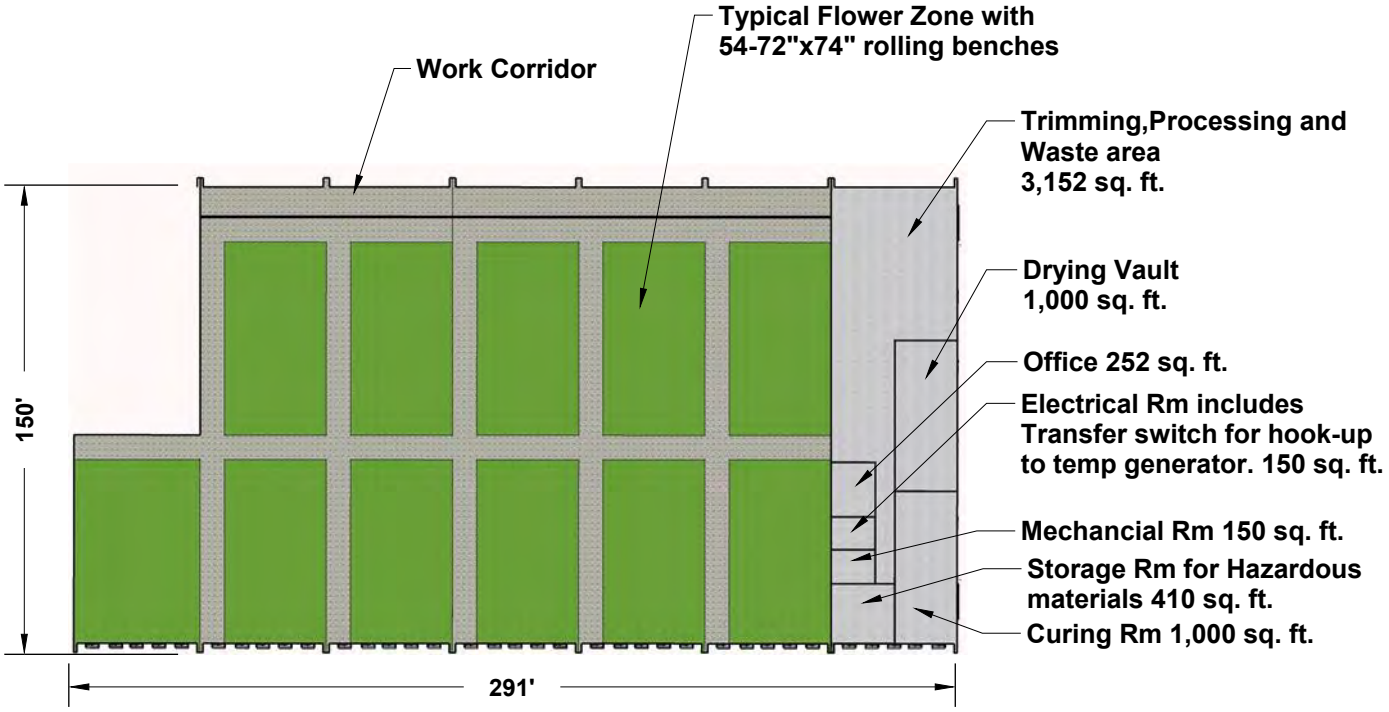
Calculation of Pervious and Impervious Surfaces

A.05





Standard Cultivation Unit



Typical Cultivation Standard Unit:

594-72"x74" Rolling Benches

21,978 sq. ft. of Flower bench space/canopy

33,737 sq. ft. of Greenhouse/ Cultivation

6,240 sq. ft. of Headhouse

Total Facility size equals 39,977 sq. ft.

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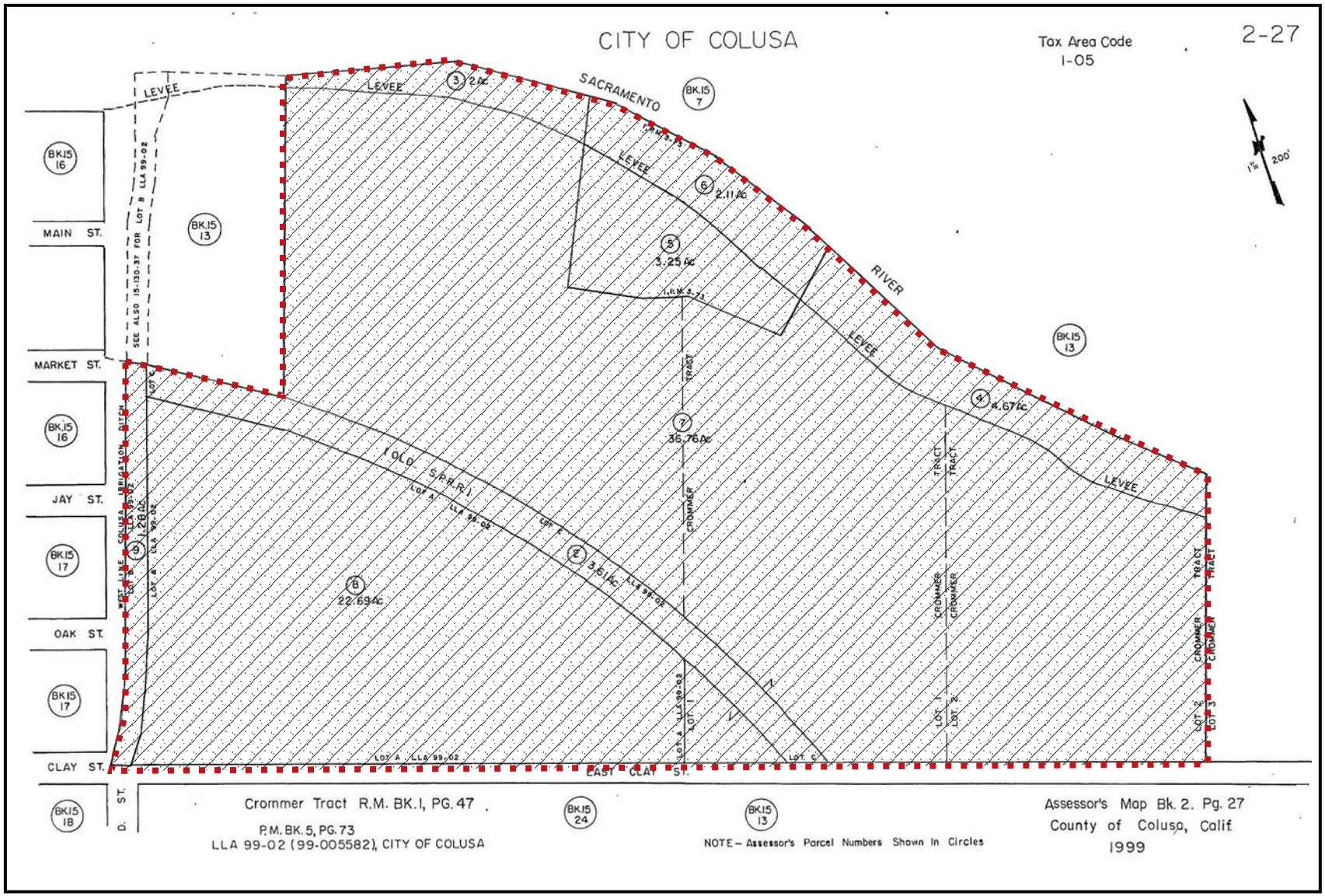
Standard Cultivation Unit 37,500 sq/ft

A.06



Existing Zoning: Planned Development (P-D) District

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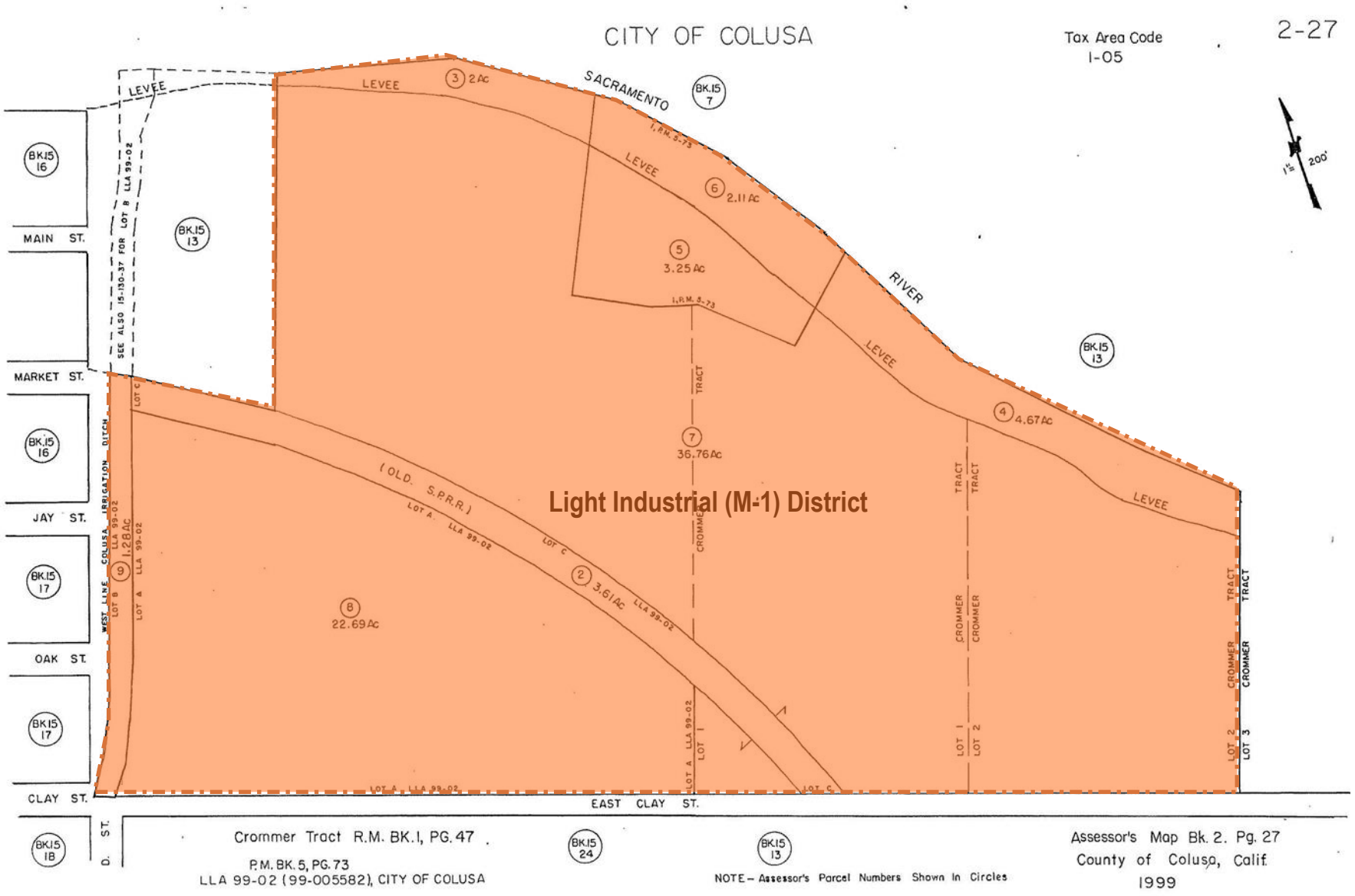
Existing Zoning
Planned Development
(P-D) District

A.07



Proposed Zoning: Light Industrial (M-1) District

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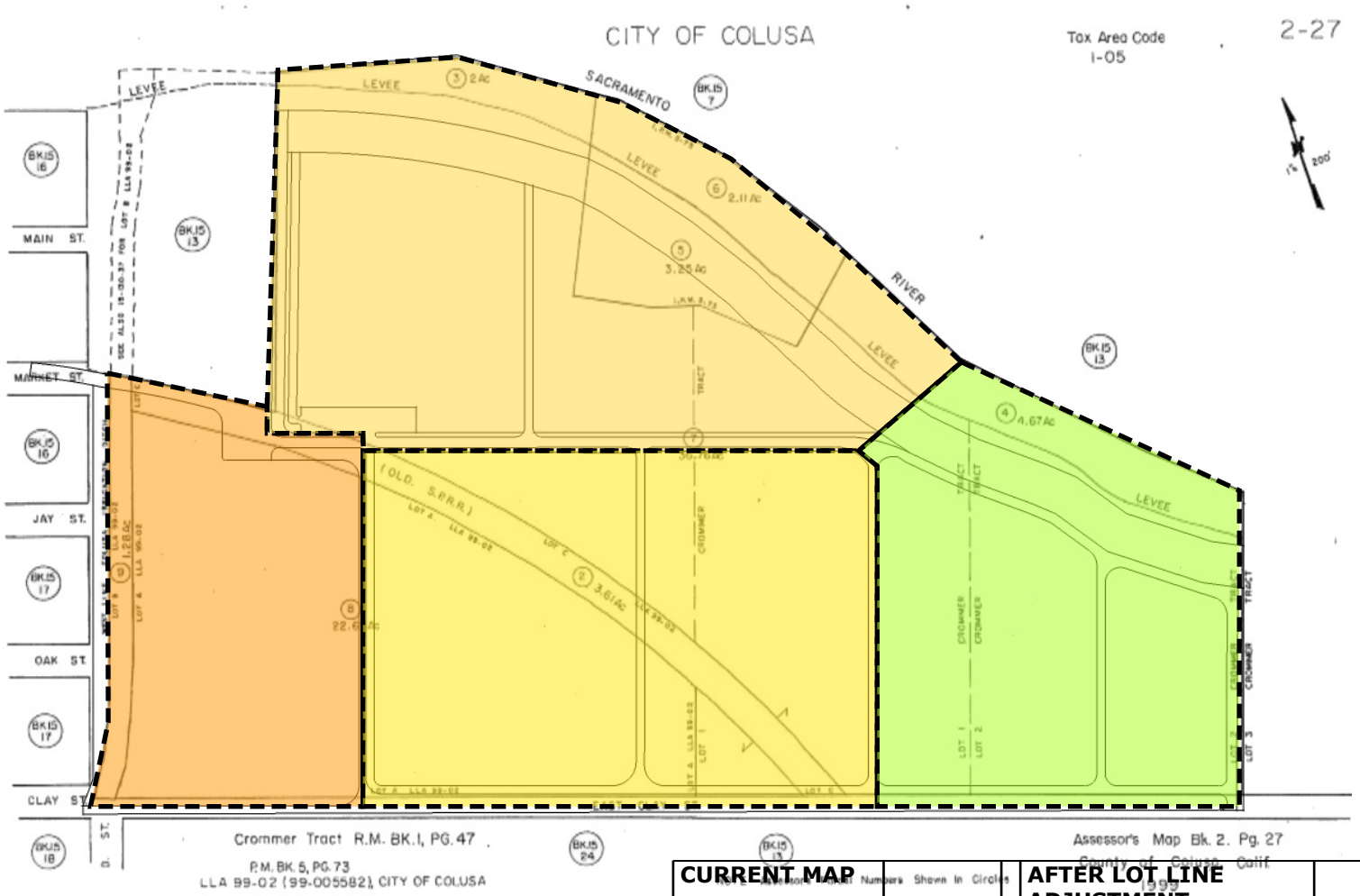
Proposed Zoning
Light Industrial (M-1)

A.08



CURRENT MAP			AFTER LOT LINE ADJUSTMENT	
APN	Acreage		APN	Acreage
002-270-002	2.112		002-270-003	14.210
002-270-003	2.719		002-270-005	27.120
002-270-004	3.993		002-270-007	24.250
002-270-005	2.628		002-270-009	19.120
002-270-006	3.804			
002-270-007	44.361			
002-270-008	25.134			
	84.70			84.70

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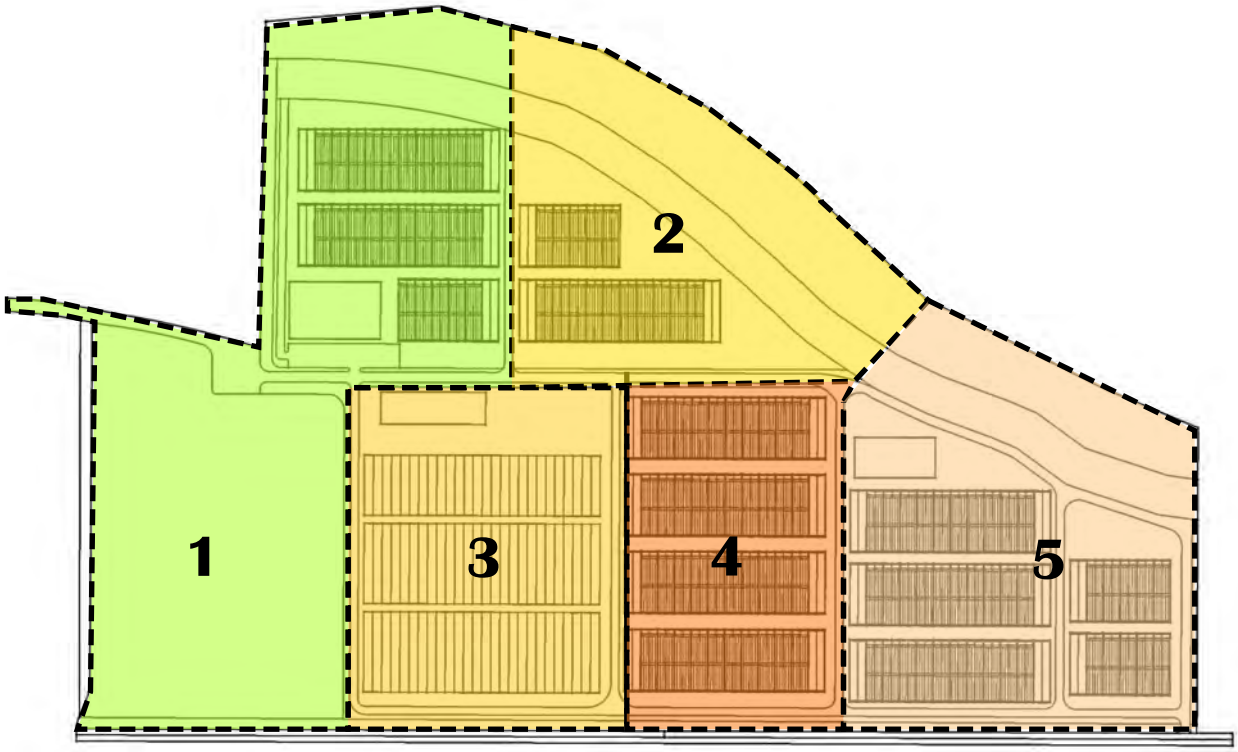
Proposed Lot Line Adjustment

A.09

Phase 1: The development and construction of 187,500 square feet of cultivation and processing that includes five separate structures at 37,500 square feet each. In addition, a 45,500 square feet of manufacturing & research and development, including square footage for administration. Necessary infrastructure will include the extension of Market Street (limited section) from Bridge Street to the commercial entrance, water extension from Bridge Street to project entrance, the construction of the required area of the detention basin and required drainage distribution system. The initial sewer connection will be established for the entire project. The development and construction will include all required landscaping and security details as proposed.

Phase 2: The development and construction of 112,500 square feet of cultivation and processing that includes three separate structures at 37,500 square feet each. Utilities will be extended to provide service for the commercial use including further development of the detention area. The development and construction will include all required landscaping and security details as proposed.

Phase 3: The development and construction of 328,878 square feet of nursery and supporting structures and equipment. A fourth structure is a 40,000-square foot distribution center and warehouse. Utilities will be extended to provide service along with further development of the detention area for drainage. The development and construction will include all required landscaping and security details as proposed.



Phase 4: The development and construction of 300,000 square feet of cultivation and processing that includes eight separate structures at 37,500 square feet each. Utilities will be extended to provide service for the commercial use including further development of the detention area. The development and construction will include all required landscaping and security details as proposed.

Phase 5: The development and construction of 300,000 square feet of cultivation and processing that includes eight separate structures at 37,500 square feet each. In addition, 19,250 square feet of distribution, manufacturing and warehouse. Utilities will be extended to provide service, including additional development of the detention area if necessary. The development and construction will include all required landscaping and security details as proposed.

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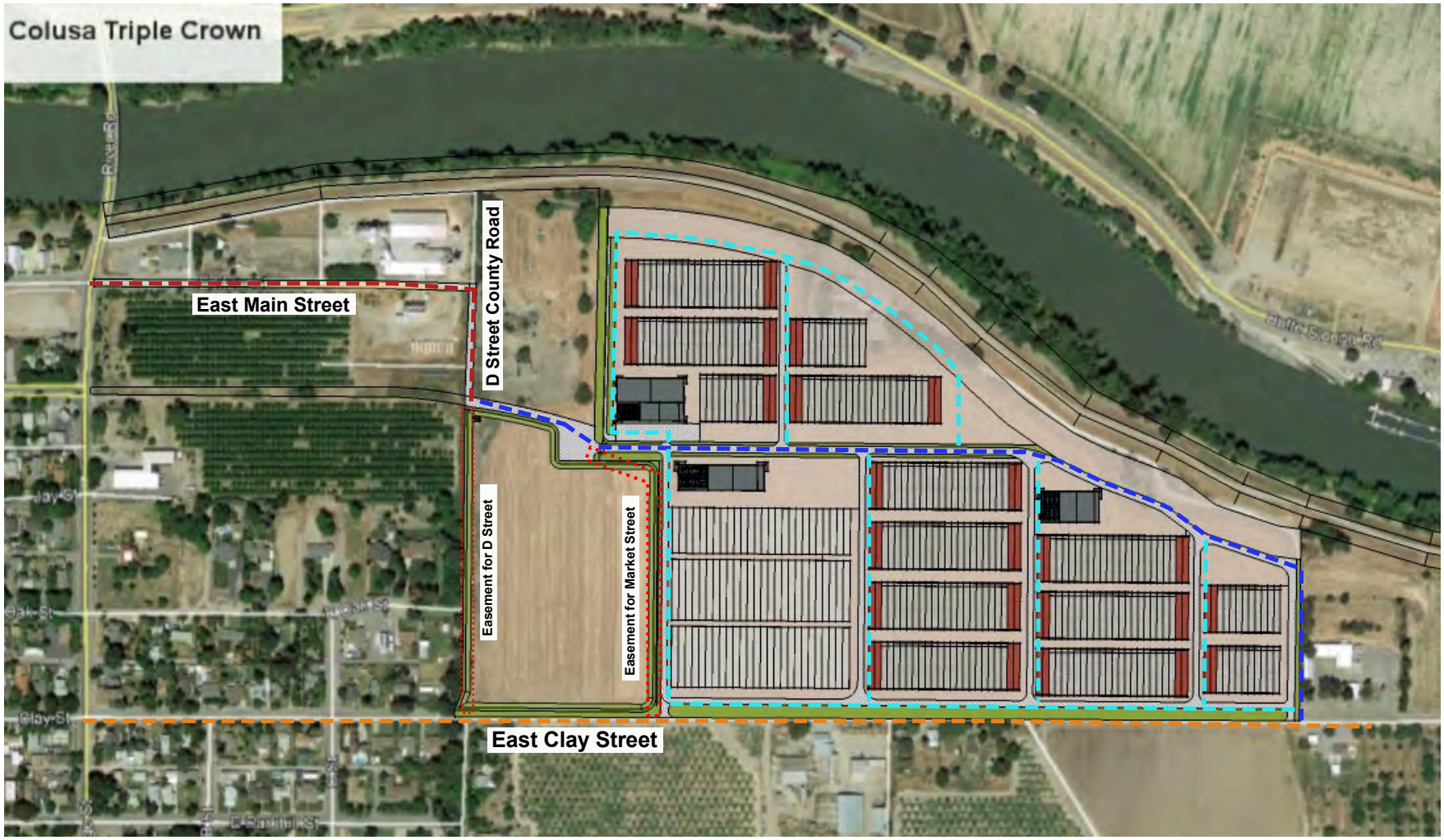
Proposed Phasing

A.10



East Main Street County Road

East Clay 58'-0 ROW

Private road for employees and deliveries and for use as public service not open to local traffic

Private roads for commercial use

Circulation Plan

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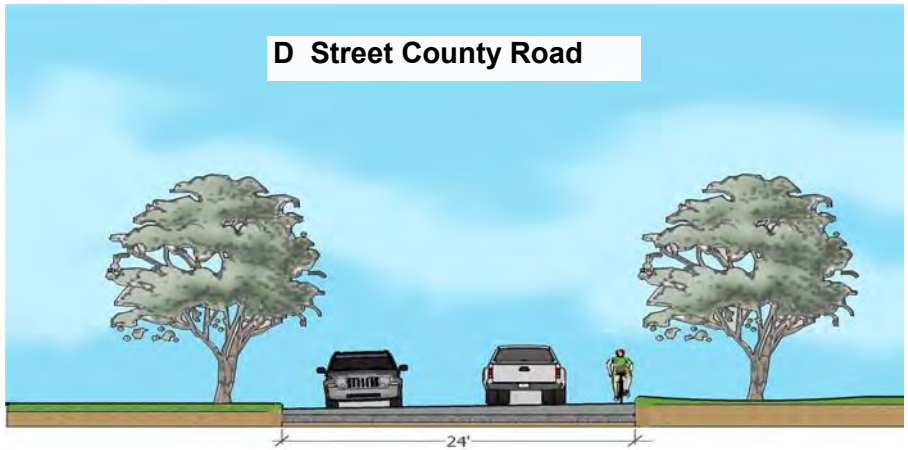
Circulation Plan
Light Industrial (M-1)

A.11



East Main Street from Bridge Street to D Street will be the Primary Entrance to the Project Site. D Street will be constructed as a County Road from East Main Street south to the main project entrance.

There is one primary entrance to the Colusa Triple Crown project: D Street will extend from East Main Street to the project site. East Main Street will be the main entrance and exit from Colusa Triple Crown Business Park for all future employees and deliveries. An easement for the future D Street will run north-south connecting both Market Street and East Clay Street.

All roads within the Colusa Triple Crown (CTC) Business Park are private roads and will be maintained by the property owners. The project will provide an emergency road for local Public Service that will extend through the project off Market Street and circulate around the project turning south until intersecting with East Clay. The Public Service road will be maintained by the property owners and will not be open to local traffic.

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Street Section
Light Industrial (M-1)

Overall Drainage Plan

The Applicant submitted a project drainage description and a concept off-site drainage routing exhibit depicting alternative proposed locations of interim drainage channels and detention facilities to serve the project plan area. Drainage plan showing grading and drainage information including topographic information are preliminary only. A comprehensive storm drainage plan for the ultimate development buildout and any interim drainage plan serving the entire project area or any portion of the project area associated with phasing of the development improvements shall be prepared by a registered civil engineer and submitted to the City Engineer for approval. The drainage plan shall identify specific storm drainage design features to control increased runoff from the project site. The drainage plan shall demonstrate the effectiveness of the proposed storm drainage system to prevent negative impacts to existing downstream facilities and to prevent additional flooding at off-site downstream locations. All necessary calculations and assumptions and design details shall be submitted to the City Engineer for review and approval. The design features proposed by the applicant shall be consistent with the most recent version of the City's Storm Drainage Master Plan criteria and City Public Improvement Standards. The plan shall incorporate secondary flood routing analysis and shall include final sizing and location of on-site and off-site storm conduit channels, structures, and detention facilities. The Storm Drainage Plan shall be approved prior to submittal of the first final map. The applicant shall pay the cost associated with all improvements required by the plan and an appropriate reimbursement agreement shall be drafted to reimburse the applicant for oversize improvements on a pro rata basis per the Project level Reimbursement Agreement.

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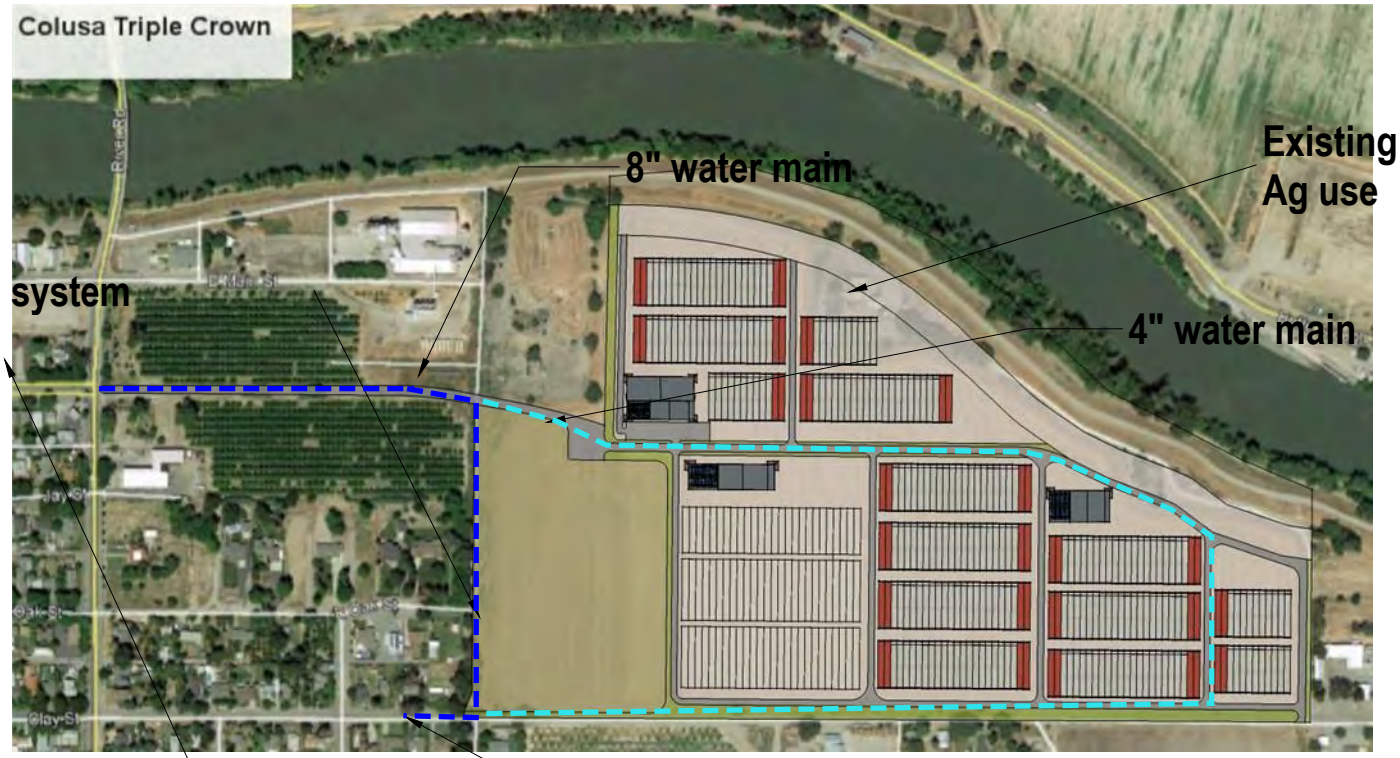
Storm Drain System
Light Industrial (M-1)



Water System Plan

All domestic water services will be metered. Water meters shall be installed on all water services to the satisfaction of the city engineer.

Per City of Colusa Cross Connection Control Program, all types of multi-family residential, commercial buildings and landscape irrigation services are required to maintain an approved backflow prevention assembly at the applicant's expense. Service size and flow rate for the backflow prevention assembly must be submitted. Location of the backflow prevention assembly shall be per the City of Colusa Public Improvements Standards and Construction Standards.

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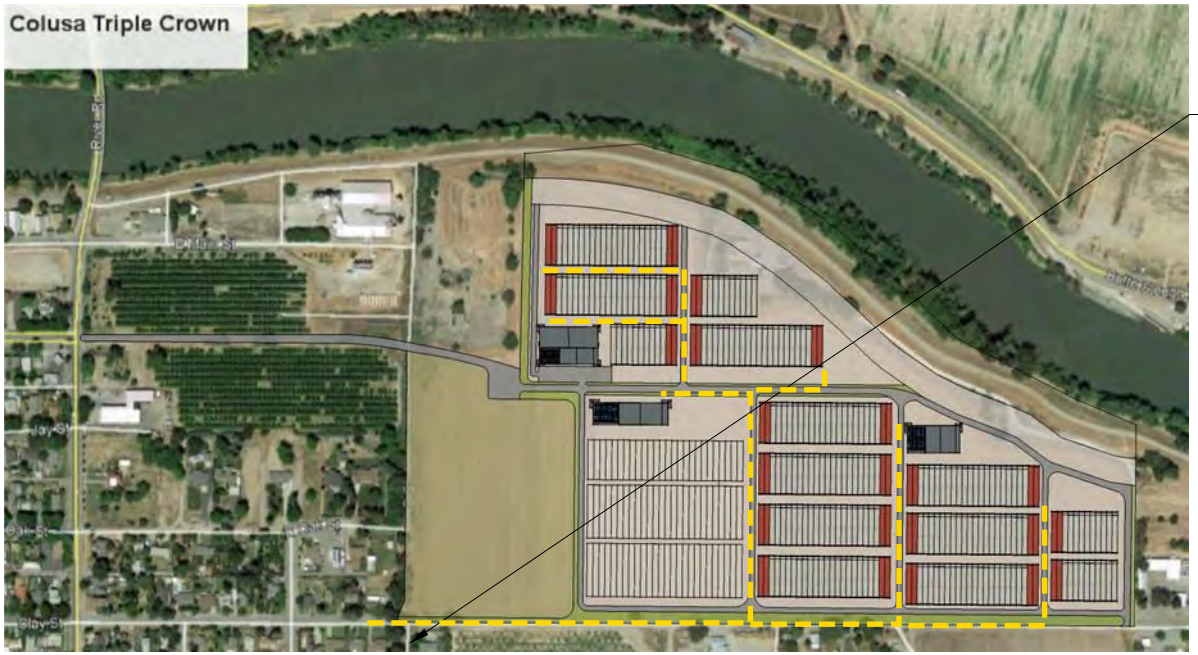
Water System
Light Industrial (M-1)



Connect to existing manhole on D Street. The system will be maintained by Colusa Triple Crown

Sewer System Upgrades: Eliminating Infiltration & Inflow

The E/One Sewer system is a pressure sewer system that is powered by E/One grinder pumps. A pressure sewer system uses small-diameter pipes and grinder pumps, which are installed at each location. The grinder pump station collects all the wastewater and grinds it into slurry. The wastewater is then pumped to a larger sewer main.

- **Sewer flat, hilly, rocky or wet terrain**
- **Eliminates infiltration and inflow**
- **Low initial costs make central sewers economically feasible**
- **Central sewers increase the value of developmental units**
- **High reliability - maintenance is minimal**
- **Reduces operating costs**
- **Protective of public health**
- **Permits regulatory compliance**
- **Installation follows the contour of the land - needs only shallow trenches**
- **Labor and material costs are much less than gravity sewer systems**

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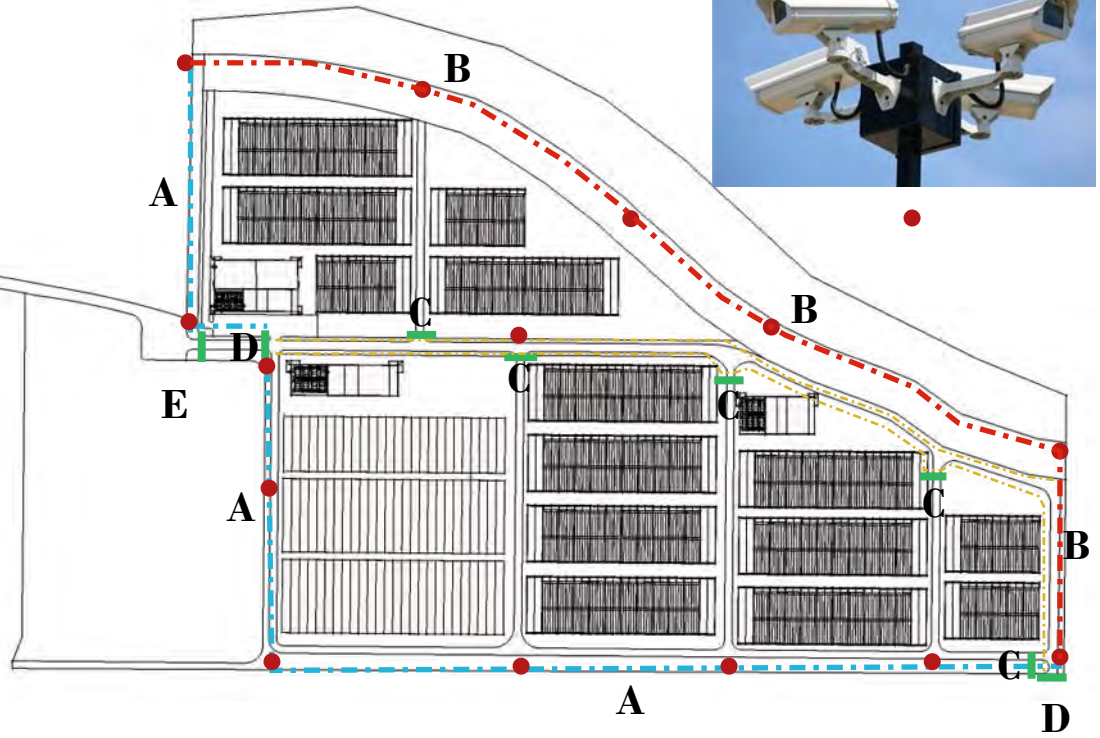
Sewer System
Light Industrial (M-1)

E

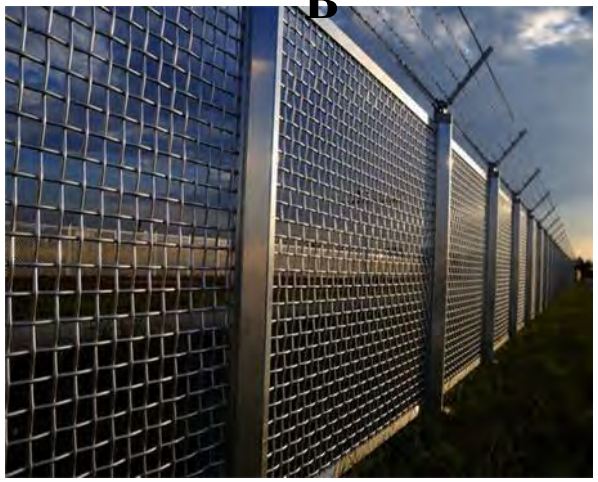
D



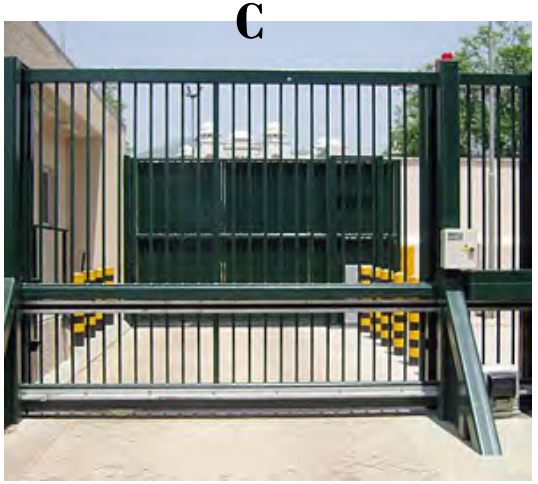
Security System

A

B



C



Owner:
Colusa Riverbend Estates LLC
1046 Olive Drive Suite 3
Davis CA 95616

Applicant:
Colusa Triple Crown, LLC
1046 Olive Dr. Suite 3b
Davis, CA 95616

PROJECT:
Colusa Triple Crown

Security Fencing and Gate System

Entrance off Market Street

Example of Detention Area

Owner:
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Davis CA 95616

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PROJECT:
Colusa Triple Crown

Landscaping

North View

South View

Owner:
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Applicant:
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1046 Olive Dr. Suite 3b
Davis, CA 95616

PROJECT:
Colusa Triple Crown

Aerial Perspective
Light Industrial (M-1)

West View

East View

N

N

A.19

Aerial Perspective
Light Industrial (M-1)

PROJECT:
Colusa Triple Crown

Applicant:
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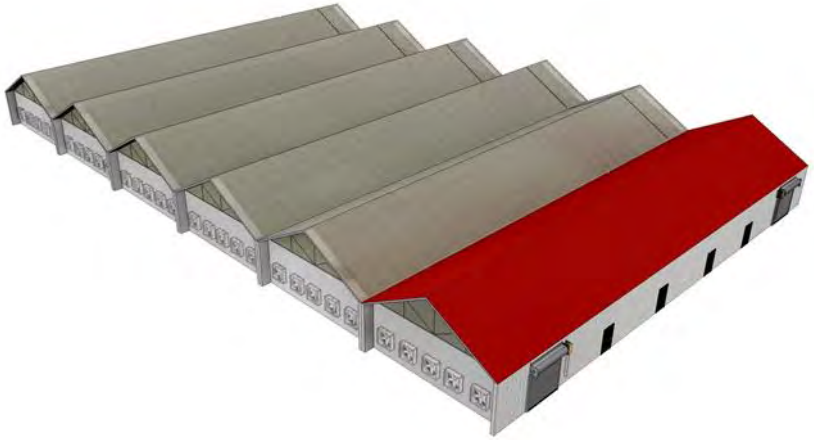
1046 Olive Dr. Suite 3b
Davis, CA 95616

Owner:
Colusa Riverbend Estates LLC
1046 Olive Drive Suite 3
Davis CA 95616



Colorado leaf greenhouse complex

Cultivation

As plants mature from seedlings, they are transferred to the cultivation area which covers 900,000 square feet. This area utilizes state of the art greenhouses to harness readily available resources, i.e. the sun, while controlling negative factors such as pests and contaminants. Each greenhouse is optimized for the plant varietal(s) it houses and is controlled via a central computer system that monitors and corrects for humidity, temperature, light, and soil compounds.

Plant management and soil amendments are carried out through the widely accepted “fertigation” method which deploys plant nutrients through the plant’s water supply (drip irrigation.) While each greenhouse is optimized for plant health, other factors will be considered. Minimizing environmental impact is important and will be managed through intelligent water reclamation. In addition, each greenhouse will be laid out in a way that allows for farmer access since we believe farm, farmer and plant benefit from regular, hands-on testing and attention.

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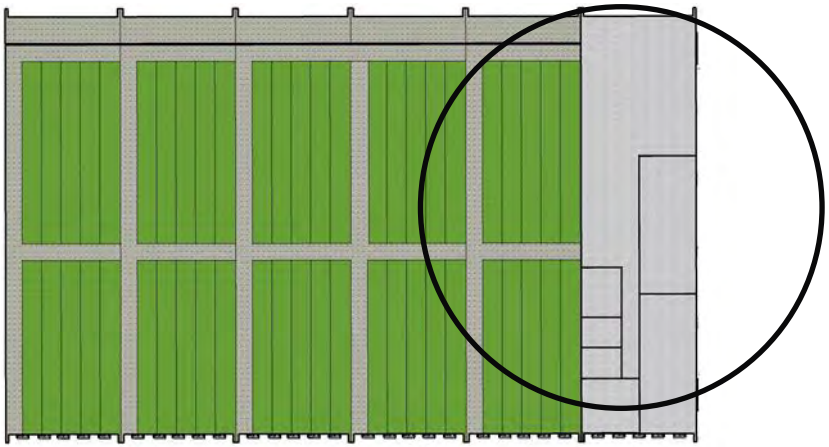
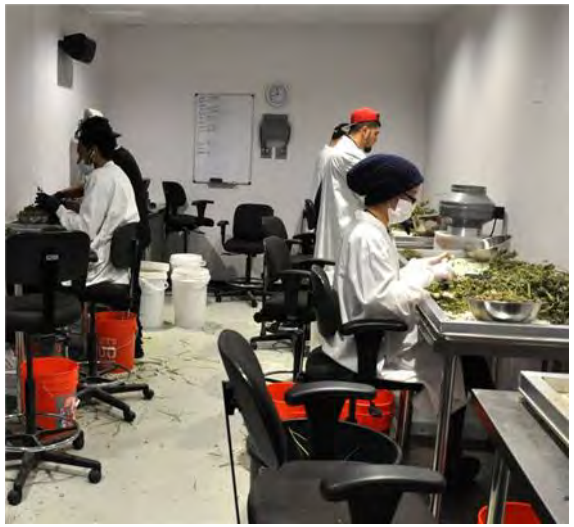
PROJECT:
Colusa Triple Crown

Proposed Greenhouse System





Processing, Drying, and Storage

Throughout the year, plant flower will be harvested and processed into a commercial-ready product in a 149,760-square foot facility. In addition to processing recently collected flower, this facility will also serve as an inventoried storage location where flower will get prepared for testing and packaged for distribution.

