Jifco, Inc.
CEQA Addendum

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PREPARED BY FEHR & PEERS

1.0 INTRODUCTION

This Addendum was prepared in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. This document has been prepared to serve as an Addendum to the previously certified Initial Study / Mitigated Negative Declaration (IS/MND) for the Scannell Properties Industrial Project (Original Project), adopted by the Lathrop City Council on November 8, 2021 (Resolution #21-4985). The City of Lathrop is the lead agency for the environmental review of the proposed project modifications submitted by Jifco, Inc. (Modified Project).

This Addendum addresses the proposed modifications in relation to the previous environmental review prepared for the Scannell Properties Industrial Project. CEQA Guidelines Section 15164 describes the circumstances that require preparation of an Addendum as:

> *The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*
>
> *…..A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record.*

Information and technical analyses from the Scannell Properties Industrial Project IS/MND are utilized throughout this Addendum. Relevant passages from the Scannell Properties Industrial Project IS/MND are cited and available for review at:

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1.1 BACKGROUND AND PURPOSE OF THE EIR ADDENDUM

In determining whether an Addendum is the appropriate document to analyze the proposed modifications to the project and its approval, CEQA Guidelines Section 15164 (Addendum to an EIR or Negative Declaration) states:

a) *The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*

b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

d) The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's required findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.

1.2 BASIS FOR DECISION TO PREPARE AN ADDENDUM

When an environmental impact report has been certified for a project, Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15164 set forth the criteria for determining whether a subsequent EIR, subsequent negative declaration, addendum, or no further documentation be prepared in support of further agency action on the project. Under these Guidelines, a subsequent EIR or negative declaration shall be prepared if any of the following criteria are met:

(a) When an EIR has been certified or negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, and addendum, or no further documentation.

Based on review of the Modified Project, no new significant environmental effects, no substantial increases in the severity of previously identified environmental effects, and no new information of substantial importance that would require major changes to the Scannell Properties Industrial Project IS/MND pursuant to CEQA Guidelines Section 15162(a) have been identified. Therefore, a Subsequent Negative Declaration is not warranted for this project.

The Modified Project would only require minor changes to the Scannell Properties Industrial Project IS/MND to address the incremental change in impacts between development of the site with the previously approved Scannell Properties Industrial Project characteristics and development of the site as currently proposed. In general, it is anticipated that all impacts would remain the same under the Modified Project when compared to the Original Project previously analyzed in the Scannell Properties Industrial Project IS/MND.

As demonstrated in the environmental analysis provided in Section 3.0 (Environmental Analysis), the proposed changes do not meet the criteria for preparing a subsequent EIR or negative declaration. An addendum is appropriate here because, as explained in Section 3.0, none of the conditions calling for preparation of a subsequent EIR or negative declaration have occurred.

2.0 PROJECT DESCRIPTION

This section provides a detailed description of the Original Project and proposed Modified Project. The reader is referred to Section 3.0 (Environmental Analysis) for the analysis of environmental effects of the proposed Modified Project in relation to the analysis contained in the previously certified Scannell Properties Industrial Project IS/MND.

2.1 PROJECT LOCATION

The Project site is located approximately 775 feet east of the Lathrop Road/Mckinley Avenue intersection in the City of Lathrop. The Project site area (which includes APN's: 198-040-31, 198-040-33 & 198-040-34) is bounded by Lathrop Road and existing industrial uses to the north, an existing freight transportation business (UPS Freight) and food product manufacturing and warehouse business (Gehl Food & Beverage) to the west, an existing water tank and concrete manufacturing business (Con Fab California Corporation) to the east, and an existing metal recycling business (AMG Resources Corporation) to the south. Primary access to the future plan area development will be from Lathrop Road. Refer to Figure 3, Vicinity Map – Modified Project.

Figure 1 – Site Photographs



Frontage of Property Looking East



Frontage of Property Looking West



Frontage of Property Looking South

2.2 SURROUNDING LAND USES

The table below provides the surrounding General Plan land use designations and zoning designations.

Table 1 - Surrounding Land Uses

	General Plan Land Use Designations	Zoning Designation
North	LI, Limited Industrial	IL, Limited Industrial
South	GI, General Industrial	IG, General Industrial
East	GI, General Industrial	IG, General Industrial
West	SC, Service Commercial / GI, General Industrial	CS, Commercial Service / IG, General Industrial

2.3 SITE CHARACTERISTICS

The Project site consists of raw undeveloped land that is mostly flat terrain and includes an elevation range of approximately 16 to 23 feet above sea level for the entire site. The site is surrounded by industrial development to the north, east, south, and west with Lathrop Road at its north end border.

2.4 PROJECT CHARACTERISTICS AND DESCRIPTION

The Scannell Properties Industrial Project (Original Project) was approved by the City Council at their November 8, 2021 and December 13, 2021, meetings per Resolution No. 21-4985, 21-4986, 21-4987, and 21-4988, and Ordinance No. 21-429. The Transportation Impacts identified in the IS/MND associated with this project were based upon a Transportation Analysis prepared by Fehr & Peers, dated September 9, 2021.

Since the IS/MND was adopted in 2021, the City has received a new Site Plan Review (SPR) Application for APN: 198-040-33 in August 2025. The site area for Building 3 on APN 198-040-34 will not be modified as part of the new SPR application and will remain as previously approved in addition to the on-site stormwater retention basin, per the Original Project. A Lot Line Adjustment (LLA) was approved by the City in July 2025 to accommodate the area proposed for development under the SPR Application (APN: 198-040-33), separate from the Building 3 and retention basin parcels (APN: 198-030-34 and 198-040-31).

To supplement the new SPR application, the City received and evaluated an updated Traffic Memorandum, dated May 4, 2026, prepared by Fehr & Peers, which serves to update the Transportation Analysis prepared in 2021 and as analyzed in the Original Project IS/MND. Existing conditions within this area of Lathrop have generally remained the same over the past five years since the IS/MND was adopted in 2021; however, the Project site is now zoned as General Industrial with a General Plan land use designation of General Industrial, rather than the former Commercial Service zoning and Service Commercial General Plan land use designation. Additionally, the SPR application proposes manufacturing facilities for the site in lieu of warehouse buildings 1 and 2 approved under the Original Project, which has necessitated a re-evaluation of the project impact on Transportation.

Following the adoption of the Scannell Properties Industrial Project IS/MND, the City completed a comprehensive update to its General Plan in September 2022. As part of this General Plan Update, a comprehensive evaluation of the City's transportation network and Citywide traffic analysis was completed and was then included as part of the General Plan EIR.

2.5 ORIGINAL PROJECT

The information from the Original Project provided below lists what was covered under the original Scannell Properties Industrial Project IS/MND (dated September 9, 2021) when the City Council considered the project at their November and December meetings in 2021.

General Plan Amendment, Rezone, Vesting Tentative Parcel Map, and Site Plan Review

General Plan Amendment. In 2021, the Lathrop General Plan designated the project site with a Service Commercial (SC) designation. The Original Project required a General Plan Amendment (GPA) to replace the SC designation with the General Industrial (GI) land use designation because the anticipated uses for the site are considered to be industrial in nature. The City's General Plan states that General Industrial uses are intended to provide opportunities for large-scale industries requiring substantial acreage, with access to rail and freeway facilities. The General Plan Amendment became effective when the City Council approved the amendment on November 8, 2021 (Resolution No. 21-4986).

Rezone. In 2021, the Lathrop Zoning Map identified the project site as having a Commercial Service (CS) zoning designation. The Project required a rezone to the General Industrial (IG) zoning designation because the anticipated uses for the site are considered to be industrial type in nature. The IG zoning designation provides for a full range of manufacturing, industrial processing, general service, and distribution use, which is intended for this site. The first hearing for the Rezone was approved at the November 8, 2021, City Council meeting. The Rezone's second reading was held and approved by the City Council on December 13, 2021 (Ordinance No. 21-429).

Vesting Tentative Parcel Map. The original Scannell Properties Industrial Project in 2021 was for a proposed industrial development located at the project site area involving approximately 18.2 acres of land. The original project included a Vesting Tentative Parcel Map request to allow for the creation of four (4) parcels to accommodate the construction of three (3) new industrial warehouse buildings that total 191,160± square feet and one stormwater retention basin. The Vesting Tentative Parcel Map request was approved by the City Council on November 8, 2021, and the Map was officially recorded on December 16, 2022, thereby creating three separate developable parcels and a fourth parcel to accommodate a stormwater retention basin that would serve the development (Resolution No. 21-4988).

Site Plan Review. The Original Project included three (3) new industrial warehouse buildings that total 191,160± square feet in size with project related physical improvements such as: adequate parking, loading areas, and a stormwater retention/infiltration basin, which are further discussed below. The Site Plan Review request was approved by the City Council on November 8, 2021 (Resolution No. 21-4987).

Proposed Land Uses

The Project site consists of three (3) parcels that total approximately 18.2 acres in size. The proposed land uses include industrial warehouse uses and accessory office uses. The first industrial warehouse building (Building 1) would be located in the northern portion of the Project site and have a building footprint of approximately 70,200 square feet on a 6.54-acre site. Building 2 would be located in the southwest portion of the Project site and have a building footprint of approximately 78,400 square feet on a 5.58-acre site . Building 3 would be located in the southeast portion of the Project site and have a building footprint of approximately 42,560 square feet on a 3.50-acre site. The total building square footage for all buildings would be 191,160 square feet. Approximately 10% (approximately 19,116 square feet) of the building square footage would be dedicated to office uses, while the remainder of the building square footage (approximately 172,004 square feet) would be dedicated to warehouse uses.

Employees and Hours of Operation

The project anticipates approximately five (5) employees per 10,000 square feet of building, working between the hours of operation of 7am-9pm. Pick up and deliveries are scheduled to occur between 8am-5pm Monday-Saturday.

Parking

Automobile parking would be available surrounding each of the Project buildings. Parking for trucks/trailers would be available in the center portion of the Project site. The Project site would contain approximately 236 standard automobile parking spaces, 14 “accessible” automobile parking spaces (i.e., a total of 250 automobile parking spaces), and an additional 101 truck/trailer parking spaces. This number of parking spaces more than exceeds the requirements for parking as established by Chapter 17.76 of the City Municipal Code.

Landscaping

Landscaping will be provided throughout the subject property. Landscaped trees and bushes would be provided surrounding the Project site to provide screening of the Project site from the outside; shrubs would located along the trash enclosures as additional screening; ornamental grasses and trees would be provided within the parking lot to provide canopy and aesthetic improvements; and additional trees and ground cover would surround the stormwater retention/infiltration basin.

Security fencing with gates would be provided at Project entrances and exits. Additionally, the Project includes on-site surface improvements such as pavement and curbs.

Access

The Project site will have two access points, as follows:

- Access Point #1 (Lathrop Road): the access point is located at the northwest corner of the Project site connecting to Lathrop Road. With the access point being on the west side of the property it maximizes the spacing between the other existing driveways and intersections along Lathrop Road. The access point will allow right-in/right turn movements only since left turn movements are prohibited by the existing raised center median in Lathrop Road. Lathrop Road consists of two travel lanes plus a shoulder. Vehicles entering the Project site at this access point from Lathrop Road can utilize the right lane while other vehicles can continue through in the left lane consistent with how access works for the existing development to the west.

- Access Point #2 (D Street): the access point is located near the northeast corner of the Project site connecting to Street D. With the access point being at the south end of Street D it maximizes the distance from Lathrop Road therefore allowing the maximum amount of queuing possible if/when needed. The access point connects the Project to the existing D Street/Lathrop Road intersection which allows turn movements in all directions including an existing westbound turn pocket that vehicles entering the Project site may utilize.

All emergency vehicles arriving to and from the proposed Project would be able to enter via Lathrop Road and Access Point #2 (D Street). All accesses points would be designed to City standards that accommodate turning requirements for fire trucks. These multiple entry/exit points provide flexibility for emergency vehicles to access or evacuate from multiple directions during an emergency. The access points would be designed for vehicle and pedestrian safety based on City standards taking into account the swept path of the vehicles, sidewalks with curb ramps, site distance, and any other relevant City standards.

Circulation within the site consists of vehicular access to all sides of each building, creating a contiguous looping street pattern. A road would be installed adjacent to the proposed stormwater basin to allow for access and maintenance as needed.

Infrastructure

On-Site Utility Improvements (Potable Water, Sanitary Sewer, Storm Drainage, and Dry Utilities)

Potable water and sanitary sewer connections to the Project site would occur via the nearby connection from the City of Lathrop water system. A new sewer pump station would be installed on-site with a force main that would connect to the City's existing force main at the intersection of Lathrop Road and McKinley Avenue. Stormwater drainpipes would discharge into the 2.6-acre stormwater retention/infiltration basin located in the far southeastern portion of the Project site. The stormwater retention/infiltration basin has been designed according to the City of Lathrop's design and construction standards, and consistent the relevant multi-agency postconstruction stormwater standards manual.

The Project would extend dry utilities (electric, gas, cable, and phone) from existing facilities along Lathrop Road to each building as needed.

Off-Site Improvements

The Project includes driveway/access improvements on Lathrop Road along the project boundary, as well as to make a connection to existing D Street.

2.6 MODIFIED PROJECT

This section provides a description of the proposed Modified Project. The description below focuses only on where revisions, or amendments, to the Original Project are proposed. If any section of the Original Project is not specifically mentioned or described in this Modified Project description, such sections of the Original Project remain the same as written above. The reader is referred to Section 3.0 (Environmental Analysis) for the analysis of environmental effects of the proposed modifications in relation to the analysis contained in the previously adopted Scannell Properties Industrial Project IS/MND.

In summary, the Modified Project consists of the following:

- Construction of five (5) buildings on one of the three developable parcels, including, one (1) two-story office building, and four (4) manufacturing buildings that total 126,965 square feet in size, in lieu of the previously approved two (2) industrial warehouse buildings (Building 1 and 2 intended for APN: 198-040-33). Building 3 intended for APN: 198-040-34 and the on-site stormwater retention basin intended for APN: 198-040-31 would remain as previously approved under the original project.

A more detailed description of the Modified Project is provided below.

Site Plan Review. The Modified Project, as submitted by Jifco, Inc. (Site Plan Review No. SPR-25-113) will include the construction of five (5) buildings, one (1) two-story office building and four (4) manufacturing buildings that total 126,965 square feet in lieu of the previously approved two (2) industrial warehouse buildings (Buildings 1 and 2). The Modified Project is located at APN: 198-040-33.

Proposed Land Uses

Jifco, Inc. manufactures pipes for private and municipal water agencies. The manufacturing buildings have different features including modifying pipe that is delivered to the site, coating, cutting, welding flanges, and angles, etc. Additionally, the Modified Project includes outdoor storage of finished material, located at the northeast corner of the Modified Project site.

Specifically, the Modified Project would include the construction of the following buildings:

Table 2 – Proposed Buildings

Building	Purpose	Square Footage
Building 1	Two (2) story Office Building with Warehouse / Storage Area	16,463 square feet
Building 2	Warehouse, Fabrication / Welding Area, and Offices	43,196 square feet including 2,887 sq. ft. of covered area
Buildings 3 and 4	Fabrication Area (Sanding, Coating, and Lining of Pipes), Storage, Offices, and Yard Bay	44,457 square feet including 22,998 square feet of covered area
Building 5	Warehouse and Fabrication / Welding Area	22,849 square feet
Total (Gross Building Area)		**126,965 square feet**

Building 3 intended for APN: 198-040-34 and the on-site stormwater retention basin intended for APN: 198-040-31 would remain as previously approved under the original project.

Employees and Hours of Operation

It is expected that the Modified Project will employ approximately sixty-five (65) people with the proposed office building accommodating approximately fifteen (15) administrative staff members, and the proposed manufacturing buildings accommodating approximately fifty (50) employees.

Employees would work in two (2) shifts, between five (5) and six (6) days per week. The morning shift is from 5:30 A.M. to 2:30 P.M., and the night shift is from 3:30 P.M. to 12:30 A.M.

Parking

Section 17.76.020(D)(3) of the Lathrop Municipal Code (LMC) includes the following off-street parking requirements:

- Offices: One (1) off-street parking space for each 400 square feet of floor area
- Manufacturing, Processing, and Packaging: Two (2) parking spaces for each 1,000 square feet of floor area.
- Warehouse, Storage and Distribution: One (1) parking space for each 2,000 square feet-of-floor area.

Therefore, the Proposed Project is required to provide approximately twenty-nine (29) off-street parking spaces for office area, one (1) off-street parking space for warehouse area, and eighty-eight (88) off-street parking spaces for manufacturing area, for a total of 118 required off-street parking spaces.

Designated automobile parking areas will be available surrounding the proposed office and storage building (Building 1). Pursuant to LMC Section 17.76.020(D)(12), an alternative parking formula may be submitted for consideration and approval by the Planning Commission. A Parking Assessment Letter, dated May 13, 2026, was prepared and reviewed by City staff for the Modified Project. The Parking Assessment Letter requested a reduction of required automobile parking spaces. Specifically, the letter requested an off-street parking requirement of one (1) parking space for each 1,350 square feet of floor area for Manufacturing uses. The Modified Project site proposes approximately 76 standard automobile parking spaces, four (4) "accessible" automobile parking spaces, and 17 electric vehicle parking spaces, for a total of 97 automobile parking spaces.

Landscaping

Landscaping will be provided throughout the subject property. Per the Modified Project Plans (Appendix A), 51,151 square feet of landscaping, or 10% of the overall Modified Project site, is proposed. Trees and shrubs will be provided along the Lathrop Road project frontage area to screen the Project site from the roadway. Landscaping will also be provided to screen the trash enclosure from public view from Lathrop Road, located to the north of the Project site. Additionally, trees, shrubs, and groundcover area will be provided throughout the parking lot to provide canopy and aesthetic improvements.

Security fencing with gates will be provided at Modified Project entrances and exits. Additionally, a 10-foot-tall precast wall will be provided around the outdoor gravel storage yard area at the northeast corner of the Project site. The Modified Project proposes 333,115 square feet of hardscaping, which covers approximately 66% of the Project site. See Appendix A (Project Plans) for reference.

Access

The Modified Project will provide two (2) access points via a two-way driveway located along Lathrop Road and a two-way driveway located along D Street. Circulation within the site consists of vehicular access to all sides of each building, thereby creating a contiguous looping street pattern.

Emergency vehicles arriving to and from the Modified Project will be able to enter via the primary access point on Lathrop Road or the secondary access point on D Street. Additionally, an emergency vehicle access gate will be provided that connects to APN: 198-040-34. An additional emergency access gate for vehicles to utilize during an emergency is also provided adjacent to the west side of Building 1.

All access points will be designed to meet City standards to accommodate turning requirements for fire trucks. These multiple entry/exit points provide flexibility for emergency vehicles to access or evacuate from multiple directions during an emergency. The access points will be designed for vehicle and pedestrian safety based on City standards taking into account the swept path of the vehicles, sidewalks with curb ramps, site distance, and any other relevant City standards.

Building Elevations

The proposed office building under the Modified Project will be constructed with the use of metal panels and metal roofing material. Two (2) glass sectional garage doors will be installed on the north side of the office building, along with an aluminum storefront entrance. Two (2) metal roll-up doors are also proposed on the south side of the office building.

The four (4) manufacturing buildings, labeled as Buildings 2 through 5 on the Project Plans (Appendix A), will also be constructed using metal panels and metal roofing material. A 45'-0" x 20'-0" metal roll-up door is proposed on the south side of Building 2, along with a 50'-0" x 20'-0" barn door on the north side of the building. Buildings 3 and 4 will include roll-up doors in varying sizes across all elevations, and a 50'-0" x 20'-0" metal industrial door on the east side of each building. Building 5 will provide a roll-up door on the south side of the building. See Appendix A (Modified Project Plans) for reference.

Lighting

Lighting will be provided throughout the Modified Project site, including throughout the parking lot and around each building on-site. Parking lots, driveways, and trash enclosure areas will be illuminated during the hours of darkness with a minimum maintained one foot-candle of light and an average not to exceed four foot-candles of light, in accordance with Lathrop Municipal Code Section 17.76.030. See Appendix A (Project Plans) for reference.