The 'curing' process is an important step to ensure proper shelf life and safe consumption by the consumer. While most of this process is manual, it is space intensive to ensure inventory integrity and to store enough product to resist market demand fluctuations. This facility will also contain additional security elements given the quantity of finished product stored on-site.

Processing and Drying Facilities

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PROJECT:
Colusa Triple Crown

Processing and Drying

Research & Development, Quality Control and Manufacturing

Manufacturing and R&D

Once the plant flower is harvested, dried, tested, and packaged, it is ready for sale or further refinement. The manufacturing facility, comprising 44,500 square feet, will house a fractional distillation process that separates out each plant chemical (e.g. terpenes, cannabinoids, etc.) into its purest form. These pure cannabinoids and terpenes can then get mixed together, for example, to provide a specific flavor or effect for the consumer when consumed.

The fractional distillation process does not use a solvent-based approach and is thus a much safer albeit more expensive process for refining flower into commercial ready cannabis oil.

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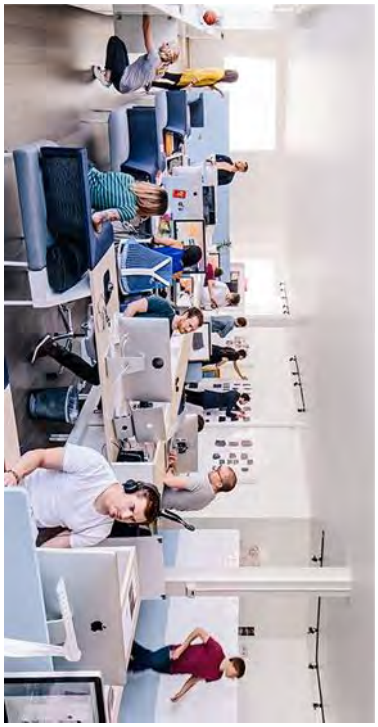
Manufacturing and R&D



A.23

Administration and Employee Areas

PROJECT:
Colusa Triple Crown

Applicant:
Colusa Triple Crown, LLC
1046 Olive Dr. Suite 3b
Davis, CA 95616

Owner:
Colusa Riverbend Estates LLC
1046 Olive Drive Suite 3
Davis CA 95616

Distribution

After Triple Crown's products are tested and ready for sale, they move to the 40,000-square foot distribution and warehouse facility. This facility may be operated by Big Moon Sky, an online-only dispensary in California. Big Moon Sky offers curated collections of cannabis products for sale on-line which are then shipped to consumer's homes across the state.

This facility will serve as a distribution center where orders are picked, packed, and then shipped out. Orders are pre-sorted based on delivery location minimizing the need for multiple truck pick-ups throughout the day - this cuts down on environmental impact and truck congestion.

This state-of-the-art distribution center also relies on local staffing; providing employment opportunities throughout the city and county. The facility operates across a single shift with the opportunity of extending to three shifts if required.

Any product that is not sold direct-to-consumer via Big Moon Sky is then made available to the regulated market and sold in bulk to distributors who hold the required local and state permits to purchase and transport cannabis products.

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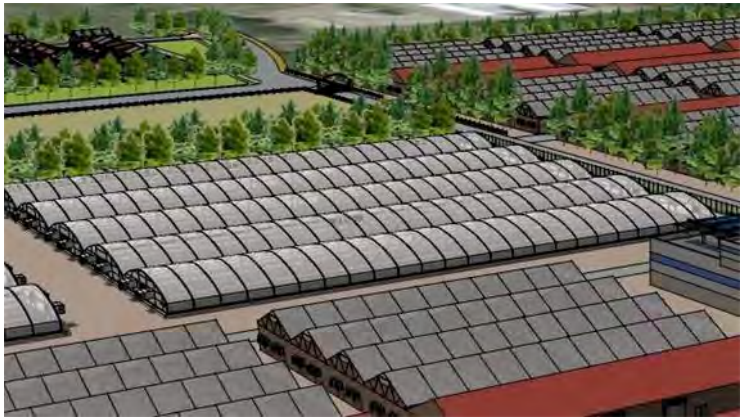
Colusa Triple Crown

Distribution Facility



Nursery

Located on-site will be a 7.55-acre nursery facility where each plant will begin its development from seed to seedling. The nursery serves two purposes: plant incubator and strain/varietal development.

In the early stages of development, the plant requires a particularly controlled environment free of pests and harmful environmentals that can take advantage of the fragile state of the infant plant. As the plant starts to mature, it develops natural defenses increasing survivability in its permanent, greenhouse environment. By segregating the immature plants we increase plant health, ensure the development of natural plant defenses (reducing the reliance on pesticides, for example) and identify/correct potential plant health issues.

In addition to incubation, the nursery provides an environment for strain or varietal development. As with grape vines in the wine world, each plant is a hybrid bred to provide a quality product in a commercially viable quantity. Plant cloning and cross breeding must be carried out in a controlled environment and will thus be part of the nursery facility.

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Colusa Triple Crown

Nursery Facility

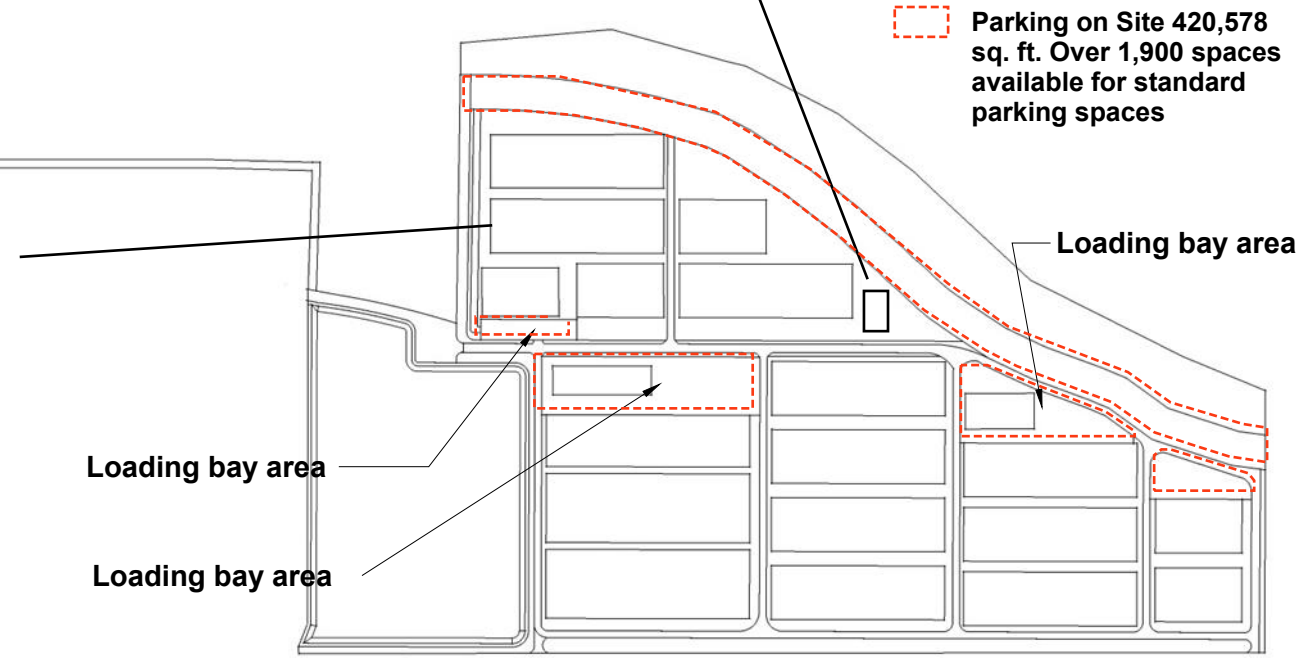
Future area for recycling of the hemp by-product for sustainable and eco-friendly use.

Fuel - hemp is an efficient biomass source of methanol

Paper - hemp has a low lignin content compared to wood and can be turned to pulp faster and easier and does not need chlorine bleaching which is good for the environment.

Construction - fiberboards made from a hemp-based composite are stronger yet lighter than those made from wood. Hemp is an economical construction material that is recyclable.

Typical waste grinders for easy and safe use in order to meet required waste disposal regulations. Located in the headhouse of cultivation standard units.



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PROJECT:
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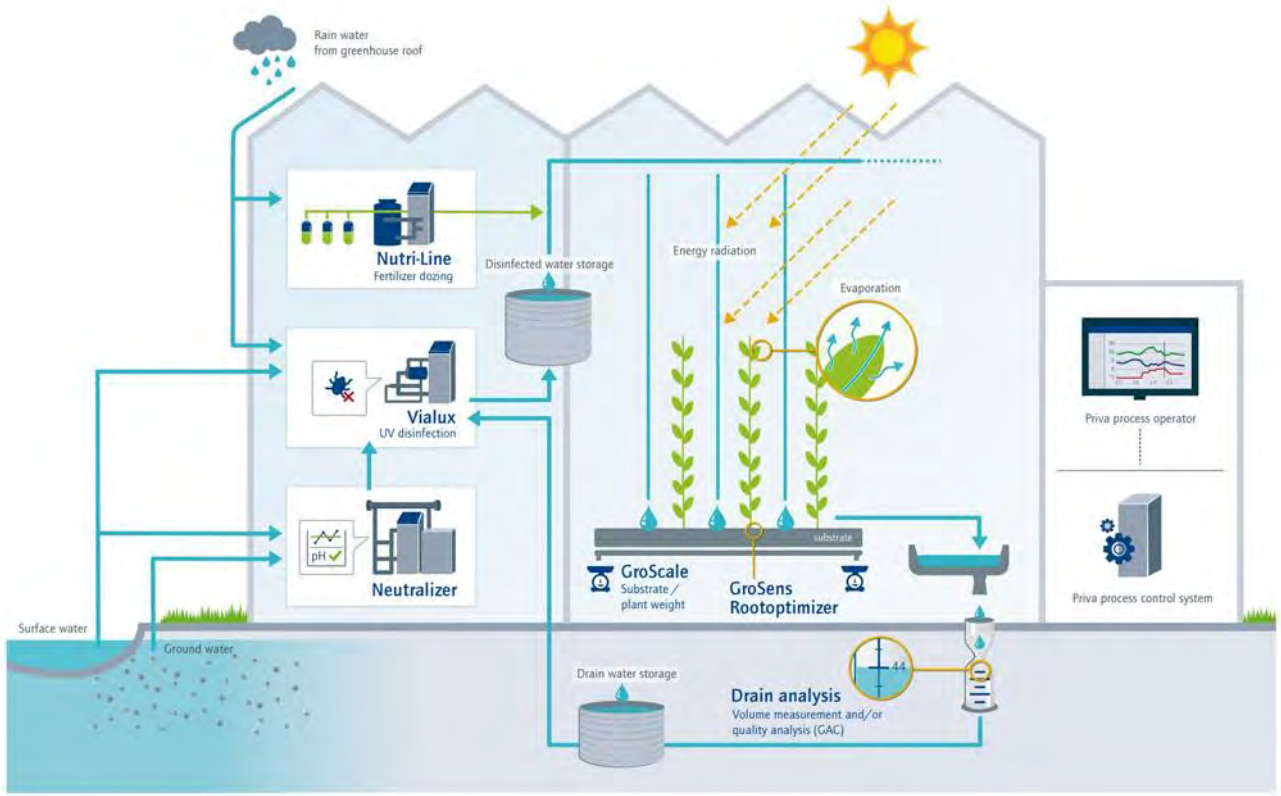
Waste Storage Plan and Loading areas



Water Management

ouse water cycle

Water management a closed loop system for healthy growth. Priva supplies automated watering systems that allows you to efficently dose high quality irrigation water and to recirculate it safely.

Pre-treatment: resonsible and economical water management starts with the correct pre-treatment of the water. HD-UV disinfection is a very reliable water disinfection method; it uses little energy, is safe for the enviroment and is low maintenance and prevents the spread of pathogens. Priva's watering system allows you to fine tune the bicarbonate content so that a stable pH is achieved. The EC pre-mixing allows you to reuse the drain water to the greatest possible extent.

Fertigation: The fertigation must be flexible and straightforward and Priva system controls this with stable EC and pH. The correct pH allows plants to absorb the fertizer efficently, and a stable EC ensures better growth in the greenhouse and a longer shelf life in the supply chain.

Water recirculation: The Priva systems disinfect the drain water. This is even more effective using a combination of HD-UV and oxidation: growth inhibitors and other harmful substances are broken down more effectively. See appendix for more detail

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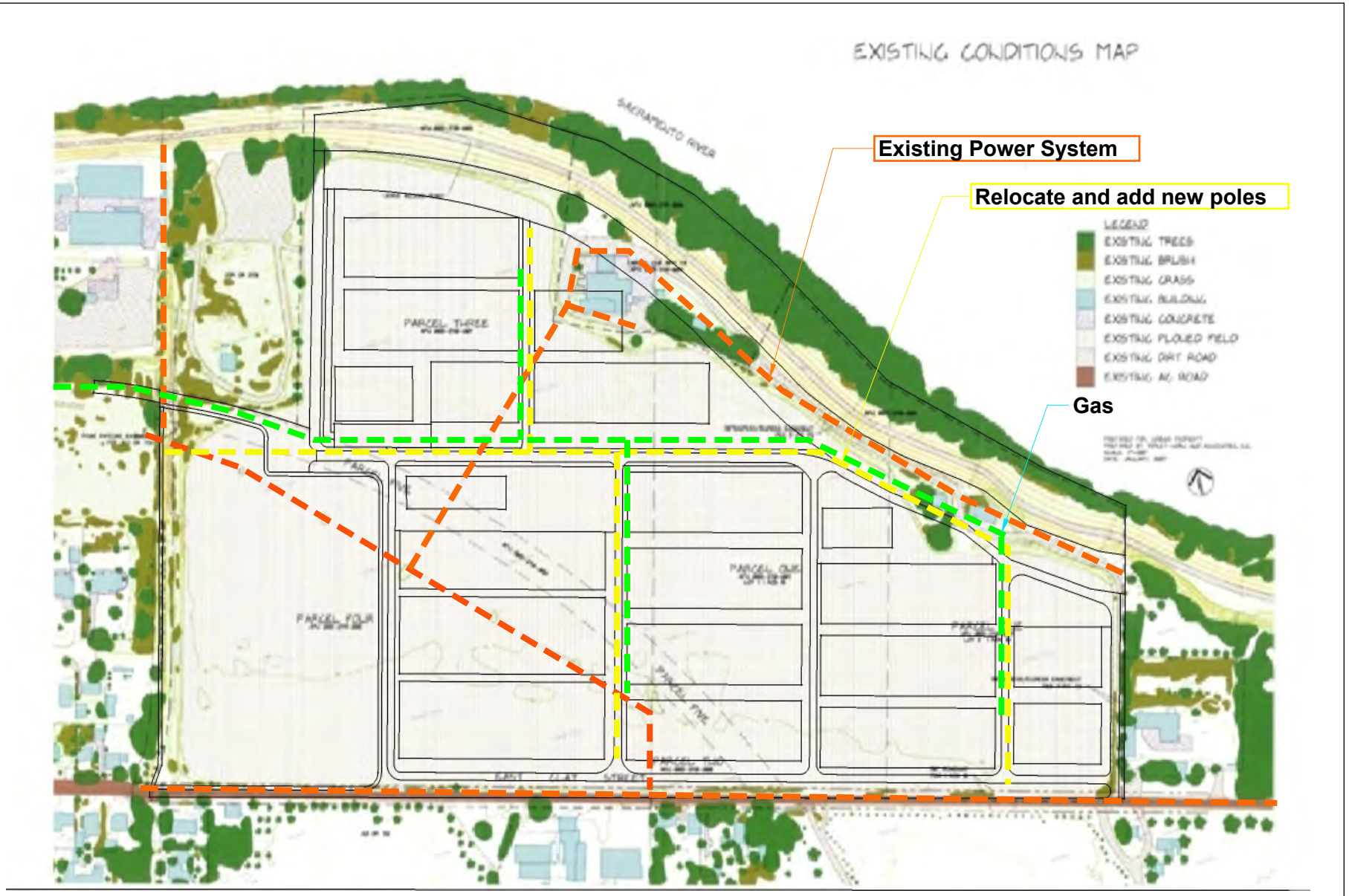
Colusa Triple Crown

Water Management and Recirculation Plan



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PROJECT:
Colusa Triple Crown

Power Distribution System

A.28

Appendix B
Air Quality and Greenhouse Gas Emissions Calculations

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County Emissions by Year	Pollutant (Tons/Year)					
	ROG	NOX	CO	SOX	PM10	PM2.5
2012	2332	4073	7435	128	4679	1069
2015	2154	3577	6570	146	4690	1055
2020	2000	3044	5720	157	4745	1055
Project Construction Emissions (MAX)	0.8	4	2	0	1	1
Project Construction Emissions (Combined All Phases)	2.4	8.4	7.1	0.01315	1.5022	0.91959
Percent of County Emissions for Max Annual (2020)	0.04	0.14	0.043	0.0029	0.025	0.066
Percent of County Emissions for Combined Annual (2020)	0.12	0.28	0.12	0.0084	0.03	0.09
Project Operation Emissions	5.949	1.5086	2.0934	0.0095	0.8628	0.2681
Percent of County Emissions for Combined Annual (2020)	0.30	0.05	0.04	0.006	0.02	0.03

Air Quality and Greenhouse Gas Modeling Assumptions

Table Appx - 1. Project Elements & Construction Phases.

Construction Phase	Associated Project Element	Project Size (sqft)	Land Use Type for Modeling	Construction Phase Type	Notes
Demolition	Demolition existing buildings	17,610		demolition	
1	Site Grading (entire area)	2,650,000		grading	
1	Road Improvements	37,200		Paving	Assume length of 1550 ft and width of 24 feet; assume 60 days for gravel parking and road improvements
1	Research and Development Facility	55,700	Industrial, Research and Development	Construction	
1	Cultivation	200,000	Industrial, Unrefrigerated warehouse No Rail	Construction	
1	Parking	420,578		Parking	1,900 parking spaces; permeable, all-weather, gravel
1	Paving Road			Paving	Used non-default input from client re: 5 days of paving
1	Water Supply Extension	6,000		Trenching	Approx. 1,200 linear ft utility easement, assume 5 foot width of disturbance
1	Detention basin Excavation	566,280		grading	13-acre basin
1	Sewer Connections	6,000		Trenching	Approx. 1,200 linear ft utility easement, assume 5 foot width of disturbance
2	Utility Extensions	6,000		Trenching	Onsite utilities assumed maximum area of impact = 6,000 sq ft.
2	Cultivation	120,000	Industrial, Unrefrigerated warehouse No Rail	Construction	
3	Distribution and Warehouse--Warehouse Only	38,800	Industrial, Unrefrigerated warehouse No Rail	Construction	
3	Distribution and Warehouse--Office Only	11,200	Commercial, General Office Building	Construction	
3	Nursery	328,878	Industrial, Unrefrigerated warehouse No Rail	Construction	
4	Cultivation	320,000	Industrial, Unrefrigerated warehouse No Rail	Construction	
5	Cultivation	320,000	Industrial, Unrefrigerated warehouse No Rail	Construction	
5	Manufacturing Facility- manufacturing/lab only	13,200	Industrial, manufacturing use	Construction	
5	Manufacturing Facility- office only	11,200	Commercial, General Office Building	Construction	

Table Appx - 2. Grading Areas.
All Grading to be done in Phase 1

Phase	Total Grading Areas (sqft)	Total Grading Areas (acres)	Total Building Square Footages by Phase	Building Construction Duration by Phase (Given combined total default duration of 500 days in CALEEMOD) (used ratio of total building square footage to number of total work days to estimate by	Estimated Architectural Coating Duration by Phase (Assume 6 days each)	Total Arch. Coating Area (CALEEMOD), exclude Greenhouse areas, and multiply by 2	Assume Archit. Interior Coating Area (CALEEMOD) 75% of total	Assume Archit. Exterior Coating Area (CALEEMOD) 25% of total
1	540,000	12	255,700	90	6	111,400	83550	27850
2	640,000	15	120,000	42				
3	490,000	11	378,878	134	6	100000	75000	25000
4	420,000	10	320,000	113				
5	560,000	13	344,400	121	6	48800	36600	12200
TOTAL	**2,650,000**	**61**			**TOTAL**	**260,200**	**195,150**	**65,050**

Assume no architectural coating for the greenhouses

Table Appx - 3. Construction Phases & Equipment.

Construction Phase	Associated Project Element	Notes	Non-default equipment (based on input from applicant)	Phase Start	Phase Duration (days)	Phase End
Demolition	Demolition existing buildings			9/1/19	30	10/11/19
1	Site Preparation			9/1/19	20	9/27/19
1	Grading		(3) scrapers, (2) graders, dozers (2), loaders (2), wa	9/28/19	60	12/20/19
1	Road Improvements & Gravel Placement for Parking		(2) graders, (2) dozer, water trucks (2) (assume up	9/28/19	60	12/20/19
1	Research and Development Facility	Combined Building Construction Phase in CALEEMOD with Phase 1 Cultivation	For Cultivation Construction: Concrete Trucks and	12/21/19	90	6/1/20
1	Cultivation	see above.				
1	Arch Coating Phase 1	Only on non-greenhouse		6/2/2020	6	6/11/2020
1	Paving Road	Selected Non-asphalt pa	one paver, rollers (2), oil truck (1), small work truc	12/21/2019	5	12/27/2019
1	Water Supply Extension & Sewer Connections	Combined as 60 days for	excavators (2), backhoes (2, water truck, and trans	6/2/2020	30	8/24/2020
2	Utility Extensions		excavators (2), backhoes (2, water truck, and trans	9/1/2020	30	8/24/2020
2	Cultivation		same as other cultivation phases	9/1/2020	42	10/28/2020
3	Phase 3 Buildings Combined	Combine all Phase 3 buildings		9/1/2022	134	3/7/2023
3	Arch Coating Phase 3	Only on non-greenhouse		3/8/2023	6	5/16/2023
4	Cultivation		same as other cultivation phases	9/1/2024	113	2/5/2025
5	Phase 5 Buildings Combined	All Phase 5 combined	same as other cultivation phases	9/1/2026	121	2/16/2027
6	Arch Coating Phase 5	Only on non-greenhouse		2/17/2027	6	2/26/2027

Table Appx - 4. Estimate Import Trips

Construction Phase	Associated Project Element	Quantity (cubic yards)	Notes
1	Parking and Gravel Placement	3,600	Assume max. of up to 8 import trips to the site during gravel placement, 30 days, and 15 cu. yd. capacity trucks. Total of 240 one-way hauling trips during the Road and Gravel placement phase.

Table Appx - 5. Operational Project Elements.

Operational Project Element	Associated Project Element	Equipment	Size/Use	Workers	Notes
1	Research and Development Facility				
1	Cultivation	Emergency Generator	Tier 4 approved, size: 44 hp.; number = 5 (1/bldg)		Assume up to 100 hours per year of use
2	Cultivation	Emergency Generator	Tier 4 approved, size: 44 hp.; number = 3 (1/bldg)		Assume up to 100 hours per year of use
3	Distribution and Warehouse--Warehouse Only				
3	Distribution and Warehouse--Office Only				
3	Nursery	Emergency Generator	Tier 4 approved, size: 44 hp.; number = 3 (1/bldg)		Assume up to 100 hours per year of use
4	Cultivation	Emergency Generator	Tier 4 approved, size: 44 hp.; number = 8 (1/bldg)		Assume up to 100 hours per year of use
5	Cultivation	Emergency Generator	Tier 4 approved, size: 44 hp.; number = 8 (1/bldg)		
5	Manufacturing Facility- manufacturing/lab only				
5	Manufacturing Facility- office only				
	TOTAL	**Emergency Generator**	27		

Colusa Triple Crown Cannabis Operations Trip Calculations

	Trip Generation			
	Inbound	**Outbound**	**Total**	
Average Daily Delivery Trips for Project (vendor) at buildout			30	(From Traffic Study (assume up to 15 deliveries per day))
Average Daily Trips for Project (worker) at buildout	-	-	792	(Buildout Operational Trips from Traffic Study (July 2018))
Percentage of AADT that are nonworker trips			4%	

TOTAL TRIPS	**822**

Proposed Facility Vehicle Trips																			
Vehicle Trips Land Use SubType	Vehicle Trips Land Use Size Metric	Weekday Trips	Saturday Trips	Sunday Trips	Home to Work Trip Length (HW)	Home to Shopping Trip Length (HS)	Home to Other Trip Length (HO)	CC_TL	CW_TL	CNW_TL	PR_TP	DV_TP	PB_TP	HW_TTP	HS_TTP	HO_TTP	CC_TTP	CW_TTP	CNW_TTP
General Office Building	1000sqft	0	0	0	0	0	0	6.6	14.7	6.6	0	0	0	0	0	0	0	0	0
Manufacturing	1000sqft	33.6885	33.6885	33.6885	0	0	0	6.6	14.7	6.6	92	5	3	0	0	0	0	96	4
Other Non-Asphalt Surfaces	1000sqft	0	0	0	0	0	0	6.6	14.7	6.6	0	0	0	0	0	0	0	0	0
Research & Development	1000sqft	0	0	0	0	0	0	6.6	14.7	6.6	0	0	0	0	0	0	0	0	0
Unrefrigerated Warehouse-No Rail	1000sqft	0	0	0	0	0	0	6.6	14.7	6.6	0	0	0	0	0	0	0	0	0
					0														

Total Trips	822
Manufacturing Square Footage	24,400
Building Sq. Ft. / 1,000	24
Trips per 1000 sq ft manufacturing per day	33.68852

Assume that operational trips primarily match with manufacturing/warehouse trip patterns with 92% being primary, 5% diverted, and 3% non-employees.

Assume that 96% of trips are workers and 4% are commercial non-worker and no customers.

Construction Phase	Associated Project Element	Project Size (sqft)
1	Research and Development Facility	55,700
1	Cultivation	200,000
2	Cultivation	120,000
3	Distribution and Warehouse--Warehouse Only	38,800
3	Distribution and Warehouse--Office Only	11,200
3	Nursery	328,878
4	Cultivation	320,000
5	Cultivation	320,000
5	Manufacturing Facility-manufacturing/lab only	13,200
5	Manufacturing Facility- office only	11,200
	TOTAL	1,418,978

Triple Crown Cannabis

Colusa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	11.20	1000sqft	0.26	11,200.00	0
General Office Building	11.20	1000sqft	0.26	11,200.00	0
Research & Development	55.70	1000sqft	1.28	55,700.00	0
Manufacturing	13.20	1000sqft	0.30	13,200.00	0
Unrefrigerated Warehouse-No Rail	200.00	1000sqft	4.59	200,000.00	0
Unrefrigerated Warehouse-No Rail	120.00	1000sqft	2.75	120,000.00	0
Unrefrigerated Warehouse-No Rail	38.80	1000sqft	0.89	38,800.00	0
Unrefrigerated Warehouse-No Rail	328.88	1000sqft	7.55	328,878.00	0
Unrefrigerated Warehouse-No Rail	320.00	1000sqft	7.35	320,000.00	0
Unrefrigerated Warehouse-No Rail	320.00	1000sqft	7.35	320,000.00	0
Other Non-Asphalt Surfaces	420.58	1000sqft	9.66	420,578.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	56
Climate Zone	1			**Operational Year**	2028
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

Triple Crown Cannabis - Colusa County, Annual

Project Characteristics -

Land Use - Land Uses based on Project Description.

Construction Phase - Extended grading phase from default 45 days to 60 days. Divided building construction default of 500 days into the construction phases. See attachment with assumed phase durations based on input from applicant.

Trips and VMT - Assume 15 round trips (30 one-way) worker trips for all construction phases based on the traffic study. Demolition trips used default. Assume 10 one-way vendor trips per day.

Demolition - Area assumed from Google Map estimates. See air quality chapter references for details.

Grading - Acres graded detailed by phase in attachment. Assumed imported gravel for parking (see attachment for estimate calculation details).

Architectural Coating - Assume only gravel parking and no need for remarking areas. Assume architectural coating only required on non-greenhouse (or nursery) buildings. See attachment for calculations.

Vehicle Trips - assume trips follow pattern of manufacturing land use. See attached trip table for information on how trip rate and percentage trip distributions were estimated.

Fleet Mix -

Area Coating - Only included non-greenhouse architectural coating areas. See attached file for detailed calculations. Used total interior and exterior areas.

Energy Use - Assumed greenhouse electricity is 50 percent of typical manufacturing energy intensity. Thus, changed values to 0.31, 0.925, and 0.905, respectively. No change to natural gas energy intensity.

Operational Off-Road Equipment - generators accounted for elsewhere

Stationary Sources - Emergency Generators and Fire Pumps - Total number of emergency generators. Horsepower provided by applicant. assumed up to 100 hours of use per year.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	12,200.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	27,850.00
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tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,128,467.00	75,000.00
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tblArchitecturalCoating	ConstArea_Parking	25,235.00	0.00
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tblAreaCoating	Area_Nonresidential_Interior	2128467	195150
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tblConstructionPhase	NumDays	740.00	134.00
tblConstructionPhase	NumDays	55.00	9.00
tblConstructionPhase	NumDays	740.00	113.00
tblConstructionPhase	NumDays	740.00	121.00
tblConstructionPhase	NumDays	55.00	8.00
tblEnergyUse	LightingElect	0.00	0.91
tblEnergyUse	NT24E	0.00	0.93
tblEnergyUse	T24E	0.00	0.31
tblGrading	AcresOfGrading	150.00	61.00
tblGrading	MaterialImported	0.00	3,600.00
tblLandUse	LandUseSquareFeet	328,880.00	328,878.00
tblLandUse	LandUseSquareFeet	420,580.00	420,578.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CO_EF	4.10	4.10
tblStationaryGeneratorsPumpsEF	NOX_EF	5.32	5.32
tblStationaryGeneratorsPumpsEF	PM10_EF	0.45	0.45

tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	44.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	100.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	27.00
tblTripsAndVMT	HaulingTripNumber	450.00	240.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00

tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	13.00	4.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	96.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	15.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	82.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.49	33.69
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	0.62	33.69
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00

tblVehicleTrips	WD_TR	3.82	33.69
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3988	4.1749	2.4558	4.5800e-003	0.9812	0.2011	1.1823	0.5111	0.1854	0.6965	0.0000	412.3094	412.3094	0.1159	0.0000	415.2066
2020	0.8236	1.5519	1.4114	2.5300e-003	0.0340	0.0854	0.1194	9.1300e-003	0.0803	0.0895	0.0000	220.6558	220.6558	0.0449	0.0000	221.7777
2022	0.0822	0.7267	0.7713	1.4300e-003	0.0187	0.0354	0.0541	5.0300e-003	0.0333	0.0384	0.0000	124.7240	124.7240	0.0252	0.0000	125.3543
2023	0.6217	0.3652	0.4233	8.0000e-004	0.0118	0.0169	0.0286	3.1600e-003	0.0159	0.0190	0.0000	69.4705	69.4705	0.0135	0.0000	69.8082
2024	0.0707	0.6220	0.7525	1.4200e-003	0.0187	0.0268	0.0455	5.0300e-003	0.0252	0.0303	0.0000	123.5466	123.5466	0.0246	0.0000	124.1623
2025	0.0197	0.1729	0.2227	4.2000e-004	5.5900e-003	6.9000e-003	0.0125	1.5000e-003	6.4900e-003	7.9900e-003	0.0000	36.7668	36.7668	7.3100e-003	0.0000	36.9496
2026	0.0662	0.5842	0.7505	1.4200e-003	0.0189	0.0233	0.0423	5.0900e-003	0.0220	0.0271	0.0000	123.9456	123.9456	0.0247	0.0000	124.5632
2027	0.3086	0.2236	0.2905	5.5000e-004	8.5800e-003	8.9600e-003	0.0175	2.3000e-003	8.4400e-003	0.0108	0.0000	48.3174	48.3174	9.3300e-003	0.0000	48.5506
Maximum	**0.8236**	**4.1749**	**2.4558**	**4.5800e-003**	**0.9812**	**0.2011**	**1.1823**	**0.5111**	**0.1854**	**0.6965**	**0.0000**	**412.3094**	**412.3094**	**0.1159**	**0.0000**	**415.2066**

2.1 Overall Construction

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					
2019	0.3988	4.1749	2.4558	4.5800e-003	0.9812	0.2011	1.1823	0.5111	0.1854	0.6965	0.0000	412.3090	412.3090	0.1159	0.0000	415.2062
2020	0.8236	1.5519	1.4114	2.5300e-003	0.0340	0.0854	0.1194	9.1300e-003	0.0803	0.0895	0.0000	220.6556	220.6556	0.0449	0.0000	221.7775
2022	0.0822	0.7267	0.7713	1.4300e-003	0.0187	0.0354	0.0541	5.0300e-003	0.0333	0.0384	0.0000	124.7239	124.7239	0.0252	0.0000	125.3542
2023	0.6217	0.3652	0.4233	8.0000e-004	0.0118	0.0169	0.0286	3.1600e-003	0.0159	0.0190	0.0000	69.4705	69.4705	0.0135	0.0000	69.8081
2024	0.0707	0.6220	0.7525	1.4200e-003	0.0187	0.0268	0.0455	5.0300e-003	0.0252	0.0303	0.0000	123.5465	123.5465	0.0246	0.0000	124.1622
2025	0.0197	0.1729	0.2227	4.2000e-004	5.5900e-003	6.9000e-003	0.0125	1.5000e-003	6.4900e-003	7.9900e-003	0.0000	36.7668	36.7668	7.3100e-003	0.0000	36.9495
2026	0.0662	0.5842	0.7505	1.4200e-003	0.0189	0.0233	0.0423	5.0900e-003	0.0220	0.0271	0.0000	123.9455	123.9455	0.0247	0.0000	124.5631
2027	0.3086	0.2236	0.2905	5.5000e-004	8.5800e-003	8.9600e-003	0.0175	2.3000e-003	8.4400e-003	0.0108	0.0000	48.3174	48.3174	9.3300e-003	0.0000	48.5506
Maximum	**0.8236**	**4.1749**	**2.4558**	**4.5800e-003**	**0.9812**	**0.2011**	**1.1823**	**0.5111**	**0.1854**	**0.6965**	**0.0000**	**412.3090**	**412.3090**	**0.1159**	**0.0000**	**415.2062**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2019**	**11-30-2019**	3.6188	3.6188
2	**12-1-2019**	**2-29-2020**	1.4248	1.4248

3	**3-1-2020**	**5-31-2020**	0.7491	0.7491
4	**6-1-2020**	**8-31-2020**	0.5924	0.5924
5	**9-1-2020**	**11-30-2020**	0.4724	0.4724
13	**9-1-2022**	**11-30-2022**	0.6048	0.6048
14	**12-1-2022**	**2-28-2023**	0.5650	0.5650
15	**3-1-2023**	**5-31-2023**	0.6485	0.6485
21	**9-1-2024**	**11-30-2024**	0.5180	0.5180
22	**12-1-2024**	**2-28-2025**	0.3672	0.3672
29	**9-1-2026**	**11-30-2026**	0.4808	0.4808
30	**12-1-2026**	**2-28-2027**	0.6696	0.6696
		Highest	3.6188	3.6188

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	5.7213	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0329	0.0329	9.0000e-005	0.0000	0.0350
Energy	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	1,020.6683	1,020.6683	0.0452	9.8700e-003	1,024.7410
Mobile	0.1265	0.9668	1.6562	8.8300e-003	0.8117	5.7600e-003	0.8175	0.2173	5.3800e-003	0.2227	0.0000	814.0738	814.0738	0.0243	0.0000	814.6800
Stationary	0.0975	0.5083	0.3924	4.7000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	45.2387	45.2387	6.3400e-003	0.0000	45.3973
Waste						0.0000	0.0000		0.0000	0.0000	261.7467	0.0000	261.7467	15.4688	0.0000	648.4664
Water						0.0000	0.0000		0.0000	0.0000	108.3254	539.9639	648.2893	11.1505	0.2678	1,006.8441
Total	**5.9490**	**1.5086**	**2.0934**	**9.5000e-003**	**0.8117**	**0.0512**	**0.8628**	**0.2173**	**0.0508**	**0.2681**	**370.0721**	**2,419.9775**	**2,790.0496**	**26.6952**	**0.2776**	**3,540.1637**

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	5.7213	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0329	0.0329	9.0000e-005	0.0000	0.0350
Energy	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	1,020.6683	1,020.6683	0.0452	9.8700e-003	1,024.7410
Mobile	0.1265	0.9668	1.6562	8.8300e-003	0.8117	5.7600e-003	0.8175	0.2173	5.3800e-003	0.2227	0.0000	814.0738	814.0738	0.0243	0.0000	814.6800
Stationary	0.0975	0.5083	0.3924	4.7000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	45.2387	45.2387	6.3400e-003	0.0000	45.3973
Waste						0.0000	0.0000		0.0000	0.0000	261.7467	0.0000	261.7467	15.4688	0.0000	648.4664
Water						0.0000	0.0000		0.0000	0.0000	108.3254	539.9639	648.2893	11.1505	0.2678	1,006.8441
Total	**5.9490**	**1.5086**	**2.0934**	**9.5000e-003**	**0.8117**	**0.0512**	**0.8628**	**0.2173**	**0.0508**	**0.2681**	**370.0721**	**2,419.9775**	**2,790.0496**	**26.6952**	**0.2776**	**3,540.1637**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Triple Crown Cannabis - Colusa County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2019	10/11/2019	5	30	Demolition Existing Bldgs
2	Site Preparation Phase 1	Site Preparation	9/1/2019	9/27/2019	5	20	Phase 1 Site Prep
3	Road and Parking	Site Preparation	9/28/2019	12/20/2019	5	60	Road Imp. Gravel Parking Placement
4	Grading Phase 1	Grading	9/28/2019	12/20/2019	5	60	Phase 1 Grading
5	Building Construction Phase 1	Building Construction	12/21/2019	6/1/2020	5	116	Phase 1 Bldgs
6	Building Construction Phase 2	Building Construction	9/1/2020	10/28/2020	5	42	Phase 2 Bldgs
7	Paving Phase 1	Paving	12/21/2019	12/27/2019	5	5	Paving for Road
8	Architectural Coating Phase 1	Architectural Coating	6/2/2020	6/11/2020	5	8	Phase 1 Coating
9	Building Construction Phase 3	Building Construction	9/1/2022	3/7/2023	5	134	Phase 3 Bldgs
10	Architectural Coating Phase 3	Architectural Coating	3/8/2023	3/20/2023	5	9	Phase 3 Coating
11	Building Construction Phase 4	Building Construction	9/1/2024	2/5/2025	5	113	Phase 4 Bldgs
12	Building Construction Phase 5	Building Construction	9/1/2026	2/16/2027	5	121	Phase 5 Bldgs
13	ARchitectural Coating Phase 5	Architectural Coating	2/17/2027	2/26/2027	5	8	Phase 5 Coating

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 9.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 83,550; Non-Residential Outdoor: 27,850; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Site Preparation Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Road and Parking	Rubber Tired Dozers	3	8.00	247	0.40
Road and Parking	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Phase 1	Excavators	2	8.00	158	0.38
Grading Phase 1	Graders	1	8.00	187	0.41
Grading Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading Phase 1	Scrapers	2	8.00	367	0.48
Grading Phase 1	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction Phase 1	Cranes	1	7.00	231	0.29
Building Construction Phase 1	Forklifts	3	8.00	89	0.20
Building Construction Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 1	Welders	1	8.00	46	0.45
Building Construction Phase 2	Cranes	1	7.00	231	0.29
Building Construction Phase 2	Forklifts	3	8.00	89	0.20
Building Construction Phase 2	Generator Sets	1	8.00	84	0.74
Building Construction Phase 2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 2	Welders	1	8.00	46	0.45
Paving Phase 1	Pavers	2	8.00	130	0.42
Paving Phase 1	Paving Equipment	2	8.00	132	0.36
Paving Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating Phase 1	Air Compressors	1	6.00	78	0.48
Building Construction Phase 3	Cranes	1	7.00	231	0.29
Building Construction Phase 3	Forklifts	3	8.00	89	0.20
Building Construction Phase 3	Generator Sets	1	8.00	84	0.74
Building Construction Phase 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction Phase 3	Welders	1	8.00	46	0.45
Architectural Coating Phase 3	Air Compressors	1	6.00	78	0.48
Building Construction Phase 4	Cranes	1	7.00	231	0.29
Building Construction Phase 4	Forklifts	3	8.00	89	0.20
Building Construction Phase 4	Generator Sets	1	8.00	84	0.74
Building Construction Phase 4	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 4	Welders	1	8.00	46	0.45
Building Construction Phase 5	Cranes	1	7.00	231	0.29
Building Construction Phase 5	Forklifts	3	8.00	89	0.20
Building Construction Phase 5	Generator Sets	1	8.00	84	0.74
Building Construction Phase 5	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 5	Welders	1	8.00	46	0.45
ARchitectural Coating Phase 5	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
Demolition	6	30.00	0.00	80.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation Phase 1	7	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Road and Parking	7	30.00	0.00	240.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading Phase 1	8	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 1	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 2	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving Phase 1	6	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating Phase 1	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 3	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating Phase 3	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 4	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 5	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
ARchitectural Coating Phase 5	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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					8.6700e-003	0.0000	8.6700e-003	1.3100e-003	0.0000	1.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0527	0.5367	0.3309	5.8000e-004		0.0269	0.0269		0.0250	0.0250	0.0000	51.9395	51.9395	0.0145	0.0000	52.3007
Total	**0.0527**	**0.5367**	**0.3309**	**5.8000e-004**	**8.6700e-003**	**0.0269**	**0.0356**	**1.3100e-003**	**0.0250**	**0.0264**	**0.0000**	**51.9395**	**51.9395**	**0.0145**	**0.0000**	**52.3007**

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	3.7000e-004	0.0121	1.9500e-003	3.0000e-005	6.8000e-004	6.0000e-005	7.4000e-004	1.9000e-004	5.0000e-005	2.4000e-004	0.0000	3.1100	3.1100	1.3000e-004	0.0000	3.1133
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7900e-003	2.5100e-003	0.0223	5.0000e-005	5.5600e-003	4.0000e-005	5.5900e-003	1.4800e-003	4.0000e-005	1.5100e-003	0.0000	4.9278	4.9278	1.8000e-004	0.0000	4.9324
Total	**3.1600e-003**	**0.0146**	**0.0242**	**8.0000e-005**	**6.2400e-003**	**1.0000e-004**	**6.3300e-003**	**1.6700e-003**	**9.0000e-005**	**1.7500e-003**	**0.0000**	**8.0378**	**8.0378**	**3.1000e-004**	**0.0000**	**8.0457**