Infrastructure

On-Site Utility Improvements (Potable Water, Sanitary Sewer, Storm Drainage, and Dry Utilities)

Potable water connection to the Modified Project site will occur via an 8" domestic water line that connects to the City of Lathrop water system. Additionally, the Modified Project will provide a 12" fire water line that connects to the City of Lathrop's water main along Lathrop Road.

A new sewer pump station, located at the northwest corner of the Modified Project site, would be installed with an 8" force main that would connect to the City's existing force main at the intersection of Lathrop Road and McKinley Avenue.

The Modified Project will provide a 36" stormwater drainpipe that discharges into the on-site stormwater retention basin located on "Parcel 4," as shown on the Project Plans (Appendix A). The stormwater retention/infiltration basin will be designed according to the City of Lathrop's design and construction standards, and consistent the relevant multi-agency postconstruction stormwater standards manual.

The Modified Project will extend dry utilities (electric, gas, cable, and phone) from existing facilities along Lathrop Road to each building as needed. See Appendix A (Project Plans) for reference.

Off-Site Improvements

The Modified Project includes driveway/access improvements on Lathrop Road along the project boundary, as well as making a connection to existing D Street.

Figure 2. Vicinity Map – Original Project

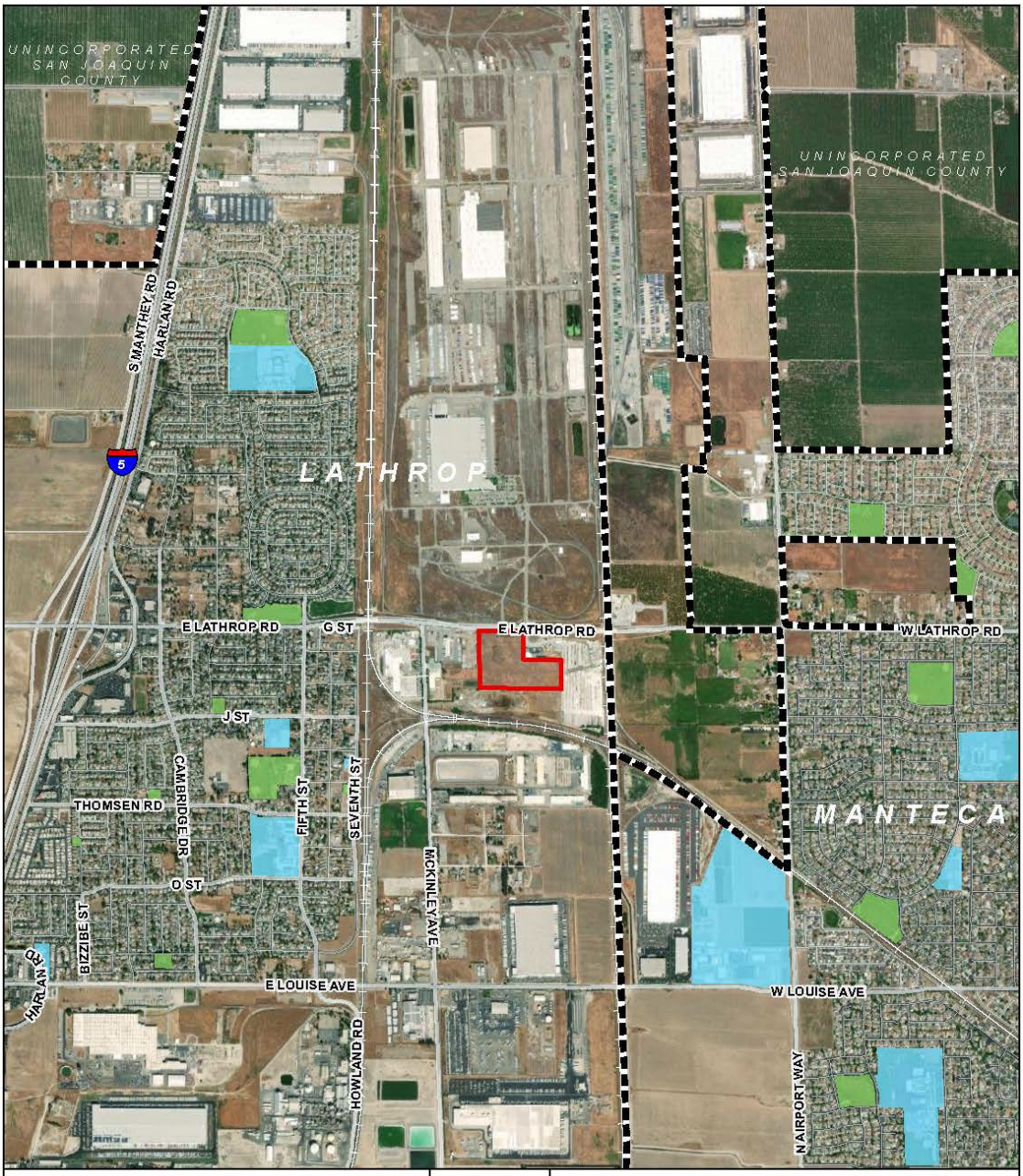


Figure 3. Vicinity Map – Modified Project

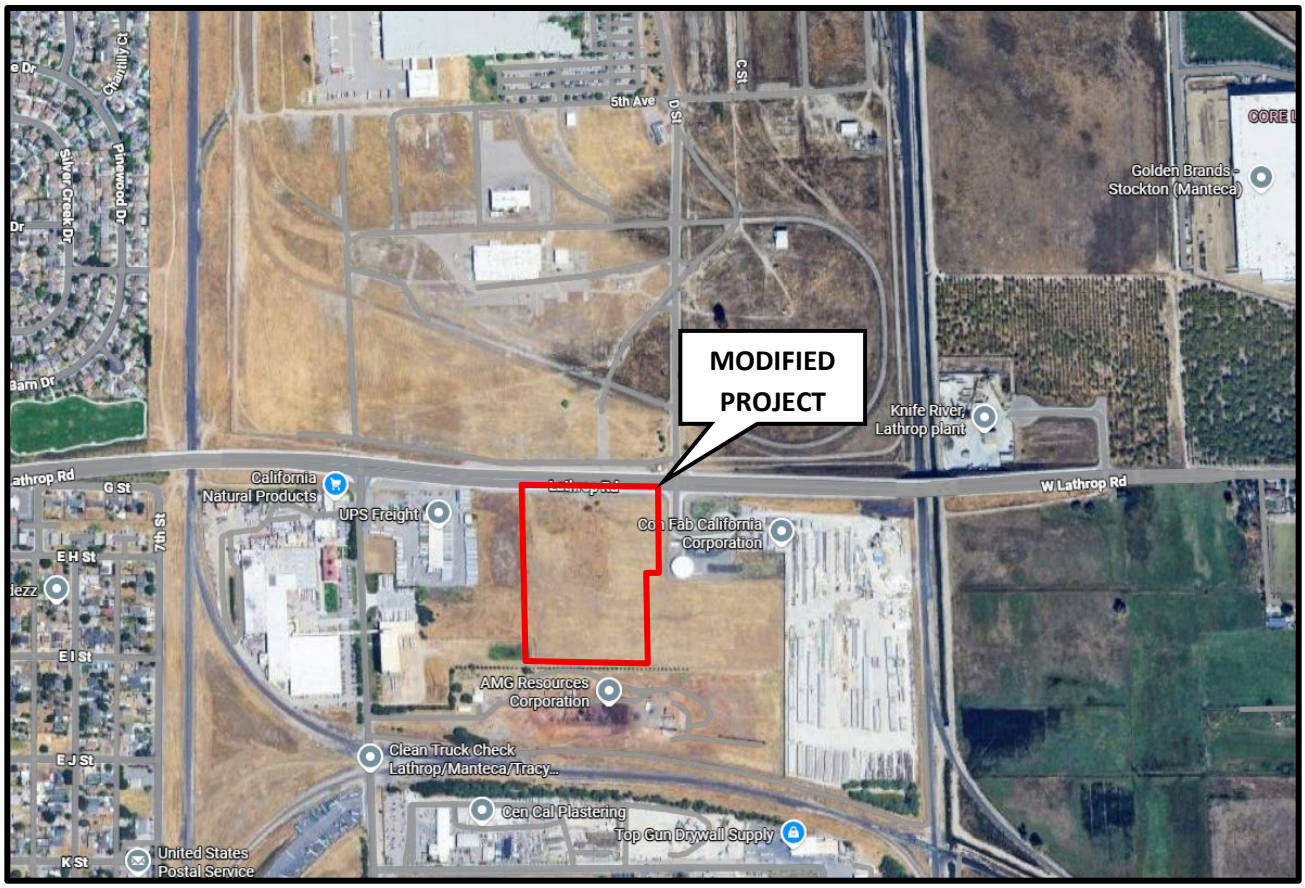


Figure 4. Site Plan – Original Project

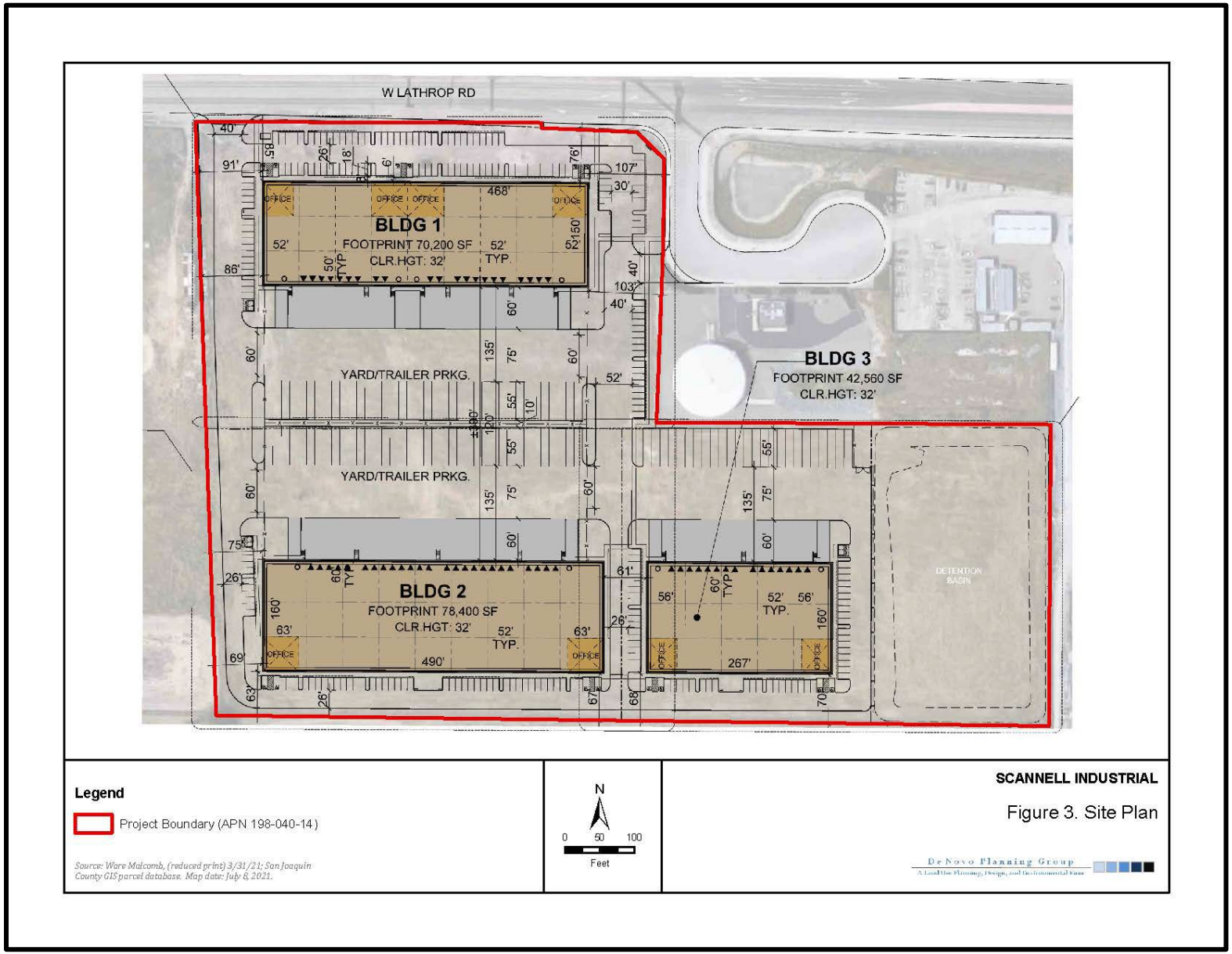


Figure 5. Site Plan – Modified Project

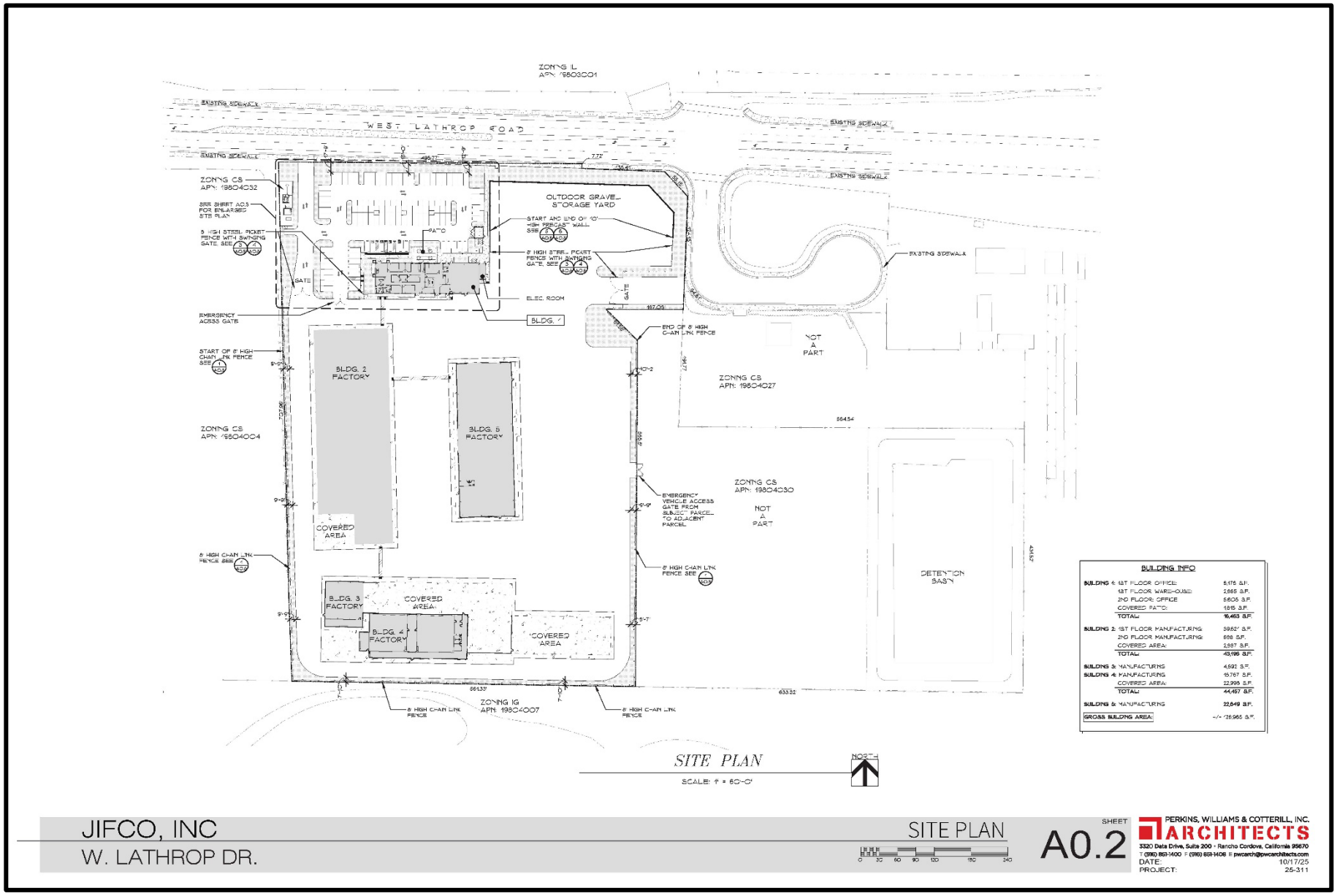


Figure 6. Office Building Elevations

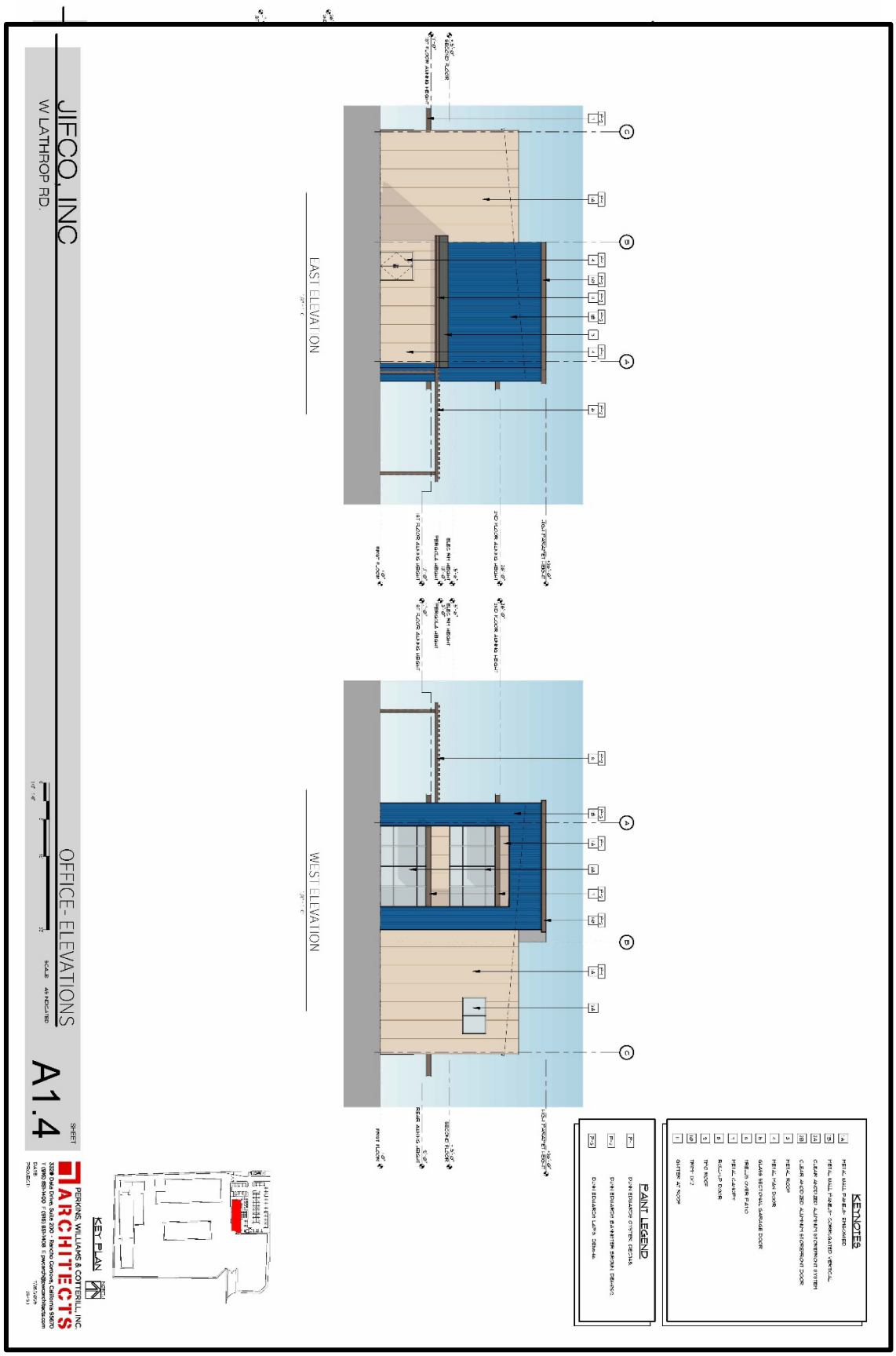
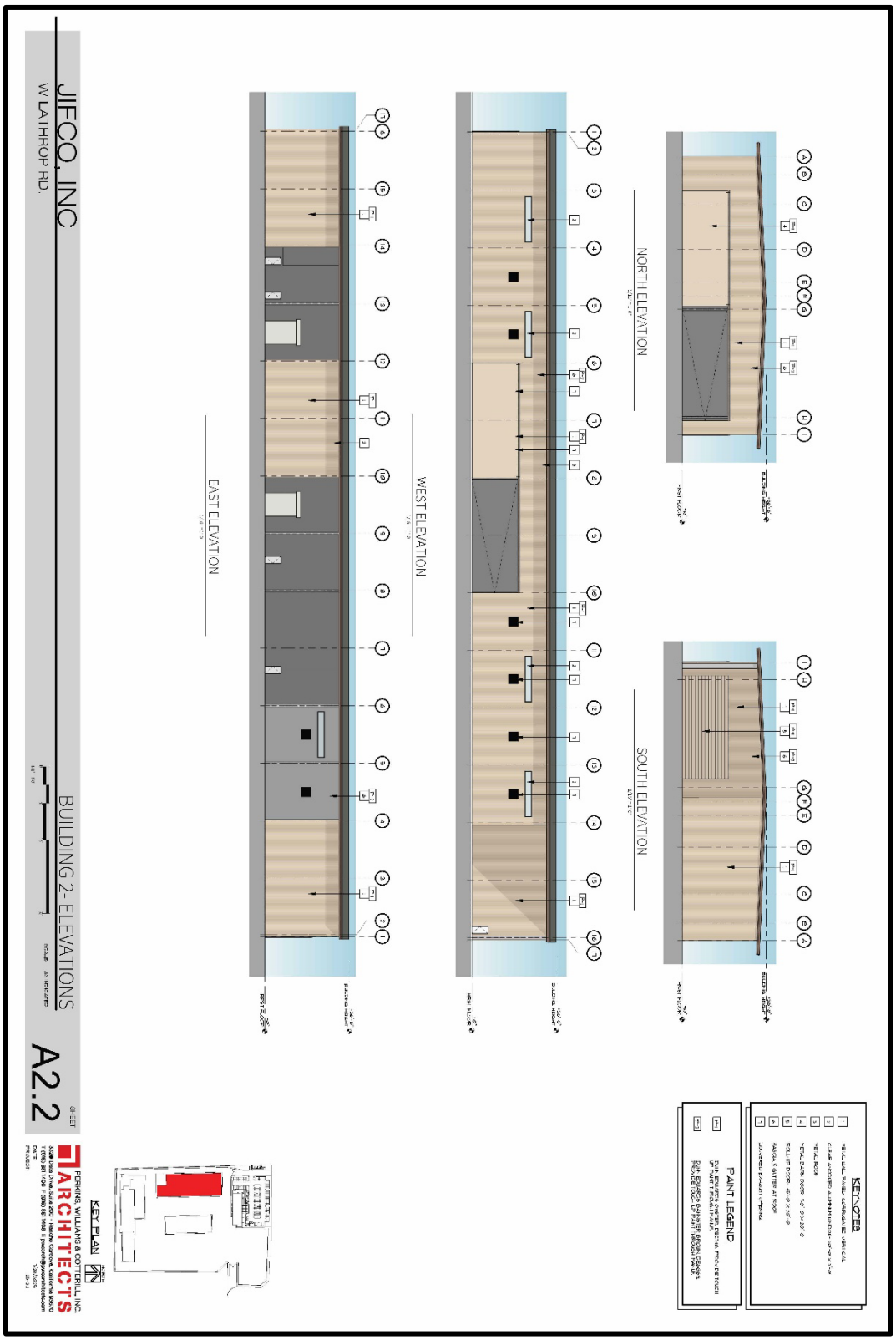


Figure 7. Building 2 Elevations



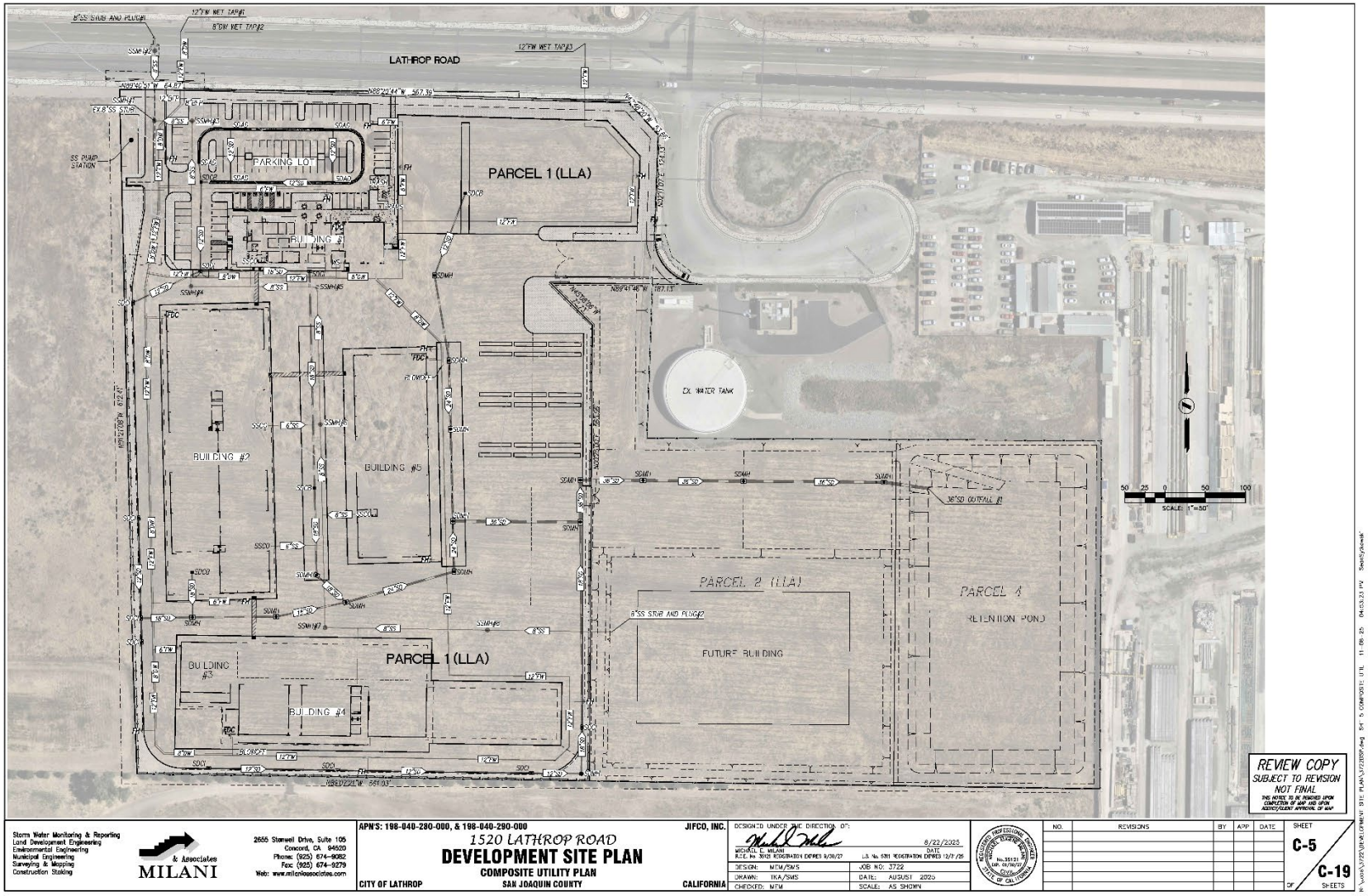


Figure 8. Utility Plan

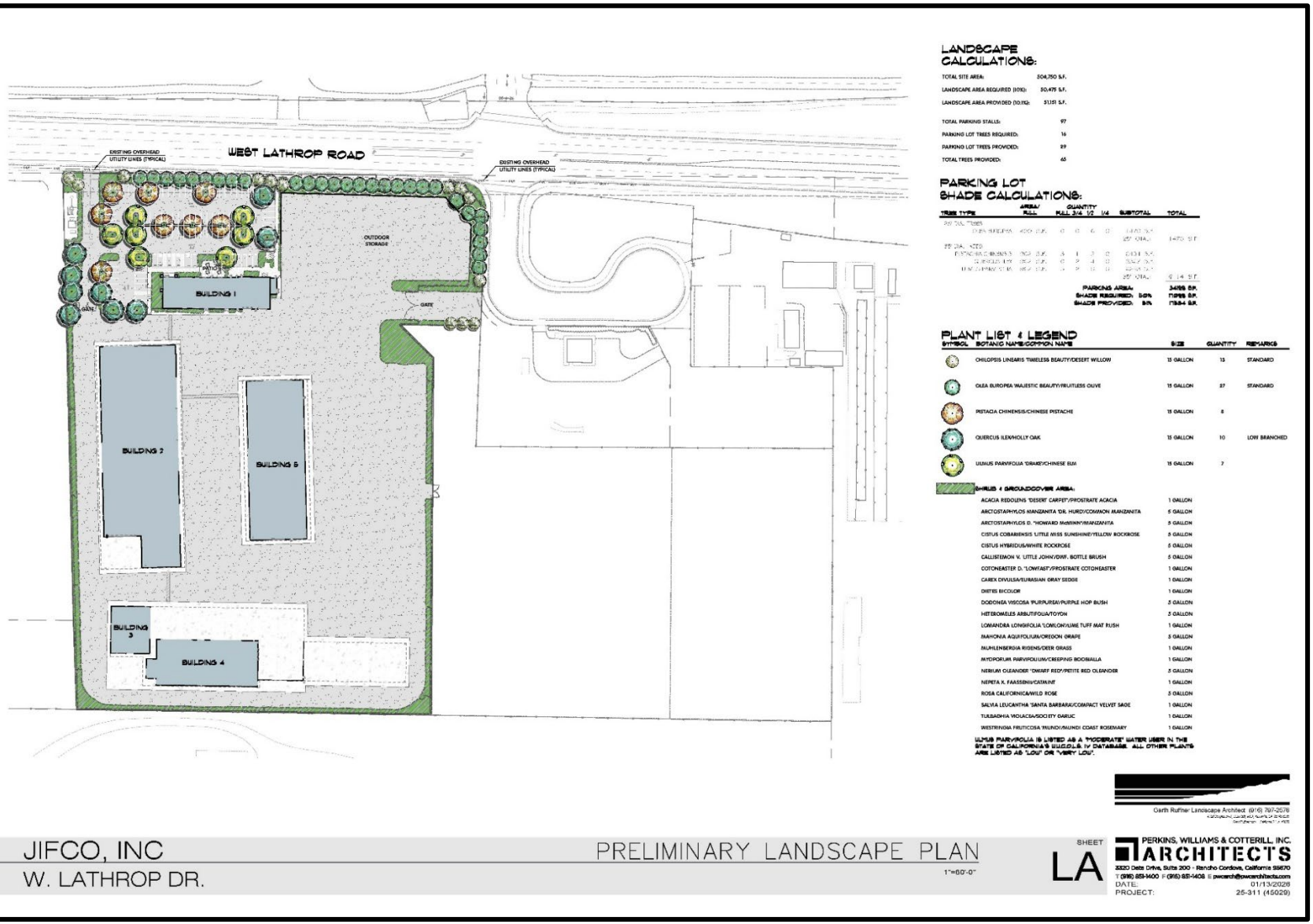


Figure 9. Landscape Plan

3.0 ENVIRONMENTAL ANALYSIS

INTRODUCTION

This chapter of the Initial Study/Addendum evaluates the potential environmental impacts of the Modified Project in comparison to the potential environmental effects of the Original Project, as considered in the Initial Study/Mitigated Negative Declaration (IS/MND) for the previous Scannell Properties Industrial Project of September 2021 which will be known as the "Original Project's IS/MND" in this Initial Study/Addendum. The Modified Project is located where the previously approved two (2) industrial warehouse buildings were analyzed in the Original Project's IS/MND (Building 1 and 2 intended for APN: 198-040-33). The location of the Modified Project site is shown in Figure 3 in Chapter 1.0 of this document above. The City of Lathrop (City) was the Lead Agency for the Original Project and is the Lead Agency for the Modified Project. Jifco, Inc. is the project applicant.

The following environmental impact analysis follows the same template checklist of potential environmental issues analyzed in the Original Project's IS/MND. In accordance with the requirements of CEQA Guidelines Sections 15162 and 15168, the purpose of the checklist and accompanying is to evaluate each of the environmental issues addressed in the Original Project's IS/MND and determine whether the Modified Project, changed circumstances, or new information of substantial importance could result in new significant environmental effects or a substantial increase in the severity of a previously identified environmental effect as these effects were described in the Original Project's IS/MND.

A "No" answer in the following checklist does not necessarily mean that there are no potential impacts related to the environmental issue. Rather, it indicates that the Modified Project will not result in any change in the severity of the impact as discussed, and as addressed by mitigation measures, if necessary, in the Original Project's IS/MND. Under these circumstances, a "No" answer indicates the Modified Project does not result in any need to modify the conclusions of the Original Project's IS/MND.

EXPLANATION OF CHECKLIST EVALUATION CATEGORIES

Conclusion in Previous IS/MND – This column identifies the conclusion of the previous IS/MND relative to each environmental issue listed.

Does the project involve new impacts? – This column indicates whether the Modified Project will result in new significant environmental impacts not previously identified or mitigated by the Original Project's IS/MND, or whether the changes will result in a substantial increase in the severity of a previously identified significant impact, pursuant to CEQA Guidelines Section 15162(a)(1). This conclusion is based on the narrative that follows each section of the table.

New circumstances involving new impacts? - This column indicates whether there have been any substantial changes with respect to the circumstances under which the proposed project is undertaken that will require major revisions to the Original Project's IS/MND, due to the involvement of new significant environmental impacts or a substantial increase in the severity of previously identified significant impacts pursuant to CEQA Guidelines Section 15162(a)(2). This conclusion is also documented in the narrative.

New information requiring new analysis or verification? - Pursuant to CEQA Guidelines Section 15162(a)(3), this column indicates whether new information of substantial importance, which was not known and could not have been known with reasonable diligence at the time the Original Project's IS/MND was adopted shows any of the following:

- The project will have one or more significant effects not discussed in the Original Project's IS/MND,

- Significant effects previously examined will be substantially more severe than shown in the Original Project's IS/MND,

- Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative, or

- Mitigation measures or alternatives which are considerably different from those analyzed in the Original Project's IS/MND would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.

Where this analysis finds that the conclusions of the Original Project's IS/MND remain the same – that is, no new significant impacts have been identified, previously identified impacts are not found to be substantially more severe, and additional mitigation is not necessary - then the checklist questions are answered "No", and no additional CEQA analysis would be required.