3.2 Demolition - 2019

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					8.6700e-003	0.0000	8.6700e-003	1.3100e-003	0.0000	1.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0527	0.5367	0.3309	5.8000e-004		0.0269	0.0269		0.0250	0.0250	0.0000	51.9394	51.9394	0.0145	0.0000	52.3007
Total	**0.0527**	**0.5367**	**0.3309**	**5.8000e-004**	**8.6700e-003**	**0.0269**	**0.0356**	**1.3100e-003**	**0.0250**	**0.0264**	**0.0000**	**51.9394**	**51.9394**	**0.0145**	**0.0000**	**52.3007**

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	3.7000e-004	0.0121	1.9500e-003	3.0000e-005	6.8000e-004	6.0000e-005	7.4000e-004	1.9000e-004	5.0000e-005	2.4000e-004	0.0000	3.1100	3.1100	1.3000e-004	0.0000	3.1133
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7900e-003	2.5100e-003	0.0223	5.0000e-005	5.5600e-003	4.0000e-005	5.5900e-003	1.4800e-003	4.0000e-005	1.5100e-003	0.0000	4.9278	4.9278	1.8000e-004	0.0000	4.9324
Total	**3.1600e-003**	**0.0146**	**0.0242**	**8.0000e-005**	**6.2400e-003**	**1.0000e-004**	**6.3300e-003**	**1.6700e-003**	**9.0000e-005**	**1.7500e-003**	**0.0000**	**8.0378**	**8.0378**	**3.1000e-004**	**0.0000**	**8.0457**

3.3 Site Preparation Phase 1 - 2019

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					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0434	0.4557	0.2206	3.8000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	34.1687	34.1687	0.0108	0.0000	34.4390
Total	**0.0434**	**0.4557**	**0.2206**	**3.8000e-004**	**0.1807**	**0.0239**	**0.2046**	**0.0993**	**0.0220**	**0.1213**	**0.0000**	**34.1687**	**34.1687**	**0.0108**	**0.0000**	**34.4390**

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	1.8600e-003	1.6700e-003	0.0148	4.0000e-005	3.7000e-003	3.0000e-005	3.7300e-003	9.8000e-004	2.0000e-005	1.0100e-003	0.0000	3.2852	3.2852	1.2000e-004	0.0000	3.2882
Total	**1.8600e-003**	**1.6700e-003**	**0.0148**	**4.0000e-005**	**3.7000e-003**	**3.0000e-005**	**3.7300e-003**	**9.8000e-004**	**2.0000e-005**	**1.0100e-003**	**0.0000**	**3.2852**	**3.2852**	**1.2000e-004**	**0.0000**	**3.2882**

3.3 Site Preparation Phase 1 - 2019

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					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0434	0.4557	0.2206	3.8000e-004		0.0239	0.0239		0.0220	0.0220	0.0000	34.1687	34.1687	0.0108	0.0000	34.4389
Total	**0.0434**	**0.4557**	**0.2206**	**3.8000e-004**	**0.1807**	**0.0239**	**0.2046**	**0.0993**	**0.0220**	**0.1213**	**0.0000**	**34.1687**	**34.1687**	**0.0108**	**0.0000**	**34.4389**

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	1.8600e-003	1.6700e-003	0.0148	4.0000e-005	3.7000e-003	3.0000e-005	3.7300e-003	9.8000e-004	2.0000e-005	1.0100e-003	0.0000	3.2852	3.2852	1.2000e-004	0.0000	3.2882
Total	**1.8600e-003**	**1.6700e-003**	**0.0148**	**4.0000e-005**	**3.7000e-003**	**3.0000e-005**	**3.7300e-003**	**9.8000e-004**	**2.0000e-005**	**1.0100e-003**	**0.0000**	**3.2852**	**3.2852**	**1.2000e-004**	**0.0000**	**3.2882**

3.4 Road and Parking - 2019

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					0.5422	0.0000	0.5422	0.2980	0.0000	0.2980	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1301	1.3672	0.6619	1.1400e-003		0.0717	0.0717		0.0660	0.0660	0.0000	102.5061	102.5061	0.0324	0.0000	103.3169
Total	**0.1301**	**1.3672**	**0.6619**	**1.1400e-003**	**0.5422**	**0.0717**	**0.6139**	**0.2980**	**0.0660**	**0.3639**	**0.0000**	**102.5061**	**102.5061**	**0.0324**	**0.0000**	**103.3169**

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	1.1200e-003	0.0362	5.8400e-003	1.0000e-004	2.0400e-003	1.7000e-004	2.2100e-003	5.6000e-004	1.6000e-004	7.3000e-004	0.0000	9.3300	9.3300	4.0000e-004	0.0000	9.3400
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5800e-003	5.0100e-003	0.0445	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8556	9.8556	3.6000e-004	0.0000	9.8647
Total	**6.7000e-003**	**0.0412**	**0.0504**	**2.1000e-004**	**0.0132**	**2.5000e-004**	**0.0134**	**3.5100e-003**	**2.3000e-004**	**3.7500e-003**	**0.0000**	**19.1856**	**19.1856**	**7.6000e-004**	**0.0000**	**19.2047**

3.4 Road and Parking - 2019

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					0.5422	0.0000	0.5422	0.2980	0.0000	0.2980	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1301	1.3672	0.6619	1.1400e-003		0.0717	0.0717		0.0660	0.0660	0.0000	102.5059	102.5059	0.0324	0.0000	103.3167
Total	**0.1301**	**1.3672**	**0.6619**	**1.1400e-003**	**0.5422**	**0.0717**	**0.6139**	**0.2980**	**0.0660**	**0.3639**	**0.0000**	**102.5059**	**102.5059**	**0.0324**	**0.0000**	**103.3167**

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	1.1200e-003	0.0362	5.8400e-003	1.0000e-004	2.0400e-003	1.7000e-004	2.2100e-003	5.6000e-004	1.6000e-004	7.3000e-004	0.0000	9.3300	9.3300	4.0000e-004	0.0000	9.3400
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5800e-003	5.0100e-003	0.0445	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8556	9.8556	3.6000e-004	0.0000	9.8647
Total	**6.7000e-003**	**0.0412**	**0.0504**	**2.1000e-004**	**0.0132**	**2.5000e-004**	**0.0134**	**3.5100e-003**	**2.3000e-004**	**3.7500e-003**	**0.0000**	**19.1856**	**19.1856**	**7.6000e-004**	**0.0000**	**19.2047**

3.5 Grading Phase 1 - 2019

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					0.2130	0.0000	0.2130	0.1028	0.0000	0.1028	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1422	1.6356	1.0013	1.8600e-003		0.0715	0.0715		0.0658	0.0658	0.0000	167.1040	167.1040	0.0529	0.0000	168.4257
Total	**0.1422**	**1.6356**	**1.0013**	**1.8600e-003**	**0.2130**	**0.0715**	**0.2845**	**0.1028**	**0.0658**	**0.1686**	**0.0000**	**167.1040**	**167.1040**	**0.0529**	**0.0000**	**168.4257**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5800e-003	5.0100e-003	0.0445	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8556	9.8556	3.6000e-004	0.0000	9.8647
Total	**5.5800e-003**	**5.0100e-003**	**0.0445**	**1.1000e-004**	**0.0111**	**8.0000e-005**	**0.0112**	**2.9500e-003**	**7.0000e-005**	**3.0200e-003**	**0.0000**	**9.8556**	**9.8556**	**3.6000e-004**	**0.0000**	**9.8647**

3.5 Grading Phase 1 - 2019

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					0.2130	0.0000	0.2130	0.1028	0.0000	0.1028	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1422	1.6356	1.0013	1.8600e-003		0.0715	0.0715		0.0658	0.0658	0.0000	167.1038	167.1038	0.0529	0.0000	168.4255
Total	**0.1422**	**1.6356**	**1.0013**	**1.8600e-003**	**0.2130**	**0.0715**	**0.2845**	**0.1028**	**0.0658**	**0.1686**	**0.0000**	**167.1038**	**167.1038**	**0.0529**	**0.0000**	**168.4255**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5800e-003	5.0100e-003	0.0445	1.1000e-004	0.0111	8.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.8556	9.8556	3.6000e-004	0.0000	9.8647
Total	**5.5800e-003**	**5.0100e-003**	**0.0445**	**1.1000e-004**	**0.0111**	**8.0000e-005**	**0.0112**	**2.9500e-003**	**7.0000e-005**	**3.0200e-003**	**0.0000**	**9.8556**	**9.8556**	**3.6000e-004**	**0.0000**	**9.8647**

3.6 Building Construction Phase 1 - 2019

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	8.2600e-003	0.0738	0.0601	9.0000e-005		4.5100e-003	4.5100e-003		4.2400e-003	4.2400e-003	0.0000	8.2287	8.2287	2.0000e-003	0.0000	8.2788
Total	**8.2600e-003**	**0.0738**	**0.0601**	**9.0000e-005**		**4.5100e-003**	**4.5100e-003**		**4.2400e-003**	**4.2400e-003**	**0.0000**	**8.2287**	**8.2287**	**2.0000e-003**	**0.0000**	**8.2788**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	4.3000e-003	1.4500e-003	1.0000e-005	2.1000e-004	3.0000e-005	2.4000e-004	6.0000e-005	3.0000e-005	9.0000e-005	0.0000	0.9084	0.9084	6.0000e-005	0.0000	0.9100
Worker	6.5000e-004	5.8000e-004	5.1900e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1498	1.1498	4.0000e-005	0.0000	1.1509
Total	**8.6000e-004**	**4.8800e-003**	**6.6400e-003**	**2.0000e-005**	**1.5100e-003**	**4.0000e-005**	**1.5500e-003**	**4.0000e-004**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**2.0582**	**2.0582**	**1.0000e-004**	**0.0000**	**2.0609**

3.6 Building Construction Phase 1 - 2019

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	8.2600e-003	0.0738	0.0601	9.0000e-005		4.5100e-003	4.5100e-003		4.2400e-003	4.2400e-003	0.0000	8.2286	8.2286	2.0000e-003	0.0000	8.2788
Total	**8.2600e-003**	**0.0738**	**0.0601**	**9.0000e-005**		**4.5100e-003**	**4.5100e-003**		**4.2400e-003**	**4.2400e-003**	**0.0000**	**8.2286**	**8.2286**	**2.0000e-003**	**0.0000**	**8.2788**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	4.3000e-003	1.4500e-003	1.0000e-005	2.1000e-004	3.0000e-005	2.4000e-004	6.0000e-005	3.0000e-005	9.0000e-005	0.0000	0.9084	0.9084	6.0000e-005	0.0000	0.9100
Worker	6.5000e-004	5.8000e-004	5.1900e-003	1.0000e-005	1.3000e-003	1.0000e-005	1.3100e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1498	1.1498	4.0000e-005	0.0000	1.1509
Total	**8.6000e-004**	**4.8800e-003**	**6.6400e-003**	**2.0000e-005**	**1.5100e-003**	**4.0000e-005**	**1.5500e-003**	**4.0000e-004**	**4.0000e-005**	**4.4000e-004**	**0.0000**	**2.0582**	**2.0582**	**1.0000e-004**	**0.0000**	**2.0609**

3.6 Building Construction Phase 1 - 2020

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	0.1155	1.0456	0.9182	1.4700e-003		0.0609	0.0609		0.0572	0.0572	0.0000	126.2274	126.2274	0.0308	0.0000	126.9973
Total	**0.1155**	**1.0456**	**0.9182**	**1.4700e-003**		**0.0609**	**0.0609**		**0.0572**	**0.0572**	**0.0000**	**126.2274**	**126.2274**	**0.0308**	**0.0000**	**126.9973**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e-003	0.0614	0.0196	1.5000e-004	3.2500e-003	3.1000e-004	3.5600e-003	9.4000e-004	3.0000e-004	1.2400e-003	0.0000	14.0561	14.0561	9.4000e-004	0.0000	14.0796
Worker	9.1900e-003	8.0100e-003	0.0718	1.9000e-004	0.0202	1.3000e-004	0.0203	5.3700e-003	1.2000e-004	5.4900e-003	0.0000	17.3418	17.3418	5.7000e-004	0.0000	17.3561
Total	**0.0119**	**0.0694**	**0.0915**	**3.4000e-004**	**0.0234**	**4.4000e-004**	**0.0239**	**6.3100e-003**	**4.2000e-004**	**6.7300e-003**	**0.0000**	**31.3979**	**31.3979**	**1.5100e-003**	**0.0000**	**31.4357**

3.6 Building Construction Phase 1 - 2020

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	0.1155	1.0456	0.9182	1.4700e-003		0.0609	0.0609		0.0572	0.0572	0.0000	126.2273	126.2273	0.0308	0.0000	126.9972
Total	**0.1155**	**1.0456**	**0.9182**	**1.4700e-003**		**0.0609**	**0.0609**		**0.0572**	**0.0572**	**0.0000**	**126.2273**	**126.2273**	**0.0308**	**0.0000**	**126.9972**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.7000e-003	0.0614	0.0196	1.5000e-004	3.2500e-003	3.1000e-004	3.5600e-003	9.4000e-004	3.0000e-004	1.2400e-003	0.0000	14.0561	14.0561	9.4000e-004	0.0000	14.0796
Worker	9.1900e-003	8.0100e-003	0.0718	1.9000e-004	0.0202	1.3000e-004	0.0203	5.3700e-003	1.2000e-004	5.4900e-003	0.0000	17.3418	17.3418	5.7000e-004	0.0000	17.3561
Total	**0.0119**	**0.0694**	**0.0915**	**3.4000e-004**	**0.0234**	**4.4000e-004**	**0.0239**	**6.3100e-003**	**4.2000e-004**	**6.7300e-003**	**0.0000**	**31.3979**	**31.3979**	**1.5100e-003**	**0.0000**	**31.4357**

3.7 Building Construction Phase 2 - 2020

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	0.0445	0.4029	0.3538	5.7000e-004		0.0235	0.0235		0.0221	0.0221	0.0000	48.6381	48.6381	0.0119	0.0000	48.9348
Total	**0.0445**	**0.4029**	**0.3538**	**5.7000e-004**		**0.0235**	**0.0235**		**0.0221**	**0.0221**	**0.0000**	**48.6381**	**48.6381**	**0.0119**	**0.0000**	**48.9348**

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	1.0400e-003	0.0236	7.5600e-003	6.0000e-005	1.2500e-003	1.2000e-004	1.3700e-003	3.6000e-004	1.1000e-004	4.8000e-004	0.0000	5.4161	5.4161	3.6000e-004	0.0000	5.4252
Worker	3.5400e-003	3.0900e-003	0.0277	7.0000e-005	7.7800e-003	5.0000e-005	7.8300e-003	2.0700e-003	5.0000e-005	2.1200e-003	0.0000	6.6822	6.6822	2.2000e-004	0.0000	6.6877
Total	**4.5800e-003**	**0.0267**	**0.0352**	**1.3000e-004**	**9.0300e-003**	**1.7000e-004**	**9.2000e-003**	**2.4300e-003**	**1.6000e-004**	**2.6000e-003**	**0.0000**	**12.0983**	**12.0983**	**5.8000e-004**	**0.0000**	**12.1128**

3.7 Building Construction Phase 2 - 2020

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	0.0445	0.4029	0.3538	5.7000e-004		0.0235	0.0235		0.0221	0.0221	0.0000	48.6380	48.6380	0.0119	0.0000	48.9347
Total	**0.0445**	**0.4029**	**0.3538**	**5.7000e-004**		**0.0235**	**0.0235**		**0.0221**	**0.0221**	**0.0000**	**48.6380**	**48.6380**	**0.0119**	**0.0000**	**48.9347**

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	1.0400e-003	0.0236	7.5600e-003	6.0000e-005	1.2500e-003	1.2000e-004	1.3700e-003	3.6000e-004	1.1000e-004	4.8000e-004	0.0000	5.4161	5.4161	3.6000e-004	0.0000	5.4252
Worker	3.5400e-003	3.0900e-003	0.0277	7.0000e-005	7.7800e-003	5.0000e-005	7.8300e-003	2.0700e-003	5.0000e-005	2.1200e-003	0.0000	6.6822	6.6822	2.2000e-004	0.0000	6.6877
Total	**4.5800e-003**	**0.0267**	**0.0352**	**1.3000e-004**	**9.0300e-003**	**1.7000e-004**	**9.2000e-003**	**2.4300e-003**	**1.6000e-004**	**2.6000e-003**	**0.0000**	**12.0983**	**12.0983**	**5.8000e-004**	**0.0000**	**12.1128**

3.8 Paving Phase 1 - 2019

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	3.6400e-003	0.0381	0.0367	6.0000e-005		2.0600e-003	2.0600e-003		1.9000e-003	1.9000e-003	0.0000	5.1188	5.1188	1.6200e-003	0.0000	5.1593
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.6400e-003**	**0.0381**	**0.0367**	**6.0000e-005**		**2.0600e-003**	**2.0600e-003**		**1.9000e-003**	**1.9000e-003**	**0.0000**	**5.1188**	**5.1188**	**1.6200e-003**	**0.0000**	**5.1593**

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	4.2000e-004	3.7100e-003	1.0000e-005	9.3000e-004	1.0000e-005	9.3000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.8213	0.8213	3.0000e-005	0.0000	0.8221
Total	**4.7000e-004**	**4.2000e-004**	**3.7100e-003**	**1.0000e-005**	**9.3000e-004**	**1.0000e-005**	**9.3000e-004**	**2.5000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.8213**	**0.8213**	**3.0000e-005**	**0.0000**	**0.8221**

3.8 Paving Phase 1 - 2019

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	3.6400e-003	0.0381	0.0367	6.0000e-005		2.0600e-003	2.0600e-003		1.9000e-003	1.9000e-003	0.0000	5.1188	5.1188	1.6200e-003	0.0000	5.1593
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.6400e-003**	**0.0381**	**0.0367**	**6.0000e-005**		**2.0600e-003**	**2.0600e-003**		**1.9000e-003**	**1.9000e-003**	**0.0000**	**5.1188**	**5.1188**	**1.6200e-003**	**0.0000**	**5.1593**

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	4.2000e-004	3.7100e-003	1.0000e-005	9.3000e-004	1.0000e-005	9.3000e-004	2.5000e-004	1.0000e-005	2.5000e-004	0.0000	0.8213	0.8213	3.0000e-005	0.0000	0.8221
Total	**4.7000e-004**	**4.2000e-004**	**3.7100e-003**	**1.0000e-005**	**9.3000e-004**	**1.0000e-005**	**9.3000e-004**	**2.5000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.8213**	**0.8213**	**3.0000e-005**	**0.0000**	**0.8221**

3.9 Architectural Coating Phase 1 - 2020

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	0.6454					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233
Total	**0.6464**	**6.7400e-003**	**7.3300e-003**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**1.0213**	**1.0213**	**8.0000e-005**	**0.0000**	**1.0233**

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	6.7000e-004	5.9000e-004	5.2700e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2728	1.2728	4.0000e-005	0.0000	1.2738
Total	**6.7000e-004**	**5.9000e-004**	**5.2700e-003**	**1.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.2728**	**1.2728**	**4.0000e-005**	**0.0000**	**1.2738**

3.9 Architectural Coating Phase 1 - 2020

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	0.6454					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233
Total	**0.6464**	**6.7400e-003**	**7.3300e-003**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**1.0213**	**1.0213**	**8.0000e-005**	**0.0000**	**1.0233**

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	6.7000e-004	5.9000e-004	5.2700e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.2728	1.2728	4.0000e-005	0.0000	1.2738
Total	**6.7000e-004**	**5.9000e-004**	**5.2700e-003**	**1.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.2728**	**1.2728**	**4.0000e-005**	**0.0000**	**1.2738**

3.10 Building Construction Phase 3 - 2022

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	0.0742	0.6793	0.7118	1.1700e-003		0.0352	0.0352		0.0331	0.0331	0.0000	100.8005	100.8005	0.0242	0.0000	101.4042
Total	**0.0742**	**0.6793**	**0.7118**	**1.1700e-003**		**0.0352**	**0.0352**		**0.0331**	**0.0331**	**0.0000**	**100.8005**	**100.8005**	**0.0242**	**0.0000**	**101.4042**

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	1.7000e-003	0.0423	0.0124	1.2000e-004	2.6000e-003	1.2000e-004	2.7100e-003	7.5000e-004	1.1000e-004	8.6000e-004	0.0000	11.0452	11.0452	7.0000e-004	0.0000	11.0628
Worker	6.2600e-003	5.0700e-003	0.0471	1.4000e-004	0.0161	1.0000e-004	0.0162	4.2800e-003	9.0000e-005	4.3800e-003	0.0000	12.8783	12.8783	3.6000e-004	0.0000	12.8873
Total	**7.9600e-003**	**0.0474**	**0.0595**	**2.6000e-004**	**0.0187**	**2.2000e-004**	**0.0189**	**5.0300e-003**	**2.0000e-004**	**5.2400e-003**	**0.0000**	**23.9235**	**23.9235**	**1.0600e-003**	**0.0000**	**23.9501**

3.10 Building Construction Phase 3 - 2022

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	0.0742	0.6793	0.7118	1.1700e-003		0.0352	0.0352		0.0331	0.0331	0.0000	100.8004	100.8004	0.0242	0.0000	101.4041
Total	**0.0742**	**0.6793**	**0.7118**	**1.1700e-003**		**0.0352**	**0.0352**		**0.0331**	**0.0331**	**0.0000**	**100.8004**	**100.8004**	**0.0242**	**0.0000**	**101.4041**

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	1.7000e-003	0.0423	0.0124	1.2000e-004	2.6000e-003	1.2000e-004	2.7100e-003	7.5000e-004	1.1000e-004	8.6000e-004	0.0000	11.0452	11.0452	7.0000e-004	0.0000	11.0628
Worker	6.2600e-003	5.0700e-003	0.0471	1.4000e-004	0.0161	1.0000e-004	0.0162	4.2800e-003	9.0000e-005	4.3800e-003	0.0000	12.8783	12.8783	3.6000e-004	0.0000	12.8873
Total	**7.9600e-003**	**0.0474**	**0.0595**	**2.6000e-004**	**0.0187**	**2.2000e-004**	**0.0189**	**5.0300e-003**	**2.0000e-004**	**5.2400e-003**	**0.0000**	**23.9235**	**23.9235**	**1.0600e-003**	**0.0000**	**23.9501**

3.10 Building Construction Phase 3 - 2023

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	0.0370	0.3380	0.3817	6.3000e-004		0.0164	0.0164		0.0155	0.0155	0.0000	54.4741	54.4741	0.0130	0.0000	54.7981
Total	**0.0370**	**0.3380**	**0.3817**	**6.3000e-004**		**0.0164**	**0.0164**		**0.0155**	**0.0155**	**0.0000**	**54.4741**	**54.4741**	**0.0130**	**0.0000**	**54.7981**

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	7.1000e-004	0.0183	5.7300e-003	6.0000e-005	1.4000e-003	3.0000e-005	1.4300e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.8694	5.8694	2.7000e-004	0.0000	5.8762
Worker	3.1500e-003	2.4500e-003	0.0232	7.0000e-005	8.7000e-003	5.0000e-005	8.7600e-003	2.3100e-003	5.0000e-005	2.3600e-003	0.0000	6.6959	6.6959	1.7000e-004	0.0000	6.7002
Total	**3.8600e-003**	**0.0208**	**0.0289**	**1.3000e-004**	**0.0101**	**8.0000e-005**	**0.0102**	**2.7200e-003**	**7.0000e-005**	**2.7900e-003**	**0.0000**	**12.5653**	**12.5653**	**4.4000e-004**	**0.0000**	**12.5764**

3.10 Building Construction Phase 3 - 2023

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	0.0370	0.3380	0.3817	6.3000e-004		0.0164	0.0164		0.0155	0.0155	0.0000	54.4741	54.4741	0.0130	0.0000	54.7980
Total	**0.0370**	**0.3380**	**0.3817**	**6.3000e-004**		**0.0164**	**0.0164**		**0.0155**	**0.0155**	**0.0000**	**54.4741**	**54.4741**	**0.0130**	**0.0000**	**54.7980**

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	7.1000e-004	0.0183	5.7300e-003	6.0000e-005	1.4000e-003	3.0000e-005	1.4300e-003	4.1000e-004	2.0000e-005	4.3000e-004	0.0000	5.8694	5.8694	2.7000e-004	0.0000	5.8762
Worker	3.1500e-003	2.4500e-003	0.0232	7.0000e-005	8.7000e-003	5.0000e-005	8.7600e-003	2.3100e-003	5.0000e-005	2.3600e-003	0.0000	6.6959	6.6959	1.7000e-004	0.0000	6.7002
Total	**3.8600e-003**	**0.0208**	**0.0289**	**1.3000e-004**	**0.0101**	**8.0000e-005**	**0.0102**	**2.7200e-003**	**7.0000e-005**	**2.7900e-003**	**0.0000**	**12.5653**	**12.5653**	**4.4000e-004**	**0.0000**	**12.5764**

3.11 Architectural Coating Phase 3 - 2023

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	0.5794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	5.8600e-003	8.1500e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	1.1490	1.1490	7.0000e-005	0.0000	1.1507
Total	**0.5802**	**5.8600e-003**	**8.1500e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**1.1490**	**1.1490**	**7.0000e-005**	**0.0000**	**1.1507**

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	6.0000e-004	4.7000e-004	4.4400e-003	1.0000e-005	1.6700e-003	1.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2822	1.2822	3.0000e-005	0.0000	1.2830
Total	**6.0000e-004**	**4.7000e-004**	**4.4400e-003**	**1.0000e-005**	**1.6700e-003**	**1.0000e-005**	**1.6800e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.2822**	**1.2822**	**3.0000e-005**	**0.0000**	**1.2830**

3.11 Architectural Coating Phase 3 - 2023

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	0.5794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	5.8600e-003	8.1500e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	1.1490	1.1490	7.0000e-005	0.0000	1.1507
Total	**0.5802**	**5.8600e-003**	**8.1500e-003**	**1.0000e-005**		**3.2000e-004**	**3.2000e-004**		**3.2000e-004**	**3.2000e-004**	**0.0000**	**1.1490**	**1.1490**	**7.0000e-005**	**0.0000**	**1.1507**

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	6.0000e-004	4.7000e-004	4.4400e-003	1.0000e-005	1.6700e-003	1.0000e-005	1.6800e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2822	1.2822	3.0000e-005	0.0000	1.2830
Total	**6.0000e-004**	**4.7000e-004**	**4.4400e-003**	**1.0000e-005**	**1.6700e-003**	**1.0000e-005**	**1.6800e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.2822**	**1.2822**	**3.0000e-005**	**0.0000**	**1.2830**

3.12 Building Construction Phase 4 - 2024

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	0.0640	0.5848	0.7033	1.1700e-003		0.0267	0.0267		0.0251	0.0251	0.0000	100.8544	100.8544	0.0239	0.0000	101.4506
Total	**0.0640**	**0.5848**	**0.7033**	**1.1700e-003**		**0.0267**	**0.0267**		**0.0251**	**0.0251**	**0.0000**	**100.8544**	**100.8544**	**0.0239**	**0.0000**	**101.4506**

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	1.2600e-003	0.0331	9.8300e-003	1.1000e-004	2.6000e-003	4.0000e-005	2.6400e-003	7.5000e-004	4.0000e-005	7.9000e-004	0.0000	10.7773	10.7773	4.9000e-004	0.0000	10.7896
Worker	5.4500e-003	4.0900e-003	0.0394	1.3000e-004	0.0161	9.0000e-005	0.0162	4.2800e-003	9.0000e-005	4.3700e-003	0.0000	11.9149	11.9149	2.9000e-004	0.0000	11.9221
Total	**6.7100e-003**	**0.0372**	**0.0492**	**2.4000e-004**	**0.0187**	**1.3000e-004**	**0.0189**	**5.0300e-003**	**1.3000e-004**	**5.1600e-003**	**0.0000**	**22.6922**	**22.6922**	**7.8000e-004**	**0.0000**	**22.7118**

3.12 Building Construction Phase 4 - 2024

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	0.0640	0.5848	0.7033	1.1700e-003		0.0267	0.0267		0.0251	0.0251	0.0000	100.8542	100.8542	0.0239	0.0000	101.4505
Total	**0.0640**	**0.5848**	**0.7033**	**1.1700e-003**		**0.0267**	**0.0267**		**0.0251**	**0.0251**	**0.0000**	**100.8542**	**100.8542**	**0.0239**	**0.0000**	**101.4505**

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	1.2600e-003	0.0331	9.8300e-003	1.1000e-004	2.6000e-003	4.0000e-005	2.6400e-003	7.5000e-004	4.0000e-005	7.9000e-004	0.0000	10.7773	10.7773	4.9000e-004	0.0000	10.7896
Worker	5.4500e-003	4.0900e-003	0.0394	1.3000e-004	0.0161	9.0000e-005	0.0162	4.2800e-003	9.0000e-005	4.3700e-003	0.0000	11.9149	11.9149	2.9000e-004	0.0000	11.9221
Total	**6.7100e-003**	**0.0372**	**0.0492**	**2.4000e-004**	**0.0187**	**1.3000e-004**	**0.0189**	**5.0300e-003**	**1.3000e-004**	**5.1600e-003**	**0.0000**	**22.6922**	**22.6922**	**7.8000e-004**	**0.0000**	**22.7118**

3.12 Building Construction Phase 4 - 2025

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	0.0178	0.1621	0.2091	3.5000e-004		6.8600e-003	6.8600e-003		6.4500e-003	6.4500e-003	0.0000	30.1495	30.1495	7.0900e-003	0.0000	30.3267
Total	**0.0178**	**0.1621**	**0.2091**	**3.5000e-004**		**6.8600e-003**	**6.8600e-003**		**6.4500e-003**	**6.4500e-003**	**0.0000**	**30.1495**	**30.1495**	**7.0900e-003**	**0.0000**	**30.3267**

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	3.6000e-004	9.6900e-003	2.7300e-003	3.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.2000e-004	1.0000e-005	2.4000e-004	0.0000	3.1976	3.1976	1.5000e-004	0.0000	3.2012
Worker	1.5300e-003	1.1100e-003	0.0109	4.0000e-005	4.8200e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4197	3.4197	8.0000e-005	0.0000	3.4216
Total	**1.8900e-003**	**0.0108**	**0.0136**	**7.0000e-005**	**5.6000e-003**	**4.0000e-005**	**5.6300e-003**	**1.5000e-003**	**4.0000e-005**	**1.5500e-003**	**0.0000**	**6.6173**	**6.6173**	**2.3000e-004**	**0.0000**	**6.6229**

3.12 Building Construction Phase 4 - 2025

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	0.0178	0.1621	0.2091	3.5000e-004		6.8600e-003	6.8600e-003		6.4500e-003	6.4500e-003	0.0000	30.1495	30.1495	7.0900e-003	0.0000	30.3267
Total	**0.0178**	**0.1621**	**0.2091**	**3.5000e-004**		**6.8600e-003**	**6.8600e-003**		**6.4500e-003**	**6.4500e-003**	**0.0000**	**30.1495**	**30.1495**	**7.0900e-003**	**0.0000**	**30.3267**

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	3.6000e-004	9.6900e-003	2.7300e-003	3.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.2000e-004	1.0000e-005	2.4000e-004	0.0000	3.1976	3.1976	1.5000e-004	0.0000	3.2012
Worker	1.5300e-003	1.1100e-003	0.0109	4.0000e-005	4.8200e-003	3.0000e-005	4.8400e-003	1.2800e-003	3.0000e-005	1.3100e-003	0.0000	3.4197	3.4197	8.0000e-005	0.0000	3.4216
Total	**1.8900e-003**	**0.0108**	**0.0136**	**7.0000e-005**	**5.6000e-003**	**4.0000e-005**	**5.6300e-003**	**1.5000e-003**	**4.0000e-005**	**1.5500e-003**	**0.0000**	**6.6173**	**6.6173**	**2.3000e-004**	**0.0000**	**6.6229**

3.13 Building Construction Phase 5 - 2026

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	0.0602	0.5487	0.7077	1.1900e-003		0.0232	0.0232		0.0218	0.0218	0.0000	102.0446	102.0446	0.0240	0.0000	102.6443
Total	**0.0602**	**0.5487**	**0.7077**	**1.1900e-003**		**0.0232**	**0.0232**		**0.0218**	**0.0218**	**0.0000**	**102.0446**	**102.0446**	**0.0240**	**0.0000**	**102.6443**

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	1.1600e-003	0.0321	8.7000e-003	1.1000e-004	2.6300e-003	4.0000e-005	2.6600e-003	7.6000e-004	4.0000e-005	8.0000e-004	0.0000	10.7449	10.7449	4.8000e-004	0.0000	10.7569
Worker	4.9100e-003	3.4200e-003	0.0341	1.2000e-004	0.0163	9.0000e-005	0.0164	4.3300e-003	8.0000e-005	4.4200e-003	0.0000	11.1562	11.1562	2.4000e-004	0.0000	11.1621
Total	**6.0700e-003**	**0.0355**	**0.0428**	**2.3000e-004**	**0.0189**	**1.3000e-004**	**0.0191**	**5.0900e-003**	**1.2000e-004**	**5.2200e-003**	**0.0000**	**21.9011**	**21.9011**	**7.2000e-004**	**0.0000**	**21.9190**

3.13 Building Construction Phase 5 - 2026

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	0.0602	0.5487	0.7077	1.1900e-003		0.0232	0.0232		0.0218	0.0218	0.0000	102.0444	102.0444	0.0240	0.0000	102.6441
Total	**0.0602**	**0.5487**	**0.7077**	**1.1900e-003**		**0.0232**	**0.0232**		**0.0218**	**0.0218**	**0.0000**	**102.0444**	**102.0444**	**0.0240**	**0.0000**	**102.6441**

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	1.1600e-003	0.0321	8.7000e-003	1.1000e-004	2.6300e-003	4.0000e-005	2.6600e-003	7.6000e-004	4.0000e-005	8.0000e-004	0.0000	10.7449	10.7449	4.8000e-004	0.0000	10.7569
Worker	4.9100e-003	3.4200e-003	0.0341	1.2000e-004	0.0163	9.0000e-005	0.0164	4.3300e-003	8.0000e-005	4.4200e-003	0.0000	11.1562	11.1562	2.4000e-004	0.0000	11.1621
Total	**6.0700e-003**	**0.0355**	**0.0428**	**2.3000e-004**	**0.0189**	**1.3000e-004**	**0.0191**	**5.0900e-003**	**1.2000e-004**	**5.2200e-003**	**0.0000**	**21.9011**	**21.9011**	**7.2000e-004**	**0.0000**	**21.9190**

3.13 Building Construction Phase 5 - 2027

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	0.0226	0.2058	0.2654	4.4000e-004		8.7000e-003	8.7000e-003		8.1900e-003	8.1900e-003	0.0000	38.2667	38.2667	9.0000e-003	0.0000	38.4916
Total	**0.0226**	**0.2058**	**0.2654**	**4.4000e-004**		**8.7000e-003**	**8.7000e-003**		**8.1900e-003**	**8.1900e-003**	**0.0000**	**38.2667**	**38.2667**	**9.0000e-003**	**0.0000**	**38.4916**

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	4.2000e-004	0.0118	3.1100e-003	4.0000e-005	9.8000e-004	1.0000e-005	1.0000e-003	2.8000e-004	1.0000e-005	3.0000e-004	0.0000	4.0039	4.0039	1.8000e-004	0.0000	4.0083
Worker	1.7400e-003	1.1700e-003	0.0119	4.0000e-005	6.1100e-003	3.0000e-005	6.1400e-003	1.6200e-003	3.0000e-005	1.6500e-003	0.0000	4.0450	4.0450	8.0000e-005	0.0000	4.0470
Total	**2.1600e-003**	**0.0130**	**0.0150**	**8.0000e-005**	**7.0900e-003**	**4.0000e-005**	**7.1400e-003**	**1.9000e-003**	**4.0000e-005**	**1.9500e-003**	**0.0000**	**8.0488**	**8.0488**	**2.6000e-004**	**0.0000**	**8.0552**

3.13 Building Construction Phase 5 - 2027

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	0.0226	0.2058	0.2654	4.4000e-004		8.7000e-003	8.7000e-003		8.1900e-003	8.1900e-003	0.0000	38.2667	38.2667	9.0000e-003	0.0000	38.4916
Total	**0.0226**	**0.2058**	**0.2654**	**4.4000e-004**		**8.7000e-003**	**8.7000e-003**		**8.1900e-003**	**8.1900e-003**	**0.0000**	**38.2667**	**38.2667**	**9.0000e-003**	**0.0000**	**38.4916**

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	4.2000e-004	0.0118	3.1100e-003	4.0000e-005	9.8000e-004	1.0000e-005	1.0000e-003	2.8000e-004	1.0000e-005	3.0000e-004	0.0000	4.0039	4.0039	1.8000e-004	0.0000	4.0083
Worker	1.7400e-003	1.1700e-003	0.0119	4.0000e-005	6.1100e-003	3.0000e-005	6.1400e-003	1.6200e-003	3.0000e-005	1.6500e-003	0.0000	4.0450	4.0450	8.0000e-005	0.0000	4.0470
Total	**2.1600e-003**	**0.0130**	**0.0150**	**8.0000e-005**	**7.0900e-003**	**4.0000e-005**	**7.1400e-003**	**1.9000e-003**	**4.0000e-005**	**1.9500e-003**	**0.0000**	**8.0488**	**8.0488**	**2.6000e-004**	**0.0000**	**8.0552**

3.14 ARchitectural Coating Phase 5 - 2027

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	0.2827					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	4.5800e-003	7.2400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0227
Total	**0.2834**	**4.5800e-003**	**7.2400e-003**	**1.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**1.0213**	**1.0213**	**6.0000e-005**	**0.0000**	**1.0227**

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	4.2000e-004	2.8000e-004	2.8800e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	0.9806	0.9806	2.0000e-005	0.0000	0.9811
Total	**4.2000e-004**	**2.8000e-004**	**2.8800e-003**	**1.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**0.9806**	**0.9806**	**2.0000e-005**	**0.0000**	**0.9811**

3.14 ARchitectural Coating Phase 5 - 2027

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	0.2827					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	4.5800e-003	7.2400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0227
Total	**0.2834**	**4.5800e-003**	**7.2400e-003**	**1.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**1.0213**	**1.0213**	**6.0000e-005**	**0.0000**	**1.0227**

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	4.2000e-004	2.8000e-004	2.8800e-003	1.0000e-005	1.4800e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	0.9806	0.9806	2.0000e-005	0.0000	0.9811
Total	**4.2000e-004**	**2.8000e-004**	**2.8800e-003**	**1.0000e-005**	**1.4800e-003**	**1.0000e-005**	**1.4900e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**0.9806**	**0.9806**	**2.0000e-005**	**0.0000**	**0.9811**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1265	0.9668	1.6562	8.8300e-003	0.8117	5.7600e-003	0.8175	0.2173	5.3800e-003	0.2227	0.0000	814.0738	814.0738	0.0243	0.0000	814.6800
Unmitigated	0.1265	0.9668	1.6562	8.8300e-003	0.8117	5.7600e-003	0.8175	0.2173	5.3800e-003	0.2227	0.0000	814.0738	814.0738	0.0243	0.0000	814.6800

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Manufacturing	444.69	444.69	444.69	2,170,406	2,170,406
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	444.69	444.69	444.69	2,170,406	2,170,406

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 Office Building	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Manufacturing	14.70	6.60	6.60	96.00	0.00	4.00	92	5	3
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Research & Development	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Manufacturing	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Other Non-Asphalt Surfaces	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Research & Development	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Unrefrigerated Warehouse-No Rail	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Triple Crown Cannabis - Colusa County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	984.4057	984.4057	0.0445	9.2100e-003	988.2629
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	984.4057	984.4057	0.0445	9.2100e-003	988.2629
NaturalGas Mitigated	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	36.2626	36.2626	7.0000e-004	6.6000e-004	36.4781
NaturalGas Unmitigated	3.6600e-003	0.0333	0.0280	2.0000e-004		2.5300e-003	2.5300e-003		2.5300e-003	2.5300e-003	0.0000	36.2626	36.2626	7.0000e-004	6.6000e-004	36.4781

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 Office Building	218848	2.3600e-003	0.0215	0.0180	1.3000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	23.3571	23.3571	4.5000e-004	4.3000e-004	23.4959
Manufacturing	46332	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4725	2.4725	5.0000e-005	5.0000e-005	2.4871
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
Research & Development	195507	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4330	10.4330	2.0000e-004	1.9000e-004	10.4950
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.6600e-003**	**0.0333**	**0.0280**	**2.0000e-004**		**2.5300e-003**	**2.5300e-003**		**2.5300e-003**	**2.5300e-003**	**0.0000**	**36.2626**	**36.2626**	**7.0000e-004**	**6.7000e-004**	**36.4781**

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 Office Building	218848	2.3600e-003	0.0215	0.0180	1.3000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	23.3571	23.3571	4.5000e-004	4.3000e-004	23.4959
Manufacturing	46332	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4725	2.4725	5.0000e-005	5.0000e-005	2.4871
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
Research & Development	195507	1.0500e-003	9.5800e-003	8.0500e-003	6.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	10.4330	10.4330	2.0000e-004	1.9000e-004	10.4950
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**3.6600e-003**	**0.0333**	**0.0280**	**2.0000e-004**		**2.5300e-003**	**2.5300e-003**		**2.5300e-003**	**2.5300e-003**	**0.0000**	**36.2626**	**36.2626**	**7.0000e-004**	**6.7000e-004**	**36.4781**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	123872	72.0716	3.2600e-003	6.7000e-004	72.3540
Manufacturing	56496	16.4353	7.4000e-004	1.5000e-004	16.4997
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Research & Development	238396	69.3521	3.1400e-003	6.5000e-004	69.6239
Unrefrigerated Warehouse-No Rail	256800	74.7061	3.3800e-003	7.0000e-004	74.9988
Unrefrigerated Warehouse-No Rail	428000	124.5101	5.6300e-003	1.1600e-003	124.9980
Unrefrigerated Warehouse-No Rail	684800	398.4323	0.0180	3.7300e-003	399.9935
Unrefrigerated Warehouse-No Rail	703799	204.7432	9.2600e-003	1.9200e-003	205.5454
Unrefrigerated Warehouse-No Rail	83032	24.1550	1.0900e-003	2.3000e-004	24.2496
Total		**984.4057**	**0.0445**	**9.2100e-003**	**988.2629**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	123872	72.0716	3.2600e-003	6.7000e-004	72.3540
Manufacturing	56496	16.4353	7.4000e-004	1.5000e-004	16.4997
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Research & Development	238396	69.3521	3.1400e-003	6.5000e-004	69.6239
Unrefrigerated Warehouse-No Rail	256800	74.7061	3.3800e-003	7.0000e-004	74.9988
Unrefrigerated Warehouse-No Rail	428000	124.5101	5.6300e-003	1.1600e-003	124.9980
Unrefrigerated Warehouse-No Rail	684800	398.4323	0.0180	3.7300e-003	399.9935
Unrefrigerated Warehouse-No Rail	703799	204.7432	9.2600e-003	1.9200e-003	205.5454
Unrefrigerated Warehouse-No Rail	83032	24.1550	1.0900e-003	2.3000e-004	24.2496
Total		**984.4057**	**0.0445**	**9.2100e-003**	**988.2629**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.7213	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0329	0.0329	9.0000e-005	0.0000	0.0350
Unmitigated	5.7213	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0329	0.0329	9.0000e-005	0.0000	0.0350

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	0.1508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.5690					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5500e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0329	0.0329	9.0000e-005	0.0000	0.0350
Total	**5.7213**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0329**	**0.0329**	**9.0000e-005**	**0.0000**	**0.0350**

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	tons/yr										MT/yr					
Architectural Coating	0.1508					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.5690					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5500e-003	1.5000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0329	0.0329	9.0000e-005	0.0000	0.0350
Total	**5.7213**	**1.5000e-004**	**0.0169**	**0.0000**		**6.0000e-005**	**6.0000e-005**		**6.0000e-005**	**6.0000e-005**	**0.0000**	**0.0329**	**0.0329**	**9.0000e-005**	**0.0000**	**0.0350**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	648.2893	11.1505	0.2678	1,006.8441
Unmitigated	648.2893	11.1505	0.2678	1,006.8441

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.98124 / 2.44011	10.0145	0.1301	3.1500e-003	14.2048
Manufacturing	3.0525 / 0	5.7734	0.0997	2.3900e-003	8.9788
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	27.3874 / 0	51.7998	0.8944	0.0215	80.5586
Unrefrigerated Warehouse-No Rail	307.026 / 0	580.7016	10.0263	0.2408	903.1020
Total		**648.2893**	**11.1505**	**0.2678**	**1,006.8441**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	3.98124 / 2.44011	10.0145	0.1301	3.1500e-003	14.2048
Manufacturing	3.0525 / 0	5.7734	0.0997	2.3900e-003	8.9788
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	27.3874 / 0	51.7998	0.8944	0.0215	80.5586
Unrefrigerated Warehouse-No Rail	307.026 / 0	580.7016	10.0263	0.2408	903.1020
Total		**648.2893**	**11.1505**	**0.2678**	**1,006.8441**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	261.7467	15.4688	0.0000	648.4664
Unmitigated	261.7467	15.4688	0.0000	648.4664

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	20.83	4.2283	0.2499	0.0000	10.4754
Manufacturing	16.37	3.3230	0.1964	0.0000	8.2325
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Research & Development	4.23	0.8587	0.0507	0.0000	2.1273
Unrefrigerated Warehouse-No Rail	1248.02	253.3368	14.9718	0.0000	627.6312
Total		**261.7467**	**15.4688**	**0.0000**	**648.4664**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	20.83	4.2283	0.2499	0.0000	10.4754
Manufacturing	16.37	3.3230	0.1964	0.0000	8.2325
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Research & Development	4.23	0.8587	0.0507	0.0000	2.1273
Unrefrigerated Warehouse-No Rail	1248.02	253.3368	14.9718	0.0000	627.6312
Total		**261.7467**	**15.4688**	**0.0000**	**648.4664**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	27	1	100	44	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

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					
Emergency Generator - Diesel (25 - 50 HP)	0.0975	0.5083	0.3924	4.7000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	45.2387	45.2387	6.3400e-003	0.0000	45.3973
Total	**0.0975**	**0.5083**	**0.3924**	**4.7000e-004**		**0.0428**	**0.0428**		**0.0428**	**0.0428**	**0.0000**	**45.2387**	**45.2387**	**6.3400e-003**	**0.0000**	**45.3973**

11.0 Vegetation

Triple Crown Cannabis

Colusa County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	11.20	1000sqft	0.26	11,200.00	0
General Office Building	11.20	1000sqft	0.26	11,200.00	0
Research & Development	55.70	1000sqft	1.28	55,700.00	0
Manufacturing	13.20	1000sqft	0.30	13,200.00	0
Unrefrigerated Warehouse-No Rail	200.00	1000sqft	4.59	200,000.00	0
Unrefrigerated Warehouse-No Rail	120.00	1000sqft	2.75	120,000.00	0
Unrefrigerated Warehouse-No Rail	38.80	1000sqft	0.89	38,800.00	0
Unrefrigerated Warehouse-No Rail	328.88	1000sqft	7.55	328,878.00	0
Unrefrigerated Warehouse-No Rail	320.00	1000sqft	7.35	320,000.00	0
Unrefrigerated Warehouse-No Rail	320.00	1000sqft	7.35	320,000.00	0
Other Non-Asphalt Surfaces	420.58	1000sqft	9.66	420,578.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	56
Climate Zone	1			**Operational Year**	2028
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

Triple Crown Cannabis - Colusa County, Summer

Project Characteristics -

Land Use - Land Uses based on Project Description.

Construction Phase - Extended grading phase from default 45 days to 60 days. Divided building construction default of 500 days into the construction phases. See attachment with assumed phase durations based on input from applicant.

Trips and VMT - Assume 15 round trips (30 one-way) worker trips for all construction phases based on the traffic study. Demolition trips used default. Assume 10 one-way vendor trips per day.

Demolition - Area assumed from Google Map estimates. See air quality chapter references for details.

Grading - Acres graded detailed by phase in attachment. Assumed imported gravel for parking (see attachment for estimate calculation details).

Architectural Coating - Assume only gravel parking and no need for remarking areas. Assume architectural coating only required on non-greenhouse (or nursery) buildings. See attachment for calculations.

Vehicle Trips - assume trips follow pattern of manufacturing land use. See attached trip table for information on how trip rate and percentage trip distributions were estimated.

Fleet Mix -

Area Coating - Only included non-greenhouse architectural coating areas. See attached file for detailed calculations. Used total interior and exterior areas.

Energy Use - Assumed greenhouse electricity is 50 percent of typical manufacturing energy intensity. Thus, changed values to 0.31, 0.925, and 0.905, respectively. No change to natural gas energy intensity.

Operational Off-Road Equipment - generators accounted for elsewhere

Stationary Sources - Emergency Generators and Fire Pumps - Total number of emergency generators. Horsepower provided by applicant. assumed up to 100 hours of use per year.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	12,200.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	27,850.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	25,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,128,467.00	36,600.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,128,467.00	83,550.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,128,467.00	75,000.00
tblArchitecturalCoating	ConstArea_Parking	25,235.00	0.00
tblArchitecturalCoating	ConstArea_Parking	25,235.00	0.00
tblArchitecturalCoating	ConstArea_Parking	25,235.00	0.00
tblAreaCoating	Area_Nonresidential_Exterior	709489	65050

tblAreaCoating	Area_Nonresidential_Interior	2128467	195150
tblAreaCoating	Area_Parking	25235	0
tblConstructionPhase	NumDays	50.00	30.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	30.00	60.00
tblConstructionPhase	NumDays	75.00	60.00
tblConstructionPhase	NumDays	740.00	116.00
tblConstructionPhase	NumDays	740.00	42.00
tblConstructionPhase	NumDays	55.00	5.00
tblConstructionPhase	NumDays	55.00	8.00
tblConstructionPhase	NumDays	740.00	134.00
tblConstructionPhase	NumDays	55.00	9.00
tblConstructionPhase	NumDays	740.00	113.00
tblConstructionPhase	NumDays	740.00	121.00
tblConstructionPhase	NumDays	55.00	8.00
tblEnergyUse	LightingElect	0.00	0.91
tblEnergyUse	NT24E	0.00	0.93
tblEnergyUse	T24E	0.00	0.31
tblGrading	AcresOfGrading	150.00	61.00
tblGrading	MaterialImported	0.00	3,600.00
tblLandUse	LandUseSquareFeet	328,880.00	328,878.00
tblLandUse	LandUseSquareFeet	420,580.00	420,578.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CO_EF	4.10	4.10
tblStationaryGeneratorsPumpsEF	NOX_EF	5.32	5.32
tblStationaryGeneratorsPumpsEF	PM10_EF	0.45	0.45

tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	44.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	100.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	27.00
tblTripsAndVMT	HaulingTripNumber	450.00	240.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00

tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	13.00	4.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	96.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	15.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	82.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.49	33.69
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	0.62	33.69
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00

tblVehicleTrips	WD_TR	3.82	33.69
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00

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					
2019	13.2802	138.2800	83.1902	0.1565	27.0176	6.5849	33.6025	13.7828	6.0768	19.8596	0.0000	15,508.1174	15,508.1174	4.2655	0.0000	15,614.7545
2020	161.7888	20.4230	18.7836	0.0336	0.4445	1.1251	1.5697	0.1193	1.0580	1.1773	0.0000	3,231.6846	3,231.6846	0.6543	0.0000	3,248.0415
2022	1.9070	16.6789	17.9456	0.0333	0.4445	0.8140	1.2585	0.1193	0.7658	0.8851	0.0000	3,201.3970	3,201.3970	0.6394	0.0000	3,217.3809
2023	129.0925	15.2502	17.6751	0.0331	0.4445	0.7030	1.1475	0.1193	0.6615	0.7808	0.0000	3,184.0017	3,184.0017	0.6293	0.0000	3,199.7338
2024	1.6406	14.2818	17.4840	0.0330	0.4445	0.6165	1.0610	0.1193	0.5798	0.6991	0.0000	3,168.6819	3,168.6819	0.6245	0.0000	3,184.2956
2025	1.5267	13.2838	17.3015	0.0328	0.4445	0.5306	0.9752	0.1193	0.4991	0.6184	0.0000	3,154.1104	3,154.1104	0.6201	0.0000	3,169.6133
2026	1.5181	13.2623	17.2165	0.0327	0.4445	0.5305	0.9750	0.1193	0.4990	0.6183	0.0000	3,140.4467	3,140.4467	0.6191	0.0000	3,155.9247
2027	70.9724	13.2436	17.1433	0.0326	0.4445	0.5303	0.9749	0.1193	0.4989	0.6181	0.0000	3,128.4051	3,128.4051	0.6183	0.0000	3,143.8625
Maximum	**161.7888**	**138.2800**	**83.1902**	**0.1565**	**27.0176**	**6.5849**	**33.6025**	**13.7828**	**6.0768**	**19.8596**	**0.0000**	**15,508.1174**	**15,508.1174**	**4.2655**	**0.0000**	**15,614.7545**

2.1 Overall Construction (Maximum Daily Emission)

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					
2019	13.2802	138.2800	83.1902	0.1565	27.0176	6.5849	33.6025	13.7828	6.0768	19.8596	0.0000	15,508.1174	15,508.1174	4.2655	0.0000	15,614.7544
2020	161.7888	20.4230	18.7836	0.0336	0.4445	1.1251	1.5697	0.1193	1.0580	1.1773	0.0000	3,231.6846	3,231.6846	0.6543	0.0000	3,248.0415
2022	1.9070	16.6789	17.9456	0.0333	0.4445	0.8140	1.2585	0.1193	0.7658	0.8851	0.0000	3,201.3970	3,201.3970	0.6394	0.0000	3,217.3809
2023	129.0925	15.2502	17.6751	0.0331	0.4445	0.7030	1.1475	0.1193	0.6615	0.7808	0.0000	3,184.0017	3,184.0017	0.6293	0.0000	3,199.7338
2024	1.6406	14.2818	17.4840	0.0330	0.4445	0.6165	1.0610	0.1193	0.5798	0.6991	0.0000	3,168.6819	3,168.6819	0.6245	0.0000	3,184.2956
2025	1.5267	13.2838	17.3015	0.0328	0.4445	0.5306	0.9752	0.1193	0.4991	0.6184	0.0000	3,154.1104	3,154.1104	0.6201	0.0000	3,169.6133
2026	1.5181	13.2623	17.2165	0.0327	0.4445	0.5305	0.9750	0.1193	0.4990	0.6183	0.0000	3,140.4467	3,140.4467	0.6191	0.0000	3,155.9247
2027	70.9724	13.2436	17.1433	0.0326	0.4445	0.5303	0.9749	0.1193	0.4989	0.6181	0.0000	3,128.4051	3,128.4051	0.6183	0.0000	3,143.8625
Maximum	**161.7888**	**138.2800**	**83.1902**	**0.1565**	**27.0176**	**6.5849**	**33.6025**	**13.7828**	**6.0768**	**19.8596**	**0.0000**	**15,508.1174**	**15,508.1174**	**4.2655**	**0.0000**	**15,614.7544**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Energy	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298
Mobile	0.8453	5.1663	10.5822	0.0520	4.6110	0.0316	4.6427	1.2310	0.0296	1.2606		5,278.7530	5,278.7530	0.1496		5,282.4936
Stationary	1.9493	10.1661	7.8475	9.3700e-003		0.8561	0.8561		0.8561	0.8561		997.3428	997.3428	0.1398		1,000.8385
Total	**34.1731**	**15.5166**	**18.7704**	**0.0625**	**4.6110**	**0.9023**	**5.5133**	**1.2310**	**0.9002**	**2.1312**		**6,495.5266**	**6,495.5266**	**0.2947**	**4.0200e-003**	**6,504.0906**

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	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Energy	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298
Mobile	0.8453	5.1663	10.5822	0.0520	4.6110	0.0316	4.6427	1.2310	0.0296	1.2606		5,278.7530	5,278.7530	0.1496		5,282.4936
Stationary	1.9493	10.1661	7.8475	9.3700e-003		0.8561	0.8561		0.8561	0.8561		997.3428	997.3428	0.1398		1,000.8385
Total	**34.1731**	**15.5166**	**18.7704**	**0.0625**	**4.6110**	**0.9023**	**5.5133**	**1.2310**	**0.9002**	**2.1312**		**6,495.5266**	**6,495.5266**	**0.2947**	**4.0200e-003**	**6,504.0906**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Triple Crown Cannabis - Colusa County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2019	10/11/2019	5	30	Demolition Existing Bldgs
2	Site Preparation Phase 1	Site Preparation	9/1/2019	9/27/2019	5	20	Phase 1 Site Prep
3	Road and Parking	Site Preparation	9/28/2019	12/20/2019	5	60	Road Imp. Gravel Parking Placement
4	Grading Phase 1	Grading	9/28/2019	12/20/2019	5	60	Phase 1 Grading
5	Building Construction Phase 1	Building Construction	12/21/2019	6/1/2020	5	116	Phase 1 Bldgs
6	Building Construction Phase 2	Building Construction	9/1/2020	10/28/2020	5	42	Phase 2 Bldgs
7	Paving Phase 1	Paving	12/21/2019	12/27/2019	5	5	Paving for Road
8	Architectural Coating Phase 1	Architectural Coating	6/2/2020	6/11/2020	5	8	Phase 1 Coating
9	Building Construction Phase 3	Building Construction	9/1/2022	3/7/2023	5	134	Phase 3 Bldgs
10	Architectural Coating Phase 3	Architectural Coating	3/8/2023	3/20/2023	5	9	Phase 3 Coating
11	Building Construction Phase 4	Building Construction	9/1/2024	2/5/2025	5	113	Phase 4 Bldgs
12	Building Construction Phase 5	Building Construction	9/1/2026	2/16/2027	5	121	Phase 5 Bldgs
13	ARchitectural Coating Phase 5	Architectural Coating	2/17/2027	2/26/2027	5	8	Phase 5 Coating

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 9.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 83,550; Non-Residential Outdoor: 27,850; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Triple Crown Cannabis - Colusa County, Summer

Site Preparation Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Road and Parking	Rubber Tired Dozers	3	8.00	247	0.40
Road and Parking	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Phase 1	Excavators	2	8.00	158	0.38
Grading Phase 1	Graders	1	8.00	187	0.41
Grading Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading Phase 1	Scrapers	2	8.00	367	0.48
Grading Phase 1	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction Phase 1	Cranes	1	7.00	231	0.29
Building Construction Phase 1	Forklifts	3	8.00	89	0.20
Building Construction Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 1	Welders	1	8.00	46	0.45
Building Construction Phase 2	Cranes	1	7.00	231	0.29
Building Construction Phase 2	Forklifts	3	8.00	89	0.20
Building Construction Phase 2	Generator Sets	1	8.00	84	0.74
Building Construction Phase 2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 2	Welders	1	8.00	46	0.45
Paving Phase 1	Pavers	2	8.00	130	0.42
Paving Phase 1	Paving Equipment	2	8.00	132	0.36
Paving Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating Phase 1	Air Compressors	1	6.00	78	0.48
Building Construction Phase 3	Cranes	1	7.00	231	0.29
Building Construction Phase 3	Forklifts	3	8.00	89	0.20
Building Construction Phase 3	Generator Sets	1	8.00	84	0.74
Building Construction Phase 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction Phase 3	Welders	1	8.00	46	0.45
Architectural Coating Phase 3	Air Compressors	1	6.00	78	0.48
Building Construction Phase 4	Cranes	1	7.00	231	0.29
Building Construction Phase 4	Forklifts	3	8.00	89	0.20
Building Construction Phase 4	Generator Sets	1	8.00	84	0.74
Building Construction Phase 4	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 4	Welders	1	8.00	46	0.45
Building Construction Phase 5	Cranes	1	7.00	231	0.29
Building Construction Phase 5	Forklifts	3	8.00	89	0.20
Building Construction Phase 5	Generator Sets	1	8.00	84	0.74
Building Construction Phase 5	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 5	Welders	1	8.00	46	0.45
ARchitectural Coating Phase 5	Air Compressors	1	6.00	78	0.48

Trips and VMT

Triple Crown Cannabis - Colusa County, Summer

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
Demolition	6	30.00	0.00	80.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation Phase 1	7	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Road and Parking	7	30.00	0.00	240.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading Phase 1	8	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 1	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 2	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving Phase 1	6	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating Phase 1	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 3	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating Phase 3	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 4	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 5	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
ARchitectural Coating Phase 5	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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					0.5778	0.0000	0.5778	0.0875	0.0000	0.0875			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.5778**	**1.7949**	**2.3727**	**0.0875**	**1.6697**	**1.7572**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

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	0.0245	0.7783	0.1233	2.2000e-003	0.0468	3.7500e-003	0.0505	0.0128	3.5900e-003	0.0164		230.8376	230.8376	9.3200e-003		231.0705
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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2351**	**0.9311**	**1.9173**	**6.2500e-003**	**0.4300**	**6.2900e-003**	**0.4362**	**0.1145**	**5.9300e-003**	**0.1204**		**633.3881**	**633.3881**	**0.0247**		**634.0049**

3.2 Demolition - 2019

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					0.5778	0.0000	0.5778	0.0875	0.0000	0.0875			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.5778**	**1.7949**	**2.3727**	**0.0875**	**1.6697**	**1.7572**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

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	0.0245	0.7783	0.1233	2.2000e-003	0.0468	3.7500e-003	0.0505	0.0128	3.5900e-003	0.0164		230.8376	230.8376	9.3200e-003		231.0705
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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2351**	**0.9311**	**1.9173**	**6.2500e-003**	**0.4300**	**6.2900e-003**	**0.4362**	**0.1145**	**5.9300e-003**	**0.1204**		**633.3881**	**633.3881**	**0.0247**		**634.0049**

3.3 Site Preparation Phase 1 - 2019

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2106**	**0.1528**	**1.7941**	**4.0500e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**402.5506**	**402.5506**	**0.0154**		**402.9344**

3.3 Site Preparation Phase 1 - 2019

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2106**	**0.1528**	**1.7941**	**4.0500e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**402.5506**	**402.5506**	**0.0154**		**402.9344**

3.4 Road and Parking - 2019

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					18.0730	0.0000	18.0730	9.9317	0.0000	9.9317			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0730**	**2.3904**	**20.4634**	**9.9317**	**2.1991**	**12.1308**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.0367	1.1674	0.1849	3.3000e-003	0.0701	5.6200e-003	0.0758	0.0192	5.3800e-003	0.0246		346.2564	346.2564	0.0140		346.6058
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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2473**	**1.3202**	**1.9790**	**7.3500e-003**	**0.4533**	**8.1600e-003**	**0.4615**	**0.1209**	**7.7200e-003**	**0.1286**		**748.8069**	**748.8069**	**0.0293**		**749.5402**

3.4 Road and Parking - 2019

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					18.0730	0.0000	18.0730	9.9317	0.0000	9.9317			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0730**	**2.3904**	**20.4634**	**9.9317**	**2.1991**	**12.1308**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.0367	1.1674	0.1849	3.3000e-003	0.0701	5.6200e-003	0.0758	0.0192	5.3800e-003	0.0246		346.2564	346.2564	0.0140		346.6058
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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2473**	**1.3202**	**1.9790**	**7.3500e-003**	**0.4533**	**8.1600e-003**	**0.4615**	**0.1209**	**7.7200e-003**	**0.1286**		**748.8069**	**748.8069**	**0.0293**		**749.5402**

3.5 Grading Phase 1 - 2019

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					7.1003	0.0000	7.1003	3.4267	0.0000	3.4267			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.1003**	**2.3827**	**9.4829**	**3.4267**	**2.1920**	**5.6187**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2106**	**0.1528**	**1.7941**	**4.0500e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**402.5506**	**402.5506**	**0.0154**		**402.9344**

3.5 Grading Phase 1 - 2019

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					7.1003	0.0000	7.1003	3.4267	0.0000	3.4267			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.1003**	**2.3827**	**9.4829**	**3.4267**	**2.1920**	**5.6187**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2106**	**0.1528**	**1.7941**	**4.0500e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**402.5506**	**402.5506**	**0.0154**		**402.9344**

3.6 Building Construction Phase 1 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.0591	1.2003	0.3910	2.7900e-003	0.0613	8.6200e-003	0.0700	0.0177	8.2400e-003	0.0259		290.4694	290.4694	0.0195		290.9560
Worker	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2697**	**1.3531**	**2.1851**	**6.8400e-003**	**0.4445**	**0.0112**	**0.4557**	**0.1193**	**0.0106**	**0.1299**		**693.0199**	**693.0199**	**0.0348**		**693.8904**

3.6 Building Construction Phase 1 - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.0591	1.2003	0.3910	2.7900e-003	0.0613	8.6200e-003	0.0700	0.0177	8.2400e-003	0.0259		290.4694	290.4694	0.0195		290.9560
Worker	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2697**	**1.3531**	**2.1851**	**6.8400e-003**	**0.4445**	**0.0112**	**0.4557**	**0.1193**	**0.0106**	**0.1299**		**693.0199**	**693.0199**	**0.0348**		**693.8904**

3.6 Building Construction Phase 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0490	1.1024	0.3374	2.7700e-003	0.0613	5.6300e-003	0.0670	0.0177	5.3900e-003	0.0231		288.6936	288.6936	0.0181		289.1455
Worker	0.1907	0.1345	1.5976	3.9200e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		389.9280	389.9280	0.0133		390.2615
Total	**0.2397**	**1.2369**	**1.9351**	**6.6900e-003**	**0.4445**	**8.0800e-003**	**0.4526**	**0.1193**	**7.6500e-003**	**0.1269**		**678.6216**	**678.6216**	**0.0314**		**679.4070**

3.6 Building Construction Phase 1 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0490	1.1024	0.3374	2.7700e-003	0.0613	5.6300e-003	0.0670	0.0177	5.3900e-003	0.0231		288.6936	288.6936	0.0181		289.1455
Worker	0.1907	0.1345	1.5976	3.9200e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		389.9280	389.9280	0.0133		390.2615
Total	**0.2397**	**1.2369**	**1.9351**	**6.6900e-003**	**0.4445**	**8.0800e-003**	**0.4526**	**0.1193**	**7.6500e-003**	**0.1269**		**678.6216**	**678.6216**	**0.0314**		**679.4070**

3.7 Building Construction Phase 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0490	1.1024	0.3374	2.7700e-003	0.0613	5.6300e-003	0.0670	0.0177	5.3900e-003	0.0231		288.6936	288.6936	0.0181		289.1455
Worker	0.1907	0.1345	1.5976	3.9200e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		389.9280	389.9280	0.0133		390.2615
Total	**0.2397**	**1.2369**	**1.9351**	**6.6900e-003**	**0.4445**	**8.0800e-003**	**0.4526**	**0.1193**	**7.6500e-003**	**0.1269**		**678.6216**	**678.6216**	**0.0314**		**679.4070**

3.7 Building Construction Phase 2 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0490	1.1024	0.3374	2.7700e-003	0.0613	5.6300e-003	0.0670	0.0177	5.3900e-003	0.0231		288.6936	288.6936	0.0181		289.1455
Worker	0.1907	0.1345	1.5976	3.9200e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		389.9280	389.9280	0.0133		390.2615
Total	**0.2397**	**1.2369**	**1.9351**	**6.6900e-003**	**0.4445**	**8.0800e-003**	**0.4526**	**0.1193**	**7.6500e-003**	**0.1269**		**678.6216**	**678.6216**	**0.0314**		**679.4070**

3.8 Paving Phase 1 - 2019

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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2106**	**0.1528**	**1.7941**	**4.0500e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**402.5506**	**402.5506**	**0.0154**		**402.9344**

3.8 Paving Phase 1 - 2019

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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.2106	0.1528	1.7941	4.0500e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		402.5506	402.5506	0.0154		402.9344
Total	**0.2106**	**0.1528**	**1.7941**	**4.0500e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**402.5506**	**402.5506**	**0.0154**		**402.9344**

3.9 Architectural Coating Phase 1 - 2020

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	161.3559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**161.5981**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

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	0.1907	0.1345	1.5976	3.9200e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		389.9280	389.9280	0.0133		390.2615
Total	**0.1907**	**0.1345**	**1.5976**	**3.9200e-003**	**0.3832**	**2.4500e-003**	**0.3857**	**0.1016**	**2.2600e-003**	**0.1039**		**389.9280**	**389.9280**	**0.0133**		**390.2615**

3.9 Architectural Coating Phase 1 - 2020

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	161.3559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**161.5981**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

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	0.1907	0.1345	1.5976	3.9200e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		389.9280	389.9280	0.0133		390.2615
Total	**0.1907**	**0.1345**	**1.5976**	**3.9200e-003**	**0.3832**	**2.4500e-003**	**0.3857**	**0.1016**	**2.2600e-003**	**0.1039**		**389.9280**	**389.9280**	**0.0133**		**390.2615**

3.10 Building Construction Phase 3 - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0386	0.9565	0.2647	2.7300e-003	0.0613	2.6600e-003	0.0640	0.0177	2.5400e-003	0.0202		284.2968	284.2968	0.0169		284.7200
Worker	0.1622	0.1068	1.3174	3.6400e-003	0.3832	2.2900e-003	0.3855	0.1016	2.1100e-003	0.1037		362.7666	362.7666	0.0105		363.0287
Total	**0.2008**	**1.0633**	**1.5822**	**6.3700e-003**	**0.4445**	**4.9500e-003**	**0.4495**	**0.1193**	**4.6500e-003**	**0.1239**		**647.0634**	**647.0634**	**0.0274**		**647.7487**

3.10 Building Construction Phase 3 - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0386	0.9565	0.2647	2.7300e-003	0.0613	2.6600e-003	0.0640	0.0177	2.5400e-003	0.0202		284.2968	284.2968	0.0169		284.7200
Worker	0.1622	0.1068	1.3174	3.6400e-003	0.3832	2.2900e-003	0.3855	0.1016	2.1100e-003	0.1037		362.7666	362.7666	0.0105		363.0287
Total	**0.2008**	**1.0633**	**1.5822**	**6.3700e-003**	**0.4445**	**4.9500e-003**	**0.4495**	**0.1193**	**4.6500e-003**	**0.1239**		**647.0634**	**647.0634**	**0.0274**		**647.7487**

3.10 Building Construction Phase 3 - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0300	0.7695	0.2275	2.6800e-003	0.0613	1.0600e-003	0.0624	0.0177	1.0100e-003	0.0187		279.6738	279.6738	0.0121		279.9767
Worker	0.1508	0.0958	1.2037	3.5000e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		349.1180	349.1180	9.3300e-003		349.3511
Total	**0.1808**	**0.8653**	**1.4311**	**6.1800e-003**	**0.4445**	**3.2800e-003**	**0.4478**	**0.1193**	**3.0500e-003**	**0.1223**		**628.7917**	**628.7917**	**0.0215**		**629.3278**

3.10 Building Construction Phase 3 - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0300	0.7695	0.2275	2.6800e-003	0.0613	1.0600e-003	0.0624	0.0177	1.0100e-003	0.0187		279.6738	279.6738	0.0121		279.9767
Worker	0.1508	0.0958	1.2037	3.5000e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		349.1180	349.1180	9.3300e-003		349.3511
Total	**0.1808**	**0.8653**	**1.4311**	**6.1800e-003**	**0.4445**	**3.2800e-003**	**0.4478**	**0.1193**	**3.0500e-003**	**0.1223**		**628.7917**	**628.7917**	**0.0215**		**629.3278**

3.11 Architectural Coating Phase 3 - 2023

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	128.7500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**128.9417**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1508	0.0958	1.2037	3.5000e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		349.1180	349.1180	9.3300e-003		349.3511
Total	**0.1508**	**0.0958**	**1.2037**	**3.5000e-003**	**0.3832**	**2.2200e-003**	**0.3854**	**0.1016**	**2.0400e-003**	**0.1037**		**349.1180**	**349.1180**	**9.3300e-003**		**349.3511**

3.11 Architectural Coating Phase 3 - 2023

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	128.7500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**128.9417**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1508	0.0958	1.2037	3.5000e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		349.1180	349.1180	9.3300e-003		349.3511
Total	**0.1508**	**0.0958**	**1.2037**	**3.5000e-003**	**0.3832**	**2.2200e-003**	**0.3854**	**0.1016**	**2.0400e-003**	**0.1037**		**349.1180**	**349.1180**	**9.3300e-003**		**349.3511**

3.12 Building Construction Phase 4 - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	0.0285	0.7518	0.2103	2.6600e-003	0.0613	1.0000e-003	0.0623	0.0177	9.5000e-004	0.0186		277.3921	277.3921	0.0119		277.6892
Worker	0.1406	0.0862	1.1070	3.3700e-003	0.3832	2.1600e-003	0.3854	0.1016	1.9900e-003	0.1036		335.5909	335.5909	8.3100e-003		335.7987
Total	**0.1691**	**0.8380**	**1.3172**	**6.0300e-003**	**0.4445**	**3.1600e-003**	**0.4477**	**0.1193**	**2.9400e-003**	**0.1222**		**612.9830**	**612.9830**	**0.0202**		**613.4879**

3.12 Building Construction Phase 4 - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	0.0285	0.7518	0.2103	2.6600e-003	0.0613	1.0000e-003	0.0623	0.0177	9.5000e-004	0.0186		277.3921	277.3921	0.0119		277.6892
Worker	0.1406	0.0862	1.1070	3.3700e-003	0.3832	2.1600e-003	0.3854	0.1016	1.9900e-003	0.1036		335.5909	335.5909	8.3100e-003		335.7987
Total	**0.1691**	**0.8380**	**1.3172**	**6.0300e-003**	**0.4445**	**3.1600e-003**	**0.4477**	**0.1193**	**2.9400e-003**	**0.1222**		**612.9830**	**612.9830**	**0.0202**		**613.4879**

3.12 Building Construction Phase 4 - 2025

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0271	0.7359	0.1950	2.6400e-003	0.0613	9.4000e-004	0.0623	0.0177	9.0000e-004	0.0186		275.3641	275.3641	0.0117		275.6561
Worker	0.1322	0.0782	1.0218	3.2300e-003	0.3832	2.1100e-003	0.3853	0.1016	1.9500e-003	0.1036		322.2720	322.2720	7.4900e-003		322.4592
Total	**0.1593**	**0.8141**	**1.2169**	**5.8700e-003**	**0.4445**	**3.0500e-003**	**0.4476**	**0.1193**	**2.8500e-003**	**0.1221**		**597.6361**	**597.6361**	**0.0192**		**598.1152**

3.12 Building Construction Phase 4 - 2025

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0271	0.7359	0.1950	2.6400e-003	0.0613	9.4000e-004	0.0623	0.0177	9.0000e-004	0.0186		275.3641	275.3641	0.0117		275.6561
Worker	0.1322	0.0782	1.0218	3.2300e-003	0.3832	2.1100e-003	0.3853	0.1016	1.9500e-003	0.1036		322.2720	322.2720	7.4900e-003		322.4592
Total	**0.1593**	**0.8141**	**1.2169**	**5.8700e-003**	**0.4445**	**3.0500e-003**	**0.4476**	**0.1193**	**2.8500e-003**	**0.1221**		**597.6361**	**597.6361**	**0.0192**		**598.1152**

3.13 Building Construction Phase 5 - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0260	0.7213	0.1834	2.6200e-003	0.0613	8.9000e-004	0.0622	0.0177	8.5000e-004	0.0185		273.3517	273.3517	0.0114		273.6368
Worker	0.1248	0.0713	0.9485	3.1200e-003	0.3832	2.0500e-003	0.3852	0.1016	1.8800e-003	0.1035		310.6207	310.6207	6.7700e-003		310.7899
Total	**0.1507**	**0.7927**	**1.1319**	**5.7400e-003**	**0.4445**	**2.9400e-003**	**0.4475**	**0.1193**	**2.7300e-003**	**0.1220**		**583.9724**	**583.9724**	**0.0182**		**584.4266**

3.13 Building Construction Phase 5 - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0260	0.7213	0.1834	2.6200e-003	0.0613	8.9000e-004	0.0622	0.0177	8.5000e-004	0.0185		273.3517	273.3517	0.0114		273.6368
Worker	0.1248	0.0713	0.9485	3.1200e-003	0.3832	2.0500e-003	0.3852	0.1016	1.8800e-003	0.1035		310.6207	310.6207	6.7700e-003		310.7899
Total	**0.1507**	**0.7927**	**1.1319**	**5.7400e-003**	**0.4445**	**2.9400e-003**	**0.4475**	**0.1193**	**2.7300e-003**	**0.1220**		**583.9724**	**583.9724**	**0.0182**		**584.4266**

3.13 Building Construction Phase 5 - 2027

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0250	0.7087	0.1743	2.6000e-003	0.0613	8.5000e-004	0.0622	0.0177	8.1000e-004	0.0185		271.5944	271.5944	0.0112		271.8746
Worker	0.1178	0.0653	0.8843	3.0100e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		300.3363	300.3363	6.1400e-003		300.4898
Total	**0.1429**	**0.7739**	**1.0586**	**5.6100e-003**	**0.4445**	**2.7900e-003**	**0.4473**	**0.1193**	**2.5900e-003**	**0.1219**		**571.9307**	**571.9307**	**0.0174**		**572.3645**

3.13 Building Construction Phase 5 - 2027

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0250	0.7087	0.1743	2.6000e-003	0.0613	8.5000e-004	0.0622	0.0177	8.1000e-004	0.0185		271.5944	271.5944	0.0112		271.8746
Worker	0.1178	0.0653	0.8843	3.0100e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		300.3363	300.3363	6.1400e-003		300.4898
Total	**0.1429**	**0.7739**	**1.0586**	**5.6100e-003**	**0.4445**	**2.7900e-003**	**0.4473**	**0.1193**	**2.5900e-003**	**0.1219**		**571.9307**	**571.9307**	**0.0174**		**572.3645**

3.14 ARchitectural Coating Phase 5 - 2027

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	70.6838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**70.8546**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	0.1178	0.0653	0.8843	3.0100e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		300.3363	300.3363	6.1400e-003		300.4898
Total	**0.1178**	**0.0653**	**0.8843**	**3.0100e-003**	**0.3832**	**1.9400e-003**	**0.3851**	**0.1016**	**1.7800e-003**	**0.1034**		**300.3363**	**300.3363**	**6.1400e-003**		**300.4898**

3.14 ARchitectural Coating Phase 5 - 2027

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	70.6838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**70.8546**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	0.1178	0.0653	0.8843	3.0100e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		300.3363	300.3363	6.1400e-003		300.4898
Total	**0.1178**	**0.0653**	**0.8843**	**3.0100e-003**	**0.3832**	**1.9400e-003**	**0.3851**	**0.1016**	**1.7800e-003**	**0.1034**		**300.3363**	**300.3363**	**6.1400e-003**		**300.4898**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8453	5.1663	10.5822	0.0520	4.6110	0.0316	4.6427	1.2310	0.0296	1.2606		5,278.7530	5,278.7530	0.1496		5,282.4936
Unmitigated	0.8453	5.1663	10.5822	0.0520	4.6110	0.0316	4.6427	1.2310	0.0296	1.2606		5,278.7530	5,278.7530	0.1496		5,282.4936

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Manufacturing	444.69	444.69	444.69	2,170,406	2,170,406
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	444.69	444.69	444.69	2,170,406	2,170,406

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 Office Building	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Manufacturing	14.70	6.60	6.60	96.00	0.00	4.00	92	5	3
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Research & Development	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Manufacturing	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Other Non-Asphalt Surfaces	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Research & Development	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Unrefrigerated Warehouse-No Rail	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643

5.0 Energy Detail

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 Mitigated	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298
NaturalGas Unmitigated	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298

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 Office Building	599.584	0.0129	0.1176	0.0988	7.1000e-004		8.9300e-003	8.9300e-003		8.9300e-003	8.9300e-003		141.0785	141.0785	2.7000e-003	2.5900e-003	141.9168
Manufacturing	126.937	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9338	14.9338	2.9000e-004	2.7000e-004	15.0225
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
Research & Development	535.636	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0160	63.0160	1.2100e-003	1.1600e-003	63.3904
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0201**	**0.1825**	**0.1533**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**		**219.0282**	**219.0282**	**4.2000e-003**	**4.0200e-003**	**220.3298**

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 Office Building	0.599584	0.0129	0.1176	0.0988	7.1000e-004		8.9300e-003	8.9300e-003		8.9300e-003	8.9300e-003		141.0785	141.0785	2.7000e-003	2.5900e-003	141.9168
Manufacturing	0.126937	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9338	14.9338	2.9000e-004	2.7000e-004	15.0225
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
Research & Development	0.535636	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0160	63.0160	1.2100e-003	1.1600e-003	63.3904
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0201**	**0.1825**	**0.1533**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**		**219.0282**	**219.0282**	**4.2000e-003**	**4.0200e-003**	**220.3298**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Unmitigated	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288

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	0.8261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0173	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Total	**31.3584**	**1.7000e-003**	**0.1873**	**1.0000e-005**		**6.7000e-004**	**6.7000e-004**		**6.7000e-004**	**6.7000e-004**		**0.4026**	**0.4026**	**1.0500e-003**		**0.4288**

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	0.8261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0173	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Total	**31.3584**	**1.7000e-003**	**0.1873**	**1.0000e-005**		**6.7000e-004**	**6.7000e-004**		**6.7000e-004**	**6.7000e-004**		**0.4026**	**0.4026**	**1.0500e-003**		**0.4288**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	27	1	100	44	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

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					
Emergency Generator - Diesel (25 - 50 HP)	1.9493	10.1661	7.8475	9.3700e-003		0.8561	0.8561		0.8561	0.8561		997.3428	997.3428	0.1398		1,000.8385
Total	**1.9493**	**10.1661**	**7.8475**	**9.3700e-003**		**0.8561**	**0.8561**		**0.8561**	**0.8561**		**997.3428**	**997.3428**	**0.1398**		**1,000.8385**

11.0 Vegetation

Triple Crown Cannabis

Colusa County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	11.20	1000sqft	0.26	11,200.00	0
General Office Building	11.20	1000sqft	0.26	11,200.00	0
Research & Development	55.70	1000sqft	1.28	55,700.00	0
Manufacturing	13.20	1000sqft	0.30	13,200.00	0
Unrefrigerated Warehouse-No Rail	200.00	1000sqft	4.59	200,000.00	0
Unrefrigerated Warehouse-No Rail	120.00	1000sqft	2.75	120,000.00	0
Unrefrigerated Warehouse-No Rail	38.80	1000sqft	0.89	38,800.00	0
Unrefrigerated Warehouse-No Rail	328.88	1000sqft	7.55	328,878.00	0
Unrefrigerated Warehouse-No Rail	320.00	1000sqft	7.35	320,000.00	0
Unrefrigerated Warehouse-No Rail	320.00	1000sqft	7.35	320,000.00	0
Other Non-Asphalt Surfaces	420.58	1000sqft	9.66	420,578.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	56
Climate Zone	1			**Operational Year**	2028
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 -

Land Use - Land Uses based on Project Description.

Construction Phase - Extended grading phase from default 45 days to 60 days. Divided building construction default of 500 days into the construction phases. See attachment with assumed phase durations based on input from applicant.

Trips and VMT - Assume 15 round trips (30 one-way) worker trips for all construction phases based on the traffic study. Demolition trips used default. Assume 10 one-way vendor trips per day.

Demolition - Area assumed from Google Map estimates. See air quality chapter references for details.

Grading - Acres graded detailed by phase in attachment. Assumed imported gravel for parking (see attachment for estimate calculation details).

Architectural Coating - Assume only gravel parking and no need for remarking areas. Assume architectural coating only required on non-greenhouse (or nursery) buildings. See attachment for calculations.

Vehicle Trips - assume trips follow pattern of manufacturing land use. See attached trip table for information on how trip rate and percentage trip distributions were estimated.

Fleet Mix -

Area Coating - Only included non-greenhouse architectural coating areas. See attached file for detailed calculations. Used total interior and exterior areas.

Energy Use - Assumed greenhouse electricity is 50 percent of typical manufacturing energy intensity. Thus, changed values to 0.31, 0.925, and 0.905, respectively. No change to natural gas energy intensity.