Mitigation required? - This column indicates whether new mitigation measures are required to address potential environmental effects related to the Modified Project. Where the Modified Project involves potentially significant environmental effects, and mitigation for the impact was prescribed in the Original Project's IS/MND, these same measures will apply to the Modified Project. These include any mitigation measures identified in the Original Project's IS/MND and those developed specifically for the Modified Project. If "None required" is indicated, the Original Project's IS/MND and/or this Addendum conclude that no impact occurs with the Modified Project, or the project impact is not significant. In both cases, no additional mitigation measures are required.

3.1 AESTHETICS

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Scenic vistas	Less than significant	No	No	No	None required
b) Scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway	No impact	No	No	No	None required
c) Visual character and quality	Less than significant	No	No	No	None required
d) Light and glare	Less than significant	No	No	No	None required

Environmental Setting

The Project site consists of raw undeveloped land that is mostly flat terrain and includes an elevation range of approximately 16 to 23 above sea level for the entire site. Like the Original Project, there are no prominent visual features on or adjacent to the Project site. The Project site is surrounded by industrial development to the north, east, south, and west with Lathrop Road at its north end border. The aesthetic impacts of the Modified Project are analyzed below.

Environmental Impacts and Mitigation Measures

a) Scenic Vistas.

A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. The General Plan EIR states that there are no official designated scenic vista points identified within the City of Lathrop. Additionally, there are no officially designated scenic highways located in the vicinity of Lathrop. The most significant visual features within or adjacent to the City of Lathrop include the San Joaquin River to the west of the City and agricultural land and open space located in undeveloped areas within and around the City.

As described in the Original Project's Initial Study and Mitigated Negative Declaration (IS/MND), the Project site itself does not provide any visual resources that would be considered a scenic vista because it primarily consists of former agricultural lands, which are relatively common in other areas of the City and are not unique to the surrounding visual setting.

The Modified Project includes the construction of five (5) buildings on two of the three developable parcels, including one (1) two-story office building and four (4) manufacturing buildings that total 126,965 square feet in size, in lieu of the previously approved two (2) industrial warehouse buildings (Building 1 and 2 intended for APN: 198-040-33). Building 3 intended for APN: 198-040-34 and the on-site stormwater retention basin intended for APN: 198-040-31 are planned for future development, as described in the Original Project. Proposed structures are relatively low in height and therefore would not substantially block any available views of the Coast Ranges, the Sierra Nevada Mountains, or the San Joaquin River environment. Like the Original Project, the Modified Project's impacts on scenic vistas are less than significant. Upon build-out, the Modified Project will be of similar visual character to the nearby and adjacent industrial developments.

Consequently, the Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Scenic Resources.

As described above, the Project site consists of raw undeveloped land that is mostly flat terrain and is not located within a view of a designated scenic highway. The Caltrans Scenic Highway Mapping System states that the only highway section in San Joaquin County that is listed as a Designated Scenic Highway is a segment of Interstate 580 from Interstate 5 to Interstate 205, generally located southwest of the City of Tracy. This officially designated scenic highway does not provide views of Lathrop or the immediate surrounding areas. Furthermore, there are no sections of highway in the Lathrop vicinity eligible for Scenic Highway designation.

Therefore, the Modified Project will have no impact on scenic resources or scenic highways. This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

c) Visual Character and Quality.

As noted in a) above, the Project site does not provide any visual resources that would be considered a scenic vista because it primarily consists of former agricultural lands, which are relatively common in other areas of the City and are not unique to the surrounding visual setting. Similar to the Original Project, the Project site consists of mostly flat terrain with unobstructed views of the surrounding agricultural lands, the Lathrop Intermodal Terminal, and residential and other developments. Neither the Project site nor any of the surrounding land uses contains features typically associated with scenic vistas (e.g., ridgelines, peaks, overlooks). Therefore, little opportunity exists for project activities to obscure views of scenic vistas that may be located within the immediate area of the Project site.

Additionally, the Modified Project will comply with all applicable regulations governing scenic quality. The Modified Project will comply with all requirements under Chapter 17.92, Landscaping and Screening Standards, of the City's Zoning Ordinance, which contains several sections that regulate aesthetic or visual standards for development in the City. Consistent with the Original Project's IS/MND, the Modified Project will be consistent with the applicable design standards and development standards and therefore will have a less than significant impact on visual character and quality. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

d) Light and Glare.

As stated in the Original Project's IS/MND, The project site does not contain existing sources of light and glare. However, nearby land uses include outdoor lighting. The Union Pacific Railroad Lathrop Intermodal Terminal, the Sharpe Army Depot, scattered rural residential development, and other nearby commercial and industrial developments also include outdoor lighting. Other nearby sources of light include the streetlights at the nearby intersections, as well as vehicles traveling along Lathrop Road.

The Modified Project will include the installation of lighting throughout the parking lot and around each building on-site. Parking lots, driveways, and trash enclosure areas will be illuminated during the hours of darkness with a minimum maintained one foot-candle of light and an average not to exceed four foot-candles of light, in accordance with Lathrop Municipal Code (LMC) Section 17.76.030. Consistent with the Original Project's lighting analyzed under the previous IS/MND, all lighting under the Modified Project will comply with the City of Lathrop lighting standards. The City of Lathrop Department of Public Works Design and Construction Standards identify general lighting standards and nuisance prevention. Compliance with the standards helps to ensure that the Modified Project does not introduce substantial sources of light and glare to the Project vicinity,

Therefore, the Modified Project's impacts related to light and glare are considered less than significant, consistent with the Original Project. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Conversion of farmland	No impact	No	No	No	None required
b) Williamson Act contracts	No impact	No	No	No	None required
c) Conflict with zoning for forest land/timberland	No impact	No	No	No	None required
d) Conversion of forest land	No impact	No	No	No	None required
e) Indirect conversion of farmland or forest land	No impact	No	No	No	None required

Environmental Setting

Currently, the Project site is vacant and not actively used for agriculture. A review of Google Earth aerial photographs indicates that the Project site has not been used for intensive agriculture for at least the past 20 years.

The Important Farmland Maps, prepared by the California Department of Conservation as part of the Farmland Mapping and Monitoring Program, designates the viability of the land for farmland use, based on the physical and chemical properties of the soils. The maps categorize farmland, in decreasing order of soil quality, as “Prime Farmland,” “Farmland of Statewide Importance,” and “Unique Farmland," which together comprise "Farmland” as defined by the CEQA Guidelines Appendix G, as well as other categories. According to the San Joaquin County Important Farmland 2022 Map, the Project site has land designated as Vacant or Disturbed Land (FMMP 2022).

Environmental Impacts and Mitigation Measures

a) Agricultural Land Conversion.

The Modified Project would facilitate urban development of land classified as Vacant or Disturbed Land, which is not considered Farmland as defined in CEQA Guidelines Appendix G. Consistent with the Original Project's IS/MND, implementation of the Modified Project would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the Modified Project has no impact on the conversion of farmland. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Agricultural Zoning and Williamson Act Lands.

The Williamson Act preserves active agricultural land by means of a contract between the landowner and local government that keeps the contracted land in agricultural use in exchange for a lower property tax assessment. As discussed in the Original Project's IS/MND, the Project site does not include any land associated with a Williamson Act contract and is not designated or zoned for agricultural uses. Under the Original Project, the Project site was rezoned from Commercial Service (CS) to General Industrial (IG). The Project site is currently zoned General Industrial (IG), consistent with the previous analysis under the Original Project's IS/MND.

Therefore, the Modified Project will have no impact on agricultural zoning or Williamson Act contracts, consistent with the previous IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

c) Forest Land Zoning

As defined in Public Resources Code Section 12220(g), forest land is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Public Resources Code Section 4526 defines timberland as land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

Consistent with the previous IS/MND findings for the Original Project, the Modified Project is not classified as forest land, as defined by Public Resources Code Section 12220(g), or timberland, as defined by Public Resources Code Section 4526. Additionally, the Modified Project will not conflict with the existing zoning for or cause the rezone of forest land or timberland.

Therefore, implementation of the Modified Project will have no impact relative to this issue, consistent with the Original Project. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

d) Loss or Conversion of Forest Land

As noted in c) above, there is no forest land on the Project site or in the vicinity of the Project site. The Modified Project will not result in the loss of forest land or conversion of forest land to non-forest use, consistent with the Original Project's IS/MND findings.

Therefore, implementation of the Modified Project will have no impact relative to this issue, consistent with the Original Project. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

e) Indirect Conversion of Farmland or Forest Land.

As noted above, the Project site is vacant and not actively used for agriculture. The Project site does not contain forest land, and there is no forest land in the vicinity of the Project site. Furthermore, the Project site does not contain any protected farmland.

Consistent with the analysis in the Original Project's IS/MND, the Modified Project does not involve any other changes in the existing environment not disclosed under the previous responses which, due to their location or nature, could result in conversion of farmland, to non-agricultural use, or conversion of forest land to non-forest use.

Therefore, implementation of the Modified Project will have no impact relative to this issue, consistent with the Original Project. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.3 AIR QUALITY

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Conflict with air quality plan	Less than significant	No	No	No	None required
b) Cumulative Emissions	Less than significant	No	No	No	None required
c) Exposure to sensitive receptors	Less than significant	No	No	No	None required
d) Odors and other emissions	Less than significant	No	No	No	None required

Environmental Setting

The Project site is within the San Joaquin Valley Air Basin, which includes San Joaquin County and all or part of seven other Central Valley counties. The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over most air quality matters in the Air Basin. The SJVAPCD is tasked with implementing programs and regulations required by both the federal and California Clean Air Acts. Under their respective Clean Air Acts, both the State of California and the federal government have established ambient air quality standards for six criteria air pollutants: ozone (O_3), particulate matter (PM), carbon monoxide (CO), nitrogen oxide (NO_x), sulfur dioxide (SO_2), and lead (Pb). California has standards for four additional criteria pollutants under its Clean Air Act.

Table 3 shows the current attainment status of the Air Basin relative to the federal and State ambient air quality standards for the criteria pollutants. Except for ozone and particulate matter (PM2.5), the Air Basin is in attainment of, or unclassified for, all federal and State ambient air quality standards. Ozone is not emitted directly into the air but is formed when reactive organic gases (ROG) and nitrogen oxides (NO_x) react in the atmosphere in the presence of sunlight. The SJVAPCD currently has a 2022 Plan for the 2015 8-Hour Ozone Standard and the 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard to attain federal ambient air quality standards for ozone.

Particulate matter is a mixture of solid and liquid particles suspended in air, including dust, pollen, soot, smoke, and liquid droplets. Particulate matter less than 10 micrometers in diameter (PM_{10}) and less than 2.5 micrometers in diameter ($PM_{2.5}$) are subject to regulation, as both can be inhaled into the lungs. The SJVAPCD currently has a 2024 Plan for the 2012 Annual PM2.5 Standard to attain federal ambient air quality standards for $PM_{2.5}$ and the 2007 PM10 Maintenance Plan to maintain its current PM_{10} attainment status.

CO is an odorless, colorless gas that is toxic in high concentrations. It is formed by the incomplete combustion of fuels and is emitted directly into the air, unlike ozone. The main source of CO in the San Joaquin Valley is on-road motor vehicles (SJVAPCD 2015). The San Joaquin Valley Air Basin is in attainment/unclassified status for CO; as such, the SJVAPCD has no CO attainment plans. However, high CO concentrations may occur in areas of limited geographic size referred to as "hotspots," which are ordinarily associated with areas of heavy traffic volumes and congestion.

TABLE 3
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

	Designation/Classification	
Pollutant	**Federal Primary Standards**	**State Standards**
Ozone - One hour	Revoked	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme	Nonattainment
PM_{10}	Attainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Source: SJVAPCD Ambient Air Quality Standards & Attainment Status.

In addition to the criteria pollutants, the California Air Resources Board (CARB) has also identified other air pollutants as toxic air contaminants (TACs) - pollutants that are carcinogenic (i.e., cause cancer) or that may cause other adverse short-term or long-term health effects. Per Lathrop's General Plan EIR Section 3.3.2, diesel particulate matter, considered a carcinogen, was added to the list of CARB TACs, as it is a product of combustion in diesel engines. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate Best Available Control Technologies (BACT) to minimize emissions.

The SJVAPCD reviewed the Modified Project and provided a response letter dated November 5, 2025. The comment letter listed regulations that are potentially applicable to the project. Regulations that may be applicable to the Modified Project are summarized below:

Regulation VIII (Fugitive Dust PM_{10} Prohibitions)

Rules 8011-8081 are designed to reduce PM_{10} emissions, predominantly dust/dirt, generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, landfill operations, etc. Since over 5 acres will be disturbed, the Modified Project will be required to submit a Dust Control Plan to the SJVAPCD pursuant to Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities. Additionally, due to the Project site being larger than 1-acre, the Modified Project will be required to submit a Construction Notification application to the SJVAPCD at least 48 hours prior to commencing any earthmoving activities.

Rules 2010 and 2201 (Air Quality Permitting for Stationary Sources)

District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT). The Modified Project will be required to submit an ATC application to SJVAPCD prior to construction.

Rule 9510 (Indirect Source Review)

Rule 9510, also known as the Indirect Source Rule, is intended to reduce or mitigate construction and operational emissions of NO_x and PM_{10} generated by new development, either directly by the incorporation of mitigation into projects and/or by payment of off-site mitigation fees. Rule 9510 applies to the Modified Project because it will receive a project-level discretionary approval from a public agency and exceeds 25,000 square feet of industrial space. The Modified Project will be required to provide an Air Impact Assessment (AIA) application to SJVAPCD to ensure that the proper mitigation and clean air design under ISR can be incorporated into the Project.

Rule 9410 (Employer Based Trip Reduction)

If the Modified Project results, in 100 or more "eligible" employees, it will be required to establish an Employer Trip Reduction Implementation Plan (eTRIP) that encourages employees to reduce single-occupancy vehicle trips, resulting in less pollutant emissions.

Rule 4601 (Architectural Coatings)

This rule sets limits on the volatile organic compounds, a component of ROG, allowed in various paints and other coatings.

Other District Rules and Regulations

The Modified Project might also be subject to Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

In 2015, the SJVAPCD adopted a revised Guide for Assessing and Mitigating Air Quality Impacts. The Guide defines analysis methodology, thresholds of significance, and mitigation measures for the assessment of air quality impacts for projects within SJVAPCD's jurisdiction (SJVAPCD 2015). Row 1 of Table 4 shows the CEQA thresholds for significance for pollutant emissions within the SJVAPCD for both project construction and project operations. Projected construction and operational emissions from the Modified Project, are shown in the subsequent rows, along with a determination as to whether the applicable significance threshold is exceeded.

Environmental Impacts and Mitigation Measures

a) Conflict with Air Quality Plan.

The project's construction and annual operational emissions were estimated using the California Emissions Estimator Model (CalEEMod) computer program, a modeling program recommended by SJVAPCD. Summarized CalEEMod results for the project are available in Appendix B of this IS/Addendum, and the results are also summarized in Table 4 below.

As the significance thresholds were established in part to ensure consistency with the objectives of the air quality plans adopted by the SJVAPCD, the Modified Project will therefore be consistent with these plans.

TABLE 4
SJVAPCD SIGNIFICANCE THRESHOLDS
AND ESTIMATED PROJECT EMISSIONS

	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Significance Thresholds[1]	**10**	**10**	**100**	**27**	**15**	**15**
Construction Emissions[2]	0.46	1.57	2.13	0.004	0.23	0.11
Exceeds Threshold?	*No*	*No*	*No*	*No*	*No*	*No*
Operational Emissions[3]	1.25	0.75	4.60	0.01	0.98	0.27
Exceeds Threshold?	*No*	*No*	*No*	*No*	*No*	*No*

Note: All figures are in tons per year and are "unmitigated" (i.e., emissions that do not include project features or mitigations that would reduce emissions).

[1] Applies to both construction and operational emissions.

[2] Maximum unmitigated emissions in a calendar year.

[3] Annual unmitigated emissions.

Sources: CalEEMod Version 2022.1.1.43, SJVAPCD 2015.

Construction Emissions:

As indicated by Table 4 above, none of the Modified Project's construction emissions will exceed the SJVAPCD significance thresholds. All construction emissions have decreased for the Modified Project in comparison to the Original Project.

As described in the Environmental Setting above, SJVAPCD Regulation VIII requires the implementation of control measures to reduce construction-related emissions, including PM_{10} fugitive dust rules and equipment exhaust emissions controls. Regulation VIII also requires the Modified Project to submit a Dust Control Plan to the SJVAPCD. Dust control provisions are also routinely included in site improvement plans and specifications, along with construction contracts. The Modified Project will also be required to submit a Construction Notification application to the SJVAPCD at least 48 hours prior to commencing any earthmoving activities. By complying with the SJVAPCD's regulations and application requirements, construction of the Modified Project will have a less than significant impact.

Operational Emissions:

The Modified Project is consistent with the existing land use designation in the Lathrop General Plan and will not require a zoning change. As indicated by Table 4, the Modified Project will have more operational emissions than the Original Project, with the exception of NO_x emissions. Regardless, none of the Modified Project's operational emissions will exceed the SJVAPCD significance thresholds.

While project emissions will not be significant, as defined by the SJVAPCD significance thresholds, the project will still be required to observe applicable SJVAPCD rules and regulations, as described in the Environmental Setting above. The Modified Project will be subject to SJVAPCD Rule 9510, which requires reductions in NO_x and particulate matter emissions from both project construction and project operations. Rule 9510 also requires the Modified Project to provide an Air Impact Assessment (AIA) application to SJVAPCD to ensure that the proper mitigation and clean air design under ISR can be incorporated into the Modified Project's operations. Implementation of these actions will further reduce estimated operational emissions for the Modified Project that are already considered less than significant without mitigation.

Therefore, implementation of the Modified Project will have a less than significant impact relative to the implantation of the applicable air quality plan, consistent with the Original Project. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Cumulative Emissions.

As noted in a) above, operational emissions for the Modified Project will not exceed SJVAPCD significance thresholds. Future attainment of federal and State ambient air quality standards is a function of successful implementation of the SJVAPCD's attainment plans. Consequently, the application of significance thresholds for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Pursuant to the SJVAPCD's guidance, if project-specific emissions will be less than the thresholds of significance for criteria pollutants, the project is not expected to result in a cumulatively considerable net increase in any criteria pollutant for which the SJVAPCD is in nonattainment under applicable federal or State ambient air quality standards. Accordingly, cumulative impacts on air quality for the Modified Project will be less than significant.

This is consistent with the Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

c) Exposure to Sensitive Receptors.

"Sensitive receptors" refer to those segments of the population most susceptible to poor air quality, mainly children, the elderly, and those with pre-existing serious health problems affected by air quality. Land uses where sensitive individuals are most likely to spend time also may be called sensitive receptors; these include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (SJVAPCD 2015). The nearest land use to the Project site that may be considered a sensitive receptor is the existing residences located approximately 0.34 miles to the west of the Project site.

As indicated in Table 4 above, the Modified Project will not emit pollutants at levels that exceed SJVAPCD significance thresholds. These significance thresholds were established in part to ensure consistency with the objectives of the air quality plans adopted by the SJVAPCD, which were prepared in part to meet federal air quality standards designed to protect human health. The pollutant emissions generated by the Modified Project are consistent with pollutants generated by similar industrial development.

Construction-Related Impacts on Sensitive Receptors:

Construction of the Modified Project will be temporary and short-term. As stated in a) above, compliance with the SJVAPCD's regulations and application requirements will result in Project construction having a less than significant impact. The construction emissions shown in Table 4 will not exceed the SJVAPCD significance thresholds. Therefore, impacts to sensitive receptors during construction of the Modified Project will be negligible and have a less than significant impact.

Operational-Related and Toxic Air Contaminant (TAC) Impacts on Sensitive Receptors:

The Modified Project has the potential to impact nearby sensitive receptors during long-term operations as a result of truck trip generation. Since heavy-duty diesel trucks emit diesel particular matter (DPM), the on-site truck vehicle circulation, idling, and off-site mobile travel may lead to increased DPM emissions. As described in a) and b) above, operational emissions for the Modified Project will not exceed SJVAPCD significance thresholds. The Original Project's IS/MND determined that the Original Project's operations would not exceed the maximum risk values established by the SJVAPCD for TACs. Based on the prioritization score associated with total cancer risk from the Original Project, DPM was determined to be below the SJVAPCD threshold of 10 that would require development of an air toxics Health Risk Assessment (HRA) that includes air dispersion modeling. Additionally, non-cancer (i.e., chronic, and acute risks) associated with the Original Project's DPM was also determined to be well below the applicable thresholds for the Maximally Exposed Individual (i.e., greater than or equal to the Hazard Index level of 1).

As described in Section 3.17, Transportation, the Modified Project will result in fewer heavy vehicle (truck) trips and overall will result in a reduction of approximately 9 percent for daily vehicle trips, compared to the Original Project. Less trips will result in reduced DPM emissions for the Modified Project's operations. Therefore, the Modified Project's DPM emissions will not exceed the SJVAPCD's thresholds for TACs and have a less than significant impact on sensitive receptors, consistent with the Original Project.

CO Hotspots:

As noted, CO hotspots may occur in areas with heavy traffic volumes and congestion. CO hotspots have the potential to expose sensitive receptors to emissions that violate state and/or federal CO standards even if the broader Air Basin is in attainment for federal and state levels. As stated in the Original Project's IS/MND, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (i.e., bridges and tunnels)in order to generate a substantial CO impact. Per Section 3.17, Transportation, the Modified Project will generate a maximum of approximately 19 AM peak hour trips and 5 PM peak hour trips for heavy vehicle (truck) trips. As such, no CO hotspots that could potentially affect sensitive receptors in the Project vicinity are expected to develop. Overall, the Modified Project's air quality impacts on sensitive receptors is less than significant.

This conclusion is consistent with the findings of the Original Project's IS/MND. Consequently, the Modified Project will not involve any new impacts or need for mitigation in this issue area.

d) Odors and Other Emissions.

The Modified Project may result in localized odors during construction from equipment and vehicle emissions. However, these odor emissions will be temporary and will readily dissipate before causing any extended effect on surrounding land uses. Construction activities associated with the Modified Project will also generate TACs, mainly diesel particulate matter from equipment and vehicle exhaust. These emissions are likewise temporary and would cease when construction work is completed.

The SJVAPCD provides a suggested screening distance for a variety of odor-generating land uses and operations and is described in Table 5 below. These distances are used as a guide to assess whether nearby facilities could be sources of significant odors.

TABLE 5
SJVAPCD SCREENING LEVELS FOR POTENTIAL ODOR SOURCES

Land Use / Type of Operation	Project Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Facility	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting / Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot / Dairy	1 mile
Rendering Plant	1 mile

Source: San Joaquin Valley Air Pollution Control District (SJVAPCD) Guide for Assessing and Mitigating Air Quality Impacts (GAMAQ), 2015.

The Modified Project's operations do not fall into any of the operational categories listed in Table 5 and pipe manufacturing facilities are not a known source of odorous emissions. Furthermore, per the SJVAPCD response letter dated November 5, 2025, the Modified Project will be required to submit an Air Impact Assessment application to the Air District to ensure proper mitigation and clean air design is incorporated into the project, which will further reduce impacts resulting from odors and other emissions. The Modified Project is an industrial project which is not considered a sensitive receptor that would need to consider impacts as a "receiver." Therefore, there are no significant concerns related to odors or a need for further odor assessment of the Project operations.

Neither construction nor long-term operations of the Modified Project are anticipated to generate any significant objectionable odors that affect a substantial number of people. Considering the low intensity of potential odor emissions, the Modified Project's operational activities will not expose receptors to objectionable odor emissions.

Project impacts related to odors and other emissions will be less than significant. This conclusion is consistent with the findings of the Original Project's IS/MND. Consequently, the Modified Project will not involve any new impacts or need for mitigation in this issue area.

3.4 BIOLOGICAL RESOURCES

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Special-status species	Less than significant with mitigation	No	No	No	Yes, BIO-1 and BIO-2
b) Riparian and other sensitive habitats	Less than significant	No	No	No	None required
c) Federally protected wetlands	Less than significant	No	No	No	None required
d) Fish and wildlife movement and native nursery sites	Less than significant	No	No	No	None required
e) Local biological resource policies and ordinances	Less than significant	No	No	No	None required
f) Conflict with habitat conservation plans	Less than significant	No	No	No	None required

Environmental Setting

A Biological Assessment was prepared for the Original Project. The Biological Assessment, dated October 6, 2020, was prepared by Moore Biological Consultants.

Per the Biological Assessment, the Project site is essentially flat and is at elevations of approximately 20 feet above mean sea level. The site consists of a leveled grassland field that has been fallow for over a decade and is likely periodically mowed and/or disked. The Project site is vegetated with highly disturbed ruderal grasses and weeds. No potentially jurisdictional Waters of the U.S. or wetlands were observed in or adjacent to the Project site. Additionally, no sensitive natural communities were observed in the Project site, and due to a lack of suitable habitat, it is unlikely that special-status plants occur in the site. No special-status wildlife species are expected to occur in or near the site on more than a very occasional or transitory basis.