Operational Off-Road Equipment - generators accounted for elsewhere

Stationary Sources - Emergency Generators and Fire Pumps - Total number of emergency generators. Horsepower provided by applicant. assumed up to 100 hours of use per year.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	12,200.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	27,850.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	709,489.00	25,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,128,467.00	36,600.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,128,467.00	83,550.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	2,128,467.00	75,000.00
tblArchitecturalCoating	ConstArea_Parking	25,235.00	0.00
tblArchitecturalCoating	ConstArea_Parking	25,235.00	0.00
tblArchitecturalCoating	ConstArea_Parking	25,235.00	0.00
tblAreaCoating	Area_Nonresidential_Exterior	709489	65050

tblAreaCoating	Area_Nonresidential_Interior	2128467	195150
tblAreaCoating	Area_Parking	25235	0
tblConstructionPhase	NumDays	50.00	30.00
tblConstructionPhase	NumDays	30.00	20.00
tblConstructionPhase	NumDays	30.00	60.00
tblConstructionPhase	NumDays	75.00	60.00
tblConstructionPhase	NumDays	740.00	116.00
tblConstructionPhase	NumDays	740.00	42.00
tblConstructionPhase	NumDays	55.00	5.00
tblConstructionPhase	NumDays	55.00	8.00
tblConstructionPhase	NumDays	740.00	134.00
tblConstructionPhase	NumDays	55.00	9.00
tblConstructionPhase	NumDays	740.00	113.00
tblConstructionPhase	NumDays	740.00	121.00
tblConstructionPhase	NumDays	55.00	8.00
tblEnergyUse	LightingElect	0.00	0.91
tblEnergyUse	NT24E	0.00	0.93
tblEnergyUse	T24E	0.00	0.31
tblGrading	AcresOfGrading	150.00	61.00
tblGrading	MaterialImported	0.00	3,600.00
tblLandUse	LandUseSquareFeet	328,880.00	328,878.00
tblLandUse	LandUseSquareFeet	420,580.00	420,578.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	CO_EF	4.10	4.10
tblStationaryGeneratorsPumpsEF	NOX_EF	5.32	5.32
tblStationaryGeneratorsPumpsEF	PM10_EF	0.45	0.45

tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.45	0.45
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	44.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	100.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	27.00
tblTripsAndVMT	HaulingTripNumber	450.00	240.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	VendorTripNumber	302.00	10.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00
tblTripsAndVMT	WorkerTripNumber	20.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	15.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	765.00	30.00
tblTripsAndVMT	WorkerTripNumber	153.00	30.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CC_TTP	28.00	0.00

tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	13.00	4.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	96.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	15.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	0.00
tblVehicleTrips	PR_TP	82.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.49	33.69
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	0.62	33.69
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00

tblVehicleTrips	WD_TR	3.82	33.69
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00

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					
2019	13.2546	138.4507	82.2739	0.1547	27.0176	6.5851	33.6027	13.7828	6.0771	19.8598	0.0000	15,337.6837	15,337.6837	4.2617	0.0000	15,444.2254
2020	161.7805	20.4739	18.5478	0.0330	0.4445	1.1253	1.5698	0.1193	1.0581	1.1774	0.0000	3,170.5683	3,170.5683	0.6544	0.0000	3,186.9293
2022	1.9032	16.7153	17.7438	0.0327	0.4445	0.8141	1.2586	0.1193	0.7659	0.8852	0.0000	3,143.8131	3,143.8131	0.6399	0.0000	3,159.8108
2023	129.0871	15.2787	17.4812	0.0326	0.4445	0.7030	1.1476	0.1193	0.6615	0.7808	0.0000	3,128.3238	3,128.3238	0.6294	0.0000	3,144.0586
2024	1.6381	14.3071	17.3034	0.0324	0.4445	0.6165	1.0610	0.1193	0.5799	0.6992	0.0000	3,114.9467	3,114.9467	0.6248	0.0000	3,130.5665
2025	1.5247	13.3065	17.1335	0.0323	0.4445	0.5306	0.9752	0.1193	0.4991	0.6184	0.0000	3,102.2719	3,102.2719	0.6205	0.0000	3,117.7835
2026	1.5168	13.2828	17.0596	0.0322	0.4445	0.5305	0.9751	0.1193	0.4990	0.6183	0.0000	3,090.2827	3,090.2827	0.6196	0.0000	3,105.7716
2027	70.9699	13.2620	16.9963	0.0321	0.4445	0.5304	0.9749	0.1193	0.4989	0.6182	0.0000	3,079.6949	3,079.6949	0.6188	0.0000	3,095.1652
Maximum	**161.7805**	**138.4507**	**82.2739**	**0.1547**	**27.0176**	**6.5851**	**33.6027**	**13.7828**	**6.0771**	**19.8598**	**0.0000**	**15,337.6837**	**15,337.6837**	**4.2617**	**0.0000**	**15,444.2254**

2.1 Overall Construction (Maximum Daily Emission)

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					
2019	13.2546	138.4507	82.2739	0.1547	27.0176	6.5851	33.6027	13.7828	6.0771	19.8598	0.0000	15,337.6836	15,337.6836	4.2617	0.0000	15,444.2254
2020	161.7805	20.4739	18.5478	0.0330	0.4445	1.1253	1.5698	0.1193	1.0581	1.1774	0.0000	3,170.5683	3,170.5683	0.6544	0.0000	3,186.9293
2022	1.9032	16.7153	17.7438	0.0327	0.4445	0.8141	1.2586	0.1193	0.7659	0.8852	0.0000	3,143.8131	3,143.8131	0.6399	0.0000	3,159.8108
2023	129.0871	15.2787	17.4812	0.0326	0.4445	0.7030	1.1476	0.1193	0.6615	0.7808	0.0000	3,128.3238	3,128.3238	0.6294	0.0000	3,144.0586
2024	1.6381	14.3071	17.3034	0.0324	0.4445	0.6165	1.0610	0.1193	0.5799	0.6992	0.0000	3,114.9467	3,114.9467	0.6248	0.0000	3,130.5665
2025	1.5247	13.3065	17.1335	0.0323	0.4445	0.5306	0.9752	0.1193	0.4991	0.6184	0.0000	3,102.2719	3,102.2719	0.6205	0.0000	3,117.7835
2026	1.5168	13.2828	17.0596	0.0322	0.4445	0.5305	0.9751	0.1193	0.4990	0.6183	0.0000	3,090.2827	3,090.2827	0.6196	0.0000	3,105.7716
2027	70.9699	13.2620	16.9963	0.0321	0.4445	0.5304	0.9749	0.1193	0.4989	0.6182	0.0000	3,079.6949	3,079.6949	0.6188	0.0000	3,095.1652
Maximum	**161.7805**	**138.4507**	**82.2739**	**0.1547**	**27.0176**	**6.5851**	**33.6027**	**13.7828**	**6.0771**	**19.8598**	**0.0000**	**15,337.6836**	**15,337.6836**	**4.2617**	**0.0000**	**15,444.2254**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Energy	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298
Mobile	0.6597	5.3915	9.1740	0.0473	4.6110	0.0317	4.6428	1.2310	0.0297	1.2607		4,809.9675	4,809.9675	0.1515		4,813.7560
Stationary	1.9493	10.1661	7.8475	9.3700e-003		0.8561	0.8561		0.8561	0.8561		997.3428	997.3428	0.1398		1,000.8385
Total	**33.9875**	**15.7418**	**17.3621**	**0.0578**	**4.6110**	**0.9024**	**5.5134**	**1.2310**	**0.9003**	**2.1313**		**6,026.7410**	**6,026.7410**	**0.2966**	**4.0200e-003**	**6,035.3531**

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	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Energy	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298
Mobile	0.6597	5.3915	9.1740	0.0473	4.6110	0.0317	4.6428	1.2310	0.0297	1.2607		4,809.9675	4,809.9675	0.1515		4,813.7560
Stationary	1.9493	10.1661	7.8475	9.3700e-003		0.8561	0.8561		0.8561	0.8561		997.3428	997.3428	0.1398		1,000.8385
Total	**33.9875**	**15.7418**	**17.3621**	**0.0578**	**4.6110**	**0.9024**	**5.5134**	**1.2310**	**0.9003**	**2.1313**		**6,026.7410**	**6,026.7410**	**0.2966**	**4.0200e-003**	**6,035.3531**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Triple Crown Cannabis - Colusa County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2019	10/11/2019	5	30	Demolition Existing Bldgs
2	Site Preparation Phase 1	Site Preparation	9/1/2019	9/27/2019	5	20	Phase 1 Site Prep
3	Road and Parking	Site Preparation	9/28/2019	12/20/2019	5	60	Road Imp. Gravel Parking Placement
4	Grading Phase 1	Grading	9/28/2019	12/20/2019	5	60	Phase 1 Grading
5	Building Construction Phase 1	Building Construction	12/21/2019	6/1/2020	5	116	Phase 1 Bldgs
6	Building Construction Phase 2	Building Construction	9/1/2020	10/28/2020	5	42	Phase 2 Bldgs
7	Paving Phase 1	Paving	12/21/2019	12/27/2019	5	5	Paving for Road
8	Architectural Coating Phase 1	Architectural Coating	6/2/2020	6/11/2020	5	8	Phase 1 Coating
9	Building Construction Phase 3	Building Construction	9/1/2022	3/7/2023	5	134	Phase 3 Bldgs
10	Architectural Coating Phase 3	Architectural Coating	3/8/2023	3/20/2023	5	9	Phase 3 Coating
11	Building Construction Phase 4	Building Construction	9/1/2024	2/5/2025	5	113	Phase 4 Bldgs
12	Building Construction Phase 5	Building Construction	9/1/2026	2/16/2027	5	121	Phase 5 Bldgs
13	ARchitectural Coating Phase 5	Architectural Coating	2/17/2027	2/26/2027	5	8	Phase 5 Coating

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 9.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 83,550; Non-Residential Outdoor: 27,850; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Triple Crown Cannabis - Colusa County, Winter

Site Preparation Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Road and Parking	Rubber Tired Dozers	3	8.00	247	0.40
Road and Parking	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Phase 1	Excavators	2	8.00	158	0.38
Grading Phase 1	Graders	1	8.00	187	0.41
Grading Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading Phase 1	Scrapers	2	8.00	367	0.48
Grading Phase 1	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction Phase 1	Cranes	1	7.00	231	0.29
Building Construction Phase 1	Forklifts	3	8.00	89	0.20
Building Construction Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 1	Welders	1	8.00	46	0.45
Building Construction Phase 2	Cranes	1	7.00	231	0.29
Building Construction Phase 2	Forklifts	3	8.00	89	0.20
Building Construction Phase 2	Generator Sets	1	8.00	84	0.74
Building Construction Phase 2	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 2	Welders	1	8.00	46	0.45
Paving Phase 1	Pavers	2	8.00	130	0.42
Paving Phase 1	Paving Equipment	2	8.00	132	0.36
Paving Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating Phase 1	Air Compressors	1	6.00	78	0.48
Building Construction Phase 3	Cranes	1	7.00	231	0.29
Building Construction Phase 3	Forklifts	3	8.00	89	0.20
Building Construction Phase 3	Generator Sets	1	8.00	84	0.74
Building Construction Phase 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Building Construction Phase 3	Welders	1	8.00	46	0.45
Architectural Coating Phase 3	Air Compressors	1	6.00	78	0.48
Building Construction Phase 4	Cranes	1	7.00	231	0.29
Building Construction Phase 4	Forklifts	3	8.00	89	0.20
Building Construction Phase 4	Generator Sets	1	8.00	84	0.74
Building Construction Phase 4	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 4	Welders	1	8.00	46	0.45
Building Construction Phase 5	Cranes	1	7.00	231	0.29
Building Construction Phase 5	Forklifts	3	8.00	89	0.20
Building Construction Phase 5	Generator Sets	1	8.00	84	0.74
Building Construction Phase 5	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction Phase 5	Welders	1	8.00	46	0.45
ARchitectural Coating Phase 5	Air Compressors	1	6.00	78	0.48

Trips and VMT

Triple Crown Cannabis - Colusa County, Winter

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
Demolition	6	30.00	0.00	80.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation Phase 1	7	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Road and Parking	7	30.00	0.00	240.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading Phase 1	8	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 1	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 2	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving Phase 1	6	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating Phase 1	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 3	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating Phase 3	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 4	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction Phase 5	9	30.00	10.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
ARchitectural Coating Phase 5	1	30.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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					0.5778	0.0000	0.5778	0.0875	0.0000	0.0875			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.5778**	**1.7949**	**2.3727**	**0.0875**	**1.6697**	**1.7572**		**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

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	0.0254	0.8060	0.1401	2.1500e-003	0.0468	3.8400e-003	0.0506	0.0128	3.6800e-003	0.0165		225.3797	225.3797	0.0105		225.6417
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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2267**	**0.9926**	**1.6147**	**5.6700e-003**	**0.4300**	**6.3800e-003**	**0.4363**	**0.1145**	**6.0200e-003**	**0.1205**		**575.6673**	**575.6673**	**0.0236**		**576.2571**

3.2 Demolition - 2019

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					0.5778	0.0000	0.5778	0.0875	0.0000	0.0875			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	**3.5134**	**35.7830**	**22.0600**	**0.0388**	**0.5778**	**1.7949**	**2.3727**	**0.0875**	**1.6697**	**1.7572**	**0.0000**	**3,816.8994**	**3,816.8994**	**1.0618**		**3,843.4451**

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	0.0254	0.8060	0.1401	2.1500e-003	0.0468	3.8400e-003	0.0506	0.0128	3.6800e-003	0.0165		225.3797	225.3797	0.0105		225.6417
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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2267**	**0.9926**	**1.6147**	**5.6700e-003**	**0.4300**	**6.3800e-003**	**0.4363**	**0.1145**	**6.0200e-003**	**0.1205**		**575.6673**	**575.6673**	**0.0236**		**576.2571**

3.3 Site Preparation Phase 1 - 2019

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2013**	**0.1866**	**1.4746**	**3.5200e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**350.2875**	**350.2875**	**0.0131**		**350.6153**

3.3 Site Preparation Phase 1 - 2019

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0663**	**2.3904**	**20.4566**	**9.9307**	**2.1991**	**12.1298**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2013**	**0.1866**	**1.4746**	**3.5200e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**350.2875**	**350.2875**	**0.0131**		**350.6153**

3.4 Road and Parking - 2019

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					18.0730	0.0000	18.0730	9.9317	0.0000	9.9317			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0730**	**2.3904**	**20.4634**	**9.9317**	**2.1991**	**12.1308**		**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.0382	1.2091	0.2102	3.2300e-003	0.0701	5.7700e-003	0.0759	0.0192	5.5200e-003	0.0248		338.0696	338.0696	0.0157		338.4626
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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2394**	**1.3956**	**1.6848**	**6.7500e-003**	**0.4533**	**8.3100e-003**	**0.4616**	**0.1209**	**7.8600e-003**	**0.1287**		**688.3571**	**688.3571**	**0.0288**		**689.0779**

3.4 Road and Parking - 2019

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					18.0730	0.0000	18.0730	9.9317	0.0000	9.9317			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	**4.3350**	**45.5727**	**22.0630**	**0.0380**	**18.0730**	**2.3904**	**20.4634**	**9.9317**	**2.1991**	**12.1308**	**0.0000**	**3,766.4529**	**3,766.4529**	**1.1917**		**3,796.2445**

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	0.0382	1.2091	0.2102	3.2300e-003	0.0701	5.7700e-003	0.0759	0.0192	5.5200e-003	0.0248		338.0696	338.0696	0.0157		338.4626
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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2394**	**1.3956**	**1.6848**	**6.7500e-003**	**0.4533**	**8.3100e-003**	**0.4616**	**0.1209**	**7.8600e-003**	**0.1287**		**688.3571**	**688.3571**	**0.0288**		**689.0779**

3.5 Grading Phase 1 - 2019

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					7.1003	0.0000	7.1003	3.4267	0.0000	3.4267			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.1003**	**2.3827**	**9.4829**	**3.4267**	**2.1920**	**5.6187**		**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2013**	**0.1866**	**1.4746**	**3.5200e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**350.2875**	**350.2875**	**0.0131**		**350.6153**

3.5 Grading Phase 1 - 2019

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					7.1003	0.0000	7.1003	3.4267	0.0000	3.4267			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	**4.7389**	**54.5202**	**33.3768**	**0.0620**	**7.1003**	**2.3827**	**9.4829**	**3.4267**	**2.1920**	**5.6187**	**0.0000**	**6,140.0195**	**6,140.0195**	**1.9426**		**6,188.5854**

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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2013**	**0.1866**	**1.4746**	**3.5200e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**350.2875**	**350.2875**	**0.0131**		**350.6153**

3.6 Building Construction Phase 1 - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**		**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.0622	1.2278	0.4524	2.6900e-003	0.0613	8.8200e-003	0.0702	0.0177	8.4300e-003	0.0261		280.0783	280.0783	0.0217		280.6212
Worker	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2634**	**1.4144**	**1.9270**	**6.2100e-003**	**0.4445**	**0.0114**	**0.4559**	**0.1193**	**0.0108**	**0.1301**		**630.3659**	**630.3659**	**0.0348**		**631.2365**

3.6 Building Construction Phase 1 - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	**2.3612**	**21.0788**	**17.1638**	**0.0269**		**1.2899**	**1.2899**		**1.2127**	**1.2127**	**0.0000**	**2,591.5802**	**2,591.5802**	**0.6313**		**2,607.3635**

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	0.0622	1.2278	0.4524	2.6900e-003	0.0613	8.8200e-003	0.0702	0.0177	8.4300e-003	0.0261		280.0783	280.0783	0.0217		280.6212
Worker	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2634**	**1.4144**	**1.9270**	**6.2100e-003**	**0.4445**	**0.0114**	**0.4559**	**0.1193**	**0.0108**	**0.1301**		**630.3659**	**630.3659**	**0.0348**		**631.2365**

3.6 Building Construction Phase 1 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0518	1.1239	0.3942	2.6700e-003	0.0613	5.7900e-003	0.0671	0.0177	5.5400e-003	0.0232		278.2327	278.2327	0.0203		278.7389
Worker	0.1824	0.1640	1.3051	3.4100e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		339.2726	339.2726	0.0113		339.5559
Total	**0.2342**	**1.2879**	**1.6993**	**6.0800e-003**	**0.4445**	**8.2400e-003**	**0.4528**	**0.1193**	**7.8000e-003**	**0.1271**		**617.5052**	**617.5052**	**0.0316**		**618.2948**

3.6 Building Construction Phase 1 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0518	1.1239	0.3942	2.6700e-003	0.0613	5.7900e-003	0.0671	0.0177	5.5400e-003	0.0232		278.2327	278.2327	0.0203		278.7389
Worker	0.1824	0.1640	1.3051	3.4100e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		339.2726	339.2726	0.0113		339.5559
Total	**0.2342**	**1.2879**	**1.6993**	**6.0800e-003**	**0.4445**	**8.2400e-003**	**0.4528**	**0.1193**	**7.8000e-003**	**0.1271**		**617.5052**	**617.5052**	**0.0316**		**618.2948**

3.7 Building Construction Phase 2 - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0518	1.1239	0.3942	2.6700e-003	0.0613	5.7900e-003	0.0671	0.0177	5.5400e-003	0.0232		278.2327	278.2327	0.0203		278.7389
Worker	0.1824	0.1640	1.3051	3.4100e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		339.2726	339.2726	0.0113		339.5559
Total	**0.2342**	**1.2879**	**1.6993**	**6.0800e-003**	**0.4445**	**8.2400e-003**	**0.4528**	**0.1193**	**7.8000e-003**	**0.1271**		**617.5052**	**617.5052**	**0.0316**		**618.2948**

3.7 Building Construction Phase 2 - 2020

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0518	1.1239	0.3942	2.6700e-003	0.0613	5.7900e-003	0.0671	0.0177	5.5400e-003	0.0232		278.2327	278.2327	0.0203		278.7389
Worker	0.1824	0.1640	1.3051	3.4100e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		339.2726	339.2726	0.0113		339.5559
Total	**0.2342**	**1.2879**	**1.6993**	**6.0800e-003**	**0.4445**	**8.2400e-003**	**0.4528**	**0.1193**	**7.8000e-003**	**0.1271**		**617.5052**	**617.5052**	**0.0316**		**618.2948**

3.8 Paving Phase 1 - 2019

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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**		**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2013**	**0.1866**	**1.4746**	**3.5200e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**350.2875**	**350.2875**	**0.0131**		**350.6153**

3.8 Paving Phase 1 - 2019

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	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4544**	**15.2441**	**14.6648**	**0.0228**		**0.8246**	**0.8246**		**0.7586**	**0.7586**	**0.0000**	**2,257.0025**	**2,257.0025**	**0.7141**		**2,274.8548**

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	0.2013	0.1866	1.4746	3.5200e-003	0.3832	2.5400e-003	0.3857	0.1016	2.3400e-003	0.1040		350.2875	350.2875	0.0131		350.6153
Total	**0.2013**	**0.1866**	**1.4746**	**3.5200e-003**	**0.3832**	**2.5400e-003**	**0.3857**	**0.1016**	**2.3400e-003**	**0.1040**		**350.2875**	**350.2875**	**0.0131**		**350.6153**

3.9 Architectural Coating Phase 1 - 2020

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	161.3559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	**161.5981**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**		**281.4481**	**281.4481**	**0.0218**		**281.9928**

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	0.1824	0.1640	1.3051	3.4100e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		339.2726	339.2726	0.0113		339.5559
Total	**0.1824**	**0.1640**	**1.3051**	**3.4100e-003**	**0.3832**	**2.4500e-003**	**0.3857**	**0.1016**	**2.2600e-003**	**0.1039**		**339.2726**	**339.2726**	**0.0113**		**339.5559**

3.9 Architectural Coating Phase 1 - 2020

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	161.3559					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	**161.5981**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**	**0.0000**	**281.4481**	**281.4481**	**0.0218**		**281.9928**

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	0.1824	0.1640	1.3051	3.4100e-003	0.3832	2.4500e-003	0.3857	0.1016	2.2600e-003	0.1039		339.2726	339.2726	0.0113		339.5559
Total	**0.1824**	**0.1640**	**1.3051**	**3.4100e-003**	**0.3832**	**2.4500e-003**	**0.3857**	**0.1016**	**2.2600e-003**	**0.1039**		**339.2726**	**339.2726**	**0.0113**		**339.5559**

3.10 Building Construction Phase 3 - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0410	0.9696	0.3140	2.6300e-003	0.0613	2.8000e-003	0.0641	0.0177	2.6700e-003	0.0203		273.8105	273.8105	0.0191		274.2877
Worker	0.1560	0.1301	1.0664	3.1700e-003	0.3832	2.2900e-003	0.3855	0.1016	2.1100e-003	0.1037		315.6690	315.6690	8.8800e-003		315.8909
Total	**0.1970**	**1.0996**	**1.3804**	**5.8000e-003**	**0.4445**	**5.0900e-003**	**0.4496**	**0.1193**	**4.7800e-003**	**0.1241**		**589.4795**	**589.4795**	**0.0280**		**590.1786**

3.10 Building Construction Phase 3 - 2022

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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.0410	0.9696	0.3140	2.6300e-003	0.0613	2.8000e-003	0.0641	0.0177	2.6700e-003	0.0203		273.8105	273.8105	0.0191		274.2877
Worker	0.1560	0.1301	1.0664	3.1700e-003	0.3832	2.2900e-003	0.3855	0.1016	2.1100e-003	0.1037		315.6690	315.6690	8.8800e-003		315.8909
Total	**0.1970**	**1.0996**	**1.3804**	**5.8000e-003**	**0.4445**	**5.0900e-003**	**0.4496**	**0.1193**	**4.7800e-003**	**0.1241**		**589.4795**	**589.4795**	**0.0280**		**590.1786**

3.10 Building Construction Phase 3 - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0319	0.7773	0.2672	2.5800e-003	0.0613	1.0900e-003	0.0624	0.0177	1.0400e-003	0.0187		269.2979	269.2979	0.0137		269.6394
Worker	0.1455	0.1165	0.9701	3.0500e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		303.8160	303.8160	7.8900e-003		304.0131
Total	**0.1774**	**0.8938**	**1.2372**	**5.6300e-003**	**0.4445**	**3.3100e-003**	**0.4478**	**0.1193**	**3.0800e-003**	**0.1224**		**573.1139**	**573.1139**	**0.0216**		**573.6526**

3.10 Building Construction Phase 3 - 2023

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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0319	0.7773	0.2672	2.5800e-003	0.0613	1.0900e-003	0.0624	0.0177	1.0400e-003	0.0187		269.2979	269.2979	0.0137		269.6394
Worker	0.1455	0.1165	0.9701	3.0500e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		303.8160	303.8160	7.8900e-003		304.0131
Total	**0.1774**	**0.8938**	**1.2372**	**5.6300e-003**	**0.4445**	**3.3100e-003**	**0.4478**	**0.1193**	**3.0800e-003**	**0.1224**		**573.1139**	**573.1139**	**0.0216**		**573.6526**

3.11 Architectural Coating Phase 3 - 2023

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	128.7500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**128.9417**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1455	0.1165	0.9701	3.0500e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		303.8160	303.8160	7.8900e-003		304.0131
Total	**0.1455**	**0.1165**	**0.9701**	**3.0500e-003**	**0.3832**	**2.2200e-003**	**0.3854**	**0.1016**	**2.0400e-003**	**0.1037**		**303.8160**	**303.8160**	**7.8900e-003**		**304.0131**

3.11 Architectural Coating Phase 3 - 2023

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	128.7500					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**128.9417**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	0.1455	0.1165	0.9701	3.0500e-003	0.3832	2.2200e-003	0.3854	0.1016	2.0400e-003	0.1037		303.8160	303.8160	7.8900e-003		304.0131
Total	**0.1455**	**0.1165**	**0.9701**	**3.0500e-003**	**0.3832**	**2.2200e-003**	**0.3854**	**0.1016**	**2.0400e-003**	**0.1037**		**303.8160**	**303.8160**	**7.8900e-003**		**304.0131**

3.12 Building Construction Phase 4 - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	0.0303	0.7586	0.2478	2.5600e-003	0.0613	1.0200e-003	0.0624	0.0177	9.8000e-004	0.0186		267.1813	267.1813	0.0134		267.5169
Worker	0.1362	0.1048	0.8888	2.9300e-003	0.3832	2.1600e-003	0.3854	0.1016	1.9900e-003	0.1036		292.0665	292.0665	7.0200e-003		292.2419
Total	**0.1665**	**0.8634**	**1.1366**	**5.4900e-003**	**0.4445**	**3.1800e-003**	**0.4477**	**0.1193**	**2.9700e-003**	**0.1223**		**559.2478**	**559.2478**	**0.0204**		**559.7588**

3.12 Building Construction Phase 4 - 2024

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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

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	0.0303	0.7586	0.2478	2.5600e-003	0.0613	1.0200e-003	0.0624	0.0177	9.8000e-004	0.0186		267.1813	267.1813	0.0134		267.5169
Worker	0.1362	0.1048	0.8888	2.9300e-003	0.3832	2.1600e-003	0.3854	0.1016	1.9900e-003	0.1036		292.0665	292.0665	7.0200e-003		292.2419
Total	**0.1665**	**0.8634**	**1.1366**	**5.4900e-003**	**0.4445**	**3.1800e-003**	**0.4477**	**0.1193**	**2.9700e-003**	**0.1223**		**559.2478**	**559.2478**	**0.0204**		**559.7588**

3.12 Building Construction Phase 4 - 2025

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0289	0.7418	0.2306	2.5400e-003	0.0613	9.6000e-004	0.0623	0.0177	9.2000e-004	0.0186		265.2979	265.2979	0.0132		265.6280
Worker	0.1284	0.0950	0.8183	2.8100e-003	0.3832	2.1100e-003	0.3853	0.1016	1.9500e-003	0.1036		280.4997	280.4997	6.3100e-003		280.6575
Total	**0.1573**	**0.8368**	**1.0489**	**5.3500e-003**	**0.4445**	**3.0700e-003**	**0.4476**	**0.1193**	**2.8700e-003**	**0.1222**		**545.7976**	**545.7976**	**0.0195**		**546.2855**

3.12 Building Construction Phase 4 - 2025

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0289	0.7418	0.2306	2.5400e-003	0.0613	9.6000e-004	0.0623	0.0177	9.2000e-004	0.0186		265.2979	265.2979	0.0132		265.6280
Worker	0.1284	0.0950	0.8183	2.8100e-003	0.3832	2.1100e-003	0.3853	0.1016	1.9500e-003	0.1036		280.4997	280.4997	6.3100e-003		280.6575
Total	**0.1573**	**0.8368**	**1.0489**	**5.3500e-003**	**0.4445**	**3.0700e-003**	**0.4476**	**0.1193**	**2.8700e-003**	**0.1222**		**545.7976**	**545.7976**	**0.0195**		**546.2855**

3.13 Building Construction Phase 5 - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0277	0.7265	0.2175	2.5300e-003	0.0613	9.1000e-004	0.0623	0.0177	8.7000e-004	0.0185		263.4410	263.4410	0.0129		263.7636
Worker	0.1217	0.0866	0.7574	2.7100e-003	0.3832	2.0500e-003	0.3852	0.1016	1.8800e-003	0.1035		270.3674	270.3674	5.7000e-003		270.5099
Total	**0.1494**	**0.8131**	**0.9749**	**5.2400e-003**	**0.4445**	**2.9600e-003**	**0.4475**	**0.1193**	**2.7500e-003**	**0.1220**		**533.8084**	**533.8084**	**0.0186**		**534.2735**

3.13 Building Construction Phase 5 - 2026

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0277	0.7265	0.2175	2.5300e-003	0.0613	9.1000e-004	0.0623	0.0177	8.7000e-004	0.0185		263.4410	263.4410	0.0129		263.7636
Worker	0.1217	0.0866	0.7574	2.7100e-003	0.3832	2.0500e-003	0.3852	0.1016	1.8800e-003	0.1035		270.3674	270.3674	5.7000e-003		270.5099
Total	**0.1494**	**0.8131**	**0.9749**	**5.2400e-003**	**0.4445**	**2.9600e-003**	**0.4475**	**0.1193**	**2.7500e-003**	**0.1220**		**533.8084**	**533.8084**	**0.0186**		**534.2735**

3.13 Building Construction Phase 5 - 2027

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0267	0.7131	0.2073	2.5100e-003	0.0613	8.7000e-004	0.0622	0.0177	8.3000e-004	0.0185		261.8128	261.8128	0.0127		262.1302
Worker	0.1153	0.0792	0.7043	2.6200e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		261.4078	261.4078	5.1700e-003		261.5369
Total	**0.1420**	**0.7923**	**0.9117**	**5.1300e-003**	**0.4445**	**2.8100e-003**	**0.4473**	**0.1193**	**2.6100e-003**	**0.1219**		**523.2206**	**523.2206**	**0.0179**		**523.6672**

3.13 Building Construction Phase 5 - 2027

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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

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	0.0267	0.7131	0.2073	2.5100e-003	0.0613	8.7000e-004	0.0622	0.0177	8.3000e-004	0.0185		261.8128	261.8128	0.0127		262.1302
Worker	0.1153	0.0792	0.7043	2.6200e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		261.4078	261.4078	5.1700e-003		261.5369
Total	**0.1420**	**0.7923**	**0.9117**	**5.1300e-003**	**0.4445**	**2.8100e-003**	**0.4473**	**0.1193**	**2.6100e-003**	**0.1219**		**523.2206**	**523.2206**	**0.0179**		**523.6672**

3.14 ARchitectural Coating Phase 5 - 2027

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	70.6838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**70.8546**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	0.1153	0.0792	0.7043	2.6200e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		261.4078	261.4078	5.1700e-003		261.5369
Total	**0.1153**	**0.0792**	**0.7043**	**2.6200e-003**	**0.3832**	**1.9400e-003**	**0.3851**	**0.1016**	**1.7800e-003**	**0.1034**		**261.4078**	**261.4078**	**5.1700e-003**		**261.5369**

3.14 ARchitectural Coating Phase 5 - 2027

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	70.6838					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**70.8546**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

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	0.1153	0.0792	0.7043	2.6200e-003	0.3832	1.9400e-003	0.3851	0.1016	1.7800e-003	0.1034		261.4078	261.4078	5.1700e-003		261.5369
Total	**0.1153**	**0.0792**	**0.7043**	**2.6200e-003**	**0.3832**	**1.9400e-003**	**0.3851**	**0.1016**	**1.7800e-003**	**0.1034**		**261.4078**	**261.4078**	**5.1700e-003**		**261.5369**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6597	5.3915	9.1740	0.0473	4.6110	0.0317	4.6428	1.2310	0.0297	1.2607		4,809.9675	4,809.9675	0.1515		4,813.7560
Unmitigated	0.6597	5.3915	9.1740	0.0473	4.6110	0.0317	4.6428	1.2310	0.0297	1.2607		4,809.9675	4,809.9675	0.1515		4,813.7560

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
General Office Building	0.00	0.00	0.00		
Manufacturing	444.69	444.69	444.69	2,170,406	2,170,406
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Research & Development	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	444.69	444.69	444.69	2,170,406	2,170,406

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 Office Building	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Manufacturing	14.70	6.60	6.60	96.00	0.00	4.00	92	5	3
Other Non-Asphalt Surfaces	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Research & Development	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Manufacturing	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Other Non-Asphalt Surfaces	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Research & Development	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643
Unrefrigerated Warehouse-No Rail	0.571093	0.033742	0.186688	0.105356	0.016042	0.005061	0.006430	0.067470	0.000917	0.001322	0.004695	0.000541	0.000643

5.0 Energy Detail

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 Mitigated	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298
NaturalGas Unmitigated	0.0201	0.1825	0.1533	1.1000e-003		0.0139	0.0139		0.0139	0.0139		219.0282	219.0282	4.2000e-003	4.0200e-003	220.3298

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 Office Building	599.584	0.0129	0.1176	0.0988	7.1000e-004		8.9300e-003	8.9300e-003		8.9300e-003	8.9300e-003		141.0785	141.0785	2.7000e-003	2.5900e-003	141.9168
Manufacturing	126.937	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9338	14.9338	2.9000e-004	2.7000e-004	15.0225
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
Research & Development	535.636	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0160	63.0160	1.2100e-003	1.1600e-003	63.3904
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0201**	**0.1825**	**0.1533**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**		**219.0282**	**219.0282**	**4.2000e-003**	**4.0200e-003**	**220.3298**

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 Office Building	0.599584	0.0129	0.1176	0.0988	7.1000e-004		8.9300e-003	8.9300e-003		8.9300e-003	8.9300e-003		141.0785	141.0785	2.7000e-003	2.5900e-003	141.9168
Manufacturing	0.126937	1.3700e-003	0.0124	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9338	14.9338	2.9000e-004	2.7000e-004	15.0225
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
Research & Development	0.535636	5.7800e-003	0.0525	0.0441	3.2000e-004		3.9900e-003	3.9900e-003		3.9900e-003	3.9900e-003		63.0160	63.0160	1.2100e-003	1.1600e-003	63.3904
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0201**	**0.1825**	**0.1533**	**1.1000e-003**		**0.0139**	**0.0139**		**0.0139**	**0.0139**		**219.0282**	**219.0282**	**4.2000e-003**	**4.0200e-003**	**220.3298**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Unmitigated	31.3584	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288

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	0.8261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0173	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Total	**31.3584**	**1.7000e-003**	**0.1873**	**1.0000e-005**		**6.7000e-004**	**6.7000e-004**		**6.7000e-004**	**6.7000e-004**		**0.4026**	**0.4026**	**1.0500e-003**		**0.4288**

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	0.8261					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	30.5151					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0173	1.7000e-003	0.1873	1.0000e-005		6.7000e-004	6.7000e-004		6.7000e-004	6.7000e-004		0.4026	0.4026	1.0500e-003		0.4288
Total	**31.3584**	**1.7000e-003**	**0.1873**	**1.0000e-005**		**6.7000e-004**	**6.7000e-004**		**6.7000e-004**	**6.7000e-004**		**0.4026**	**0.4026**	**1.0500e-003**		**0.4288**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	27	1	100	44	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

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					
Emergency Generator - Diesel (25 - 50 HP)	1.9493	10.1661	7.8475	9.3700e-003		0.8561	0.8561		0.8561	0.8561		997.3428	997.3428	0.1398		1,000.8385
Total	**1.9493**	**10.1661**	**7.8475**	**9.3700e-003**		**0.8561**	**0.8561**		**0.8561**	**0.8561**		**997.3428**	**997.3428**	**0.1398**		**1,000.8385**

11.0 Vegetation

Appendix C
Biological Resources Information

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Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Moulton Weir (3912231) OR Sanborn Slough (3912138) OR Pennington (3912137) OR Colusa (3912221) OR Meridian (3912128) OR Sutter Buttes (3912127) OR Arbuckle (3912211) OR Grimes (3912118) OR Tisdale Weir (3912117))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Ambystoma californiense California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	WL
Amsinckia lunaris bent-flowered fiddleneck	PDBOR01070	None	None	G3	S3	1B.2
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Astragalus tener var. ferrisiae Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex depressa brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
Atriplex minuscula lesser saltscale	PDCHE042M0	None	None	G2	S2	1B.1
Atriplex persistens vernal pool smallscale	PDCHE042P0	None	None	G2	S2	1B.2
Atriplex subtilis subtle orache	PDCHE042T0	None	None	G1	S1	1B.2
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	G5T3	S3	
Brasenia schreberi watershield	PDCAB01010	None	None	G5	S3	2B.3
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Castilleja rubicundula var. rubicundula pink creamsacs	PDSCR0D482	None	None	G5T2	S2	1B.2
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Chloropyron palmatum palmate-bracted salty bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
Cicindela hirticollis abrupta Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Circus cyaneus northern harrier	ABNKC11010	None	None	G5	S3	SSC
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4T5	SH	2B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
Dipodomys californicus eximius Marysville California kangaroo rat	AMAFD03071	None	None	G4T1	S1	SSC
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Great Valley Willow Scrub Great Valley Willow Scrub	CTT63410CA	None	None	G3	S3.2	
Grus canadensis tabida greater sandhill crane	ABNMK01014	None	Threatened	G5T4	S2	FP
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Heteranthera dubia water star-grass	PMPON03010	None	None	G5	S2	2B.2
Hibiscus lasiocarpos var. occidentalis woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
Lasiurus blossevillii western red bat	AMACC05060	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Layia septentrionalis Colusa layia	PDAST5N0F0	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Melospiza melodia song sparrow ("Modesto" population)	ABPBXA3010	None	None	G5	S3?	SSC
Myotis ciliolabrum western small-footed myotis	AMACC01140	None	None	G5	S3	
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Navarretia leucocephala ssp. bakeri Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Perognathus inornatus San Joaquin Pocket Mouse	AMAFD01060	None	None	G2G3	S2S3	
Plegadis chihi white-faced ibis	ABNGE02020	None	None	G5	S3S4	WL
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G3	S2	1B.2
Rana boylii foothill yellow-legged frog	AAABH01050	None	Candidate Threatened	G3	S3	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Spinus lawrencei Lawrence's goldfinch	ABPBY06100	None	None	G3G4	S3S4	
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	SSC
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Trichocoronis wrightii var. wrightii Wright's trichocoronis	PDAST9F031	None	None	G4T3	S1	2B.1
Wolffia brasiliensis Brazilian watermeal	PMLEM03020	None	None	G5	S1	2B.3

Record Count: 58

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

Colusa Triple Crown

LOCATION

Colusa County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

Yellow-billed Cuckoo Coccyzus americanus There is **proposed** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog Rana draytonii There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS

Conservancy Fairy Shrimp Branchinecta conservatio — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8246

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/498

Vernal Pool Tadpole Shrimp Lepidurus packardi — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/2246

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Lewis's Woodpecker Melanerpes lewis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Long-billed Curlew Numenius americanus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5511	Breeds elsewhere
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Rufous Hummingbird selasphorus rufus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8002	Breeds elsewhere
Song Sparrow Melospiza melodia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Feb 20 to Sep 5
Spotted Towhee Pipilo maculatus clementae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/4243	Breeds Apr 15 to Jul 20
Yellow-billed Magpie Pica nuttalli This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

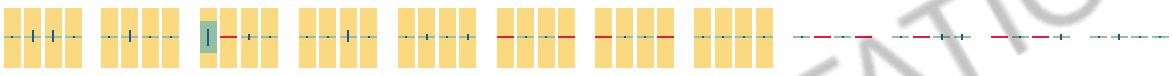
■ probability of presence ■ breeding season | survey effort – no data

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

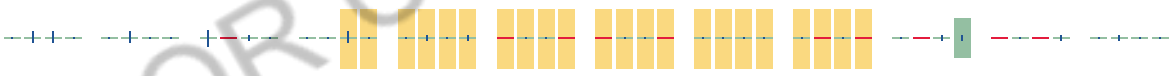
Bald Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)

Common Yellowthroat
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Lewis's Woodpecker
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



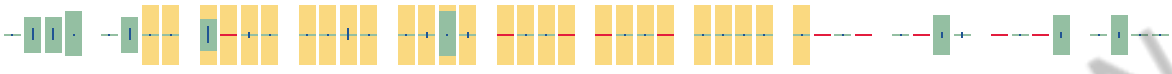
Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Nuttall's Woodpecker
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Oak Titmouse
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

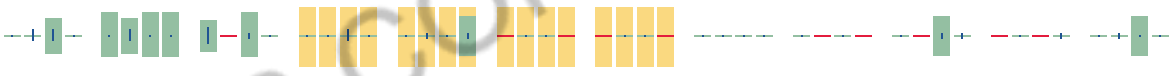
Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Spotted Towhee
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Yellow-billed Magpie
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project

intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

CNPS California Native Plant Society

Plant List

Inventory of Rare and Endangered Plants

22 matches found. Click on scientific name for details

Search Criteria

Found in Quads 3912231, 3912138, 3912137, 3912221, 3912128, 3912127, 3912211 3912118 and 3912117;

Modify Search Criteria Export to Excel Modify Columns Modify Sort Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S2S3	G2G3
Astragalus tener var. ferrisiae	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	1B.1	S1	G2T1
Atriplex cordulata var. cordulata	heartscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G3T2
Atriplex depressa	brittlescale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Atriplex minuscula	lesser saltscale	Chenopodiaceae	annual herb	May-Oct	1B.1	S2	G2
Atriplex persistens	vernal pool smallscale	Chenopodiaceae	annual herb	Jun,Aug,Sep,Oct	1B.2	S2	G2
Atriplex subtilis	subtle orache	Chenopodiaceae	annual herb	Jun,Aug,Sep(Oct)	1B.2	S1	G1
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	2B.3	S3	G5
Castilleja rubicundula var. rubicundula	pink creamsacs	Orobanchaceae	annual herb (hemiparasitic)	Apr-Jun	1B.2	S2	G5T2
Centromadia parryi ssp. parryi	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2	S2	G3T2
Centromadia parryi ssp. rudis	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	4.2	S3	G3T3
Chloropyron palmatum	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct	1B.1	S1	G1
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4T5
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S2	G2
Heteranthera dubia	water star-grass	Pontederiaceae	perennial herb (aquatic)	Jul-Oct	2B.2	S2	G5
Hibiscus lasiocarpos var. occidentalis	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	1B.2	S3	G5T3
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
Layia septentrionalis	Colusa layia	Asteraceae	annual herb	Apr-May	1B.2	S2	G2
Navarretia leucocephala ssp. bakeri	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G4T2

Puccinellia simplex	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	Asteraceae	annual herb	May-Sep	2B.1	S1	G4T3
Wolffia brasiliensis	Brazilian watermeal	Araceae	perennial herb (aquatic)	Apr,Dec	2B.3	S1	G5

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Appendix D
Cultural Resources and Tribal Cultural Resources Evaluation

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Draft Technical Report

ARCHAEOLOGICAL INVENTORY REPORT

City of Colusa Triple Crown Project
Colusa, Colusa County, California

November 2018

Prepared for:

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Community Development Department
425 Webster Street
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Prepared by:

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Limitations

This report contains confidential cultural resources location information; report distribution should be restricted to those with a need to know. Cultural resources are non-renewable, and their scientific, cultural, and aesthetic values can be significantly impaired by disturbance. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the locations of cultural resources should be kept confidential. The legal authority to restrict cultural resources information is in California Government Code 6254.1 and the National Historic Preservation Act of 1966, as amended, Section 304.

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List of Acronyms

Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
City	City of Colusa
CRHR	California Register of Historical Resources
CFR	Code of Federal Regulations
Horizon	Horizon Water and Environment, LLC
NWIC	Northwest Information Center
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
PRC	Public Resources Code
TCR	tribal cultural resource
RPA	Registered Professional Archaeologist
USGS	United State Geological Survey
Valley	Sacramento Valley

Executive Summary

The City of Colusa (City) is evaluating the proposed development of an 84-acre site on the northeast side of the city for a Development Agreement, Special Use Permit, and Regulatory Use Permit to construct and operate a cannabis research and development business park (the Proposed Project or Project). The site of the Proposed Project was formerly considered for development as a mixed-use residential/cannabis business park project on a larger parcel of 506 acres.

Archaeological studies of the larger development were conducted in 2006 and 2008 (ECORP Consulting, Inc. 2006, 2008). Five cultural resources were recorded within the Proposed Project boundaries as a result of those studies. These resources included the following:

- P-06-000589: historic-era refuse scatter
- P-06-000590: fruit dryer and ancillary features
- P-06-000591: farm complex with a house and related structures
- P-06-000592: irrigation system features
- P-06-000594: isolated wine bottle base

The larger development was terminated before any of the recorded resources were evaluated for eligibility for listing in the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP).

Although the entire Proposed Project area was not resurveyed by the current study, Horizon Water and Environment (Horizon) was retained to assess the current status of the previously recorded resources. An evaluation of these resources determined that none of the cultural resources appear eligible for listing in the CRHR.

The cultural resources assessment was based on information received from the Northwest Information Center of the California Historical Resources Information System, as well as on direct observation of site conditions and other information generally applicable as of October 2018. The conclusions and recommendations herein are therefore based on information available up to that point in time. Further information may come to light in the future that could substantially change the conclusions found herein.

Information obtained from these sources in this timeframe is assumed to be correct and complete. Horizon does not assume any liability for findings or lack of findings based upon misrepresentation of information presented to Horizon or for items that are not visible, made visible, accessible, or present at the time of the Project area inventory.

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1 Introduction

1.1 Location and Setting

The City of Colusa (City) is considering issuance of a Development Agreement, Special Use Permit, and Regulatory Use Permit to construct and operate a cannabis research and development business park (the Proposed Project or Project). The Proposed Project is located on an 84-acre site on the northeast side of the city **(Figure 1)**. The Project site is bounded by D Street to the west and East Clay Street to the south, while the Sacramento River forms its northern boundary. The Project site would be accessed via East Main Street to D Street. Improvements would also be made on Main and D streets. Connections to City water, stormwater, and possibly sewer lines will be made via an easement on East Market Street. The Proposed Project area is depicted on the Colusa 7.5" USGS topographic map in Section 29, Township 16 North, Range 1 West (**Figure 2**).

The Project site is at an elevation of 55 feet above mean sea level in the Sacramento Valley (Valley), about 50 linear miles north of the city of Sacramento. The foothills of the North Coast Range are 15 miles to the west, while the Sutter Buttes rise up out of the Valley floor 6 miles to the east. The Valley itself is a relatively flat floodplain created by the Sacramento River that flows for 447 miles from the north to the Sacramento-San Joaquin River Delta just south of the city of Sacramento. Virtually the entire Valley floor, including the Project site, is underlain by Holocene alluvium deposited during regular flooding of the Sacramento River. Though once covered with tall native grasslands and groves of valley oak trees, the region is now thoroughly developed by agriculture. The Project site has most recently been planted with oats, but rice and a variety of row crops and fruit and nut trees are produced in close proximity. Riparian vegetation grows along the waterside banks of the Sacramento River levee, and some mature oaks grow along the perimeter of the Project site.

1.2 Project Description and Project Study Area

The Proposed Project is the approval of the construction and eventual operation of a cannabis research and development business park. The Proposed Project would encompass approximately 1,420,000 square feet on 84 acres and would include energy-efficient greenhouses for cannabis cultivation, plant processing spaces, facilities for creating infused products, a testing laboratory for internal product testing, research/development and training centers, distribution center, and corporate offices. Space may be sold or leased to other cannabis businesses properly licensed by the State of California. The Proposed Project plan is depicted in **Figure 3**.

In addition to the construction of buildings, a 13-acre stormwater detention basin would be constructed in the southwest corner of the property and a new water/stormwater/sewer line and connection installed from the Project site to Bridge Street along an easement that would extend along the trajectory of East Market Street. Parking would be provided in a graveled area along the northern perimeter of the site adjacent to the levee. The maximum depth of excavations for the detention basin would be approximately 3 feet and underground utilities would not exceed 3.5 feet.

The Project study area (**Figure 4**) consists of the 84 acres proposed for development, as well as the approximately 0.25-mile improvement of Main Street, including an 80-foot-wide right of way, and a similar length of waterline along the easement of East Market Street. No additional construction staging areas would be required. The maximum depth of the study area is 3.5 feet to accommodate installation of the water lines.

Figure 1. Project Vicinity

Figure 2. Project Location

Figure 3. Project Study Area

1.3 Regulatory Setting and Need for Study

1.3.1 State of California Regulations

CEQA and State CEQA Guidelines

The proposed project must comply with California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq. and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3), which determine, in part, whether the project has a significant effect on a unique archaeological resource (per PRC 21083.2) or a historical resource (per PRC 21084.1).

CEQA Guidelines CCR 15064.5 notes that "a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." Lead agencies are required to identify potentially feasible measures or alternatives to avoid or mitigate significant adverse changes in the significance of a historical resource before such projects are approved. According to the CEQA guidelines, historical resources are:

- Listed in, or determined to be eligible for listing in, the California Register of Historical Resources (per PRC 5024.1(e));
- Included in a local register of historical resources (per PRC 5020.1(k)) or identified as significant in a historical resource survey meeting the requirements of PRC 5024.1(g); or
- Determined by a lead state agency to be historically significant.

CEQA Guidelines CCR 15064.5 also applies to unique archaeological resources as defined in PRC 21084.1.

Assembly Bill 52, which went into effect on July 1, 2015, requires, per PRC 21080.3.1, that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe, and if the agency intends to release a negative declaration, mitigated negative declaration, or environmental impact report for a project. The bill also specifies, under PRC 21084.2, that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource (TCR) is considered a project that may have a significant effect on the environment. This latter language was added to the CEQA checklist in September 2016. The City of Colusa, as the Project's CEQA lead agency, consulted with Native American tribes pursuant to PRC 21080.3.1.

As defined in Section 21074(a) of the PRC, TCRs are:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

   a. Included or determined to be eligible for inclusion in the California Register of Historical Resources; or

   b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074(b) and (c) as follows:

(b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to the newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

California Register of Historical Resources

PRC Section 5024.1 establishes the California Register of Historical Resources (CRHR). This register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed, or determined to be eligible for listing, in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

1) Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) Are associated with the lives of persons important in our past;

3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or

4) Have yielded, or may be likely to yield, information important in prehistory or history.

The regulations set forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

1.3.2 Federal Regulations

The Proposed Project does not require any federal permits, and it is not located on federal lands; therefore, federal laws do not apply to the Proposed Project. The following laws are provided for context only.

The implementing regulations of the National Historic Preservation Act (NHPA) require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking (proposed project). To determine site significance through application of NRHP criteria, several levels of potential significance that reflect different (although not necessarily mutually exclusive) values must be considered. As provided in Title 36 Code of Federal Regulations (CFR) Section 60.4, "the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association" and must be considered within the historic context. Resources must also be at least 50 years old, except in rare cases, and, to meet eligibility criteria of the NRHP, must:

(A) Be associated with events that have made a significant contribution to the broad patterns of our history; or

(B) Be associated with the lives of persons significant in our past; or

(C) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(D) Have yielded, or may be likely to yield, information important in prehistory or history.

For archaeological sites evaluated under criterion (D) above, integrity requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

Cultural resources also may be considered separately under the National Environmental Protection Act per Title 42 United States Code Sections 4321 through 4327. These sections require federal agencies to consider potential environmental impacts and appropriate mitigation measures for projects with federal involvement.

1.4 Personnel

Fieldwork, analysis, and reporting were carried out by the below-listed Horizon professionals who meet the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (per Title 48 of the CFR, Section 44716, as amended in 1983). Procedures complied with NHPA Section 106 as set forth in Title 36 of the CFR, Section 800.

- **Janis Offermann, M.A., Registered Professional Archaeologist (RPA)**, prepared this report. She has a bachelor's degree in Anthropology from Sonoma State College (now University) in Rohnert Park, California, and a master's degree in Anthropology from the University of California at Davis. She has more than 40 years of experience in California archaeology and cultural resource management. Ms. Offermann is the cultural resources practice leader with Horizon.

- **Keith Syda, B.A.**, has worked as an archaeologist for over 35 years. After completing military service and two years in the Peace Corps, he received his Bachelor's degree in Anthropology from California State University, Sacramento, and immediately began professional work. He has worked, usually as lead surveyor or field director, on hundreds of archaeological surveys

and excavation projects, on both prehistoric and historic sites. Specializing in cartography early, he has mapped hundreds of archaeological sites, including complex sites such as mining towns, railroad systems, and prehistoric villages. During the last ten years he has increasingly specialized in construction monitoring, becoming particularly skilled in decision making and maintaining smooth day-to-day interactions between construction crews, management, archaeologists, and Native American personnel.

- **Eric Durksen, B.A.**, participated in the field review of the Project. He received a bachelor's degree in 2017 from California State University, Sacramento in Anthropology with a specialization in Archaeology. He has 7 years of experience as a field technician and field crew member on a number of archaeological projects throughout California and Oregon.

2 Project Context

2.1 Prehistoric Context

The prehistory of the Project area remains poorly understood despite archaeological research that dates to the early half of the twentieth century. The earliest explorations focused on sites in the Sacramento-San Joaquin River Delta, and the archaeological sequences applied to the whole of the Sacramento Valley are derived from these and later studies throughout the region.

Today, archeologists use a number of the various sequences provided over the years, often in a combined form. After many debates and numerous revisions, the cultural sequence for the central California region generally stands as described below.

Paleo-Indian Period (11,550 to 8550 B.C)

Archaeological associations with the earliest human occupation in the Central Valley are rare, although they are assumed to be present buried under many feet of sediment. This period represents highly mobile populations that frequented the shores of late Pleistocene lakes and sloughs. Artifacts are sparse and include basally thinned and fluted projectile points. While a few Paleo-Indian sites have been recorded in the southern San Joaquin Valley, evidence of this time period has been virtually absent from the Sacramento Valley (Rosenthal et al. 2007:151).

Lower Archaic Period (8550 to 3000 B.C.)

Similar to the Paleo-Indian Period, Lower Archaic Period sites are largely restricted to the southern San Joaquin Valley. Wide-stemmed projectile points, chipped stone crescents, large bladelet flakes, and unifacial tools are the most prominent artifacts associated with the Lower Archaic Period on the valley floor, but handstones and millingstones have been found in contemporaneous sites in the foothills. Thus, the populations at this point in time are inferred to have begun to rely more on seasonal plant exploitation to supplement the hunting of game (Rosenthal et al. 2007:151-152).

Middle Archaic/Windmiller Pattern (ca. 3000 B.C. to 500 B.C)

By 3000 BP, during the Middle Archaic, the archaeological record becomes more abundant in the high mountain valleys. The dart and atlatl were introduced during the time period referred to as the Mesilla Complex in the Project region. The dart points were leaf-shaped, stemmed, and corner-notched styles that reflected influence from the Martis tradition that spread northward from the Tahoe basin. Projectile points were largely manufactured from basalt, slate, and chert. Handstones and milling slabs continued to be used for processing seeds, though bowl mortars and cylindrical pestles also appeared at this time. Other Mesilla traits included Haliotis and Olivella shell beads, along with charm stones and bone pins, all of which indicate trade with Central Valley populations. Archaeological data suggest that occupation of the mountains was by small groups who accessed the region seasonally (Moratto 2004:299).

Upper Archaic/Berkeley Pattern (ca. 500 B.C. to A.D. 500)

The Berkeley Pattern represents a gradual shift in adaptation and material culture that appears to have originated within the San Francisco Bay region. The subsistence practices of Berkeley peoples differ from those of the Windmiller population in that the utilization of acorns for food seems to have increased dramatically. The reliance on acorns is evidenced in the increase in mortars and pestles recovered from Berkeley Pattern sites. Other differences in material culture include the occurrence of an extensive bone tool kit, unique knapping techniques, and certain types of shell beads and pendants within Berkeley Pattern sites. Burial practices of Berkeley peoples also differed from those seen at Windmiller Pattern sites. No longer were interments oriented toward the west; instead, Berkeley Pattern burials are flexed with variable orientation (Moratto 2004:207-211).

Emergent Period/Augustine Pattern (ca. A.D. 500 to A.D. 1880)

The Augustine Pattern reflects local innovation in technology, as well as the incorporation of new developments with traits of the Berkeley Pattern. The artifact assemblages of Augustine Pattern sites indicate an increased reliance on acorns. Many burials continue to be flexed; however, cremation becomes the mortuary practice for high-status burials. Extensive trade networks developed to accommodate the resource and social needs of the burgeoning populations. This period also marks the establishment of the Patwin in the Central Valley (Moratto 2004:211-214).

2.2 Ethnohistoric Context

The River Patwin occupied lands along the Sacramento River directly adjacent to and east of the Hill Patwin. Kroeber (1932:259) identified three tribelets, each of which spoke a different dialect. From north to south, these are the Koru' (or Ko'roo), Sāka, and Yo'doi groups. Koru' territory, which contains the Proposed Project study area, extended from just north of present-day Princeton on the Sacramento River, south to the mouth of Sycamore Slough. On the west side of the river, the Koru' occupied a swath of plains approximately 6 miles wide; to the east, they controlled a strip approximately 2 miles wide. Seven villages, all on natural rises along the west bank of the Sacramento River, were recorded (Kroeber 1932:59-260). Again from north to south, these are K'eti', Ts'a', Wa'itere, Katsi'l, Tatno, Koru', and Kukui. The county and city name "Colusa" is derived from Koru', which is at the same location of the modern town. Sāka controlled a similar range of territory along the river below Koru' south to around the current Colusa/Yolo County line, and Yo'doi was south of that to an undetermined point below the town of Knights Landing (Kroeber 1932:260-262). Other Patwin populations are known to have inhabited the southern Sacramento Valley west of the Sacramento River to Suisun Bay and west into lower Napa Valley. However, these communities were quickly decimated by Spanish missionization in the early 1800s, and little is known about them beyond what can be gleaned from mission records (Johnson 1978:351).

Today's descendants of the ethnographic-era Patwin continue to live and thrive in the vicinity of the Proposed Project, as evidenced by the presence of the federally recognized Cachil Dehe Band of Wintun in Colusa. The tribe has developed a successful gaming venue that has allowed its members to experience economic stability and has provided them the opportunity to invest heavily in local agricultural pursuits. It has also allowed the tribe to support its members and the surrounding community by providing a preschool and learning center, along with medical facilities that include an expansive health clinic and a fitness/wellness center. Furthermore, the tribe spends considerable time and energy in maintaining its cultural heritage by sponsoring and supporting language and arts programs (Colusa Indian Community 2018).

2.3 Historic-Era Context

The historic era in the Project area began when two Spanish exploration groups travelled up the Sacramento Valley in the early 1800s. These were the 1808 Moraga expedition and the 1821 Arguello expedition. The latter expedition was documented in the diaries of the Reverend Father Fray Blas de Ordaz. The diaries described encounters with Native American villages, and Arguello likely passed through or very near the present-day town of Colusa (URS 2013).

The Spanish explorations were closely followed by those of fur trappers and traders in the late 1820s and early 1830s. The dire outcome of these expeditions led not only to a quick depletion of valued fur animals in the Sacramento Valley, but also the introduction of malaria to the indigenous population. By the summer of 1833, entire Patwin villages had been decimated by the disease (URS 2013).

With the advent of the Mexican period in California, the government began issuing land grants in the mid-1840s. The arrival of colonists over the next decade exacerbated conditions for the Patwin who survived the malaria epidemic. The surviving river tribes suffered further deprivations in the 1840s, at the hands of American colonists who raided their increasingly scarce and temporary camps, murdering villagers and taking slaves (URS 2013).

The Project area was once part of Rancho Colus. The grant was issued to John Bidwell in 1845, but it remained unoccupied until Dr. Robert Semple purchased the land from Bidwell in 1849. Dr. Semple and his brother, Charles, laid out the town of Colusa in 1850 and established a boat dock on the Sacramento River to promote trade and travel along the river. The town grew rapidly, eventually becoming the county seat in 1854 (Kyle et al. 2002).

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3 Native American Consultation and Archival Research

In accordance with the Secretary of the Interior's Standards and the Guidelines for Archaeology and Historic Preservation (Title 48 CFR Section 44716 [amended 1983]), the goals of this archaeological inventory were to identify and completely document the location, qualities, and condition of any potential historic properties in the Project's study area. Methods employed to achieve these goals follow.

3.1 Native American Consultation

The City of Colusa is handling all consultation and coordination with Native American tribes for this project, including the requirements of Assembly Bill 52. As a result, Horizon did not contact any Native American tribes during the course of this study.

3.2 Archival Research

Cultural resources include prehistoric archaeological sites, historic-era archaeological sites, TCRs, and historic buildings, structures, landscapes, districts, and linear features. A record search was conducted by the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University. The purpose of the record search was to identify the presence of any previously recorded cultural resources within the Project site, as well as within a ¼-mile buffer, and to determine whether any portions of the Project site had been surveyed for cultural resources. The record search (NWIC File No.:17-3070) indicated that much of the Project area had been previously surveyed for cultural resources during three previous projects, and five cultural resources had been recorded within the area representing the current Project site. Four of the five records are buildings or barns and ancillary structures; the remaining record is an isolated object. The record search also determined that eight cultural resource projects had either been conducted completely within the Project area or included portions of it. The results of the record search can be found in **Appendix A** and are summarized in **Table 1**.

Table 1. Northwest Information Center Records Search Results

NWIC No.	Author/Date	Title	Within Project Site or Buffer
Studies			
S-002945	Jerald Jay Johnson and Patti Johnson 1974	Cultural Resources Along the Sacramento River from Keswick Dam to Sacramento	Project Site
S-005062	Jerry J. Johnson 1974	Reconnaissance Archeological Survey of 151 Locations on the Sacramento River Drainage from Elder Creek in the North to Rio Vista in the South	Project Site
S-013593	Leslie C. Glover 1992	Geotechnical Explorations Systems Phase V, Glenn, Colusa, Sutter, and Yolo Counties	Project Site
S-020058	Melinda Peak 1997	Cultural Resources Assessment Within Reclamation Districts 108, 787 and Maintenance Area 12, Yolo and Colusa Counties, California (SAC 1)	Project Site

NWIC No.	Author/Date	Title	Within Project Site or Buffer
S-026001	Roger Klemm, John Morton, John Brennan, Donna Krause, Randy Salveson, and Linda Womble 2002	City of Colusa, Historic Resources Inventory	Project Site
S-034427	ECORP 2008	Cultural Resources Survey Report, Riverbend Estates, City of Colusa, Colusa County, California, Project 2006-185	Project Site
S-037248	Ben Elliott 2010	Final Cultural Resources Technical Report, Levee Geotechnical Evaluation Program, Sacramento River: Right Bank Levee, Colusa and Sutter Counties, California	Project Site
S-049221	Robin Hoffman and Paul Zimmer 2015	Rodent Abatement and Damage Repair Activities Project: Archaeological Sensitivity Assessment	Project Site
S-002922	Ann S. Peak & Associates 1978	Preliminary Case Report of the Colusa Bridge	Buffer
S-010741	Paul D. Bouey 1989	Cultural Resources Inventory and Evaluation: Sacramento River Bank Protection (Unit 44) Project	Buffer
S-022686	Nancy Garr 2000	Cultural Resource Report for the Colusa County Behavioral Health Facility, Colusa County, California	Buffer
S-024035	Amy Huberland and Lisa Westwood 2001	Cultural Resources Monitoring Report for the Level (3) Fiber Optic Project, Yolo, Colusa, Glenn, Tehama, and Shasta Counties, California	Buffer
S-035042	Laura Leach-Palm, Pat Mikkelsen, Paul Brandy, Jay King, Lindsay Hartman, and Bryan Larson 2008	Cultural Resources Inventory of Caltrans District 3 Rural Conventional Highways in Butte, Colusa, El Dorado, Glenn, Nevada, Placer, Sacramento, Sierra, Sutter, Yolo, and Yuba Counties	Buffer
S-037877	Mary Bailey 2010	Cultural Resources Survey for the Colusa Boat Launch Ramp, Colusa, Colusa County, California	Buffer
S-048572	Wendy Pierce 2016	Cultural Resources Inventory Report, Small Erosion Repair Project (SERP): East Levee Sacramento River at River Mile 4.6 (SERP_2016_ST03_SAC1_T2_LM4.6) Colusa County, California	Buffer
S-048572	Nancy A. Haley and Julianne Polanco 2016	Sec 106 Consultation for the Small Erosion Repair Project (SERP): East Levee Sacramento River at River Mile 4.6, City of Colusa, Colusa County, California (SPK-2016-00495)	Buffer
Resources			
P-06-000589 (CA-COL-278H)	2007 (M. Guerrero, K. Johnson, ECORP Consulting, Inc.)	Resource Name – EC-07-22, Historic-era Refuse Scatter	Project Site

NWIC No.	Author/Date	Title	Within Project Site or Buffer
P-06-000590	2007 (M. Guerrero and K. Johnson, ECORP Consulting)	Resource Name – EC-07-23, Structures, Former Fruit Dryer Complex	Project Site
P-06-000591	2007 (M. Guerrero & K. Johnson, ECORP Consulting, Inc.)	Resource Name – EC-07-024, Structures, Farm Complex	Project Site
P-06-000592	2007 (M. Guerrero & K. Johnson, ECORP Consulting)	Resource Name – EC-07-25, Elements of an Irrigation System	Project Site
P-06-000594	2007 (M. Guerrero & K. Johnson, ECORP Consulting)	Resource Name – ISO 1, Isolated wine bottle base	Project Site
P-06-000286	1980 (Dan Peterson, AIA & Associates); 2002 (Donna Krase, Roger Klemm, Colusa Heritage Preservation Comm.)	Resource Name – 0115 Bridge St; OHP PRN – 5932-0081-0000; Other – Site of former Alva A. King House; OHP Property Number – 049768; OTIS Resource Number – 452089	Buffer
P-06-000412	1980 (Dan Peterson, AIA & Associates); 2002 (Donna Krause, Roger Klemm, Colusa Heritage Comm.)	Resource Name – Colusa Rice Mill; OHP PRN – 5932-0149-0000; Other – Site of former Colusa Rice Mill; OHP Property Number – 49836	Buffer
P-06-000417	1980 (Dan Peterson, AIA & Associates; Colusa Heritage Pres. Comm.); 2002 (Donna Krause; Roger Klemm, Colusa Heritage Pres. Comm.)	Resource Name – 255 Market St; OHP PRN – 5932-0154-0000; Other – Site of former Texaco Gas Station; Other – Sankey Auto; OHP Property Number – 049841; Other – Texaco Gas Station	Buffer
P-06-000756	2016 (Michael Darcangelo, FWARG)	Resource Name – Pacific Gas & Electric Co's Gas Plant	Buffer

The previously recorded resources within the Proposed Project area are all from the historic era, and many of them contain resources of the built environment. According to the original site records, the sites include the following:

> *P-06-000589 (CA-COL-278H)*: This site is a refuse scatter that extends for approximately 350 feet east/west along the base of the levee. The site was recorded as having two distinct loci amidst a sparse scatter of material. Locus 1, at the east end of the resource, contains a variety of farm machinery and implements. Locus 2 is recorded at the west end of the site and contains a concentration of broken and burnt glass, metal, and ceramic debris.
>
> *P-06-000590*: Recorded as a commercial fruit dryer complex, this resource includes six features: Feature 1 – a dryer; Feature 2 – a dehydrator warehouse; Feature 3 – a bathroom; Feature 4 – a shed; Feature 5 – a wooden barn; and Feature 6 – a concrete foundation.

P-06-000591: This is a ranch complex consisting of a house (Feature 1), a shed (Feature 2), a barn (Feature 3), and a concrete pad (Feature 4).

P-06-000592: P-06-000592 contains elements of an irrigation system spread across the north part of the property. One element is located at the west edge of the parcel adjacent Market Street, while the other two are adjacent a drainage ditch that parallels the levee. All contain culvert gates, while Feature 2 also has an electric pump.

P-06-000594: This last resource is an isolate—an olive-green wine bottle base.

A review of historic U.S. Geological Survey (USGS) topographic maps (USGS 2018) and aerials (Netronline 2018) revealed the twentieth century historic land use of the Project parcel. Though the levee on the north boundary of the parcel has been present since the early 1900s and the area was undoubtedly used for agriculture, the USGS maps do not indicate any development, other than a dirt road, on the Project site until the early 1950s. The 1952 USGS 7.5-minute Meridian quadrangle indicates that the entire property is orchard, and there is a structure at the location of site P-06-000590, along with an access road along the east edge of the property and along the base of the levee to the structure. There is also a building in the vicinity of site P-06-000591. Furthermore, a spur of the Sacramento Northern Railroad is mapped running generally southeast to northwest through the parcel. The 1973 USGS map shows that the parcel is still an orchard, that two more buildings have been added to the location of P-06-000590, one building has been added to site P-06-000591, and the railroad is still present. There are no updates to the Meridian USGS quadrangle after that time. [1]

The earliest aerial photography of the area from 1998 indicates that the Project site was no longer an orchard. The buildings associated with sites P-06-000590 and P-06-000591 are visible, but the railroad no longer exists. All of the subsequent aerials, up to 2014, do not depict any real change on property.

A Phase I Environmental Site Assessment for the property states that the property once contained a prune orchard, but the trees were removed around 1984 and were replaced by oats; the railroad spur was removed around 1985 (ENGEO 2004:20). The report also notes that the property was owned by Frank Azevedo when the orchard was planted, and when the dehydrator and home were built. The property was purchased by Gordon Detlefsen in 1967. Mr. Detlefsen built a second dehydrator at the site in 1975 (ENGEO 2004:20).

[1] Note that the topographic map in Figure 2 retains the orchard and the railroad spur, both of which no longer exist.

4 Inventory Methods and Results

An archaeological survey was not conducted of the entire Proposed Project site due to the existence of recent surveys of the complete Project area (**see Table 1**). However, Horizon archaeologists visited the Project property on October 5, 2018, to assess the current status of the previously recorded resources. Four of the five resources were relocated and photographed, and a site record update was completed (see **Appendix B**). The exception was the isolated bottle fragment (P-06-000594), which was not relocated. Photographs of each resource are provided in **Appendix C**. The current status of the resources is summarized below.

P-06-000589 (CA-COL-278H): Locus 1, the discarded farm equipment, appears to remain the same as originally recorded, though it is very overgrown with grasses and thistles. Locus 2, however, could not be identified, even though there was 100 percent ground visibility. Instead, it appears that Locus 2 is a very sparse scatter of miscellaneous debris from the historic era spread along the toe of the levee for 300 feet as the result of levee maintenance activities. The few items observed included two ceramic shards, one with a floral pattern; four pieces of glass (one each of clear, green, brown, and purple glass); and an iron pipe collar.

P-06-000590: The current status of the six features that comprise the fruit dehydrator site are largely unchanged since they were recorded in 2007. Feature 5, a board and batten structure, has suffered the most decay, as the front porch has collapsed, and the building is overgrown.

P-06-000591: This is a ranch complex consisting of a house (Feature 1), a shed (Feature 2), a barn (Feature 3), and (Feature 4) a concrete pad. The interior of the house has been significantly vandalized in recent years, based on the graffiti observed, and the shed also appears to have deteriorated. The barn and the concrete pad have been bulldozed into a single rubble pile.

P-06-000592: All elements of this resource appear to remain intact; however, there is not clear indication that Feature 1 is associated with Features 2 and 3.

None of the previously recorded resources appear to meet the eligibility criteria, per PRC 5024.1(c), for listing in the CRHR.

Though they are not officially adopted by the State as guidelines for evaluating resources to the CRHR, the California Department of Transportation (Caltrans) has developed a list of property types that are exempt from evaluation as part of the agency's programmatic agreement with the Federal Highway Administration, the Advisory Council on Historic Preservation, and the California State Historic Preservation Officer (Caltrans 2018a). The programmatic agreement was prepared to address cultural resources under federal regulations, but the guidelines and protocols are also used by Caltrans for projects that are only under State regulations (Caltrans 2018b). Because the State has not developed implementation guidelines for evaluating cultural resources, the Caltrans guidelines are widely used for evaluating resources with no federal nexus to a project. Under these guidelines, sites P-06-000589 and P-06-000592 do not require evaluation. Resource categories pertinent to P-06-000589 that do not require evaluation include "Isolated refuse dumps and scatters over 50 years old that lack specific associations" and "agricultural, industrial and commercial equipment and machinery" (Caltrans 2018a: Attachment 4). Similarly, "gates, valves, pumps, and other flow control devices," such as those that comprise P-06-000592, do not require evaluation. As a result, neither P-06-000589 nor P-06-000592 are eligible for the CRHR.

P-06-000590 and P-06-000591 both contain standing structures and, therefore, require a different level of scrutiny. However, it is important to note that farming is ubiquitous to the region, and has been for more than 150 years, and orchards continue to produce important farming commodities in Colusa County today. Furthermore, research on the former owners of the property, Mr. Azevedo and Mr. Detlefsen, did not discover anything significant about their lives. With this in mind, the following evaluations are provided for P-06-000590 and P-06-000591.

Site P-06-000590 is not eligible under Criterion 1 for the CRHR, as the property lacks significant associations with events important to history. As previously noted, farming, including the drying of fruits, has been an important element in the history of the City of Colusa and Colusa County since arrival of the first colonists to the region. The site is not eligible under Criterion 2, as neither Mr. Azevedo nor Mr. Detlefsen are cited when important figures in the Colusa County were researched. The buildings of this resource are utilitarian in nature and lack significant architectural or design elements; therefore, they do not appear eligible under Criterion 3. Lastly, Site P-06-000590 is not a likely source of history or prehistory under Criterion 4, as the fairly recent age of the facility does not lend itself to providing information that cannot be found during research on the area. Overall, Site P-06-000590 does not appear eligible for listing in the CRHR.

As a farm house with one standing outbuilding, Site P-06-000591 is not eligible under Criterion 1 for the CRHR, as the property lacks significant associations with events important to history. The site is not eligible under Criterion 2 because Mr. Azevedo and Mr. Detlefsen do not appear to be important figures in the history of the City of Colusa or Colusa County. The main building in this complex, the house, is of modest construction that lacks significant architectural or design elements. Furthermore, the house has undergone significant vandalism that has badly affected its integrity. The one standing outbuilding, a shed, is unremarkable in design and material. As a result, the buildings do not appear eligible under Criterion 3. Identical to Site P-06-000590, Site P-06-000591 is not a likely source of history or prehistory under Criterion 4. Furthermore, the integrity of the complex has been compromised by the bulldozing of two of the resource elements since 2007. The site does not appear eligible for the CRHR.

5 Summary and Recommendations

The City of Colusa is proposing to issue permits to construct and operate a cannabis research and development business park on 84 acres at the east edge of town. An archaeological survey of the property in 2008 (ECORP Consulting, Inc. 2008) resulted in the recordation of five cultural resources: P-06-000589, P-06-000590, P-06-000591, P-06-000592, and P-06-000594.

Horizon archaeologists returned to the property in October 2018 to assess the status of the recorded resources. Four of the sites were relocated and site record updates were prepared. Site P-06-000594, an isolated bottle base, could not be relocated.

The four resources on the property were evaluated for listing in the CRHR. None of the resources appear to be CRHR-eligible. As a result, it does not appear that the Proposed Project will have a significant affect on known cultural resources.

However, it is important to note that archaeological sites may be buried with no surface manifestation. Furthermore, the project site is underlain by Holocene soils that have the potential to contain buried archaeological remains, and such discoveries have been made within and in close proximity to the City of Colusa (URS 2013). If prehistoric or historic-era materials are encountered, all work in the vicinity should halt until a qualified archaeologist can evaluate the discovery and make recommendations in accordance with 36 CFR Section 800.13(b). Prehistoric materials would most likely include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), tool-making debris, or milling equipment such as mortars and pestles. Historic-era materials might include remains of agricultural implements; stone or concrete footings and walls; and deposits of metal, glass, and/or ceramic refuse.

The possibility of encountering human remains cannot be discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial. If human remains are encountered, work should halt in the vicinity of the remains and, as required by law, the county coroner should be notified immediately. An archaeologist should also be contacted to evaluate the find. If human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of that determination. Pursuant to PRC 5097.98, the NAHC, in turn, will immediately contact an individual who is most likely descended from the remains (the "Most Likely Descendant"). The Most Likely Descendant has 48 hours to inspect the site and recommend treatment of the remains. The landowner is obligated to work with the Most Likely Descendant in good faith to find a respectful resolution to the situation and entertain all reasonable options regarding the Most Likely Descendant's preferences for treatment.

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6 References

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Appendix A
Northwest Information Center Results

Confidential – Not Available for Public Review

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Appendix B
Updated Department of Parks and Recreation Forms

See Appendix A for the original DPR forms.

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A field review of the site location was conducted on October 3, 2018 by qualified archaeologists from Horizon Water and Environment. The discarded agricultural equipment in Locus 1 is still present, though the area is extremely overgrown. However, the materials from Locus 2 have been spread over a distance of approximately 300 feet and were very sparse in an area of 100 percent visibility. An actual "locus" could not be identified. Observed historic-era materials included brick and concrete fragments; miscellaneous metal bits and straps; scattered clear, green, and brown bottle glass fragments (all machine made); a very few ceramic sherds (one with a brown transfer print design and one pink tile).

Locus 1

Locus 2

A field review of the site location was conducted on October 3, 2018 by qualified archaeologists from Horizon Water and Environment. Most of the six features of this commercial fruit dryer complex appear to be unchanged since first recorded in 2007. These include:

Feature 1 - the dehydrator is still intact and constructed of cinder block;

Feature 2 - the warehouse appears unchanged since 2007;

Feature 3 - a cinder block bathroom with a shed roof remains in similar condition;

Feature 4 - a shed with corrugated metal siding is the same and of an unknown purpose;

Feature 5 - a board and batten structure that appears to have been worker's quarters (identified as a barn in the original site record), is the only feature that displays obvious deterioration. The front portion of the building has collapsed, and it is entirely overgrown; and

Feature 6 - concrete footing with interior concrete piers is unchanged.

Feature 1 – Dehydrator

CONTINUATION SHEET

Property Name: EC-07-24

A field review of the site location was conducted on October 3, 2018 by qualified archaeologists from Horizon Water and Environment. The four features originally recorded as part of this site have been altered or have deteriorated since first recorded in 2007. These include:

Feature 1 - The house is still standing but has had additional impacts 2007. Portions of the front have been demolished and the interior appears to have been vandalized in more recent years (judging from the graffiti observed). The exterior has T11 siding, but the building is older judging by the lathe and plaster walls and the beadboard wainscoating in the main room;

Feature 2 – The shed is still intact but a little more deteriorated and the basketball hoop has been removed. The shed has board and batten siding;

Feature 3 – The barn has been bulldozed into a large pile; and

Feature 4 – the concrete pad has been bulldozed into the barn rubble pile.

Feature 1 - House

CONTINUATION SHEET

Property Name: EC-07-25

A field review of the site location was conducted on October 3, 2018 by qualified archaeologists from Horizon Water and Environment. The site consists of three related to irrigation. All three features were relocated are still intact but unused. It is unclear that there is any real associated between Feature 1 (two culvert gates along Market Road) and Features 2 (water pump and culvert gate) and 3 (two culvert gates).

Appendix C
Resource Photographs

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Photograph 1: Site P-06-000589, Locus 1

Photograph 2: Site P-06-000589, Locus 2

Photograph 3: Site P-06-000590, Feature 1, Dehydrator

Photograph 4: Site P-06-000590, Feature 2, Warehouse

Photograph 5: Site P-06-000590, Feature 3, Bathroom

Photograph 6: Site P-06-000590, Feature 4, Shed

Photograph 7: Site P-06-000590, Feature 5, Barn

Photograph 8: Site P-06-000590, Feature 6, Foundation

Photograph 9: Site P-06-000591, Feature 1, House

Photograph 10: Site P-06-000591, Feature 1, House (interior)

Photograph 11: Site P-06-000591, Feature 2, Shed

Photograph 12: Site P-06-000591, Features 3 and 4, Bulldozed pile of barn and concrete pad

Photograph 13: Site P-06-000592, Locus 1, Irrigation gate and culvert

Photograph 14: Site P-06-000592, Locus 2, Irrigation pump

Photograph 15: Site P-06-000592, Locus 3, Irrigation gate

Appendix E
Noise Calculations

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TABLE 7.3
NOISE STANDARDS FOR NEW USES AFFECTED BY TRAFFIC AND AIRPORT NOISE

New Land Use	Outdoor Activity Area - L_{dn}	Interior - L_{dn}/Peak Hour L_{eq}[1]	Notes
All residential	60-65	45	2, 3, 4, 8
Transient lodging	65	45	5
Hospitals and nursing homes	60	45	6
Theaters and auditoriums	---	35	
Churches, meeting halls, schools, and libraries	60	40	
Office buildings	65	45	7
Commercial buildings	65	50	7
Playgrounds and parks	70	---	
Industry	65	50	7

Notes:

1. *For traffic noise in the City of Colusa, L_{dn} and peak-hour L_{eq} values are estimated to be approximately similar. Interior noise level standards are applied in noise-sensitive areas of the various land uses, with windows and doors in the closed positions.*
2. *Outdoor activity areas for single-family residential uses are defined as back yards. For large parcels or residences with no clearly defined outdoor activity area, the standard shall be applicable within a 100-foot radius of the residence.*
3. *For multi-family residential uses, the exterior noise level standard shall be applied at the common outdoor recreation area, such as at pools, play areas, or tennis courts. Where such areas are not provided in multi-family residential uses, the standards shall be applied at individual patios and balconies of the development.*
4. *Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} may be allowed—provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.*
5. *Outdoor activity areas of transient lodging facilities include swimming pool and picnic areas.*
6. *Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.*
7. *Only the exterior spaces of these uses designated for employee or customer relaxation are considered sensitivee.*

TABLE 7.4
NOISE STANDARDS FOR NEW USES AFFECTED BY NON-TRANSPORTATION NOISE

New Land Use	Outdoor Activity Area – L_{eq}		Interior - L_{eq}	Notes
	Daytime	Night-Time	Day & Night	
All Residential	50	45	35	1, 2, 7
Transient Lodging	55	---	40	3
Hospitals & Nursing Homes	50	45	35	4
Theaters & Auditoriums	---	---	35	
Churches, Meeting Halls, Schools, Libraries, etc.	55	---	40	
Office Buildings	55	---	45	5, 6
Commercial Buildings	55	---	45	5, 6
Playgrounds, Parks, etc.	65	---	---	6
Light Industry	65	65	50	5

Notes:

1. *Outdoor activity areas for single-family residential uses are defined as backyards. For large parcels or residences with no clearly defined outdoor activity area, the standard shall be applicable within a 100-foot radius of the residence.*
2. *For multi-family residential uses, the exterior noise level standard shall be applied at the common outdoor recreation area, such as at pools, play areas or tennis courts. Where such areas are not provided, the standards shall be applied at individual patios and balconies of the development.*
3. *Outdoor activity areas of transient lodging facilities include swimming pool and picnic areas, and are not commonly used during nighttime hours.*
4. *Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.*
5. *Only the exterior spaces of these uses designated for employee or customer relaxation have any degree of sensitivity to noise.*
6. *The outdoor activity areas of office, commercial, and park uses are not typically utilized during nighttime hours.*
7. *It may not be possible to achieve compliance with this standard at residential uses located immediately adjacent to loading dock areas of commercial uses while trucks are unloading. The daytime and nighttime noise level standards applicable to loading docks shall be 55 and 50 dB Leq, respectively.*
8. *General: The Table 7.2 standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds.*
9. *If the existing ambient noise level exceeds the standards of Table 7.4, then the noise level standards shall be increased at 5 dB increments to encompass the ambient.*

TABLE 7.5
REQUIREMENTS FOR ACOUSTICAL ANALYSIS

An acoustical analysis prepared pursuant to the Noise Element shall:

1. Be the responsibility of the applicant.
2. Be prepared by qualified professionals experienced in the fields of environmental noise assessment.
3. Carry out a scope of work that has been previously approved by City Planning and Engineering staff.
4. Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions.
5. Estimate existing and projected (cumulative) noise levels according to the standards provided in **Table 7.3** and **Table 7.4** and assess these noise levels' consistency with the adopted policies of the Noise Element.
6. Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms and evaluate possible sleep disturbance.
7. Estimate interior and exterior noise exposure after the prescribed mitigation has been implemented.
8. Provide a post-project assessment program that could be used to evaluate the effectiveness of the proposed mitigation.

Equipment List	Similar name used	dBA 50 from:		FTA 2018	
		FTA 2018	FHWA Handbook	PPV at 25 feet	VBA
Dumptrucks (End and 10 wheel)	loaded trucks		84	0.076	86
Compressor	Compressor (air)	81	80		
	Jackhammer	88		0.035	79
Boom Truck	Crane, Mobile	83			
Flatbed Delivery Truck	Truck	84	84		
Backhoe/Forklift/Loader		80	80		
Grader	Grader	85	85		
Track Mounted Excavator	Excavator		85		
Front-end Loader			80		
Small bulldozer				0.003	58
Bulldozer	Dozer (Large bulldoze	85	85	0.089	87
Paving Equipment	Scraper, Paver	85	85		
Paving Equipment	Roller	85	85	0.21	94
Concrete Truck	Concrete mixer truck	85	85		
Compactor	Compactor (ground)	82	80		
Mowing equipment					
Pump		77			
Generator		82			

http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual, Table 7-1 (Construction Equipment Noise Levels) and Table 7-4 (Vibration Source Levels from Construction Equipment).

Two loudest

Two largest vibration sources

Noise Calculations for Colusa Triple Crown

Daytime calculations

Construction Equipment 1 (Jackhammer)	88	dBA at 50 feet	
Construction Equipment 2 (Multiple Equipment Types)	85	dBA at 50 feet	
Construction Equipment 3 (Multiple Equipment Types)	85	dBA at 50 feet	(3rd Equipment used only for County ordinance evaluation)

Combined Daytime Noise at 50 feet (Ltotal at 50 feet) 89.8 dBA (for Construction Equipment 1 and 2 only)
Ltotal=10 log(10^L1/10+10^L2/10)

Combined Daytime Noise at 50 feet (Ltotal at 50 feet) 88.0 dBA (for Construction Equipment 2 and 3 only; non-impact only)
Ltotal=10 log(10^L1/10+10^L2/10)

Colusa Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment

Noise Threshold	**Threshold Level - Leq (dBA)**	**Distance to Leq Threshold from Middle of Project Site (feet)**	
Daytime Limit (7 am-7 pm M-F, 8 am - 8 pm Weekends)	86	61.2	County's construction noise requirement is 86 dBA at edge of property site (apart from impact equipment, such as jackhammer), or that no individual equipment exceeds 83 dBA at 25 feet. No numeric limits established for construction by the City of Colusa.
Nightime Limit (7 pm-7 am weekdays, 8pm - 8 am Weekends)			

Source: County Noise Ordinance (2018).

Daytime Colusa Noise Threshold Limits and Distances from Project Sites to those Limits for Operation Equipment

Noise Threshold	**Threshold Level - Leq (dBA)**	
Industry/Commercial uses (airport/traffic noise area)	65	
Light Industry uses (non-airport/traffic area)	65	
Commercial use (non-airport/traffic area)	55	
Residential (airport/traffic noise area)	60-65	
Residential (non-airport/traffic noise area)	50	

Source: City of Colusa (2009) Noise Ordinance and City General Plan (2007)

Nearest Sensitive Receptors and Approximate Distances from Middle of Project Site

Sensitive Receptor	**Distance (feet)**
Nearest residences to center of work area	765

Vibration Source Levels for Construction Equipment (FTA 2006)

Equipment	PPV at 25 feet	VBA
Vibratory Roller	0.21	94
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Small Bulldozer	0.003	58

Vibration Calculations with Equations for Vibration-Causing Equipment (use of vibratory roller) for Project Site

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes	
PPV=PPVref * (25/d)^1.5	36.3	Building damage threshold (sensitive buildings)	
	231.5	Human Perception (65)	65 VdB
Lvd=Lvref-30log(D/25)	73.2	Annoyance (Federal)	Federal - Annoyance 80 VdB, Damage 0.3 PPV, 0.12 for sensitive buildings

Vibration Calculations with Equations for Vibration-Causing Equipment (use of Large Bulldozer) for Project Site

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	20.5	Building damage threshold (sensitive buildings)
	135.3	Human Perception (65)
Lvd=Lvref-30log(D/25)	42.8	Annoyance (Federal)

Vibration Calculations with Equations for Vibration-Causing Equipment (use of Small Bulldozer) for Project Site

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	2	Building damage threshold (sensitive buildings)
	15	Human Perception (65)
Lvd=Lvref-30log(D/25)	5	Annoyance (Federal)

Vibration Calculations with Equations for Vibration-Causing Equipment (use of Loaded Trucks) for Project Site

Threshold	Distance to Threshold from Middle of Project Site (feet)	Notes
PPV=PPVref * (25/d)^1.5	18	Building damage threshold (sensitive buildings)
	125	Human Perception (65)
Lvd=Lvref-30log(D/25)	40	Annoyance (Federal)

Distance (feet) from Center of Project Site to Sensitive Receptors	Construction Noise level dBA	Noise Level Equation: Leq = EL50-20*log(D/50)
765	66.1	Residence on Clay St.
1320	61.3	Residence on Oak St.
1435	60.6	Residence on Clay St.
2190	56.9	Colusa Medical Center
3850	52.0	First Presbyterian Church

	Distance from:		
Receptor	**Center of Site (feet)**	**Edge of Site (feet)**	
Residence on Clay St.	765	50	
Residence on Clay St.	1435	110	
Residence on Oak St.	1320	110	
First Presbyterian Church	3850	1615	Counting Main St. Section
James Burchfield Primary Elementary School	4200	2840	
Colusa Medical Center	2190	990	
George T Egling Middle School	1.1 miles	3900	
Silver Oaks Manor - Retirement	1.2 miles	4060	
High School	Over 1 mile		
Our Lady of Lourdes School	Over 1 mile		
Receptors Near Utility Trenching (across from Market Street)			
Residence at 215 Bridge Street	43	11-66 feet (depending on trench location)	
Residences along E. Oak Street	376		

Project Site Center

39°12'34.6"N 121°59'35.9"W

39.209615, -121.993302

Appendix F
Traffic Study

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TRANSPORTATION/CIRCULATION TECHNICAL STUDY

FOR

COLUSA TRIPLE CROWN

July 3, 2018

PREPARED FOR:

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EXECUTIVE SUMMARY

Project Description

The proposed project consists of a cannabis research and development facility with approximately 360 employees located in Colusa, CA. The project site is located south and west of the Sacramento River, north of Clay Street, and east of D Street. The proposed project includes a full access roadway connection that would connect to Main Street east of Bridge Street and include a new section of D Street that is currently not constructed along the west border of the project site (see **Figures 1 & 2**). Access to the outside roadway network would be provided via the Bridge Street/River Road/Main Street intersection. Two emergency only access locations would be provided at the southeast and southwest corners of the project site on East Clay Street.