Table 6 provides a summary of the listing status and habitat requirements of special-status species that have been documented in the greater project vicinity or for which there is potentially suitable habitat in the

greater project vicinity. This information is based on the Biological Assessment prepared for the Original Project's IS/MND. Table 6 also includes an assessment of the likelihood of occurrence of each of these species on the site. The table excludes fish species, as there is no aquatic habitat on either of the project sites. The complete Biological Assessment can be found in Appendix C of the Original Project's IS/MND.

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
Plants						
Large-flowered fiddleneck	*Amsinckia grandiflora*	E	E	1B	Cismontane woodland, valley and foothill grassland.	Unlikely: the grasslands in the site are highly disturbed and do not provide suitable habitat for large-flowered fiddleneck. There are no occurrences of this species in the CNDDB (2020) search area.
Slough thistle	*Cirsium crassicaule*	None	None	1B	Chenopod scrub, marshes and swamps, and riparian scrub.	Unlikely: there is no suitable habitat for slough thistle in the site. The nearest occurrence of slough thistle in the CNDDB (2020) search area is approximately 3 miles southwest of the site.
Delta button celery	*Eryngium racemosum*	None	E	1B	Seasonally inundated (usually floodplain) riparian scrub with a clay substrate.	Unlikely: there is no suitable habitat for this species in the site. The nearest occurrence of delta button celery in the CNDDB (2020) search area is approximately 9.5 miles southeast of the site.

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
Wright's trichocoronis	*Trichocoronis wrightii var. wrightii*	None	None	2	Marshes and swamps, riparian forest, meadows and seeps and vernal pools.	Unlikely: there is no suitable habitat for Wright's trichocoronis in the site. The nearest occurrence of this species in the CNDDB (2020) search area is approximately 3.5 miles southwest of the site.
Wildlife Birds						
Burrowing owl	*Athene cunicularia*	None	SC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Unlikely: there were very few ground squirrel burrows observed in the site and no ground squirrels or burrowing owls were observed during the field survey. The ruderal grasslands in the site are highly disturbed and provide low quality foraging habitat for burrowing owl. The nearest occurrence of burrowing owls in the CNDDB (2020) search area is in the open field just north of the site, across from Lathrop Road.

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
Swainson's hawk	*Buteo swainsoni*	None	T	N/A	Breeds in stands of tall trees in open areas. Requires adjacent suitable foraging habitats such as grasslands or alfalfa fields supporting rodents.	Low: the ruderal grassland in the site provides moderately suitable foraging habitat for Swainson's hawk. While there are no trees in the site, there is a large tree just southwest of the site that is suitable for nesting Swainson's hawks. A remnant raptor stick nest was observed in this tree. The nearest occurrences of Swainson's hawk in the CNDDB (2020) search area are a few records approximately 1.5 miles from the project site.
Tricolored blackbird	*Agelaius tricolor*	None	T	N/A	Requires open water and protected nesting substrate, usually cattails and riparian scrub with surrounding foraging habitat.	Unlikely: the ruderal grasslands in the site provide low quality foraging habitat for tricolored blackbird. Although there is no suitable aquatic habitat in the site, there are a few basins near the site that may provide suitable nesting habitat for tricolored blackbird. These basins were dry during the recent survey, but contain emergent wetland vegetation. The nearest occurrence of tricolored blackbird in the CNDDB (2020) search area is

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
						approximately 2 miles south of the site.
Loggerhead shrike	*Lanius ludovicianus*	None	SC	N/A	Annual grasslands and agricultural areas; nests in trees and shrubs.	Unlikely: the ruderal grasslands in the site provide low quality foraging habitat for loggerhead kite. The two oleander shrubs in the site may provide suitable nesting habitat and a loggerhead shrike was observed perching in a small tree tobacco seedling in the site. The nearest occurrence of this species in the CNDDB (2020) search area is approximately 2 miles southwest of the site.
Song sparrow ("Modesto" population)	*Melospiza melodia*	None	SC	N/A	Resident of brackish water Marshes surrounding Suisun Bay. Inhabits cattails, tules, and tangles bordering sloughs.	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of Modesto song sparrow in the CNDDB (2020) search area is approximately 3 miles northwest of the site.
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	None	SC	N/A	Brackish and fresh water marshes; usually nests in expansive patches of cattails or tules.	Unlikely: the site does not provide suitable habitat for this species. The nearest occurrence of Modesto song sparrow in the CNDDB (2020) search area is approximately 3 miles northwest of the site.

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
Mammals						
Riparian brush rabbit	*Sylvilagus bachmani riparius*	E	E	N/A	Riparian thickets in Stanislaus and southern San Joaquin Counties.	Unlikely: the site does not provide suitable habitat for riparian brush rabbit. The CNDDB (2020) contains a few occurrences of this species in the San Joaquin River corridor approximately 3 miles southwest of the site.
Reptiles and Amphibians						
Giant garter snake	*Thamnophis gigas*	T	T	N/A	Freshwater marsh and low gradient streams; drainage canals and irrigation ditches, primarily for dispersal or migration.	Unlikely: the project site does not provide suitable habitat for giant garter snake. There are no recorded occurrences of this species in the CNDDB (2020) search area.
California tiger salamander	*Ambystoma californiense*	T	T	N/A	Seasonal water bodies without fish (i.e., vernal pools and stock ponds) and grassland / woodland habitats with summer refugia (i.e., burrows).	Unlikely: there is no suitable habitat within or near the site for California tiger salamander. The nearest occurrence of this species in the CNDDB (2020) search area is approximately 3 miles southwest of the site. The site is not within designated critical habitat for California tiger salamander (USFWS, 2005a).

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
California red-legged frog	*Rana aurora draytonii*	T	SC	N/A	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Unlikely: there is no suitable aquatic habitat for California red-legged frog in or near the project site. California red-legged frog is also presumed extinct on the floor of the Central Valley of California. There are no recorded occurrences of this species in the CNDDB (2020) search area. The site is not within designated critical habitat for California redlegged frog (USFWS, 2006).
Fish						
Delta smelt	*Hypomesus transpacificus*	T	T	N/A	Shallow lower delta waterways with submersed aquatic plants and other suitable refugia.	None: there is no aquatic habitat in the site to support delta smelt. There are no recorded occurrences of this species in the CNDDB (2020) search area. The site is within designated critical habitat for delta smelt (USFWS, 1994).
Central Valley steelhead	*Oncorhynchus mykiss*	T	None	N/A	Riffle and pool complexes with adequate pawning substrates within Central Valley drainages.	None: there is no aquatic habitat in the site. The nearest occurrence of this species in the CNDDB (2020) search area is approximately 2.5 miles west of the site in the San Joaquin River. The San Joaquin River is designated critical habitat for Central Valley steelhead (NOAA, 2005).

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
Longfin smelt	*Spirinchus thaleichthys*	None	SC	N/A	Brackish estuarine habitats.	None: there is no aquatic habitat in the site to support longfin smelt. The nearest occurrence of longfin smelt in the CNDDB (2020) in the San Joaquin River approximately 2.5 miles west of the site.
Invertebrates						
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	T	None	N/A	Elderberry shrubs, usually in Central Valley riparian habitats.	Unlikely: no blue elderberry shrubs were observed in the project site. The nearest occurrence of this species in the CNDDB (2020) is approximately 6.5 miles northwest of the site. The site is not in designated critical habitat for this species (USFWS 1980).
Western bumble bee	*Bombus occidentalis*	None	CE	N/A	Meadows and grasslands with abundant floral resources, usually high elevation.	Unlikely: the site does not provide suitable habitat for western bumble bee. The nearest occurrence of this species in the CNDDB (2020) search area is approximately 3 miles southwest of the site.
Vernal pool fairy shrimp	*Branchinecta lynchi*	T	None	N/A	Vernal pools.	Unlikely: there are no vernal pools in the site. There are no occurrences of vernal pool fairy shrimp recorded in the CNDDB (2020) in the search area. The site is not within designated critical habitat for vernal pool fairy shrimp (USFWS, 2005b).

TABLE 6

SPECIAL-STATUS SPECIES POTENTIALLY OCCURRING IN THE PROJECT VICINITY

Common Name	Scientific Name	Fed. Status[1]	State Status[1]	CNPS List[2]	Habitat	Potential for Occurrence
Vernal pool tadpole shrimp	*Lepidurus packardi*	E	None	N/A	Vernal pools.	Unlikely: there are no vernal pools in the site. There are no occurrences of vernal pool tadpole shrimp recorded in the CNDDB (2020) within the search area. The site is not in designated critical habitat for vernal pool tadpole shrimp (USFWS, 2005b).

[1] T = Threatened; E = Endangered; CE = Candidate for Endangered Status; SC = State of California Species of Special Concern. .....
[2] CNPS List 1B includes species that are rare, threatened, or endangered in California and elsewhere; List 2 includes plants that are rare, threatened, or endangered in California but are more common elsewhere.

Environmental Impacts and Mitigation Measures

a) Special-Status Species.

As indicated by Table 6, most of the special-status species that have been identified in the Project vicinity are unlikely to occur on the Project site, due to lack of suitable habitat and fragmentation by past urban development.

Per the Biological Assessment, no special-status species were observed on the site, and the Project is not expected to affect special status species or their habits. Consistent with the Original Project, the Modified Project will seek coverage under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

Mitigation described below includes seeking coverage under the SJMSCP as well as conducting a preconstruction survey in accordance with SJMSCP requirements, which would minimize the potential impacts of project construction on special-status species, should any be found on the Project site. Implementation of these mitigation measures will reduce Project impacts on special-status species to a level that will be less than significant. The mitigation measures below are consistent with the conclusion of the Original Project's IS/MND and the Biological Assessment prepared for the Project site.

Mitigation Measures:

BIO-1: Prior to commencement of any grading activities, the Project applicant shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of incidental take and minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.

BIO-2: Prior to the commencement of grading activities or other ground disturbing activities on the Project site, the Project applicant shall arrange for a qualified biologist to conduct a preconstruction survey for nesting raptors in accordance with SJMSCP requirements. If no nests are detected, then construction activities may commence. If occupied nests are discovered, then the Project applicant shall coordinate with SJCOG regarding the appropriate buffer needed to avoid the particular bird species. If burrowing owls are discovered during the non-breeding season (September 1 through January 31) they should be evicted from the Project site by passive relocation as described in the California Department of Fish and Game's Staff Report on Burrowing Owls (Oct. 1995). Implementation of this mitigation shall occur prior to grading or site clearing activities. SJCOG shall be responsible for monitoring, and a qualified biologist shall conduct surveys and relocate owls as required.

Implementation of the Modified Project will not involve new impacts or the need for additional mitigation in this issue area.

b) Riparian and Other Sensitive Habitats.

There is no riparian habitat on the Project site, as discussed in the Original Project's IS/MND. Therefore, implementation of the Modified Project will have a less than significant impact on riparian habitats or natural communities, consistent with the Original Project's IS/MND findings.

The Modified Project will not involve any new impacts or need for mitigation in this issue area. This is consistent with the conclusion of the Original Project's IS/MND.

c) Wetlands and Waters of the U.S.

As mentioned above, no potentially jurisdictional Waters of the U.S. or wetlands were observed in or adjacent to the Project site. Furthermore, a search of the National Wetlands Inventory indicates no wetlands or Waters of the U.S. on the Project site.

Therefore, consistent with the Original Project, the Modified Project will not result in direct removal or fill, or hydrological interruption or other alteration of wetlands. Absent any wetlands or jurisdictional waters, implementation of the Modified Project will have a less than significant impact.

The Modified Project will not involve any new impacts or need for mitigation in this issue area. This is consistent with the conclusion of the Original Project's IS/MND.

d) Fish and Wildlife Movement.

As noted, there are no streams on or near the Project site. The Project site is not a part of any known wildlife migration corridor and is unlikely to provide migration opportunities, given the location amid urban development.

As discussed in the Biological Assessment prepared for the Project site under the Original Project, Special status fish species documented within the region include: Delta smelt (*Hypomesus transpacificus*), Hardhead (*Mylopharodon conocephalus*), Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley fall- /late fall-run Chinook salmon (*Oncorhynchus tshawytscha*), and Longfin smelt (*Spirinchus thaleichthys*). However, the closest major natural movement corridor for native fish that is documented in the region is the San Joaquin River, located 2.2 miles west of the Project site. The Modified Project, which includes the construction of one (1) two-story office building and four (4) manufacturing buildings that total 126,965 square feet for pipe manufacturing, will not have any direct disturbance to the San Joaquin River or its tributaries. Therefore, the Modified Project will not have any direct disturbance to the movement corridor or habit.

Implementation of the Modified Project will have a less than significant impact relative to this topic, consistent with the Original Project. The Modified Project will not involve any new impacts or need for mitigation in this issue area. This is consistent with the conclusion of the Original Project's IS/MND.

e) Local Biological Requirements.

The Modified Project will be required to comply with all applicable regulations protecting biological resources. The City of Lathrop does not have a local tree preservation policy or ordinance. Additionally, there are no trees on-site.

Therefore, the Modified Project will have a less than significant impact relative to this topic. The Modified Project will not involve any new impacts or need for new mitigation in this issue area. This is consistent with the conclusion of the Original Project's IS/MND.

f) Conflict with Habitat Conservation Plans.

Consistent with the Original Project and as discussed in a) above, the Modified Project will seek coverage under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). The SJMSCP is administered by a Joint Powers Authority consisting of members of the SJCOG, the California Department of Fish and Wildlife (CDFW), and the United States Fish and Wildlife Service (USFWS). According to the SJMSCP, adoption and implementation by local planning jurisdictions provides full compensation and mitigation for impacts to plants, fish, and wildlife. Adoption and implementation of the SJMSCP also secures compliance pursuant to the state and federal laws such as CEQA, the National Environmental Policy Act (NEPA), the Planning and Zoning Law, the State Subdivision Map Act, the Porter-Cologne Act and the Cortese-Knox Act in regard to species covered under the SJMSCP. Applicants pay mitigation fees on a per-acre basis. The entire County is mapped according to these categories so that landowners, project proponents, and project reviewers are easily aware of the applicable SJMSCP fees for the proposed development. The appropriate fees are collected by the City and remitted to SJCOG for administration. SJCOG uses the funds to

preserve open space land of comparable types throughout the County, often coordinating with other private or public land trusts to purchase conservation easements or buy land outright for preservation. The fees are automatically adjusted on an annual basis. The fees have been designed to sufficiently mitigation the impacts of projects on candidate, sensitive, and special status species. In addition, additional field surveying is required as part of the SJMSCP process prior to any construction activities. Per the SJMSCP, the Project site is designated as Urban and Fee Exempt. Therefore, there are no "per-acre" SJMSCP fees associated with development of the Project site.

The Modified Project will have a less than significant impact as it will comply with the SJMSCP requirements. The Modified Project will not involve any new impacts or need for new mitigation in this issue area. This is consistent with the conclusion of the Original Project's IS/MND.

3.5 CULTURAL RESOURCES

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Historical resources	Less than significant with mitigation	No	No	No	Yes, CUL-1
b) Archaeological resources	Less than significant with mitigation	No	No	No	Yes, CUL-1
c) Human remains	Less than significant with mitigation	No	No	No	Yes, CUL-2

Environmental Setting

The City of Lathrop lies within the northern portion of the ethnographic territory of the Yokuts people, who held portions of the San Joaquin Valley from the Tehachapi Mountains in the south to Stockton in the north. Section 3.18, Tribal Cultural Resources, discusses this matter in further detail.

During the preparation of the Original Project's IS/MND, AB 52 and SB 18 Tribal Consultation was completed and no requests were made at that time for consultation. The purpose of this Addendum is to analyze the minor changes that have been made since the Original Project was analyzed. Since these changes do not result in significant impacts to tribal cultural resources, as discussed in a-c) below, additional AB 52 consultation is not required. Additionally, the Modified Project does not include amendments to the General Plan, zoning designations, or a Specific Plan. As a result, additional SB 18 consultation is not required either.

There are no properties or districts currently listed on the National Register of Historic Places or California Register of Historic Places for the City of Lathrop.

Environmental Impacts and Mitigation Measures

a-b) Historical Resources and Archaeological Resources.

As described in the Environmental Setting above, tribal consultation via AB 52 and SB 18 was completed under the Original Project. The Modified Project does not require additional tribal consultation as the Modified Project does not introduce new environmental impacts that are potentially significant.

No known historic or prehistoric period sites are present on the Project site; however, it is still possible for artifacts to be discovered during construction activities. The Modified Project will be required to halt construction activities if artifacts or unusual amounts of stone, bone, or shell are uncovered, and consult with an archaeologist for on-the-spot evaluation of the findings. This requirement will be included as Mitigation Measure CUL-1 below to ensure that development of the Modified Project will have a less than significant impact on historic and archaeological resources, which is consistent with the requirements of the Original Project.

Mitigation Measure:

CUL-1: If cultural resources (i.e., prehistoric sites, historic sites, isolated artifacts/features, and paleontological sites) are discovered during construction, work shall be halted immediately within 50 meters (165 feet) of the discovery, the City of Lathrop shall be notified, and a qualified archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology (or a qualified paleontologist in the event paleontological resources are found) shall be retained to determine the significance of the discovery. The City of Lathrop shall consider recommendations presented by the professional for any unanticipated discoveries and shall carry out the measures deemed feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. Specific measures are developed based on the significance of the find.

The Modified Project will not involve any new impacts or need for additional mitigation in this issue area. This is consistent with the Original Project's IS/MND findings.

c) Human Burials.

As discussed in the Original Project's IS/MND, excavation and construction activities in this area will always have the chance to yield human remains that may not be interred in marked, formal burials.

CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. As required by existing law, all work in the vicinity of the find shall be halted, and the County Coroner shall be notified to determine if an investigation of the death is required, in accordance with California Health and Safety Code Section 7050.5.

If it is determined that the remains are Native American in origin, then the County Coroner must contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the most likely descendants of the deceased Native American, and the most likely descendants may make recommendations on the disposition of the remains and any associated grave goods with appropriate dignity. If a most likely descendant cannot be identified, the descendant fails to make a recommendation, or the landowner rejects the recommendations of the most likely descendant, then the landowner shall rebury the remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance.

Compliance with the provisions of CEQA Guidelines Section 15064.5(e) will ensure that any human remains and associated grave goods encountered during Project construction will be treated with appropriate dignity. These requirements were included as Mitigation Measure CUL-2 under the Original Project's IS/MND and will continue to be required for the Modified Project. Project impacts on human remains, subject to these requirements, will be less than significant.

Mitigation Measure:

CUL-2: If any human remains are found during grading and construction activities, all work shall be halted immediately within 50 meters (165 feet) of the discovery and the County Coroner must be notified, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, and the procedures outlined in CEQA Section 15064.5(d) and (e) shall be followed. Additionally, if the Native American resources are identified, a Native American monitor, following the Guidelines for Monitors/Consultants of Native American Cultural, Religious, and Burial Sites established by the Native American Heritage Commission, may also be required and, if required, shall be retained at the applicant's expense.

The Modified Project will not involve any new impacts or need for additional mitigation in this issue area.

3.6 ENERGY

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Project Energy Consumption	Less than significant	No	No	No	None required
b) Consistency with Energy Plans	Less than significant	No	No	No	None required

Environmental Impacts and Mitigation Measures

a-b) Project Energy Consumption and Consistency with Energy Plans.

PG&E will provide electrical and natural gas services to the Project site. Per PG&E's letter dated November 6, 2025, the Modified Project will not directly interfere with any of PG&E's existing facilities or land rights. The Modified Project will use energy at the site during the construction of the project for equipment operation. The amount of energy used at the Project site will directly correlate to the energy consumption (including fuel) used by vehicle trips generated during Project construction, fuel used by off-road construction vehicles during construction, fuel used by vehicles during Project operation, and electricity and other energy usage during Project operation. The CalEEMod modeling results for the Modified Project estimate annual operational electricity usage at approximately 1,892,154 kWh/year, and annual natural gas usage at 5,240,546 kBTU/year (see Appendix B for further detail).