Existing Conditions

The study intersections currently operate at acceptable levels of service (LOS D or better) during AM and PM peak hours.

Project Trip Generation

Trip generation estimates for the project were developed based on employee projections and project specific information provided by the project applicant. The project is expected to include up to 360 employees who would work during the following three shift times:

- Morning – 6:00 AM to 2:00 PM (210 – 240 employees)
- Afternoon – 2:00 PM to 10:00 PM (60 – 80 employees)
- Night – 10:00 PM to 7:00 AM (20 – 40 employees)

The shift times have been intentionally structured to avoid peak commute periods (i.e. 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM) when traffic on the adjacent roadways would be the highest. Trip generation estimates were developed for the following periods:

- Morning peak hour – 5:00 AM to 7:00 AM when morning shift employees are arriving
- AM peak hour – 7:00 AM to 9:00 AM morning commute period (peak hour of adjacent street traffic)
- Afternoon peak hour – 1:00 PM to 3:00 PM when morning shift employees are leaving and afternoon shift employees are arriving
- PM peak hour – 4:00 PM to 6:00 PM evening commute period (peak hour of adjacent street traffic)

The project is expected to generate approximately 822 Daily, 244 Morning peak hour, 56 AM peak hour, 324 Afternoon peak hour, and less than 10 PM peak hour trips. Based on employee arrival and departure times, no notable number of trips are expected during the PM peak hour, however it is reasonable to

expect that some trips (i.e. less than 10) could occasionally occur during the 4:00 PM to 6:00 PM time period for miscellaneous errands.

Existing Plus Project Conditions

The study intersections were analyzed during the AM and PM peak hours using Existing Plus Project conditions traffic volumes. Although the project is not expected to generate any notable traffic during the PM peak hour, for analysis purposes (to present a worst case scenario), the Afternoon peak hour trip generation estimates were added to the existing PM peak hour traffic volumes. The study intersections are expected to operate at acceptable levels of service during AM and PM peak hours under Existing Plus Project conditions.

Cumulative Conditions

Cumulative conditions traffic volume forecasts were developed by applying an annual growth rate of 1.25 percent per year to the existing traffic volumes for a 20 year period based on traffic volume projections and historical population data presented in the *Colusa County General Plan*, *Colusa County Regional Transportation Plan*, and Caltrans *SR 20 Transportation Concept Report*. The study intersections are expected to operate at acceptable levels of service during AM and PM peak hours under cumulative conditions.

Cumulative Plus Project Conditions

The study intersections were analyzed during the AM and PM peak hours using Cumulative Plus Project conditions traffic volumes. Although the project is not expected to generate any significant traffic volume during the PM peak hour, for analysis purposes (to present a worst case scenario), the Afternoon peak hour trip generation estimates were added to the existing PM peak hour traffic volumes. The study intersections are expected to operate at acceptable levels of service during AM and PM peak hours under Cumulative Plus Project conditions.

Impact Analysis

The proposed project is not expected to cause any significant impacts to the traffic and circulation system.

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Environmental Setting

This report presents the findings of a Transportation/Circulation Technical Study completed to assess the potential traffic impacts associated with a proposed cannabis research and development facility in Colusa, CA. The project would consist of a cannabis production facility with approximately 360 employees. This technical study has been prepared to document existing traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, document findings, and make recommendations to mitigate impacts, if any are found. The project is located south and west of the Sacramento River, north of Clay Street, and east of D Street, as shown on **Figure 1**. The project site plan is shown on **Figure 2**.

The following study intersections were identified through scoping conversations with City of Colusa and Caltrans staff:

1. Bridge Street / River Road / Main Street
2. Bridge Street / Market Street
3. Bridge Street / Clay Street

Existing Roadway Network

State Route (SR) 20 is generally an east-west state highway that runs from SR 1 in Fort Bragg at its west end to a junction with Interstate 80 at Yuba Pass at its east end. Within the City of Colusa, SR 20 shares a route with 10th Street, Market Street, and Bridge Street. Detailed descriptions of Bridge Street and Market Street are provided below.

Bridge Street is a north-south Arterial roadway that intersects Westcott Road at its south end and Main Street at its north end. North of Main Street the roadway is called River Road. Bridge Street shares a route with SR 20 from Westcott Road to Market Street. Bridge Street is a two-lane roadway that primarily serves residential and commercial uses. The posted speed limit on Bridge Street is 35 mph.

Market Street is an east-west Arterial roadway with two lanes in each direction and back-to-back left-turn pockets from 1st Street to 11th Street. Outside of the 1st Street to 11th Street segment, Market Street is a two-lane roadway. Market Street shares a route with SR 20 from Bridge Street to 10th Street and acts a "main street" for the City. The posted speed limit on Market Street is 30 mph.

Clay Street is an east-west local roadway that runs from 14th Street at its west end to the Sacramento River at its east end. Clay Street is a two-lane roadway that serves primarily residential uses. The posted speed limit west of D Street is 25 mph. East of D Street the speed limit is 35 mph.

Main Street is an east-west, two-lane roadway with on-street parking permitted. The City of Colusa General Plan identifies Main Street as a Collector roadway. Main Street serves primarily commercial uses and some residential uses. The posted speed limit on Main Street is 25 mph.

D Street is a north-south, two lane roadway that connects Carson Street to Clay Street south of the project site. Directly adjacent to the project site (along the west border), right-of-way exists for D Street between Oak Street and B Street. The portion of D Street between the proposed project driveway and Main Street will be constructed to serve as a part of the project entrance (see **Figure 2**).

Existing Traffic Volumes

Existing AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak hour traffic volume data was collected at the following study intersections on a mid-week day in March 2018:

1. Bridge Street / River Road / Main Street
2. Bridge Street / Market Street
3. Bridge Street / Clay Street

Figure 3 shows the existing peak hour traffic volumes at the study intersections.

Historical Traffic Volumes

The Caltrans Traffic Census Program provides Annual Average Daily Traffic (AADT) volume data for state highways. **Table 1** shows historical traffic volume data for SR 20 in the City of Colusa from 2007 to 2016 (the most recent 10 years of data available).

Table 1: Historical Annual Average Daily Traffic Volumes – SR 20

Segment[1]	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
At Fifth Street (PM 31.47)	25,500	20,400	25,000	25,000	25,000	25,000	25,000	25,500	12,100	12,100
At Market/Bridge Street (PM 31.84)	22,000	21,000	21,000	21,000	21,000	21,000	21,000	21,400	15,000	15,000
At Fremont Street (PM 32.29)	19,000	18,000	21,000	21,000	21,000	21,000	21,000	21,400	12,900	12,900

Source: Caltrans Traffic Census Program, 2018

As shown in the table, traffic volumes on SR 20 in the City of Colusa have declined approximately 30 to 50 percent since 2009.

Existing Transit Facilities

Colusa County Transit is a dial-a-ride system with fixed timed routes to: Arbuckle, Colusa, Grimes, Maxwell, Princeton, Sites, Stonyford, and Williams.

Colusa County Transit consists of nine vehicles and ten full-time employees. Colusa County Transit runs six buses each day on various routes and also provides out-of-county medical transportation on an on-call basis. (countyofcolusa.org)

Existing Bicycle and Pedestrian Facilities

Field observations indicate no existing marked bicycle lanes or bicycle routes on Bridge Street, Market Street, or Main Street. Additionally, on-street vehicle parking is allowed on these streets. The *Colusa County General Plan* includes a Regional Bicycle Facilities figure that identifies existing Class I bike paths, Class II bike lanes, and Class III bike routes. The figure shows a Class I bike path along the Sacramento River near the project site.

Sidewalks exist along at least one side of the majority of Bridge Street within the project area, and along both sides of Market Street and on Main Street west of Bridge Street. There are no sidewalks on East Main Street east of Bridge Street. There are no crosswalks at the Bridge Street/Market Street or Bridge Street/Main Street intersections, and only northbound/southbound crosswalks at the Bridge Street/Clay Street intersection.

Analysis Methodology

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of the roadway network (i.e. intersections, roadway segments, freeway facilities, etc). This term uses letter grades, “A” through “F”, to represent the perspective of drivers with “A” representing optimum conditions (free-flow traffic with no congestion) and “F” representing severe congestion (stop-and-go conditions).

Signalized Intersection Operations

Chapter 18 of the Highway Capacity Manual (HCM) 2010 provides level of service methodology for analysis of signalized intersections. The level of service for signalized intersections is based on the average control delay in seconds per vehicle for the overall intersection, and is determined using the delay threshold in **Table 2**.

Unsignalized Intersection Operations

The analysis methodology for unsignalized (side street stop controlled and all way stop controlled) intersections is provided in Chapters 19 and 20 of the HCM 2010. The level of service for all way stop controlled intersections is based on the average control delay in seconds per vehicle for the overall intersection. For side street stop controlled intersections, the level of service is determined based on the average control delay in seconds per vehicle for the worst approach/movement. **Table 2** shows the delay thresholds and corresponding levels of service for unsignalized intersections. As shown in the table, the delay ranges for unsignalized intersections are less than for signalized intersections, as drivers expect less delay at unsignlized intersections.

Table 2: Level of Service Definition for Intersections

Level of Service	Brief Description	Average Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15
C	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35
E	At or near capacity flows.	55 to 80	35 to 50
F	Over capacity conditions.	> 80	> 50

Source: Highway Capacity Manual (2010), Chapters 18, 19, and 20

Level of Service Thresholds

All of the study intersections are within the City of Colusa limits. The *City of Colusa General Plan* identifies LOS C as the minimum acceptable LOS for City streets and intersections, except in the downtown area on SR 20/45 and SR 20 (Bridge Street, Market Street, 10th Street), where LOS D is established as the minimum acceptable LOS, consistent with Caltrans general LOS standards for state highways through urban areas.

Level of Service D was used as the thresholds for this study.

For intersections already operating at unacceptable levels without the project, an increase in the overall roadway/intersection volume of five percent or more is considered a significant impact.

Existing Intersection Level of Service

Existing conditions intersection level of service analysis was performed using Synchro 9 software, with reports based on HCM 2010 methodology. The peak hour factors (PHF) from the existing counts were used in the analysis. The heavy vehicle percentages from the counts, or default heavy vehicle percentages of 2 percent (whichever was higher) were also used in the analysis. The level of service results are presented in **Table 3** and the calculation sheets are provided in **Appendix A**, attached.

Table 3: Existing Conditions Intersection Level of Service

Intersection	Control	LOS Standard	AM		PM	
			Delay[1]	LOS	Delay[1]	LOS
Bridge St / River Rd / Main St	Side-Street STOP	D				
Eastbound Approach			9.6	A	9.9	A
Westbound Approach			9.9	A	10.4	B
Northbound Left			7.5	A	7.5	A
Southbound Left			0	A	0	A
Bridge St / Market St	Side-Street STOP	D				
Southbound Approach			9.0	A	9.1	A
Eastbound Left			7.7	A	7.4	A
Bridge St / Clay St	Side-Street STOP	D				
Eastbound Approach			14.2	B	13.1	B
Westbound Approach			15.6	C	17.8	C
Northbound Left			8.0	A	8.8	A
Southbound Left			8.4	A	8.2	A

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side-street stop controlled intersections.
Source: Traffic Works, 2018

As shown in **Table 3**, the study intersections currently operate at acceptable levels of service during the AM and PM peak hours.

Regulatory Setting

Thresholds of Significance

The CEQA *Appendix G Environmental Checklist Form* was used to develop significance criteria for determining potential transportation impacts. The checklist questions are:

Would the project:

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
- Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

- Result in inadequate emergency access?
- Conflict with adopted policies, plans, programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Federal Plans and Policies

There are no federal plans or policies related to traffic circulation that have jurisdiction over the immediate project study area.

State Plans and Policies

Caltrans Guide for the Preparation of Traffic Impact Studies

The Caltrans *Guide for the Preparation of Traffic Impact Studies* (December 2002) includes the following statement regarding level of service:

> Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS.

Caltrans Transportation Concept Report

Caltrans prepares Transportation Concept Reports (TCR) for each of its state highways. "The TCR is a planning document that identifies the existing and future route conditions as well as future needs for each route on the state highway system." (Caltrans, 2017) Each TCR establishes a Concept Level of Service as the minimum acceptable level of service for that route. Longer routes are often split into segments with a different Concept LOS for each segment.

The *State Route 20 Transportation Corridor Concept Report* (March 2013) states the following:

> Segment 3 begins at the City of Colusa's western city limit and extends to the city's eastern city limit at Moon Bend Road. The roadway segment currently operates at LOS E. As the facility is expected to decline to LOS F by the year 2030, operational improvements and possible targeted capacity expansions should be studied.
>
> The 20-Year Concept LOS for Segment 3 of SR 20 is LOS E.

It should be noted that the level of service analysis included in the SR 20 TCR and LOS E result are based on traffic volume data from 2010. As shown in **Table 1** in the Environmental Setting section above, traffic volumes have decreased by approximately 30 to 50 in the City of Colusa since 2010. Therefore, a better level of service can be expected on SR 20 under existing conditions.

Regional Plans and Policies

Colusa County General Plan

The *Colusa County General Plan* (July 2012) includes the following objectives and policies related to level of service:

Objective CIRC-1A: Maintain Safe and Efficient Operating Conditions on All County Roadways

> Policy CIRC 1-4: Define level of service (LOS) consistent with the latest edition of the Highway Capacity Manual and calculate using the methodologies contained in that manual. At a minimum, weekday AM and PM peak hour traffic volumes will be used in determining compliance with the level of service standard. The analysis of other periods may be appropriate and will depend on type of use.
>
> Policy CIRC 1-5: Maintain LOS C or better for County roadways and intersections in the unincorporated County.
>
> Policy CIRC 1-6: Maintain levels of service on state highways consistent with Caltrans standards, to the extent feasible.

Colusa County Zoning Code – Site Planning Provisions

The *Colusa County Zoning Code* includes on-site parking requirements for new development projects based on the type of land use. The number of required parking spaces for Agricultural Processing, On-Site Products (which most closely represents the proposed project) is 1 space per employee.

Local Plans and Policies

City of Colusa General Plan

The *City of Colusa General Plan* (October 2007) establishes the following level of service policy:

> The City will prepare, adopt, and periodically update a Streets and Roadways Master Plan that establishes LOS C as the minimum acceptable LOS for City streets and intersections, except in the downtown area on SR 20/45 and SR 20 (Market, Bridge, 10th, and Main Streets), where LOS D is established as the minimum acceptable LOS, consistent with Caltrans LOS standards for state highways through urban areas. If conditions of LOS D or worse are already present, future proposed projects may not cause roadway volumes to increase by five percent or more and will be accompanied by other mitigation measures intended to reduce trip generation.

Project Analysis Methodology

Project Access

The proposed project includes a full access roadway connection that would connect to Main Street east of Bridge Street and include a new section of D Street that is currently not constructed along the west border of the project site. Access to the outside roadway network would be provided via the Bridge Street/River Road/Main Street intersection (shown on **Figure 2**). The project applicant proposes to construct the following improvements for the safe and efficient use of East Main Street and D Street entering/exiting the project site:

- Post clearance height advisory warning signs in both directions on East Main Street approaching the conveyor structure over the roadway
- Install 25 mph speed limit signs on both ends of East Main Street east of Bridge Street/River Road
- On East Main Street, repair the existing pavement generally east from the conveyor structure and construct new pavement per City of Colusa standards to the proposed terminus of East Main Street
- Modify or replace the existing bridge structure at the current terminus of East Main Street for adequate turning radii to D Street, roadway width, and structural adequacy
- Construct the new/proposed segment of D Street to City standards

Two emergency only access locations would be provided at the southeast and southwest corners of the project site on East Clay Street. These accesses would be gated and would not be used other than for emergency purposes.

Parking

The minimum number of parking spaces required was calculated based on the parking standards presented in the Regulatory Setting section above. The standards include requirements for "Agricultural Processing, On-Site Products." **Table 4** shows the parking requirements for the project.

Table 4: Parking Requirements

	Size	Spaces Required	Number of Parking Spaces
Cannabis Production Facility	360 employees	1 space per employee	360

Source: Traffic Works, 2018

As shown in **Table 4**, a minimum of 360 parking spaces are needed to adequately accommodate the project. The project would include approximately 420,000 square feet of space designated for parking that could accommodate over 1,900 standard size parking spaces if needed.

Trip Generation

The proposed project includes a cannabis production facility with unique trip generation characteristics that are not represented by any standard trip generation rates presented in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 10th Edition*. Therefore, trip generation estimates for the project were developed based on employee projections and project specific information provided by the project applicant. The project is expected to include up to 360 employees who would work during the following three shift times:

- Morning – 6:00 AM to 2:00 PM (210 – 240 employees)
- Afternoon – 2:00 PM to 10:00 PM (60 – 80 employees)
- Night – 10:00 PM to 7:00 AM (20 – 40 employees)

As shown above, the shift times have been intentionally structured to avoid peak commute periods (i.e. 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM) when traffic on the adjacent roadways would be the highest. Trip generation estimates were developed assuming employees arrive within the hour before their shift begins and leave within the hour after their shift ends. It was assumed that each employee would drive alone and make one trip to the site and one trip from the site (i.e. each employee makes two trips per day). It was also assumed that 10 percent of employees would make one additional round trip (i.e. two total trips) during their shift time for lunch or an errand.

Approximately 10 to 15 deliveries are expected each day between 6:00 AM and 4:00 PM with the majority of deliveries between 6:00 AM and 1:00 PM. It is likely that deliveries would be spread out throughout the day; however, for conservative analysis purposes it was assumed that 15 deliveries are made each day with approximately 50 percent arriving and departing during the AM peak hour (between 7:00 AM and 9:00 AM).

Table 5 shows the estimated Daily and peak hour project trip generation. Trip generation estimates are shown for the following periods:

- Morning peak hour – 5:00 AM to 7:00 AM when morning shift employees are arriving
- AM peak hour – 7:00 AM to 9:00 AM morning commute period (peak hour of adjacent street traffic)
- Afternoon peak hour – 1:00 PM to 3:00 PM when morning shift employees are leaving and afternoon shift employees are arriving
- PM peak hour – 4:00 PM to 6:00 PM evening commute period (peak hour of adjacent street traffic)

As shown in the table, the project is expected to generate approximately 822 Daily, 244 Morning peak hour, 56 AM peak hour, 324 Afternoon peak hour, and less than 10 PM peak hour trips. As noted above, the project has intentionally structured employee shift times to avoid the peak commute periods and reduce overall impacts to the roadway network. Based on employee arrival and departure times, no notable number of trips are expected during the PM peak hour, however it is reasonable to expect that

some trips (i.e. less than 10) could occasionally occur during the 4:00 PM to 6:00 PM time period for miscellaneous errands.

Table 5: Project Trip Generation

Trip Generator	Size/ Units	Trips[1]												
		Daily	Morn	Morn In	Morn Out	AM	AM In	AM Out	Aft.	Aft. In	Aft. Out	PM	PM In	PM Out
Employees														
Morning Shift (6AM-2PM)	240	528	240	240	0	0	0	0	240	0	240	0	0	0
Afternoon Shift (2PM-10PM)	80	176	0	0	0	0	0	0	80	80	0	0	0	0
Night Shift (10PM-7AM)	40	88	0	0	0	40	0	40	0	0	0	0	0	0
Deliveries (6AM-4PM)	15 per day	30	4	2	2	16	8	8	4	2	2	0	0	0
Total		***822***	***244***	***242***	***2***	***56***	***8***	***48***	***324***	***82***	***242***	***0***	***0***	***0***

Notes: 1. Morn = morning peak hour (5:00 AM to 7:00 AM); AM = AM peak hour (7:00 AM to 9:00 AM); Aft. = afternoon peak hour (1:00 PM to 3:00 PM); PM = PM peak hour (4:00 PM to 6:00 PM)
Source: Traffic Works, 2018

Trip Distribution

Project generated traffic was distributed to the study intersections based on the location of the project, existing travel patterns, and expectations of where employees will come from. It was assumed that some employees would come from Williams and Yuba City, but the majority of employees would come from Colusa. Project generated trips were distributed and assigned to the local roadway network based on the following:

- 10% to/from Williams (to the west) via SR 20
- 20% to/from Yuba City (to the east) via SR 20
- 70% to/from Colusa – It was assumed that trips would be dispersed fairly evenly throughout the urban core area south of Main Street and west of Bridge Street. For analysis purposes the following distribution was used:
    - 20% would access the primary residential area via Main Street (west of Bridge Street)
    - 15% would access the primary residential area via Market Street (to the south and west)
    - 5% would access the primary residential area via Jay Street and Oak Street (between Market Street and Clay Street)
    - 10% would access the primary residential area via Clay Street (to the south)
    - 20% would access the primary residential area via Bridge Street south of Clay Street

Figure 4 shows the project trip distribution and assignment.

Existing Plus Project Analysis

Intersection Level of Service

Existing Plus Project conditions intersection level of service analysis was performed during the AM and PM peak hours. The existing lane configurations and controls, peak hour factors, and heavy vehicle percentages were used in the analysis. Although the project is not expected to generate any notable traffic volume during the PM peak hour, for analysis purposes (to present a worst case scenario), the Afternoon peak hour trip generation estimates were added to the existing PM peak hour traffic volumes.

Table 6 shows the Existing Plus Project conditions level of service results. The technical calculations are provided in **Appendix B**.

Table 6: Existing Plus Project Conditions Intersection Level of Service

Intersection	Control	LOS Standard	Existing				Existing Plus Project			
			AM		PM		AM		PM[1]	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
Bridge St/River Rd/Main St	Side-Street STOP	D								
Eastbound Approach			9.6	A	9.9	A	9.8	A	11.1	B
Westbound Approach			9.9	A	10.4	B	10.9	B	18.4	C
Northbound Left			7.5	A	7.5	A	7.5	A	7.5	A
Southbound Left			0	A	0	A	0	A	0	A
Bridge St/Market St	Side-Street STOP	D								
Southbound Approach			9.0	A	9.1	A	9.2	A	11.0	B
Eastbound Left			7.7	A	7.4	A	7.7	A	7.6	A
Bridge St/Clay St	Side-Street STOP	D								
Eastbound Approach			14.2	B	13.1	B	15.0	C	21.0	C
Westbound Approach			15.6	C	17.8	C	16.0	C	21.2	C
Northbound Left			8.0	A	8.8	A	8.0	A	9.2	A
Southbound Left			8.4	A	8.2	A	8.5	A	8.3	A

Notes: 1. For analysis purposes, the Afternoon peak hour trip generation estimates were added to the existing PM peak hour traffic volumes. This presents a worst case scenario.
2. Delay is reported in seconds per vehicle for the worst approach/movement for side-street stop controlled intersections.

Bold text indicates unacceptable operations.
Underlined text indicates a significant impact.
Source: Traffic Works, 2018

As shown in **Table 6**, the study intersections are expected to operate at acceptable levels of service during the AM and PM peak hours under Existing Plus Project conditions.

Impacts and Mitigations

Impact 1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant

components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The proposed project is not expected to conflict with any applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The study intersections are expected to operate at acceptable levels of service during the AM and PM peak hours under Existing Plus Project conditions.

It should be noted that although the Caltrans *State Route 20 Transportation Corridor Concept Report* states that the segment of SR 20 through the City of Colusa currently operates at LOS E, that analysis is based on traffic volume data from 2010. As shown in **Table 1** in the Environmental Setting section above, traffic volumes have decreased by approximately 30 to 50 in the City of Colusa since 2010. Additionally, the LOS results reported in the TCR are based on daily roadway segment data, while the level of service reported in Table 6 is based on peak hour intersection data.

This is considered a *less than significant impact*.

Mitigation Measures

None required.

Impact 2: Would the project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

There is no congestion management program applicable to the study area roadways or intersections. The study intersections are expected to operate at acceptable levels of service during the AM and PM peak hours under Existing Plus Project conditions. Therefore, this is considered a *less than significant impact*.

Mitigation Measures

None required.

Impact 3: Would the project result in an impact to air traffic patterns including either an increase in traffic levels or a change in location that results in substantial safety risks?

The project would not result in a change to air traffic patterns or a change in location for air traffic. Therefore, there would be *no impact*.

Mitigation Measures

None required.

Impact 4: Would the project substantially increase hazards due to a design feature or incompatible uses?

The project would include a full access roadway connection that would connect to Main Street east of Bridge Street and include a new section of D Street that is currently not constructed along the west border of the project site. Access to the outside roadway network would be provided via the Bridge Street/River Road/Main Street intersection (shown on **Figure 2**). Proposed roadway improvements are outlined in the Project Access section. New roadway improvement would be designed and constructed to meet applicable City Colusa Improvement Standards. This impact is considered *less than significant*.

Mitigation Measures

None required.

Impact 5: Would the project result in inadequate emergency access?

The proposed project includes one full access roadway connection that would connect to the Bridge Street/River Road/Main Street intersection. Additionally, as shown on the site plan (**Figure 2**), two emergency only access locations would be provided at the southeast and southwest corners of the project site on East Clay Street. Therefore, this impact is considered *less than significant*.

Mitigation Measures

None required.

Impact 6: Would the project conflict with adopted policies, plans, programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The project is not anticipated to result in any changes to bicycle or pedestrian facilities. Existing transit facilities are limited in the project area. Countywide city-to-city service is provided based on call ahead reservations. The project is not anticipated to affect transit facilities or service.

The City of Colusa Public Works Department *Improvement Standards* (November 2007) states, "All school, park, and commercial developments shall have 8-foot sidewalks along all frontages." However, City staff has indicated that they wish to maintain the rural environment along the southern boundary of the project site (on East Clay Street) and do not want sidewalk, curb, or gutter installed. This impact is considered *less than significant*.

Mitigation Measures

None required.

Impact 7: Would the project conflict with adopted parking standards?

The question of adequate parking has been removed from the CEQA environmental checklist with recent CEQA revisions, as availability or lack of convenient parking is generally no longer considered an "environmental impact." However, the project must still meet applicable City/County standards as a matter of project entitlement and permitting.

The minimum number of parking spaces required was calculated based on standards included in the *Colusa County Zoning Code*. The standards include requirements for "Agricultural Processing, On-Site Products." The project would include approximately 420,000 square feet of space designated for parking that could accommodate over 1,900 standard size parking spaces, which is more than the 360 spaces required. This impact is *less than significant*.

Mitigation Measures

None required.

Impact 8: Would the project conflict with adopted policies regarding Vehicle Miles Travelled (VMT)?

The City of Colusa, as well as Colusa County, do not have any specific thresholds or significance criteria related to VMT at this time. Generally speaking, the City, County, and State of California have goals of reducing VMT and Green House Gas emissions. The project would increase travel and therefore can be expected to increase VMT to some degree. To be conservative, it should be assumed that an increase in VMT is probable with the project. Since no threshold values have been adopted by the City or the County related to VMT, this impact is considered *less than significant*.

Mitigation Measures

None required.

Cumulative Conditions Analysis Methodology

Traffic Volumes

Future year traffic volumes were developed by applying a growth rate to the existing traffic volumes. The *Colusa County General Plan*, *Colusa County Regional Transportation Plan*, and Caltrans *SR 20 Transportation Concept Report* all include growth projections for roadways in the City of Colusa. Additionally, the *Colusa County General Plan* includes historical population data from 1970 to 2009. The traffic volume growth projections from the three documents listed above are based on annual growth rates of 1.0 to 1.5 percent per year. The historical population data shows an average population growth of approximately 1.2 percent per year. Based on this data, future year traffic volume forecasts were developed by applying an average annual growth rate of 1.25 percent per year to the existing traffic volumes for a 20 year period.

Additionally, a current list of planned projects in the City of Colusa was provided by City of Colusa staff. The current planned projects were compared to the list of planned projects included in the *Colusa County General Plan* for the City of Colusa. A comparison of trip generation for the planned projects shows that the *General Plan* assumptions would produce higher traffic volumes than the current list of planned projects. Therefore, the annual growth rate of 1.25 percent per year conservatively accounts for more than the anticipated growth in the project area considering anticipated projects.

The cumulative conditions traffic volumes at the study intersections are shown on **Figure 6**.

Cumulative No Project Intersection Level of Service

Cumulative conditions intersection level of service was analyzed based on the future year traffic volumes shown on **Figure 6**. Existing intersection lane configurations and controls were used in the analysis, as well as the existing heavy vehicle percentages. A peak hour factor of 0.92 or the existing peak hour factors (whichever was higher) were also used for each of the study intersections. **Table 7** shows the cumulative conditions intersection level of service results. The technical calculations are provided in **Appendix C**.

Table 7: Cumulative Conditions Intersection Level of Service

Intersection	Control	LOS Standard	AM		PM	
			Delay[1]	LOS	Delay[1]	LOS
Bridge St/River Road/Main St	Side-Street STOP	D				
Eastbound Approach			10.0	B	10.3	B
Westbound Approach			9.7	A	10.4	B
Northbound Left			7.5	A	7.5	A
Southbound Left			0	A	0	A
Bridge St/Market St	Side-Street STOP	D				
Southbound Approach			9.2	A	9.3	A
Eastbound Left			7.7	A	7.5	A
Bridge St/Clay St	Side-Street STOP	D				
Eastbound Approach			17.4	C	16.9	C
Westbound Approach			17.8	C	25.3	D
Northbound Left			8.1	A	9.1	A
Southbound Left			8.7	A	8.4	A

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side-street stop controlled intersections.
Source: Traffic Works, 2018

As shown in the table, the study intersections are expected to operate at acceptable levels of service under Cumulative No Project conditions.

Cumulative Plus Project Intersection Level of Service

Cumulative Plus Project conditions intersection level of service analysis was performed during the AM and PM peak hours. The intersection lane configurations and controls, peak hour factors, and heavy vehicle percentages were assumed to be the same as Cumulative No Project conditions. Although the project is

not expected to generate any notable traffic volume during the PM peak hour, for analysis purposes (to present a worst case scenario) the Afternoon peak hour trip generation estimates were added to the cumulative conditions PM peak hour traffic volumes.

Table 8 shows the Cumulative Plus Project conditions level of service results. The technical calculations are provided in **Appendix D**.

Table 8: Cumulative Plus Project Conditions Intersection Level of Service

Intersection	Control	LOS Standard	Cumulative				Cumulative Plus Project			
			AM		PM		AM		PM[1]	
			Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS	Delay[2]	LOS
Bridge St / Main St	Side-Street STOP	D								
Eastbound Approach			10.0	B	10.3	B	10.2	B	11.5	B
Westbound Approach			9.7	A	10.4	B	11.2	B	18.2	C
Northbound Left			7.5	A	7.5	A	7.5	A	7.5	A
Southbound Left			0	A	0	A	0	A	0	A
Bridge St / Market St	Side-Street STOP	D								
Southbound Approach			9.2	A	9.3	A	9.5	A	11.4	B
Eastbound Left			7.7	A	7.5	A	7.7	A	7.6	A
Bridge St / Clay St	Side-Street STOP	D								
Eastbound Approach			17.4	C	16.9	C	18.2	C	26.9	D
Westbound Approach			17.8	C	25.3	D	18.3	C	31.1	D
Northbound Left			8.1	A	9.1	A	8.2	A	9.6	A
Southbound Left			8.7	A	8.4	A	8.7	A	8.5	A

Notes: 1. For analysis purposes, the Afternoon peak hour trip generation estimates were added to the existing PM peak hour traffic volumes. This presents a worst case scenario.
2. Delay is reported in seconds per vehicle for the worst approach/movement for side-street stop controlled intersections.

Bold text indicates unacceptable operations.
Underlined text indicates a significant impact.
Source: Traffic Works, 2018

As shown in **Table 8**, the study intersections are expected to operate at acceptable levels of service during the AM and PM peak hours under Cumulative Plus Project conditions.

Cumulative Conditions Impacts and Mitigations

Impact C1: Would the project conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The proposed project is not expected to conflict with any applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The study intersections are

expected to operate at acceptable levels of service during the AM and PM peak hours under Cumulative Plus Project conditions.

It should be noted that although the Caltrans *State Route 20 Transportation Corridor Concept Report* states that the segment of SR 20 through the City of Colusa is projected to operate at LOS F by the year 2030, that analysis is based on traffic volume data from 2010. As shown in **Table 1** in the Environmental Setting section above, traffic volumes have decreased by approximately 30 to 50 in the City of Colusa since 2010. Additionally, the LOS results reported in the TCR are based on daily roadway segment data, while the level of service reported in Table 8 is based on peak hour intersection data.

This is considered a *less than significant impact*.

Mitigation Measures

None required.

Impact C2: Would the project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

The study intersections are expected to operate at acceptable levels of service during the AM and PM peak hours under Cumulative Plus Project conditions. Therefore, this is considered a *less than significant impact*.

Mitigation Measures

None required.

All other impacts discussed in the Impacts & Mitigations section above are not expected to change from Existing Plus Project conditions.

TRAFFIC WORKS

NO SCALE

Figure 1

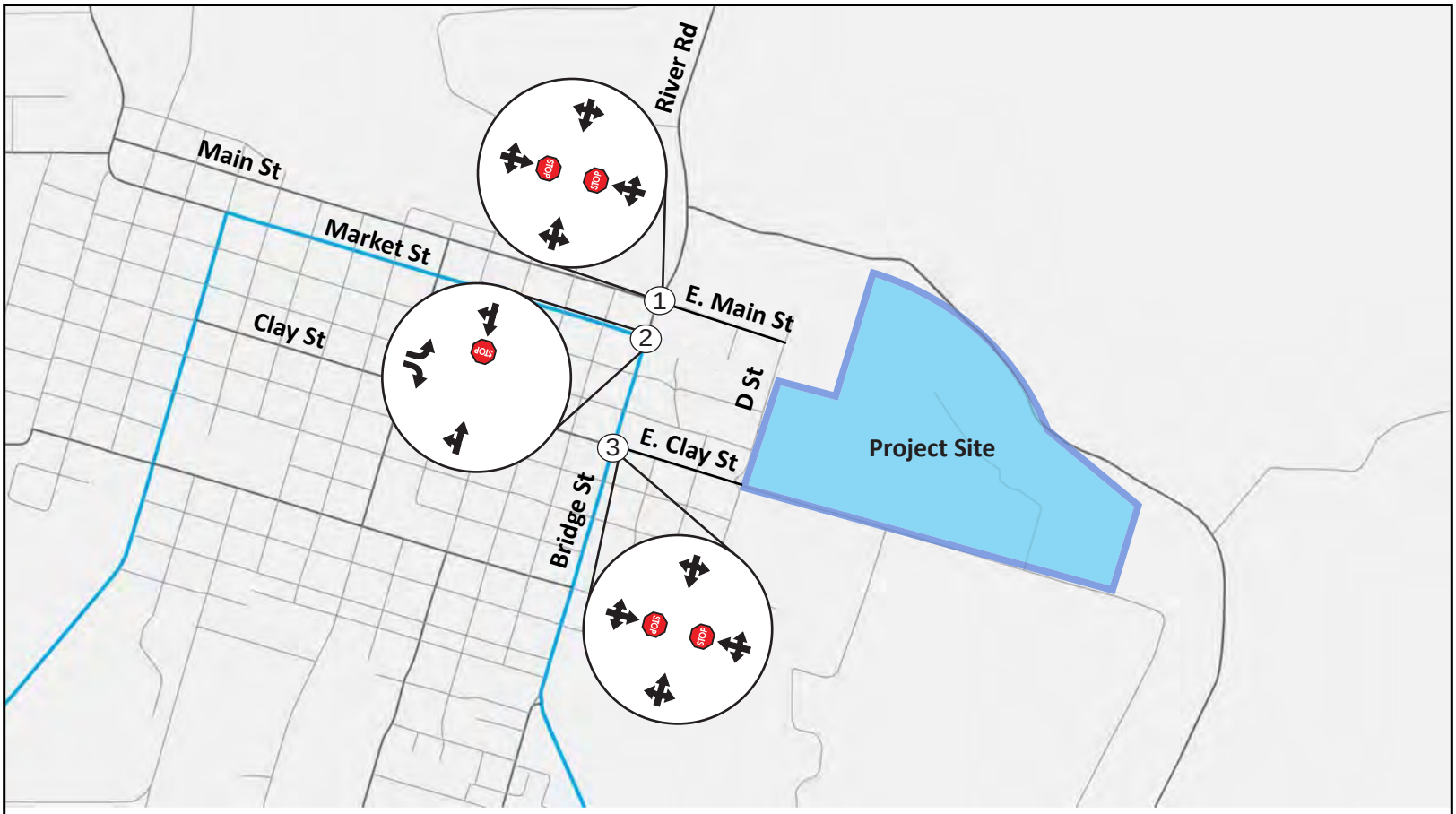
Colusa Triple Crown
TRAFFIC IMPACT STUDY
Project Location

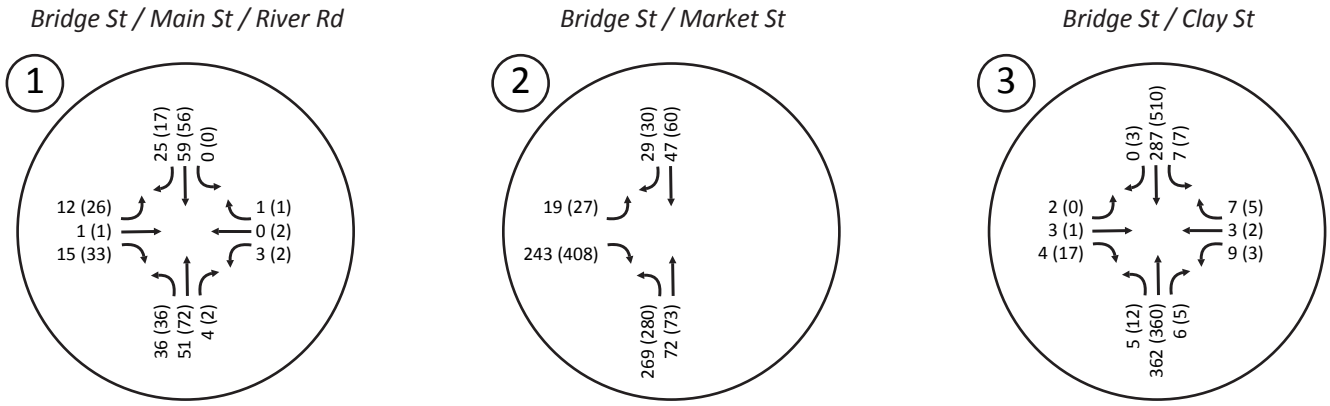
TRAFFIC WORKS

NO SCALE

Figure 2

Colusa Triple Crown
TRAFFIC IMPACT STUDY
Site Plan





AM Peak Hour Volume (PM Peak Hour Volume)

TRAFFIC WORKS

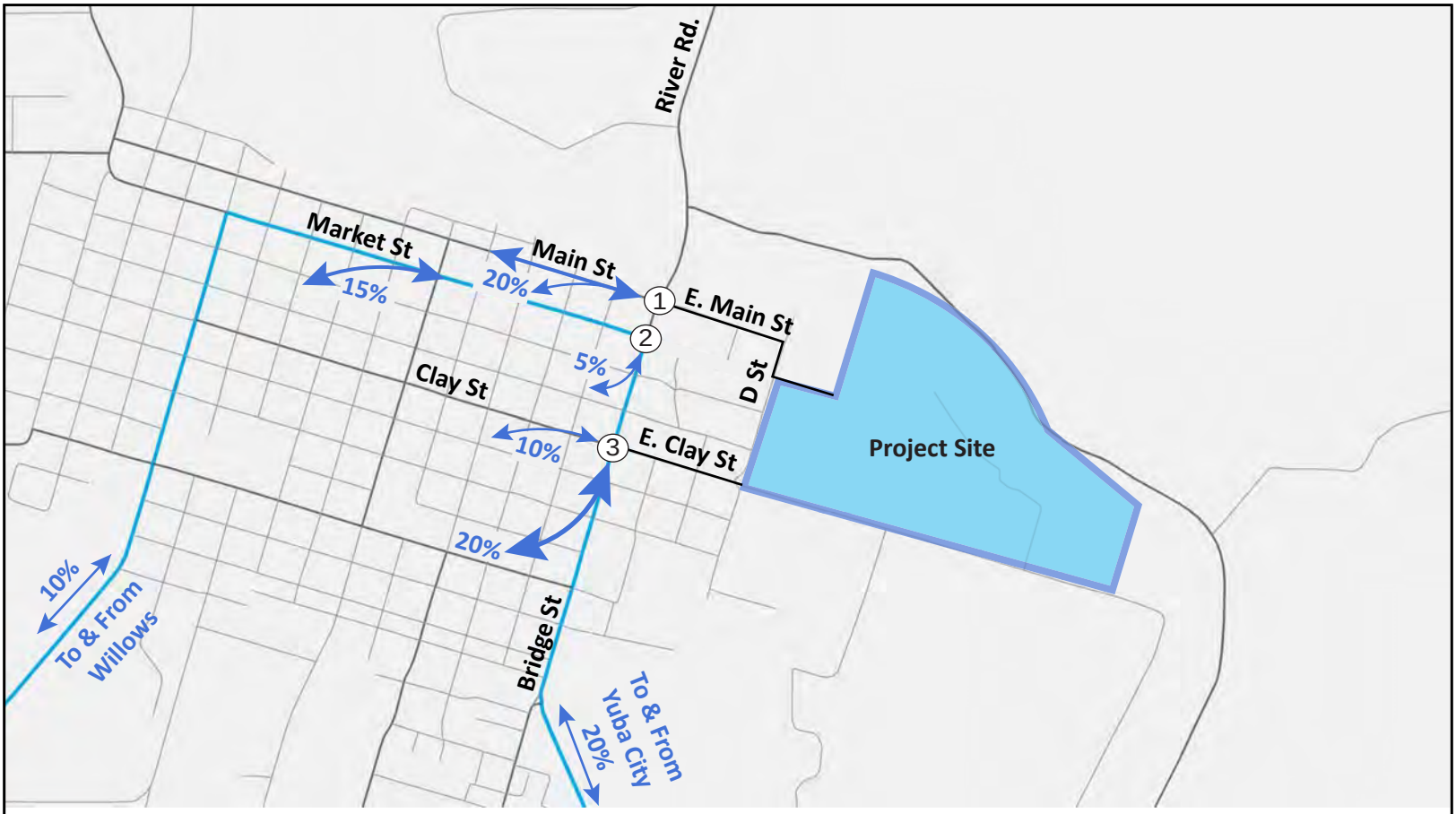
NO SCALE

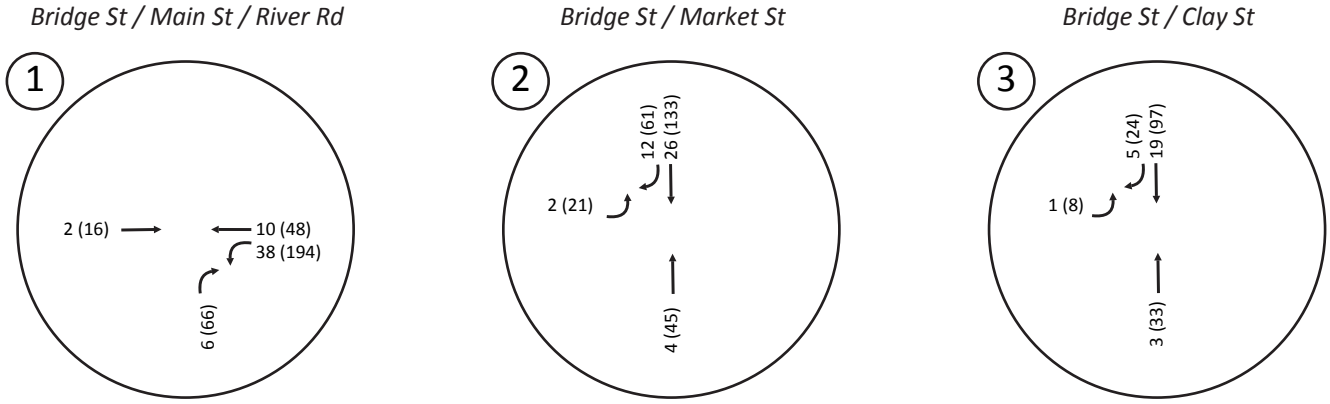
Figure 3

Colusa Triple Crown

TRAFFIC IMPACT STUDY

Existing Lane Configurations, Controls, and Traffic Volumes





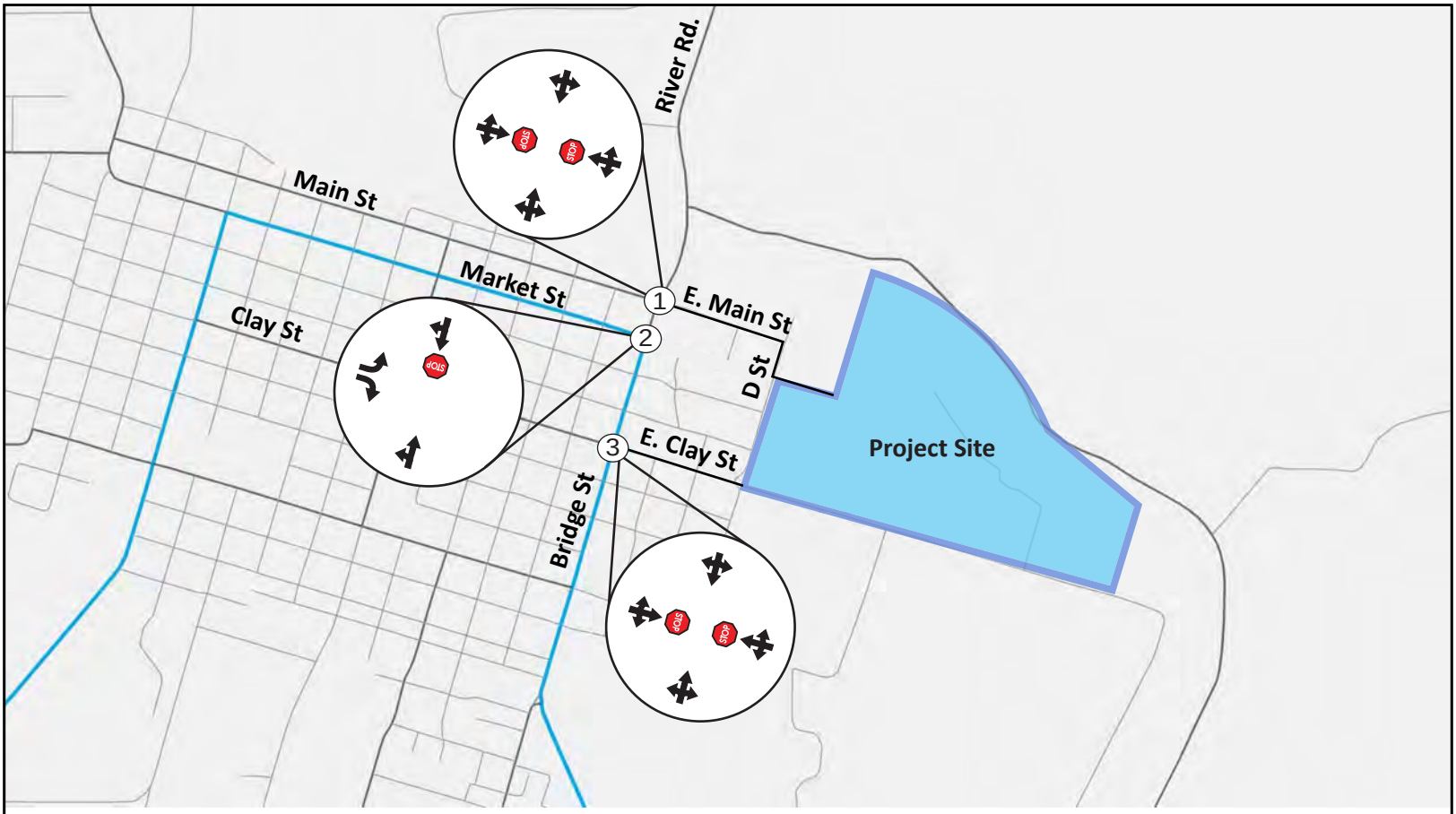
AM Peak Hour Volume (PM Peak Hour Volume)

TRAFFIC WORKS

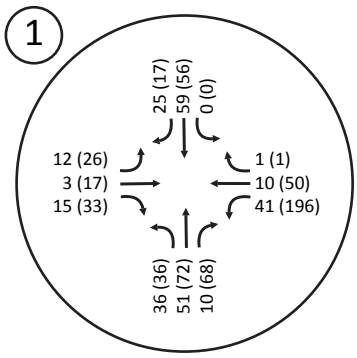
NO SCALE

Figure 4

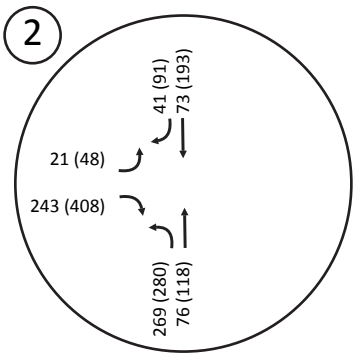
Colusa Triple Crown
TRAFFIC IMPACT STUDY
Project Trips and Trip Distribution



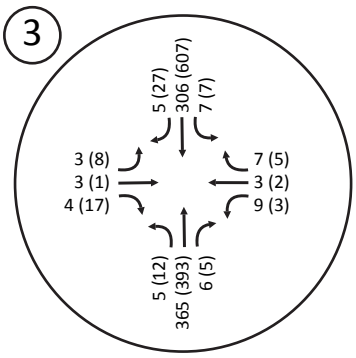
Bridge St / Main St / River Rd



Bridge St / Market St



Bridge St / Clay St



AM Peak Hour Volume (PM Peak Hour Volume)

TRAFFIC WORKS

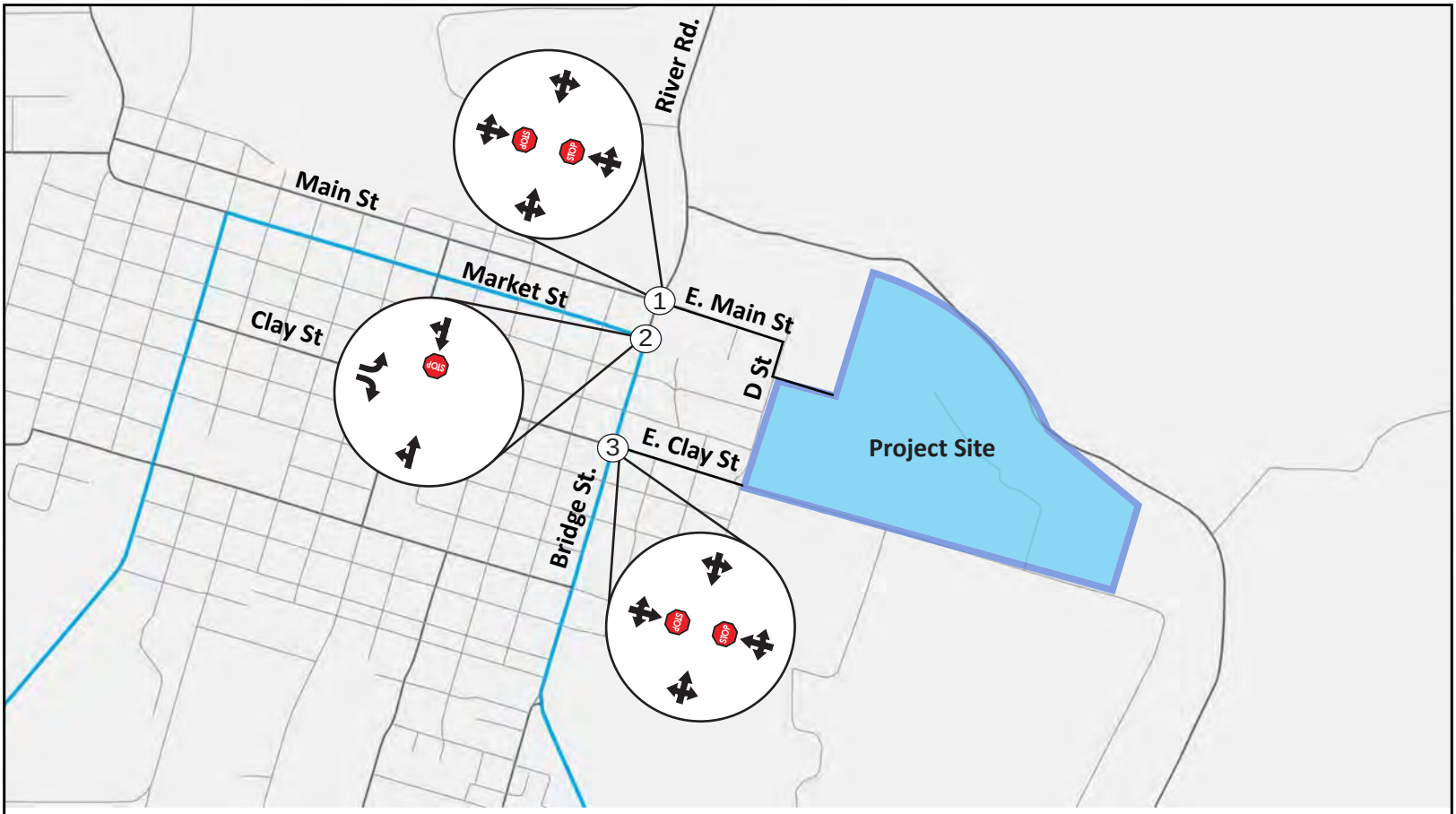
NO SCALE

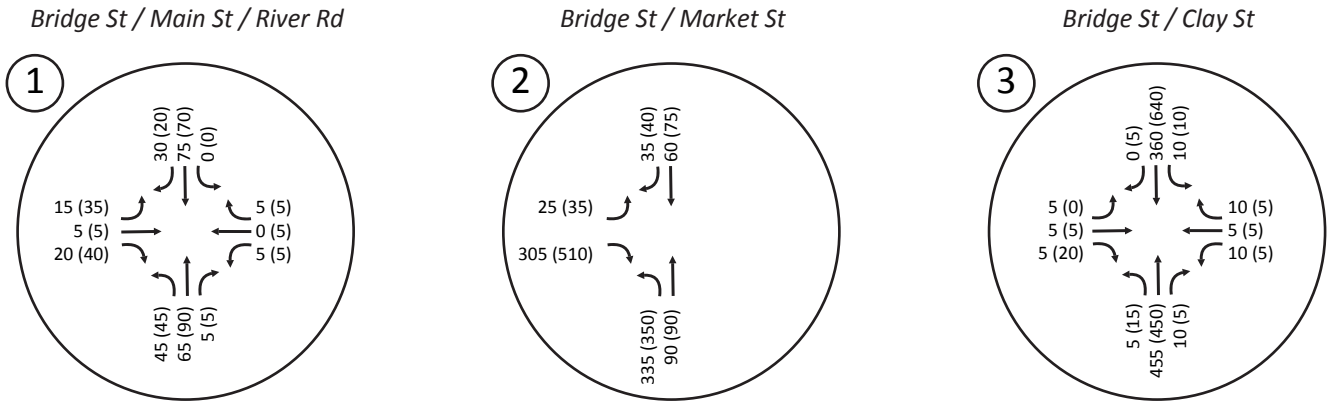
Figure 5

Colusa Triple Crown

TRAFFIC IMPACT STUDY

Existing Plus Project Lane Configurations, Controls, and Traffic Volumes





AM Peak Hour Volume (PM Peak Hour Volume)

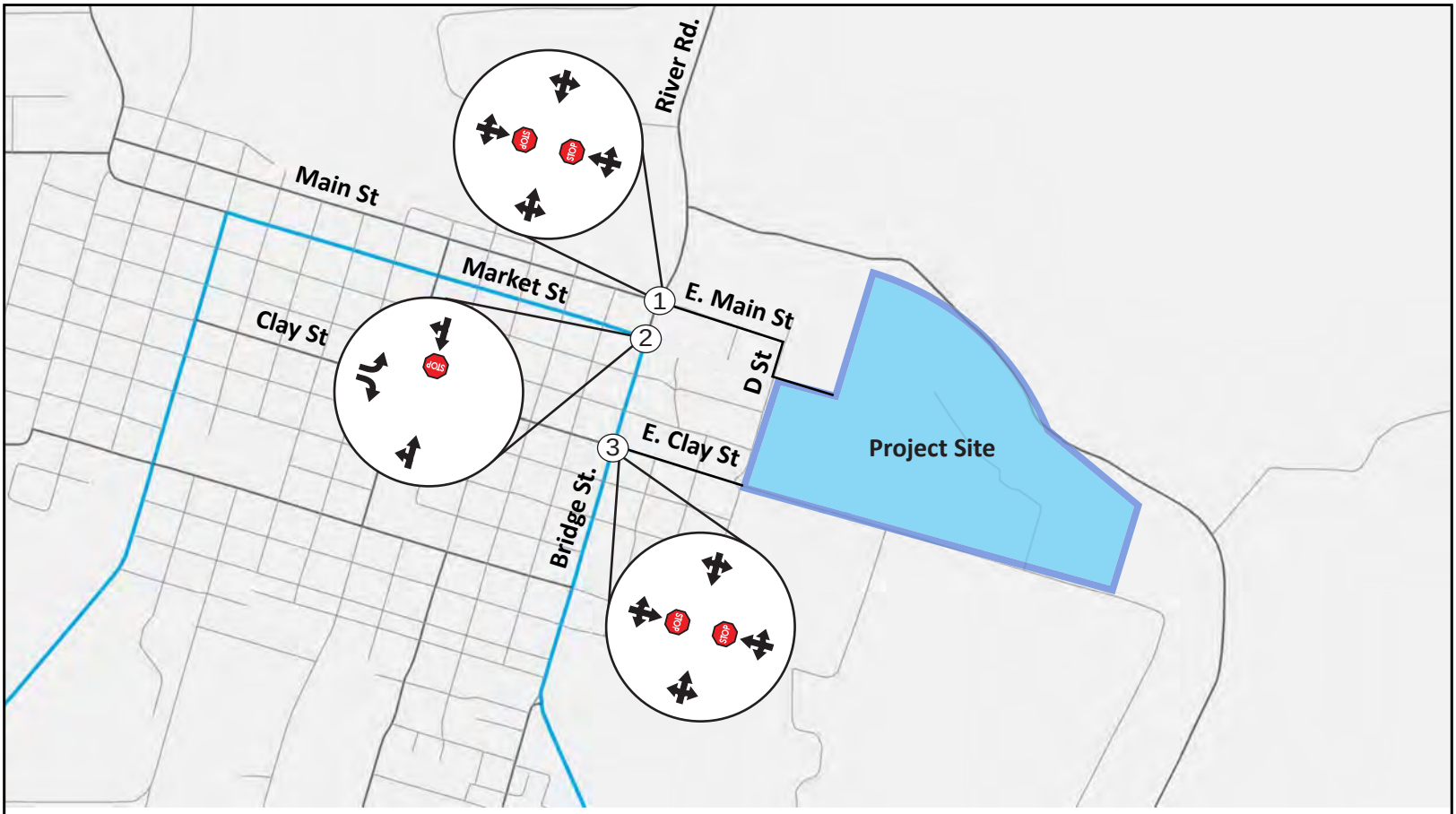
NO SCALE

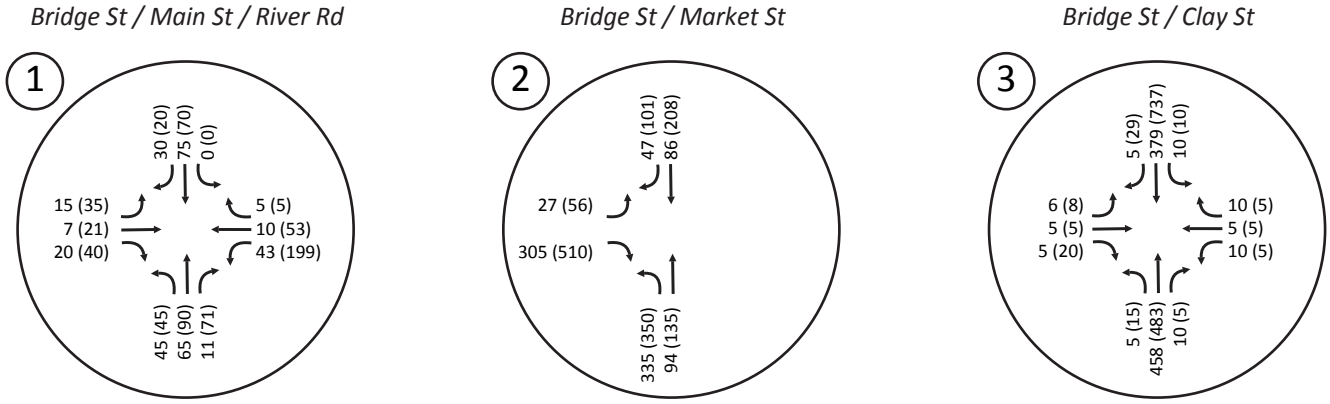
Figure 6

Colusa Triple Crown

TRAFFIC IMPACT STUDY

Cumulative Conditions Lane Configurations, Controls, and Traffic Volumes





AM Peak Hour Volume (PM Peak Hour Volume)

TRAFFIC WORKS

NO SCALE

Figure 7

Colusa Triple Crown

TRAFFIC IMPACT STUDY

Cumulative Plus Project Lane Configurations, Controls, and Traffic Volumes

Appendix A
Existing LOS Calculations

TRAFFIC WORKS LLC

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	1	15	3	0	1	36	51	4	0	59	25
Future Vol, veh/h	12	1	15	3	0	1	36	51	4	0	59	25
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	9	2	2	2	2	2	3	9	100	2	2	9
Mvmt Flow	14	1	17	3	0	1	42	59	5	0	69	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	230	232	85	238	244	62	99	0	0	64	0	0
Stage 1	84	84	-	145	145	-	-	-	-	-	-	-
Stage 2	146	148	-	93	99	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	710	668	974	716	658	1003	1488	-	-	1538	-	-
Stage 1	907	825	-	858	777	-	-	-	-	-	-	-
Stage 2	840	775	-	914	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	693	648	972	686	638	1003	1487	-	-	1538	-	-
Mov Cap-2 Maneuver	693	648	-	686	638	-	-	-	-	-	-	-
Stage 1	880	824	-	833	754	-	-	-	-	-	-	-
Stage 2	815	753	-	895	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	9.9	3	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1487	-	-	817	745	1538	-	-
HCM Lane V/C Ratio	0.028	-	-	0.04	0.006	-	-	-
HCM Control Delay (s)	7.5	0	-	9.6	9.9	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	243	269	72	47	29
Future Vol, veh/h	19	243	269	72	47	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	7	10	3	7	4
Mvmt Flow	21	264	292	78	51	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	78	0	0	0	704	78
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	4.37	-	4.2	-	6.57	6.24
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.443	-	2.29	-	4.063	3.336
Pot Cap-1 Maneuver	1376	-	-	-	355	977
Stage 1	-	-	-	-	451	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1376	-	-	-	0	977
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.6		9
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1376	-	977
HCM Lane V/C Ratio	-	-	0.015	-	0.085
HCM Control Delay (s)	-	-	7.7	-	9
HCM Lane LOS	-	-	A	-	A
HCM 95th %tile Q(veh)	-	-	0	-	0.3

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	3	4	9	3	7	5	362	6	7	287	0
Future Vol, veh/h	2	3	4	9	3	7	5	362	6	7	287	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	33	13	2	2	2	11	2	17	7	2
Mvmt Flow	2	3	5	10	3	8	6	421	7	8	334	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	792	794	334	794	790	428	334	0	0	432	0	0
Stage 1	350	350	-	440	440	-	-	-	-	-	-	-
Stage 2	442	444	-	354	350	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.53	7.23	6.52	6.22	4.12	-	-	4.27	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.597	3.617	4.018	3.318	2.218	-	-	2.353	-	-
Pot Cap-1 Maneuver	307	321	642	293	322	627	1225	-	-	1052	-	-
Stage 1	666	633	-	575	578	-	-	-	-	-	-	-
Stage 2	594	575	-	641	633	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	297	315	642	284	316	625	1225	-	-	1052	-	-
Mov Cap-2 Maneuver	297	315	-	284	316	-	-	-	-	-	-	-
Stage 1	662	627	-	569	572	-	-	-	-	-	-	-
Stage 2	579	569	-	627	627	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.2	15.6	0.1	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1225	-	-	400	363	1052	-	-
HCM Lane V/C Ratio	0.005	-	-	0.026	0.061	0.008	-	-
HCM Control Delay (s)	8	0	-	14.2	15.6	8.4	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	1	33	2	2	1	36	72	2	0	56	17
Future Vol, veh/h	26	1	33	2	2	1	36	72	2	0	56	17
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	3	4	100	2	2	2
Mvmt Flow	32	1	41	2	2	1	44	89	2	0	69	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	262	261	82	281	270	90	91	0	0	91	0	0
Stage 1	81	81	-	179	179	-	-	-	-	-	-	-
Stage 2	181	180	-	102	91	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	691	644	978	671	636	968	1498	-	-	1504	-	-
Stage 1	927	828	-	823	751	-	-	-	-	-	-	-
Stage 2	821	750	-	904	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	671	623	976	626	616	968	1497	-	-	1504	-	-
Mov Cap-2 Maneuver	671	623	-	626	616	-	-	-	-	-	-	-
Stage 1	897	827	-	797	728	-	-	-	-	-	-	-
Stage 2	792	727	-	864	819	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	10.4	2.4	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1497	-	-	809	669	1504	-	-
HCM Lane V/C Ratio	0.03	-	-	0.092	0.009	-	-	-
HCM Control Delay (s)	7.5	0	-	9.9	10.4	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	408	280	73	60	30
Future Vol, veh/h	27	408	280	73	60	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	4	2	6	2	3
Mvmt Flow	30	453	311	81	67	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	81	0	0	0	763	81
Stage 1	-	-	-	-	703	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	4.12	-	4.12	-	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	2.218	-	4.018	3.327
Pot Cap-1 Maneuver	1517	-	-	-	334	976
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1517	-	-	-	0	976
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.5		9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1517	-	976
HCM Lane V/C Ratio	-	-	0.02	-	0.102
HCM Control Delay (s)	-	-	7.4	-	9.1
HCM Lane LOS	-	-	A	-	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0.3

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1	17	3	2	5	12	360	5	7	510	3
Future Vol, veh/h	0	1	17	3	2	5	12	360	5	7	510	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	0	1	20	4	2	6	14	424	6	8	600	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1077	1080	602	1088	1079	430	604	0	0	433	0	0
Stage 1	618	618	-	459	459	-	-	-	-	-	-	-
Stage 2	459	462	-	629	620	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	197	218	500	193	218	625	974	-	-	1127	-	-
Stage 1	477	481	-	582	566	-	-	-	-	-	-	-
Stage 2	582	565	-	470	480	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	189	211	500	180	211	623	974	-	-	1127	-	-
Mov Cap-2 Maneuver	189	211	-	180	211	-	-	-	-	-	-	-
Stage 1	468	476	-	569	553	-	-	-	-	-	-	-
Stage 2	563	552	-	445	475	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	17.8	0.3	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	974	-	-	465	293	1127	-	-
HCM Lane V/C Ratio	0.014	-	-	0.046	0.04	0.007	-	-
HCM Control Delay (s)	8.8	0	-	13.1	17.8	8.2	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Appendix B
Existing Plus Project LOS Calculations

TRAFFIC WORKS LLC

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	3	15	41	10	1	36	51	10	0	59	25
Future Vol, veh/h	12	3	15	41	10	1	36	51	10	0	59	25
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	9	2	2	2	2	2	3	9	100	2	2	9
Mvmt Flow	14	3	17	48	12	1	42	59	12	0	69	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	239	239	85	244	248	65	99	0	0	71	0	0
Stage 1	84	84	-	149	149	-	-	-	-	-	-	-
Stage 2	155	155	-	95	99	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	701	662	974	710	655	999	1488	-	-	1529	-	-
Stage 1	907	825	-	854	774	-	-	-	-	-	-	-
Stage 2	831	769	-	912	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	675	642	972	678	635	999	1487	-	-	1529	-	-
Mov Cap-2 Maneuver	675	642	-	678	635	-	-	-	-	-	-	-
Stage 1	880	824	-	829	752	-	-	-	-	-	-	-
Stage 2	793	747	-	891	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	10.9	2.8	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1487	-	-	792	673	1529	-	-
HCM Lane V/C Ratio	0.028	-	-	0.044	0.09	-	-	-
HCM Control Delay (s)	7.5	0	-	9.8	10.9	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	243	269	76	73	41
Future Vol, veh/h	21	243	269	76	73	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	7	10	3	7	4
Mvmt Flow	23	264	292	83	79	45

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	83	0	0	0	713	83
Stage 1	-	-	-	-	667	-
Stage 2	-	-	-	-	46	-
Critical Hdwy	4.37	-	4.2	-	6.57	6.24
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.443	-	2.29	-	4.063	3.336
Pot Cap-1 Maneuver	1370	-	-	-	351	971
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1370	-	-	-	0	971
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.6		9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1370	-	971
HCM Lane V/C Ratio	-	-	0.017	-	0.128
HCM Control Delay (s)	-	-	7.7	-	9.2
HCM Lane LOS	-	-	A	-	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0.4

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	3	4	9	3	7	5	365	6	7	306	5
Future Vol, veh/h	3	3	4	9	3	7	5	365	6	7	306	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	33	13	2	2	2	11	2	17	7	2
Mvmt Flow	3	3	5	10	3	8	6	424	7	8	356	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	820	822	359	823	822	432	362	0	0	435	0	0
Stage 1	375	375	-	444	444	-	-	-	-	-	-	-
Stage 2	445	447	-	379	378	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.53	7.23	6.52	6.22	4.12	-	-	4.27	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.597	3.617	4.018	3.318	2.218	-	-	2.353	-	-
Pot Cap-1 Maneuver	294	309	621	280	309	624	1197	-	-	1049	-	-
Stage 1	646	617	-	572	575	-	-	-	-	-	-	-
Stage 2	592	573	-	621	615	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	284	303	621	271	303	622	1197	-	-	1049	-	-
Mov Cap-2 Maneuver	284	303	-	271	303	-	-	-	-	-	-	-
Stage 1	641	611	-	566	569	-	-	-	-	-	-	-
Stage 2	577	567	-	607	609	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	16	0.1	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1197	-	-	372	349	1049	-	-
HCM Lane V/C Ratio	0.005	-	-	0.031	0.063	0.008	-	-
HCM Control Delay (s)	8	0	-	15	16	8.5	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	17	33	196	50	1	36	72	68	0	56	17
Future Vol, veh/h	26	17	33	196	50	1	36	72	68	0	56	17
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2	3	4	100	2	2	2
Mvmt Flow	32	21	41	242	62	1	44	89	84	0	69	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	332	343	82	331	311	131	91	0	0	173	0	0
Stage 1	81	81	-	220	220	-	-	-	-	-	-	-
Stage 2	251	262	-	111	91	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	621	579	978	622	604	919	1498	-	-	1404	-	-
Stage 1	927	828	-	782	721	-	-	-	-	-	-	-
Stage 2	753	691	-	894	820	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	555	559	976	564	584	919	1497	-	-	1404	-	-
Mov Cap-2 Maneuver	555	559	-	564	584	-	-	-	-	-	-	-
Stage 1	896	827	-	756	697	-	-	-	-	-	-	-
Stage 2	663	668	-	834	819	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	18.4	1.5	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1497	-	-	684	569	1404	-	-
HCM Lane V/C Ratio	0.03	-	-	0.137	0.536	-	-	-
HCM Control Delay (s)	7.5	0	-	11.1	18.4	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	3.2	0	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	48	408	280	118	193	91
Future Vol, veh/h	48	408	280	118	193	91
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	4	2	6	2	3
Mvmt Flow	53	453	311	131	214	101

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	131	0	0	0	860	131
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	107	-
Critical Hdwy	4.12	-	4.12	-	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	2.218	-	4.018	3.327
Pot Cap-1 Maneuver	1454	-	-	-	294	916
Stage 1	-	-	-	-	417	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1454	-	-	-	0	916
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.8		11
HCM LOS			B

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1454	-	916
HCM Lane V/C Ratio	-	-	0.037	-	0.344
HCM Control Delay (s)	-	-	7.6	-	11
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1.5

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	1	17	3	2	5	12	393	5	7	607	27
Future Vol, veh/h	8	1	17	3	2	5	12	393	5	7	607	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	9	1	20	4	2	6	14	462	6	8	714	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1244	1246	730	1255	1260	469	746	0	0	472	0	0
Stage 1	746	746	-	498	498	-	-	-	-	-	-	-
Stage 2	498	500	-	757	762	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	151	174	422	148	170	594	862	-	-	1090	-	-
Stage 1	405	421	-	554	544	-	-	-	-	-	-	-
Stage 2	554	543	-	400	414	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	167	422	136	163	592	862	-	-	1090	-	-
Mov Cap-2 Maneuver	144	167	-	136	163	-	-	-	-	-	-	-
Stage 1	396	416	-	540	530	-	-	-	-	-	-	-
Stage 2	534	529	-	375	409	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21	21.2	0.3	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	862	-	-	255	234	1090	-	-
HCM Lane V/C Ratio	0.016	-	-	0.12	0.05	0.008	-	-
HCM Control Delay (s)	9.2	0	-	21	21.2	8.3	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	0	-	-

Appendix C
Cumulative No Project LOS Calculations

TRAFFIC WORKS LLC

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	5	20	5	0	5	45	65	5	0	75	30
Future Vol, veh/h	15	5	20	5	0	5	45	65	5	0	75	30
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	9	2	2	2	2	2	3	9	100	2	2	9
Mvmt Flow	16	5	22	5	0	5	49	71	5	0	82	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	273	273	100	283	286	73	115	0	0	76	0	0
Stage 1	99	99	-	171	171	-	-	-	-	-	-	-
Stage 2	174	174	-	112	115	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	665	634	956	669	623	989	1468	-	-	1523	-	-
Stage 1	890	813	-	831	757	-	-	-	-	-	-	-
Stage 2	812	755	-	893	800	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	643	611	954	631	601	989	1467	-	-	1523	-	-
Mov Cap-2 Maneuver	643	611	-	631	601	-	-	-	-	-	-	-
Stage 1	858	812	-	802	731	-	-	-	-	-	-	-
Stage 2	779	729	-	866	799	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	9.7	3	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1467	-	-	762	770	1523	-	-
HCM Lane V/C Ratio	0.033	-	-	0.057	0.014	-	-	-
HCM Control Delay (s)	7.5	0	-	10	9.7	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	305	335	90	60	35
Future Vol, veh/h	25	305	335	90	60	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	7	10	3	7	4
Mvmt Flow	27	332	364	98	65	38

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	0	0	880	98
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	54	-
Critical Hdwy	4.37	-	4.2	-	6.57	6.24
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.443	-	2.29	-	4.063	3.336
Pot Cap-1 Maneuver	1352	-	-	-	281	953
Stage 1	-	-	-	-	380	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1352	-	-	-	0	953
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.6		9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1352	-	953
HCM Lane V/C Ratio	-	-	0.02	-	0.108
HCM Control Delay (s)	-	-	7.7	-	9.2
HCM Lane LOS	-	-	A	-	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0.4

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		✣			✣			✣			✣	
Traffic Vol, veh/h	5	5	5	10	5	10	5	455	10	10	360	0
Future Vol, veh/h	5	5	5	10	5	10	5	455	10	10	360	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	33	13	2	2	2	11	2	17	7	2
Mvmt Flow	5	5	5	11	5	11	5	495	11	11	391	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	932	933	391	933	928	504	391	0	0	509	0	0
Stage 1	413	413	-	515	515	-	-	-	-	-	-	-
Stage 2	519	520	-	418	413	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.53	7.23	6.52	6.22	4.12	-	-	4.27	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.597	3.617	4.018	3.318	2.218	-	-	2.353	-	-
Pot Cap-1 Maneuver	247	266	595	235	268	568	1168	-	-	983	-	-
Stage 1	616	594	-	523	535	-	-	-	-	-	-	-
Stage 2	540	532	-	591	594	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	235	260	595	225	262	566	1168	-	-	983	-	-
Mov Cap-2 Maneuver	235	260	-	225	262	-	-	-	-	-	-	-
Stage 1	612	586	-	518	530	-	-	-	-	-	-	-
Stage 2	521	527	-	572	586	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.4	17.8	0.1	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1168	-	-	307	308	983	-	-
HCM Lane V/C Ratio	0.005	-	-	0.053	0.088	0.011	-	-
HCM Control Delay (s)	8.1	0	-	17.4	17.8	8.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	5	40	5	5	5	45	90	5	0	70	20
Future Vol, veh/h	35	5	40	5	5	5	45	90	5	0	70	20
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	3	4	100	2	2	2
Mvmt Flow	38	5	43	5	5	5	49	98	5	0	76	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	292	289	89	310	297	101	99	0	0	103	0	0
Stage 1	88	88	-	198	198	-	-	-	-	-	-	-
Stage 2	204	201	-	112	99	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	660	621	969	642	615	954	1488	-	-	1489	-	-
Stage 1	920	822	-	804	737	-	-	-	-	-	-	-
Stage 2	798	735	-	893	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	634	599	967	592	593	954	1487	-	-	1489	-	-
Mov Cap-2 Maneuver	634	599	-	592	593	-	-	-	-	-	-	-
Stage 1	887	821	-	776	711	-	-	-	-	-	-	-
Stage 2	760	709	-	846	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	10.4	2.4	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1487	-	-	763	678	1489	-	-
HCM Lane V/C Ratio	0.033	-	-	0.114	0.024	-	-	-
HCM Control Delay (s)	7.5	0	-	10.3	10.4	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	510	350	90	75	40
Future Vol, veh/h	35	510	350	90	75	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	4	2	6	2	3
Mvmt Flow	38	554	380	98	82	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	0	0	935	98
Stage 1	-	-	-	-	859	-
Stage 2	-	-	-	-	76	-
Critical Hdwy	4.12	-	4.12	-	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	2.218	-	4.018	3.327
Pot Cap-1 Maneuver	1495	-	-	-	265	955
Stage 1	-	-	-	-	373	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1495	-	-	-	0	955
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.5		9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1495	-	955
HCM Lane V/C Ratio	-	-	0.025	-	0.131
HCM Control Delay (s)	-	-	7.5	-	9.3
HCM Lane LOS	-	-	A	-	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	5	20	5	5	5	15	450	5	10	640	5
Future Vol, veh/h	0	5	20	5	5	5	15	450	5	10	640	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	0	5	22	5	5	5	16	489	5	11	696	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1250	1251	698	1262	1251	496	701	0	0	499	0	0
Stage 1	720	720	-	528	528	-	-	-	-	-	-	-
Stage 2	530	531	-	734	723	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	150	172	440	147	172	574	896	-	-	1065	-	-
Stage 1	419	432	-	534	528	-	-	-	-	-	-	-
Stage 2	533	526	-	412	431	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	140	164	440	131	164	572	896	-	-	1065	-	-
Mov Cap-2 Maneuver	140	164	-	131	164	-	-	-	-	-	-	-
Stage 1	409	425	-	519	513	-	-	-	-	-	-	-
Stage 2	509	511	-	380	424	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.9	25.3	0.3	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	896	-	-	329	194	1065	-	-
HCM Lane V/C Ratio	0.018	-	-	0.083	0.084	0.01	-	-
HCM Control Delay (s)	9.1	0	-	16.9	25.3	8.4	0	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0	-	-

Appendix D

Cumulative Plus Project LOS Calculations

TRAFFIC WORKS LLC

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	7	20	43	10	5	45	65	11	0	75	30
Future Vol, veh/h	15	7	20	43	10	5	45	65	11	0	75	30
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	9	2	2	2	2	2	3	9	100	2	2	9
Mvmt Flow	16	8	22	47	11	5	49	71	12	0	82	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	282	279	100	288	289	77	115	0	0	83	0	0
Stage 1	99	99	-	174	174	-	-	-	-	-	-	-
Stage 2	183	180	-	114	115	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	656	629	956	664	621	984	1468	-	-	1514	-	-
Stage 1	890	813	-	828	755	-	-	-	-	-	-	-
Stage 2	803	750	-	891	800	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	626	606	954	625	599	984	1467	-	-	1514	-	-
Mov Cap-2 Maneuver	626	606	-	625	599	-	-	-	-	-	-	-
Stage 1	858	812	-	799	729	-	-	-	-	-	-	-
Stage 2	759	724	-	862	799	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	11.2	2.8	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1467	-	-	744	640	1514	-	-
HCM Lane V/C Ratio	0.033	-	-	0.061	0.099	-	-	-
HCM Control Delay (s)	7.5	0	-	10.2	11.2	0	-	-
HCM Lane LOS	A	A	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	305	335	94	86	47
Future Vol, veh/h	27	305	335	94	86	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	7	10	3	7	4
Mvmt Flow	29	332	364	102	93	51

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	102	0	0	0	889	102
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	59	-
Critical Hdwy	4.37	-	4.2	-	6.57	6.24
Critical Hdwy Stg 1	-	-	-	-	5.57	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.443	-	2.29	-	4.063	3.336
Pot Cap-1 Maneuver	1348	-	-	-	277	948
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1348	-	-	-	0	948
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.6		9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1348	-	948
HCM Lane V/C Ratio	-	-	0.022	-	0.152
HCM Control Delay (s)	-	-	7.7	-	9.5
HCM Lane LOS	-	-	A	-	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0.5

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	5	5	10	5	10	5	458	10	10	379	5
Future Vol, veh/h	6	5	5	10	5	10	5	458	10	10	379	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	33	13	2	2	2	11	2	17	7	2
Mvmt Flow	7	5	5	11	5	11	5	498	11	11	412	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	958	960	415	960	957	507	417	0	0	513	0	0
Stage 1	436	436	-	518	518	-	-	-	-	-	-	-
Stage 2	522	524	-	442	439	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.53	7.23	6.52	6.22	4.12	-	-	4.27	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.23	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.597	3.617	4.018	3.318	2.218	-	-	2.353	-	-
Pot Cap-1 Maneuver	237	257	576	226	258	566	1142	-	-	980	-	-
Stage 1	599	580	-	521	533	-	-	-	-	-	-	-
Stage 2	538	530	-	574	578	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	225	251	576	216	252	564	1142	-	-	980	-	-
Mov Cap-2 Maneuver	225	251	-	216	252	-	-	-	-	-	-	-
Stage 1	595	571	-	516	528	-	-	-	-	-	-	-
Stage 2	519	525	-	555	569	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.2	18.3	0.1	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1142	-	-	290	298	980	-	-
HCM Lane V/C Ratio	0.005	-	-	0.06	0.091	0.011	-	-
HCM Control Delay (s)	8.2	0	-	18.2	18.3	8.7	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-	-

Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	21	40	199	53	5	45	90	71	0	70	20
Future Vol, veh/h	35	21	40	199	53	5	45	90	71	0	70	20
Conflicting Peds, #/hr	0	0	1	1	0	0	1	0	0	0	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	3	4	100	2	2	2
Mvmt Flow	38	23	43	216	58	5	49	98	77	0	76	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	354	361	89	355	333	136	99	0	0	175	0	0
Stage 1	88	88	-	234	234	-	-	-	-	-	-	-
Stage 2	266	273	-	121	99	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	601	566	969	600	587	913	1488	-	-	1401	-	-
Stage 1	920	822	-	769	711	-	-	-	-	-	-	-
Stage 2	739	684	-	883	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	535	545	967	539	565	913	1487	-	-	1401	-	-
Mov Cap-2 Maneuver	535	545	-	539	565	-	-	-	-	-	-	-
Stage 1	885	821	-	741	685	-	-	-	-	-	-	-
Stage 2	648	659	-	819	812	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	18.2	1.6	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1487	-	-	661	549	1401	-	-
HCM Lane V/C Ratio	0.033	-	-	0.158	0.509	-	-	-
HCM Control Delay (s)	7.5	0	-	11.5	18.2	0	-	-
HCM Lane LOS	A	A	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	2.9	0	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	56	510	350	135	208	101
Future Vol, veh/h	56	510	350	135	208	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	4	2	6	2	3
Mvmt Flow	61	554	380	147	226	110

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	147	0	0	0	1030	147
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	122	-
Critical Hdwy	4.12	-	4.12	-	6.52	6.23
Critical Hdwy Stg 1	-	-	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	2.218	-	4.018	3.327
Pot Cap-1 Maneuver	1435	-	-	-	233	897
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-		-		
Mov Cap-1 Maneuver	1435	-	-	-	0	897
Mov Cap-2 Maneuver	-	-	-	-	0	-
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-

Approach	EB	NB	SB
HCM Control Delay, s	0.8		11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBL	NBT	EBL	EBR	SBLn1
Capacity (veh/h)	-	-	1435	-	897
HCM Lane V/C Ratio	-	-	0.042	-	0.374
HCM Control Delay (s)	-	-	7.6	-	11.4
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1.8

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	5	20	5	5	5	15	483	5	10	737	29
Future Vol, veh/h	8	5	20	5	5	5	15	483	5	10	737	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	4	4	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	9	5	22	5	5	5	16	525	5	11	801	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1405	1406	817	1416	1418	532	833	0	0	534	0	0
Stage 1	839	839	-	564	564	-	-	-	-	-	-	-
Stage 2	566	567	-	852	854	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	117	139	376	115	137	547	800	-	-	1034	-	-
Stage 1	360	381	-	510	508	-	-	-	-	-	-	-
Stage 2	509	507	-	354	375	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	108	132	376	101	130	545	800	-	-	1034	-	-
Mov Cap-2 Maneuver	108	132	-	101	130	-	-	-	-	-	-	-
Stage 1	350	373	-	494	492	-	-	-	-	-	-	-
Stage 2	484	491	-	322	368	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.9	31.1	0.3	0.1
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	800	-	-	200	154	1034	-	-
HCM Lane V/C Ratio	0.02	-	-	0.179	0.106	0.011	-	-
HCM Control Delay (s)	9.6	0	-	26.9	31.1	8.5	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.3	0	-	-