Construction-related fuel consumption would be finite, short-term, and consistent with construction activities of a similar character. It is expected that more electrical construction equipment will be used in the future, as it would generate fewer air pollutant emissions. This electrical consumption would be consistent with construction activities of a similar character. Therefore, this energy use would not be considered wasteful, inefficient, or unnecessary, especially since fossil fuel consumption would be reduced. Moreover, under California's Renewables Portfolio Standard (RPS), a greater share of electricity would be provided from renewable energy sources over time, so less fossil fuel consumption to generate electricity would occur.

It should be noted that, as provided in Appendix C of this IS/MND (the Traffic Memorandum), the Original Project was found to generate home-based work VMT per employee that did not exceed the existing or cumulative citywide average for industrial uses, and, therefore, was determined not to result in a significant transportation impact under CEQA. Because the Modified Project will generate fewer daily vehicle trips than the Original Project (approximately a 9% reduction) and fewer PM peak hour trips (approximately a 35% reduction), the Modified Project will not result in a significant transportation impact.

The Modified Project will be in compliance with all applicable federal, state, and local regulations regulating energy usage. The Modified Project will comply with statewide measures, including the Pavley Bill and Low Carbon Fuel Standard, which are intended to improve the energy efficiency of statewide passenger and heavy-duty truck vehicle fleet, consistent with the Original Project and Lathrop's General Plan. As a result, gasoline and diesel fuel usage will be reduced, and the Modified Project will not result in any significant adverse impacts related to project energy requirements, energy use inefficiencies, and/or energy intensiveness of materials by amount and fuel type for each stage of the project including construction, operations, maintenance, and/or removal.

The State of California has adopted comprehensive energy efficiency standards as part of its Building Standards Code, California Code of Regulations, Title 24. Part 6 of Title 24 is referred to as the California Energy Code. In 2009, the California Building Standards Commission adopted a voluntary Green Building Standards Code (CALGreen), which became mandatory in 2011. CALGreen sets forth mandatory measures, applicable to new residential and nonresidential structures as well as additions and alterations, on water efficiency and conservation, building material conservation, and interior environmental quality. It also mentions energy efficiency, although CALGreen defers to the Energy Code for actions. The City has adopted the 2025 versions of both the California Energy Code and CALGreen. The Modified Project will be required to comply with Title 24 Energy Efficiency Standards to avoid significant adverse impacts on energy resources.

Overall, the Modified Project will not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation, nor conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Modified Project will have a less than significant impact relative to these topics, consistent with the Original Project.

The Modified Project will not involve any new impacts or need for new mitigation in this issue area. This is consistent with the conclusion of the Original Project's IS/MND.

3.7 GEOLOGY AND SOILS

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Fault rupture and other seismic hazards	Less than significant with mitigation	No	No	No	Yes, GEO-1
b) Soil erosion and loss of topsoil	Less than significant with mitigation	No	No	No	Yes, GEO-2
c) Unstable geologic units and soils	Less than significant with mitigation	No	No	No	Yes, GEO-1
d) Expansive soils	Less than significant with mitigation	No	No	No	Yes, GEO-1
e) Adequacy of soils to support wastewater disposal systems	No impact	No	No	No	None required
f) Paleontological resources	Less than significant with mitigation	No	No	No	Yes, CUL-1

Regional Setting

Per the City's General Plan EIR, Lathrop is located in the San Joaquin Valley in central California. The San Joaquin Valley is located in the central portion of the Great Valley Geomorphic Province. The Great Valley, also known as the Central Valley, is a topographically flat, northwest-trending, structural trough (or basin) about 50 miles wide and 450 miles long. It is bordered by the Tehachapi Mountains on the south, the Klamath Mountains on the north, the Sierra Nevada on the east, and the Coast Ranges on the west.

The San Joaquin Valley is filled with thick sedimentary rock sequences that were deposited as much as 130 million years ago. Large alluvial fans have developed on each side of the Valley. The larger and more gently sloping fans are on the east side of the San Joaquin Valley and overlie metamorphic and igneous basement rocks. These basement rocks are exposed in the Sierra Nevada foothills and consist of meta-sedimentary, volcanic, and granitic rocks.

The Planning Area is relatively flat with a natural gentle slope from east to west. The Planning Area's topography ranges in elevation from approximately 50 to 20 feet above sea level.

Environmental Impacts and Mitigation Measures

a-i) Fault Rupture Hazards.

The Seismic Hazards Mapping Act, passed in 1990, requires mapping of seismic hazard zones and sets requirements for projects located within such zones. Per the Department of Conservation's California Geological Survey, the Project site is not located in an earthquake fault zone. Furthermore, the City's General Plan EIR notes that Lathrop is not within an Alquist-Priolo Special Study Zone, which is consistent with the Original Project's IS/MND.

However, the Project site is located within a seismically active region. As noted in Section 3.6.1 of the City's General Plan EIR, the U.S. Geological Survey identifies potential seismic sources within 5 miles of Lathrop. The closest known faults classified as active by the U.S. Geological Survey include an unnamed fault east of the City of Tracy, located approximately 3 miles to the southwest of Lathrop, and the San Joaquin fault, located approximately 12 miles to the southwest of Lathrop. The Midway fault is located approximately 15 miles to the west. The nearest Alquist-Priolo fault zone is the Greenville fault zone located approximately 20 miles west of Lathrop. Other faults that could potentially affect Lathrop include the Corral Hollow-Carnegie fault, the Antioch fault, and the Los Positas fault. Based on this information, the Modified Project will have a less than significant impact related to fault rupture hazards.

This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

a-ii) Seismic Ground Shaking.

Section 3.6.1 of the City's General Plan EIR notes that according to the California Geological Survey's Probabilistic Seismic Hazard Assessment Program, San Joaquin County is considered to be within an area that is predicted to have a 10 percent probability that a seismic event would produce horizontal ground shaking of 10 to 20 percent within a 50-year period. This level of ground shaking correlates to a Modified Mercalli intensity of V to VII, light to strong.

The potential for seismic ground shaking in California is expected. As a result of the foreseeable seismicity in California, the State requires special design considerations for all structural improvements in accordance with the seismic design provisions in the California Building Code. These seismic design provisions require enhanced structural integrity based on several risk parameters (Lathrop General Plan EIR Section 3.6.1).

The Modified Project will be required to comply with the 2025 California Building Code, which contains seismic design criteria that must be incorporated into project design to ensure that improvements can withstand anticipated ground shaking from maximum credible earthquakes on active faults within the region.

Required compliance with the adopted California Building Code will reduce seismic ground shaking impacts to a level that is less than significant.

This is consistent with the Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

a-iii) Seismic-Related Ground Failure.

Liquefaction, which is primarily associated with loose, saturated materials, is most common in areas of sand and silt or on reclaimed lands. Cohesion between the loose materials that comprise the soil may be jeopardized during seismic events, and the ground will take on liquid properties. Thus, specific soil characteristics and seismic shaking must exist for liquefaction to be possible. Liquefaction susceptibility based on soil types, deposit, and age is presented below. Liquefaction typically requires a significant sudden decrease of shearing resistance in cohesion-less soils and a sudden increase in water pressure, which is typically associated with an earthquake of high magnitude. The potential for liquefaction is highest when groundwater levels are high, and loose, fine, sandy soils occur at depths of less than 50 feet. Soil data from the NRCS Web Soil Survey (NRCS 2017) suggests that the potential for liquefaction ranges from low to high within Lathrop, given that many soils are high in sand and the water table is moderately high (Lathrop General Plan EIR Section 3.6.1).

Therefore, consistent with the Original Project, development of the Project site could expose people or structures to adverse effects associated with liquefaction. Construction of the Modified Project will be required to comply with the City's General Plan policies related to geologic and seismic hazards. Mitigation Measure GEO-1 below, which was also included in the Original Project's IS/MND, will ensure that the Project applicant will submit a design-level geotechnical study and building plans to the City of Lathrop for review and approval.

Implementation of the mitigation measure below will reduce Project impacts on seismic-related ground failure to a level that will be less than significant. The mitigation measure below is consistent with the conclusion of the Original Project's IS/MND and the City's General Plan EIR.

Mitigation Measure:

GEO-1: Prior to issuance of building permits, the project applicant shall submit a design-level geotechnical study and building plans to the City of Lathrop for review and approval. The building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the most recent version of the California Building Standards Code. A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. The approved plans shall be incorporated into the proposed project. All onsite soil engineering activities shall be conducted under the supervision of a licensed Geotechnical Engineer or Certified Engineering Geologist.

Implementation of the Modified Project will not involve new impacts or the need for additional mitigation in this issue area.

a-iv) Landslides.

The California Geological Survey Landslides Maps have not mapped any landslide areas on the Project site or in the Project's vicinity. As noted above, the Project site is essentially flat. Therefore, the Modified Project is not susceptible to landslides, and implementation of the Modified Project will have a less than significant impact on landslides. This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Soil Erosion.

The Modified Project proposes 333,115 square feet of hardscaping, which covers approximately 66% of the Project site. Additionally, similar to the Original Project, the Modified Project will result in ground disturbance of topsoil, limited to the areas proposed for grading and excavation. After grading and excavation, and prior to overlaying the disturbed ground surfaces with impervious surfaces and structures, the potential exists for wind and water erosion to occur, which could adversely affect downstream storm drainage facilities.

Consistent with the Original Project's requirements, the Modified Project will be required to implement the appropriate Best Management Practices (BMPs) related to the prevention of soil erosion during construction in order for the Modified Project to have a less than significant impact on soil erosion.

Implementation of the mitigation measure below will reduce Project impacts on soil erosion that will be less than significant. The mitigation measure below is consistent with the conclusion of the Original Project's IS/MND.

Mitigation Measure:

GEO-2: The Project applicant shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the Project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins, and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Lathrop and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.

Implementation of the Modified Project will not involve new impacts or the need for additional mitigation in this issue area.

c) Geologic Instability.

As noted in a-iv) above, the Project site is essentially flat and not susceptible to landslides. Additionally, according to Section 3.6.1 of Lathrop's General Plan EIR, collapsible soils have not been identified in Lathrop as an issue. However, as noted in a-iii) above, the potential for liquefaction ranges from low to high within Lathrop, given that many soils are high in sand and the water table is moderately high.

Therefore, consistent with the Original Project and a-iii) above, development of the Project site could expose people or structures to adverse effects associated with liquefaction. Construction of the Modified Project will be required to comply with the City's General Plan policies related to geologic and seismic hazards. Mitigation Measure GEO-1 will ensure that the Project applicant will submit a design-level geotechnical study and building plans to the City of Lathrop for review and approval.

Implementation of this mitigation measure will reduce Project impacts on geologic instability to a level that will be less than significant. This mitigation measure is consistent with the conclusion of the Original Project's IS/MND and the City's General Plan EIR.

Mitigation Measure:

Implement Mitigation Measure GEO-1 above.

Implementation of the Modified Project will not involve new impacts or the need for additional mitigation in this issue area.

d) Expansive Soils.

Consistent with the Original Project, there are no expansive (i.e., shrink-swell) soils within the Project site. The soils located on the Project site consist of Veritas fine sandy loam, which has a low shrink-swell potential (NRCS Web Soil Survey). However, there is a possibility that development of the Project site could expose people or structures to adverse effects associated with soil expansion.

As noted in a-iii) above, the Modified Project will be required to comply with the City's General Plan policies related to geologic and seismic hazards. Mitigation Measure GEO-1 above, which was also included in the Original Project's IS/MND, will ensure that the Project applicant will submit a design-level geotechnical study and building plans to the City of Lathrop for review and approval.

Implementation of Mitigation Measure GEO-1 will reduce Project impacts on expansive soils to a level that will be less than significant. This mitigation measure is consistent with the conclusion of the Original Project's IS/MND and the City's General Plan EIR.

Mitigation Measure:

Implement Mitigation Measure GEO-1 above.

Implementation of the Modified Project will not involve new impacts or the need for additional mitigation in this issue area.

e) Adequacy of Soils for Sewage Disposal.

No septic systems will be used or developed as part of the Modified Project. Therefore, no impact will occur related to soils incapable of adequately supporting the use of septic tanks.

This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project does not involve any new impacts or need for new or expanded mitigation in this issue area.

f) Paleontological Resources

As stated in the Original Project's IS/MND, there are no known paleontological resources or unique geologic features on the Project site. The Project site is within the site footprint that was analyzed in the Original Project's IS/MND, is currently undeveloped, and is surrounded by existing or future urban development. Additionally, per Impact 3.6-6 of Lathrop's General Plan EIR, no formations in Lathrop are assigned a "very high sensitivity area" relative to the potential presence of paleontological resources. Regardless, Lathrop is located in a region where fossils and paleontological resources have previously been identified.

In the event that plant or animal fossils are discovered during subsurface excavation activities, Mitigation Measure CUL-1 requires all excavation within fifty (50) feet of the fossil to cease until a paleontologist has determined the significance of the find and provided recommendations in accordance with Society of Vertebrate Paleontology standards. If the find is determined to be significant and the City determines that avoidance is not feasible, the paleontologist would design and implement a data recovery plan consistent with the Society of Vertebrate Paleontology standards, to be submitted to the City for review and approval. With implementation of Mitigation Measure CUL-1, impacts to paleontological resources or unique geologic features are not expected.

Implementation of Mitigation Measure CUL-1 will reduce Project impacts on paleontological resources to a level that will be less than significant. This mitigation measure is consistent with the conclusion of the Original Project's IS/MND.

Mitigation Measure:

Implement Mitigation Measure CUL-1 above.

The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.8 GREENHOUSE GAS EMISSIONS

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) GHG Emissions	Less than significant	No	No	No	None required
b) Conflict with GHG reduction plans, policies, and regulations	Less than significant	No	No	No	None required

Environmental Setting

Background:

A greenhouse gas (GHG) is a gas that absorbs and emits radiation within the thermal infrared range, trapping heat in the earth's atmosphere. There are several types of GHGs, which are both naturally occurring and generated by human activity. Increased atmospheric concentrations of GHGs are considered a primary contributor to global climate change, which is a subject of concern for the State of California. Potential climate change impacts occurring in the San Joaquin Valley include higher temperatures, longer and more severe droughts, more intense precipitation events, and more frequent and extensive wildfires (Fernandez-Bou et al. 2021).

Unlike the criteria air pollutants described in Section 3.3, Air Quality, GHGs have no "attainment" standards established by the federal or State government. In fact, GHGs are not generally thought of as traditional air pollutants because their impacts are global in nature and not directly health-related, while air pollutants mainly affect the general region of their release to the atmosphere and can have adverse human effects. Nevertheless, the U.S. Environmental Protection Agency has in the past found that GHG emissions endanger both the public health and public welfare under Section 202(a) of the Clean Air Act due to their impacts associated with climate change (EPA 2009).

GHG emissions in California in 2023, the most recent year for which data is available, were estimated at approximately 360.4 million metric tons carbon dioxide equivalent ($MMTCO_2e$) – a decrease of approximately 3% from 2022. Transportation was the largest contributor to GHG emissions in California, with 37.1% of total emissions – the lowest level of the inventory time series, primarily due to reductions from on-road sources, such as decreases in the amount of fuel used. Other significant sources include industrial activities, with approximately 18.6% of total emissions, and electric power generation, both in-state and imported, with approximately 15.9% of total emissions (CARB 2025). No information on GHG emissions from Lathrop is available.

GHG Reduction Plans:

The State of California has implemented GHG emission reduction strategies through AB 32, the Global Warming Solutions Act of 2006, which requires total statewide GHG emissions to reach 1990 levels by 2020, or an approximately 29% reduction from 2004 levels. For the target year of 2020, state GHG emissions were 369.2 million metric tons CO_2e, which was 61.8 million metric tons CO_2e below the AB 32 target (ARB 2022a). It should be noted that the 2020 GHG emissions were most likely affected by the lockdown ordered by the State that year in response to the COVID-19 pandemic, which in turn affected traffic volumes and economic activity contributing to GHG emissions.

In 2016, Senate Bill (SB) 32 became law. SB 32 extends the GHG reduction objectives of AB 32 by mandating statewide reductions in GHG emissions to levels that are 40% below 1990 levels by the year 2030. The State has adopted an updated Scoping Plan that sets forth strategies for achieving the SB 32 target, which is 260 million metric tons CO_2e. The 2017 Scoping Plan proposes various measures to achieve the 2030 target. Most of these are State measures, such as use of the cap-and-trade program, the Short-Lived Climate Pollutant Plan, and achievement of the 50% renewable sources of electricity in the Renewables Portfolio Standard. The updated Scoping Plan continues many existing programs such as low-carbon fuel standards, renewable energy, and methane reduction strategies, along with a proposed 20% reduction in GHG emissions from refineries. It also addresses for the first time GHG emissions from the natural and working lands of California, including the agriculture and forestry sectors (CARB 2017).

In 2022, CARB adopted an update to the Scoping Plan. The 2022 Scoping Plan assesses progress towards achieving the SB 32 2030 reduction target and lays out a path to achieve carbon neutrality no later than 2045. Proposed strategies to achieve these reductions include rapid movement to zero-emission transportation, phasing out fossil fuel use for heating homes and buildings, restricting use of chemicals and refrigerants that are thousands of times more powerful at trapping heat than carbon dioxide, expanded development of renewable energy sources, increased use of natural and working lands for incorporating and storing carbon, and greater employment of carbon removal technology (CARB 2022).

The SJVAPCD adopted a Climate Change Action Plan in 2008 and issued guidance for development project compliance with the plan in 2009. The guidance adopted an approach that relies on the use of Best Performance Standards to reduce GHG emissions. Specified projects implementing Best Performance Standards would be determined to have a less than cumulatively significant impact. Other projects shall demonstrate a 29% reduction in project-specific (i.e., operational) GHG emissions from business-as-usual conditions to show a less-than-significant cumulative impact (SJVAPCD 2009). Although the City does not have a specific GHG reduction plan in place, its General Plan includes policies and programs that limit increases to GHG within the city.

California also has adopted a Renewables Portfolio Standard, the intent of which in part is to reduce the use of fossil fuels, a main source of GHG emissions. The Renewables Portfolio Standard set a target by which 20 percent of the State's electricity would be generated by renewable sources. In 2018, SB 100 was signed into law, which increased the electricity generation requirement from renewable sources to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045 (Lathrop General Plan EIR Section 3.7.2).

Environmental Impacts and Mitigation Measures

a, b) Project GHG Emissions and Consistency with GHG Reduction Plans.

The Modified Project will generate GHGs during both the construction and operations of the project. Consistent with the Original Project, the primary source of construction-related GHGs from the Modified Project will result from emissions of CO2 associated with the construction of the Modified Project, and employee vehicle trips. Sources of GHGs during project operation include CO2 associated with operational vehicle trips and on-site energy usage (e.g., electricity). Other sources of GHG emissions will be minimal. Construction emissions are temporary and will cease when project work is completed.

GHG emissions from Project construction and operations were estimated using CalEEMod. Results are available in Appendix B of this Addendum. Table 7 provides the estimated GHG emissions that would be generated during the construction and operation of the Modified Project. As shown in Table 7, the Modified Project will generate approximately 1,553.7 MT CO_2e per year. A common threshold for industrial projects is 10,000 MT CO_2e per year. As shown below, the Modified Project will not exceed this threshold.

Table 7: Project Unmitigated Construction and Operational GHG Emissions (metric tons/year)

Year	CO_2e
Construction	
2027	456.5
2028	190.2
Operation	
Annual	1,553.7

The Modified Project will not conflict with the implementation of plans, policy, or regulations adopted for the purpose of reducing the emissions of GHGs. The Original Project's IS/MND referred to the San Joaquin Council of Governments' (SJCOG) 2018 Regional Transportation Plan and Sustainable Communities Strategy (2018 RTP/SCS), which includes specific regional transportation-related GHG targets. Since then, the RTP/SCS was updated and approved by the SJCOG Board of Directors in 2022. Per Appendix C of this Addendum (the Traffic Memorandum), the Modified Project will generate less daily trips than the Original Project, which most directly correlates with total VMT. Therefore, the Modified Project will be consistent with SJCOG's 2022 RTP/SCS.

Additionally, as described above, the State of California has comprehensive GHG regulatory requirements, with laws and regulations requiring reductions that affect project emissions. The Modified Project is subject to several State regulations applicable to project design, construction, and operation that would reduce GHG emissions, increase energy efficiency, and ensure compliance with the Scoping Plan. Legal mandates to reduce GHG emissions from vehicles, for example, will reduce project-related vehicular emissions.

As discussed in Section 3.6, Energy, the Modified Project will be subject to adopted green building codes that require energy efficiency measures, which will reduce the demand for electricity produced by fossil fuels – a major source of GHG emissions. Also, as discussed in Section 3.6, attainment of the targets of the Renewables Portfolio Standard would reduce the amount of electricity generated by fossil fuels, further reducing GHG emissions from energy sources.

Based on the information provided above, the Modified Project will be consistent with the applicable plans, policies, and regulations adopted for the purpose of GHG reduction. Project impacts related to GHG emissions and consistency with GHG emission reduction plans will be less than significant.

This is consistent with the Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Hazardous material transportation, use, and disposal	Less than significant	No	No	Yes	None required
b) Hazardous materials upset and accident conditions	Less than significant	No	No	No	None required
c) Release of hazardous materials near schools	Less than significant	No	No	No	None required
d) Hazardous materials sites	Less than significant with mitigation	No	No	No	Yes, HAZ-1
e) Airport hazards	Less than significant	No	No	No	None required
f) Emergency response and emergency evacuation plans	Less than significant with mitigation	No	No	No	None required
g) Wildland fire hazards	Less than significant	No	No	No	None required

Environmental Setting

The California Department of Toxic Substances (DTSC)'s Envirostor Data Management System includes 18 locations with a Lathrop address that are deemed hazardous waste facilities. Of the listed sites, there are two (2) active: The J R Simplot Co. Corrective Action site, and the Sharpe Army Depot Federal Superfund Site (Lathrop General Plan EIR Section 3.8.1).

The J R Simplot Co. Corrective Action site is a one-acre site located at 16777 Howland Avenue, approximately one mile southwest of the Project site. The site has an active cleanup status as of June 14, 2011, and is associated with formulating and storing agricultural fertilizers.

The Sharpe Army Depot is a 727-acre site located at APNs: 198-030-01 and 198-020-01, which is directly north of Lathrop Road and the Project site. The Sharpe Army Depot is the single site within Lathrop that is listed on the Hazardous Waste and Substances Site (Cortese) List, a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. The Sharpe Army Depot was associated with the repair and reconditioning of heavy equipment and aircraft until 1976. The storage, handling, preservation, and shipment of general supplies and equipment is the remaining base mission (Lathrop General Plan EIR Section 3.8.1).

On the local level, San Joaquin County implements the Certified Unified Program Agency (CUPA) approved by the State. San Joaquin County's CUPA has enforcement authority over the City of Lathrop. Through the San Joaquin County CUPA, hazardous waste programs are managed and implemented. Furthermore, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over the City of Lathrop and oversees air quality and greenhouse gas management.

A Phase 1 Environmental Site Assessment (ESA), dated October 15, 2020, and a Limited Phase 2 ESA, dated November 16, 2020, were prepared for the Original Project to evaluate the environmental condition of the Project site. Both ESAs were prepared by Basics Environmental.

Environmental Impacts and Mitigation Measures

a) Hazardous Material Transportation, Use, and Storage.

As mentioned above, a Phase 1 ESA was prepared for the Original Project. The Phase 1 ESA included an analysis of the Project site's soil and groundwater condition and concluded that the Project site does not present any significant hazardous environmental concerns. Therefore, no further assessment of the Project site for hazardous materials was warranted.

The Modified Project is located within the boundaries of the Original Project and the area which was analyzed under the Phase 1 ESA. The Modified Project operations include pipe manufacturing, which includes lining pipes with cement mortar, high build, NSF approved epoxies per American Water Works Association (AWWA) C210, and polyurethanes, and the coating of pipes with cement mortar, tape wrap per AWWA C214, zinc primers, epoxy primers, high build epoxies, and polyurethanes. The storage and use of these materials may be deemed as hazardous materials. The San Joaquin County Environmental Health Department (EHD) reviewed the Modified Project and provided a response letter dated October 27, 2025. Per this letter, before any hazardous materials/waste can be stored or used on-site, the owner/operator must report the use or storage of these hazardous materials to the California Environmental Reporting System (CERS) and comply with the applicable laws and regulations for the programs listed below:

a. Any amount but not limited to the following hazardous waste; hazardous material spills, used oil, used oil filters, used oil-contaminated absorbent/debris, waste antifreeze, used batteries or other universal waste, etc. — Hazardous Waste Program (Health &Safety Code (HSC) Sections 25404 & 25180 et sec.)

b. Onsite treatment of hazardous waste — Hazardous Waste Treatment Tiered Permitting Program (HSC Sections 25404 & 25200 et sec. & California Code of Regulations (CCR), Title 22, Section 67450.1 et sec.)

c. Reportable quantities of hazardous materials-reportable quantities are 55 gallons or more of liquids, 500 pounds for solids, or 200 cubic feet for compressed gases, with some exceptions. Carbon dioxide is a regulated substance and is required to be reported as a hazardous material if storing 1,200 cubic feet (137 pounds) or more onsite in San Joaquin County — Hazardous Materials Business Plan Program (HSC Sections 25508 & 25500 et sec.)

d. Any amount of hazardous material stored in an Underground Storage Tank — Underground Storage Tank Program (HSC Sections 25286 & 25280 et sec.)

e. Storage of at least 1,320 gallons of petroleum aboveground or any amount of petroleum stored below grade in a vault — Aboveground Petroleum Storage Program (HSC Sections 25270.6 & 25270 et sec.)
    a. Spill Prevention, Countermeasures and Control (SPCC) Plan requirement

f. Threshold quantities of regulated substances stored onsite - California Accidental Release Prevention (CalARP) Program (Title 19, Section 2735.4 & HSC Section 25531 et sec.)
    a. Risk Management Plan requirement for covered processes

The San Joaquin County EHD requirements listed above will be included as a Condition of Approval for the Modified Project.

The Modified Project will also be conditioned to obtain operational fire permits for the storage and use of any hazardous materials and compressed gases, subject to the final inventory and Fire Department review.

The Modified Project may also result in very small quantity generators (VSQGs) of hazardous waste. If a business generates no more than 220 pounds (100 kilograms) of hazardous waste per month, they are a VSQG (EPA 2025). The Modified Project will be required to transport VSQGs of hazardous waste to an authorized San Joaquin County Household Hazardous Waste (HHW) collection facility.

Compliance with these requirements will result in less than significant impacts related to the transport, use, and storage of hazardous materials for the Modified Project, consistent with the Original Project.

This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Upset and Accident Conditions.

Construction activities on the Project site may involve the use of hazardous materials such as fuels and solvents and thus create potential for hazardous material spills. Construction and maintenance vehicles will transport and use fuels in ordinary quantities. Fuel spills, if any occur, would typically be minimal, and would not typically have widespread or significant adverse effects. In accordance with SWPPP requirements, contractors have absorbent materials at construction sites to clean up minor spills.

All construction work will be required to follow the existing City ordinances related to construction-related hazards, materials usage, and disposal.

As noted in a) above, development of the Modified Project includes the storage and use of potentially hazardous materials. However, the Modified Project will be required to comply with all applicable permitting requirements and regulations through the San Joaquin County Environmental Health Department. As such, compliance with these requirements and regulations will limit the potential upset and accident impacts related to the development, and Project impacts related to upset and/or accident conditions involving the release of hazardous materials will be less than significant.

This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

c) Release of Hazardous Materials near Schools.

The Project site is not located within one-quarter mile of an existing or proposed school. The closest school is Lathrop Elementary School, located approximately 0.62 miles southwest of the Project site. Therefore, consistent with the Original Project, implementation of the Modified Project will result in a less than significant impact relative to this topic. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

d) Hazardous Material Sites.

As noted in the Original Project's IS/MND, the Limited Phase II ESA prepared for the Project site did not detect any significant hazardous environmental concerns for the Project site for soil or groundwater. Therefore, no further assessment of the Project site for significant hazardous environmental concerns is warranted. However, the Phase 1 ESA completed for the Original Project documented three abandoned in-place groundwater monitoring wells located within the Project site and required their removal, per Mitigation Measure HAZ-1 below.

Mitigation Measure:

HAZ-1: Prior to the issuance of grading or building permits, the Project Applicant shall destroy the permanently inactive wells located within the Project site, in accordance with standards developed by the Department of Water Resources pursuant to Section 13800 of the Water Code and adopted by the State Water Resources Control Board or local agencies in accordance with Section 13801 of the Water Code.

Implementation of Mitigation Measure HAZ-1 will ensure that Project impacts relative to this topic are less than significant. This requirement is also noted in the San Joaquin County Environmental Health Department's response letter dated October 27, 2025. This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

e) Public Airports.

The Project site is not located within the vicinity of a private airstrip or public airport. The closest airport or airstrip is the Stockton Metropolitan Airport, located approximately 4.8 miles northeast of the Project site.

Furthermore, the Project site is not within the Airport Influence Area as indicated in the Airport Land Use Compatibility Plan (ALUCP) for the Stockton Metropolitan Airport.

Therefore, consistent with the Original Project's IS/MND findings in this issue area, the Modified Project will have a less than significant impact. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

f) Emergency Response and Evacuations.

The San Joaquin County Office of Emergency Services (OES) maintains an Emergency Operations Plan (EOP), which serves as the emergency response plan for San Joaquin County. This document was last updated on February 17, 2022. The San Joaquin County OES also oversees the Multi-Jurisdiction Hazard Mitigation Plan, which serves as the countywide plan to identify hazard, assess risk from those hazards, and come up with hazard mitigation strategies to reduce or eliminate future risk. The current Multi-Jurisdiction Hazard Mitigation Plan, dated January 2023, is currently undergoing a 2026 update. The Modified Project will be required to implement the EOP and Multi-Jurisdiction Hazard Mitigation Plan as necessary during its operations.

The San Joaquin County EOS also maintains an Evacuation Support Annex. This document, dated October 2024, provides strategies, guidelines, and organizational structures to be used during large-scale evacuations. Consistent with the Original Project, the Modified Project will not interfere with evacuation routes or plans, including the Evacuation Support Annex. Construction of the Modified Project is not anticipated to result in significant road closures, traffic detours, or congestion that could interfere with emergency vehicle access or evacuations. Furthermore, any construction work that occurs in the public right-of-way will be required to submit a Traffic Control Plan and obtain an encroachment permit from the City's Public Works Department.

Development of the Modified Project will be required to comply with all applicable City codes and regulations pertaining to emergency response and evacuation plans. Therefore, the Modified Project will have a less than significant impact on emergency response and evacuation plans, consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

g) Wildland Fire Hazards.

The Project site is essentially flat and is not located on a steep slope. Additionally, as discussed in the Original Project's IS/MND, the Project site is located in an urban area with existing or future urban development located on all sides. Additionally, Impact 3.8-6 of Lathrop's General Plan EIR states that no land within the City is characterized as having a high fire hazard risk potential or located adjacent to lands that have a high risk for wildfire. Consistent with the Original Project, the Modified Project will be required to comply with City standards for fire hydrants and fire sprinklers.

Therefore, the Modified Project will have a less than significant impact related to wildland fires. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area. Refer also to Section 3.20, Wildfire, for additional discussion.

3.10 HYDROLOGY AND WATER QUALITY

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Water quality standards and discharge requirements	Less than significant	No	No	No	None required
b) Groundwater supplies and recharge	Less than significant	No	No	No	None required
c) Change in drainage patterns	Less than significant with mitigation	No	No	No	Yes, HYDRO-1 and HYDRO-2
d) Release of pollutants in flood hazard, tsunami, or seiche zones	Less than significant	No	No	No	Yes, HYDRO-1 and HYDRO-2
e) Water quality control plan and sustainable groundwater management plans	Less than significant with mitigation	No	No	No	None required

Environmental Setting

Surface Waters and Groundwater:

As discussed in Section 3.4, Biological Resources, there are no surface streams, wetlands, or other bodies of water on or in the immediate vicinity of the Project site. The San Joaquin River is approximately 2.2 miles to the west of the Project site.

Water quality in Lathrop is governed by the Central Valley Regional Water Quality Control Board (CVRWQCB). The City of Lathrop, in collaboration with San Joaquin County, Tracy. Lodi, Manteca, and Patterson prepared a Multi-Agency Post-Construction Stormwater Standards Manual to provide consistent guidance for municipal workers, developers, and builders in implementing the requirements under the Statewide Small MS4 NPDES permit (2013-0001-DWQ) (Lathrop General Plan EIR Section 3.9.1).

Additionally, the Project site is within the Tracy Sub-basin, which covers an area of approximately 238,429 acres (370 square miles) between the eastern extent of the Coast Ranges on the south and the San Joaquin River on the east. The City relies on both surface water and groundwater for its drinking water (see Section 3.19, Utilities and Service Systems).

According to the City's General Plan EIR, the City of Lathrop's surface water supply is delivered fully treated from the Stanislaus River by the South County Water Supply Project (SCWSP), which is owned and operated by the South San Joaquin Irrigation District (SSJID). Five groundwater wells supply water to City residents. Groundwater from Wells 6, 7, 8, 9, and 10 are treated to state and federal drinking water standards at the Louise Avenue Water Treatment Facility (LAWTF).

The State's Sustainable Groundwater Management Act requires the formation of local groundwater sustainability agencies that must assess conditions in their local water basins and adopt locally based Groundwater Sustainability Plans (GSPs) for sustainable use of groundwater and avoidance of overdraft. The City of Lathrop GSA adopted its GSP on December 13, 2021.

Flooding:

Both State policy and recently enacted State legislation (Senate Bill 5) call for 200-year (0.5% annual chance) flood protection to be the minimum level of protection for urban and urbanizing areas in the Central Valley. Senate Bill 5 (SB5) requires that the 200-year protection be consistent with criteria used or developed by the Department of Water Resources. SB 5 requires all urban and urbanizing areas in the Sacramento and San Joaquin Valleys to achieve 200-year Urban Level of flood protection (or a finding of adequate progress toward 200-year flood protection) in order to approve development. The 200-year floodplain for the Project site, as mapped for the City of Lathrop and San Joaquin County, is also shown on Figure 3.9-2 of Lathrop's General Plan EIR. As shown in the figure, the majority of the Project site is located in the 200-year floodplain.

RD 17 created a Joint Powers Authority (JPA) that includes San Joaquin County, Stockton, Manteca, and Lathrop to issue bonds to fund the local share of Phase 1 through 3 Improvements to the RD 17 levees. Lathrop is working with RD 17 to update that JPA to fund the local share of the needed Urban Level of Protection (ULOP) improvements to the RD 17 levees, to adopt fee programs and/or exactions paid and advanced from property owners in areas of entitled and planned development within RD17, and a new Enhanced Infrastructure Financing District. As of February 2016, Lathrop and Manteca have funded the required Urban Levee Design Criteria analysis of the RD 17 levees, identified the 200-year floodplain, calculated an estimated cost to provide the ULOP improvements, and requested State funds for the State share of this work. Lathrop will continue to work with all public agencies within RD 17 to provide for final design and construction of ULOP improvements that will allow findings of Adequate Progress toward providing ULOP as the improvements are constructed.

The San Joaquin Area Flood Control Agency (SJAFCA) is a Joint Powers Authority that was created in May 1995 for the purpose of addressing flood protection for the City of Stockton and surrounding County. On November, 16, 2017, the Joint Exercise of Powers Agreement was expanded to include the Cities of Lathrop and Manteca. SJAFCA coordinates and partners with State and Federal agencies to address FEMA's Flood Insurance Rate Maps, levee standards, and flood protection issues.

Environmental Impacts and Mitigation Measures

a) Water Quality standards and discharge requirements.

Consistent with the Original Project's IS/MND, construction activities for the Modified Project, including grading, could temporarily increase soil erosion rates during and shortly after project construction. Construction-related erosion could result in the loss of soil and adversely affect water quality in nearby surface waters.

A Stormwater Pollution Prevention Plan (SWPP) is required for projects that are greater than one acre. As a result, the Modified Project will be required to complete a SWPP that will be submitted to the City for review and approval. This is included in the Modified Project's Conditions of Approval as Mitigation Measure GEO-2. The SWPP is required to include project-specific best management measures that are designed to control drainage and erosion. The Modified Project will also be required to submit grading and drainage plans to the City for review and approval that illustrate storm water runoff and erosion control in compliance with water quality standards.

As stated in the Project Description above, the Original Project included stormwater drainpipes that would discharge into a 2.6-acre stormwater retention/infiltration basin located in the far southeastern portion of the Project site. Under the Modified Project, the stormwater basin will remain unchanged.

Therefore, the Modified Project's impact on water quality will be less than significant, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for mitigation in this issue area.

b) Groundwater Supplies and Recharge.

The Modified Project will connect to the City of Lathrop water system. Section 2.1.3 of the Tracy Subbasin GSP, Lathrop's average water demand is about 9,000 acre-feet per year (AFY), and the future buildout water demand is approximately 20,000 AFY. As stated in the Environmental Setting above, the City's municipal water supply is provided by SSJID's SCWSP as well as local groundwater pumped from the City's wells. A centralized water treatment facility to remove arsenic from groundwater was constructed by the City of Lathrop in 2021. The City is also actively pursuing recycle water supplies to offset potable water demands for future developments (Tracy Subbasin GSP Section 3.7.3). Therefore, the City does not foresee any immediate water reliability issues. Per Figure 4-5 of the Tracy Subbasin GSP, a majority of the City of Lathrop is rated as "Excellent" under the Soil Agricultural Groundwater Banking Index (SAGBI), a suitability index for groundwater recharge.

As noted in the Lathrop General Plan EIR, the General Plan includes a range of policies designed to ensure an adequate water supply for development and to minimize the potential adverse effects of increased water use. Projected water demands associated with the General Plan buildout would not exceed the projected water supplies during normal years, and the General Plan includes a comprehensive set of goals, policies, and actions to ensure an adequate and reliable source of clean potable water. The General Plan EIR determined that impacts associated with groundwater and groundwater recharge will be less than significant. The Modified Project is consistent with the uses and development intensities analyzed in the General Plan EIR and will not result in any new or more severe impacts than those analyzed and disclosed in the General Plan EIR.

Additionally, the Modified Project will be required to comply with all applicable regulations enforced by the Regional Water Quality Control Board (RWQCB), including the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan), to ensure that impacts to water quality are minimized and future projects comply with the applicable laws and regulations. The Modified Project will also be subject to all water resources management and monitoring plans as part of the Tracy Subbasin GSP.

According to the City of Lathrop's 2020 Urban Water Management Plan (UWMP), industrial land uses are estimated to generate approximately 1,200 gallons of water demand per acre (gpd/ac). Using this water demand factor, water usage would be estimated at 13,900 gpd/ac for the 11.59-acre Project site. This is likely a highly conservative estimate as the operations being proposed under the Modified Project include a more limited demand for water use than typical industrial uses. As a result, the Modified Project will not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, consistent with the Tracy Subbasin GSP.

Construction of the Modified Project will add additional impervious surfaces to the Project site. However, as stated above, the plans for a 2.6-acre stormwater basin that was included with the Original Project will remain unchanged. The Modified Project includes additional pervious areas that will allow infiltration to underlying groundwater. Consistent with the Original Project, sufficient stormwater infrastructure will be constructed with the Modified Project to detain and filter stormwater runoff and prevent long-term water quality degradation. Therefore, development of the Modified Project is not expected to substantially deplete or interfere with groundwater supply or quality.

The Modified Project's impacts on groundwater supplies and recharge will be less than significant, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for mitigation in this issue area.

c-i, ii, iii, iv and e) Change in Drainage Patterns and Conflicts with Water Quality Control Plan and Sustainable Groundwater Management Plan.

As stated in the Original Project's IS/MND, the Project site is currently undeveloped and, as a result, a larger percentage of rainwater infiltrates into the soil and a smaller percentage flows off the Project site as storm water runoff. The development of the Project site will increase the impervious areas onsite, leading to an increase in the volume and rate of storm water runoff. As a result, flooding can occur if adequate storm drainage facilities are not provided.

As stated in the Environmental Setting and in Section 3.4, Biological Resources, above, there are no surface streams, wetlands, or other bodies of water on or in the immediate vicinity of the Project site. Therefore, there is no potential for the Modified Project to alter a water course that could lead to on or offsite flooding.

Additionally, consistent with the Original Project, drainage improvements for the Modified Project will be located on the Project site. The Modified Project will provide a thirty-six (36) inch stormwater drainpipe that discharges into the on-site stormwater retention basin located on "Parcel 4," as shown on the Project Plans (Appendix A). The stormwater retention/infiltration basin will be designed according to the City of Lathrop's design and construction standards, and consistent the relevant multi-agency postconstruction stormwater standards manual.

Mitigation Measure HYDRO-1 requires the applicant to provide a drainage plan for the Modified Project to the City for review and approval to ensure that post-project runoff is equal to or less than pre-project runoff. The construction of the drainage improvements will not substantially alter the existing drainage pattern of the area or alter the course of a stream or river. Per Mitigation Measure HYDRO-2, the applicant will also be required to develop an Operation and Maintenance (O&M) Plan for the storm drainage facilities to ensure long-term performance.

Implementation of these mitigation measures would reduce the Modified Project's impacts on drainage patterns, water quality control plans, and sustainable groundwater management plans to a level that will be less than significant. The mitigation measures below are consistent with the conclusion of the Original Project's IS/MND .

Mitigation Measures:

HYDRO-1: Prior to the issuance of a building or grading permit, the Project applicant shall submit a drainage plan to the City of Lathrop for review and approval. The plan shall include an engineered storm drainage plan that demonstrates attainment of pre-project runoff requirements and describe the volume reduction measures and treatment controls used to reach attainment consistent with the Lathrop Storm Drainage Master Plan.

HYDRO-2: The Project applicant shall implement the following nonstructural BMPs that focus on preventing pollutants from entering stormwater:

- Pollution Prevention/Good Housekeeping:
  Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the project, the Project applicant shall develop a spill response and prevention plan as a component of (1) SWPPPs prepared for construction activities, (2) SWPPPs for facilities subject to the NPDES Stormwater Permit, and (3) spill prevention control and countermeasure plans for qualifying facilities. The spill response and prevention plan shall be implemented during all construction activities.

- Operation and Maintenance (O&M) of Treatment Controls:
  Prior to clearing, grading, and disturbances to the ground such as stockpiling, or excavation in each phase of the project, the Project applicant shall develop an Operation and Maintenance (O&M) Plan for the storm drainage facilities to ensure long-term performance. The O&M plan shall incorporate the manufacturers' recommended maintenance procedures and include (1) provisions for debris removal, (2) guidance for addressing public health or safety issues, and (3) methods and criteria for assessing the efficacy of the storm drainage system. An annual report shall be submitted to the City certifying that maintenance of the facilities was conducted according to the O&M plan.

The Modified Project will not involve any new impacts or need for mitigation in these issue areas.

d) Release of Pollutants in Flood, Tsunami, or Seiche Zones.

As described in the Environmental Setting above, the Project site is located "an area with reduced flood risk due to levee" (Zone X) per the FEMA FIRM maps. However, according to the DWR, the entire project site is located within a 200-year floodplain under SB 5 jurisdiction. The Project site's floodplain designations are consistent with what was analyzed under the Original Project's IS/MND. As stated in the Original Project's IS/MND, the implementation of Mitigation Measure HAZ-1 will ensure that flooding does not risk a significant release due to project inundation.

Additionally, the Project site remains within the New Melones Dam and San Luis Dam, as analyzed under the Original Project's IS/MND. The Original Project's IS/MND concluded that regular inspection by the California Department of Water Resources (DWR), Division of Safety of Dams (DSD) and maintenance by dam owners will ensure that dams are kept in safe operating condition. As a result, failure of these dams is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event. Therefore, the Modified Project will not expose people or structures to a significant risk of loss, injury or death involving flooding as a result of the failure of a levee or dam.

As stated in a) above, the Mitigation Measure GEO-2 for the Modified Project requires the applicant to submit a SWPP to the City for review and approval. The SWPP will control storm water quality degradation to the extent practicable using best management practices during and after construction, which will assist with minimizing the discharge of materials into the storm drain system that are toxic.

The Project site is not expected to be inundated by a tsunami. As stated in the Project Description above, the entire Project site is approximately 16 to 23 feet above sea level. The closest ocean waterbody is the Pacific Ocean, which is approximately 60 miles away from the Project site. Furthermore, the Project site is not anticipated to be inundated by a seiche as it is not located in close proximity to a water body capable of creating a seiche, consistent with Impact 3.9-4 of the City's General Plan EIR.

Therefore, the Modified Project will have a less than significant impact related to the release of pollutants in flood, tsunami, or seiche zones, consistent with the Original Project's IS/MND findings. The Modified Project will not involve any new impacts or need for mitigation in this issue area.

3.11 LAND USE AND PLANNING

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Division of established community	Less than significant	No	No	No	None required
b) Conflict with plans, policies, and regulations adopted to avoid or mitigate environmental effect	Less than significant	No	No	No	None required

Environmental Setting

As stated in the Project Description, the Project site consists of raw undeveloped land that is mostly flat terrain. The Project site is surrounded by industrial development to the north, east, south, and west with Lathrop Road at its north end border.

On September 19, 2022, the Lathrop City Council voted to adopt Lathrop's General Plan Update and certify the Final Environmental Impact Report (EIR). Per Lathrop's General Plan, the Project site has a land use designation of GI, General Industrial. The Project site formerly had a land use designation of Service Commercial (SC); however, the Original Project included a General Plan Amendment (GPA) to replace the SC designation with the General Industrial (GI) land use designation. The General Plan Amendment became effective when the City Council approved the amendment on November 8, 2021. The City's General Plan states that General Industrial uses are intended to provide opportunities for large-scale industries requiring substantial acreage, with access to rail and freeway facilities.

The Project site is zoned General Industrial (IG) and is subject to Title 17 of the Lathrop Municipal Code, which is the City's Zoning Ordinance. The Project site was formerly zoned Commercial Service (CS); however, the Original Project included a rezone to the General Industrial (IG) zoning district. The first hearing for the Rezone was approved at the November 8, 2021, City Council meeting. The Rezone's second reading was held and approved by the City Council on December 13, 2021 (Ordinance No. 21-429). The IG zoning district provides for a full range of manufacturing, industrial processing, general service, and distribution use, which is intended for this site.

Environmental Impacts and Mitigation Measures

a) Division of Established Community.

The Project site is within the Project area analyzed under the Original Project. The Project site is located within the Lathrop City Limits and is adjacent primarily to existing urban and agricultural uses. Therefore, consistent with the Original Project, the Modified Project will not physically divide an established community. Implementation of the Modified Project will have a less than significant impact relative to this topic.

This is consistent with the Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Conflicts with Land Use Plans, Policies, and Regulations.

As stated above, the primary Planning documents that the Modified Project is subject to are the City of Lathrop General Plan and the City of Lathrop Zoning Ordinance. According to these documents, the Project site has a General Plan land use designation of GI, General Industrial, and is located in the General Industrial (IG) zoning district.

Approval of the Original Project included a General Plan Amendment to GI, General Industrial, and a Rezone to the General Industrial (IG) zoning district. The City's General Plan states that General Industrial uses are intended to provide opportunities for large-scale industries requiring substantial acreage, with access to rail and freeway facilities. Furthermore, the IG zoning district provides for a full range of manufacturing, industrial processing, general service, and distribution use, which is what is intended for this site. The Modified Project includes the development of a pipe manufacturing business, which is consistent with the adopted land use plans and regulations for this site. Therefore, implementation of the Modified Project will result in a less than significant impact as it relates to conflicts with land use plans, policies, and regulations.

This is consistent with the Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.12 MINERAL RESOURCES

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Loss of mineral resources	Less than significant	No	No	No	None required
b) Loss of locally-important mineral resource recovery site	Less than significant	No	No	No	None required

Environmental Impacts and Mitigation Measures

a) Loss of mineral resources.

Consistent with the Original Project's IS/MND, the Project site is located in Mineral Resource Zone MRZ-1 as shown in the Mineral Resources and Mineral Hazards Mapping Program (MRHMP) (California Department of Conservation, 2021). According to this map, the MRZ-1 zone includes areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. Since there is no presence of significant mineral deposits on-site, the Modified Project will not result in the loss of known mineral resources that would be of value to the region and residents of the state. Therefore, development and implementation of the Modified Project will have a less than significant impact relative to this topic.

This is consistent with the Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Loss of locally-important mineral resource recovery site.

As stated above, the Project site is located in Mineral Resource Zone MRZ-1. Figure 3.11-1 (Mineral Resources Zones) in the City's General Plan EIR also illustrates that any areas within City limits that have a high likelihood of containing significant mineral deposits are not located on or near the Project site. Therefore, the Modified Project will not result in the loss of availability of a locally important mineral resource recovery site, consistent with the Original Project's IS/MND findings in this issue area.

The impact is less than significant to this environmental topic. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.13 NOISE

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Exposure to or generation of ambient noise exceeding local standards	Less than significant with mitigation	No	No	No	Yes, NOI-1
b) Groundborne vibration and noise	Less than significant	No	No	No	None required
e) Exposure to noise from public or private airports	No impact	No	No	No	None required

Environmental Setting

The Original Project's IS/MND describes the typical noise and vibration levels for common outdoor activities based on CalTrans, Federal Highway Administration, and Federal Transit Administration data, and the effects of noise and vibration on people.

Additionally, Chapter 8.20 of the Lathrop Municipal Code (LMC) includes general limits for community noise exposure. Construction activities are exempt from the regulations of this section when conducted in accordance with LMC Section 8.20.110, which prohibits construction activities between the hours of 10 P.M. of one day and 7 A.M. of the next day, or 11 P.M. and 9 A.M. Fridays, Saturdays, and legal holidays.

Environmental Impacts and Mitigation Measures

a) Exposure to or generation of ambient noise exceeding local standards.

As analyzed in the Original Project's IS/MND, there is a potential increase in temporary ambient noise associated with Project construction activities, and an increase in permanent ambient noise during Project operation. Ambient noise generated by the Modified Project's construction activities and operations are described in further detail below.

Construction Noise:

Consistent with the Original Project, the Modified Project could result in temporary or periodic increases in ambient noise levels in the Project vicinity above levels existing conditions. Primarily, the use of construction equipment and worker vehicle traffic will result in temporary noise impacts. Mitigation Measure NOI-1 below was required for the Original Project and will also be required for the Modified Project. Implementation of Mitigation Measure NOI-1 will ensure that temporary noise impacts resulting from project construction will be minimized. As a result, construction noise is temporary and will have a less than significant impact with the implementation of Mitigation Measure NOI-1.

Operational Noise:

As described in the Project Description, the Modified Project includes the manufacturing of pipes for private and municipal water agencies. The manufacturing buildings have different features including modifying pipe that is delivered to the site, coating, cutting, welding flanges, and angles, etc. Additionally, the Modified Project includes outdoor storage of finished material, located at the northeast corner of the Modified Project site. The operational noise that is generated by the Modified Project will not be beyond typical noise levels found at similar manufacturing projects.

Per Section 3.12.1 of the City's General Plan EIR, welders and heavy equipment are included in the list of fixed noise sources which are typically of concern. However, the Project site is located a substantial distance from sensitive receptors. The Modified Project will also be required to comply with all local noise regulations, including LMC Chapter 8.20 (Noise), which includes general limits for community noise exposure. Per LMC Chapter 8.20, the ambient noise levels for industrial zoning districts is consistently listed at 75 decibels across the "very quiet," "slightly quiet," and "noisy" categories.

Therefore, the Modified Project is not anticipated to have a significant impact on ambient noise levels in the vicinity of the project.

Conclusion:

Consistent with the Original Project, the Modified Project is not anticipated to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project site in excess of the applicable standards. Implementation of Mitigation Measure NOI-1 will ensure that the Modified Project has a less than significant impact relative to this environmental topic.

Mitigation Measures:

NOI-1: During project construction activities, the applicant shall require its construction contractors to adhere to the following noise attenuation requirements:

- Construction activities shall be limited to the hours between 7 a.m. to 8 p.m. daily. The City of Lathrop Director of Public Works shall have the discretion to permit construction activities to occur outside of allowable hours if compelling circumstances warrant such an exception (e.g., weather conditions necessary to pour concrete).

- All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. If no noise-reduction features were installed by the manufacturer, then the contractor shall require that at least a muffler be installed on the equipment.
- Construction staging and heavy equipment maintenance activities shall be performed on the northernmost part of the Project site to create the greatest separation from the nearest residence, unless safety or technical factors take precedence (e.g., an equipment breakdown). Alternatively, staging and maintenance could be performed on adjacent vacant parcels so long as the separation to the nearest residence is greater than what could be achieved on the Project site.

The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Exposure to Groundborne Vibrations.

As analyzed in the Original Project's IS/MND, primary vibration-generating activities associated with the Modified Project will occur during construction activities. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures. In any case, any vibrations generated by construction activities will cease once construction work is completed. Vibrations generated by Project operations will be limited as manufacturing activities, such as the sanding, welding, and coating of pipes, will be conducted entirely within enclosed buildings. Therefore, Project impacts related to groundbourne vibrations will be less than significant.

This is consistent with the Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

c) Public Airport and Private Airstrip Noise.

The Project site is not located within the vicinity of an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. As analyzed in the Original Project's IS/MND, the closest airport or airstrip is the Stockton Metropolitan Airport, located approximately 7 miles north of the Project site. Therefore, the Modified Project will not expose people residing or working in the vicinity of the Project site to excessive noise levels associated with airport facilities.

Implementation of the Modified Project will have no impact relative to this topic. This is consistent with Original Project's IS/MND findings in this issue area. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.14 POPULATION AND HOUSING

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Population growth inducement	No impact	No	No	No	None required
b) Displacement of people or housing units	No impact	No	No	No	None required

Environmental Impacts and Mitigation Measures

a) Unplanned Population Growth.

The Modified Project includes the construction of five (5) buildings, one (1) two-story office building and four (4) manufacturing buildings that total 126,965 square feet in lieu of the previously approved two (2) industrial warehouse buildings (Buildings 1 and 2), to accommodate a pipe manufacturing business. Pipe that is delivered to the site will be modified via coating, cutting, welding flanges and angles, etc. Additionally, the Modified Project includes outdoor storage of finished material, located at the northeast corner of the Project site.

Implementation of the Modified Project will create new jobs, which has the potential to create some population growth. According to the applicant's letter dated October 11, 2025, Jifco, Inc. currently employs approximately 65 people. Development of the Modified Project will retain the same number of employees. Therefore, it is anticipated that these new jobs will be for the existing labor force within Lathrop and the surrounding communities. The Modified Project will have no impact relative to this topic, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for mitigation in this issue area.

b) Displacement of People or Housing Units.

As stated in the Original Project's IS/MND, the Project site is currently vacant and does not contain housing. Therefore, development of the site and the Modified Project will not displace housing or people. The Modified Project will have no impact relative to the displacement of housing or people, consistent with the Original Project's IS/MND findings.

The Modified Project will not involve any new impacts or need for mitigation in this issue area.

3.15 PUBLIC SERVICES

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a-i) New or expanded fire protection facilities	Less than significant with mitigation	No	No	No	Yes, PSU-1
a-ii) New or expanded police protection facilities	Less than significant	No	No	No	None required
a-iii) New or expanded school facilities	Less than significant	No	No	No	None required
a-iv) New or increased parks	Less than significant	No	No	No	None required
a-v) New or expanded public facilities	No impact	No	No	No	None required

Environmental Setting

Fire Protection

Fire protection services for all lands within the City of Lathrop, excluding lands north of Roth Road protected by French Camp, are provided by the Lathrop-Manteca Fire Protection District (LMFD). LMFD covers 100 square miles and currently has three (3) Fire Stations within the City of Lathrop. The closest Fire Station to the Project site is Station 31 located at 800 E. J Street.

In 2020, LMFD responded to emergency incidents 70% of the time within five minutes at the 90th percentile with all combined responses. LMFD plans to develop two (2) to three (3) additional fire stations/companies in order to serve areas of new development in the city (Lathrop General Plan EIR Section 3.13.1).

Police Protection

Police protection services are provided by the City of Lathrop Police Department (LPD), which has been fully operational since June 29, 2022. As of 2022, LPD included 35 sworn officers and 12 non-sworn professional personnel. The LPD headquarters are located at 940 River Islands Parkway.

Schools

The Project site is located within the boundaries of the Manteca Unified School District, which provides school services for grades K through 12 across 113 square miles for more than 23,000 students. The School District currently operates three (3) public elementary schools and one (1) high school within the City of Lathrop. Approximately 5,722 students are enrolled in the City, 4,385 of which are enrolled in elementary and middle school (Grades K – 8) and 1,330 of which are enrolled in high school (Grades 9-12) (Lathrop General Plan EIR Section 3.13.1).

Parks and Other Public Facilities

The City of Lathrop's website notes that there are more than 120 acres of park space and over 31 park locations throughout the city. Parks and recreational facilities within the City of Lathrop are managed by the City's Parks and Recreation Department.

Other public services in Lathrop include the Lathrop Branch Library, a branch of the San Joaquin County Library system. The library, located at 459 Spartan Way, is open six days per week (Monday through Saturday) and offers public computer workstations, a ready reference collection, and a circulating collection of popular materials in English and Spanish. Another public service in Lathrop is the Lathrop Senior Center located at 15707 Fifth Street. The Senior Center is open Monday through Friday and provides lunches, classes, and various trips and activities (Lathrop General Plan EIR Section 3.13.1).

Environmental Impacts and Mitigation Measures

a-i) Fire Protection Services.

The Modified Project will increase demand for fire protection service, as new industrial buildings will be constructed and occupied. As stated in the Environmental Setting above, the closest Fire Station to the Project site is Station 31 located at 800 E. J Street, which is approximately 0.6 miles southwest of the Project site. Since Station 31 is less than a mile from the Project site, no new facilities would be necessary to improve response times to the site. The Modified Project will be required to pay applicable impact fees to fund capital and labor costs associated with the fire protection services that are provided. The payment of impact fees is included under Mitigation Measure PSU-1 and will ensure that the impacts on fire protection services are less than significant. Mitigation Measure PSU-1 was also included with the Original Project. The Modified Project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, consistent with the Original Project.

Mitigation Measure:

PSU-1: Prior to issuance of building permits for any project uses, the Project applicant shall provide the City of Lathrop will all applicable fire protection development fees in accordance with the latest adopted fee schedule.

Furthermore, project development would be subject to the California Fire Code adopted at the time of development approval. The Fire Code sets requirements for fire flow, fire hydrant locations, and access roads, which will aid firefighters. The Project Plans (Appendix A) identify an emergency vehicle access gate that connects to APN: 198-040-34, and an additional emergency access gate adjacent to the west side of Building 1. All access points will be designed to City standards to accommodate turning requirements for fire trucks. Therefore, Project impacts related to fire protection services will be less than significant.

The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

a-ii) Police Protection Services.

When the Original Project's IS/MND was prepared, the City of Lathrop contracted with the San Joaquin Sheriff's Department for police protection services and was in the process of creating its own police department. Since then, the City has established its own police department, as described in the environmental setting above. The LPD headquarters are located approximately 2.9 miles southwest of the Project site.

The Modified Project will increase demand for police protection services since new development is involved. The Original Project's IS/MND noted the need for four (4) additional officers to meet the City's adopted level of service (LOS), as there were only 26 sworn officers at the time of analysis. LPD's June 2022 Update stated that there were 35 sworn officers when LPD became fully operational, an increase of nine (9) since the Original Project was reviewed. Therefore, the LOS has improved since the Original Project's IS/MND analysis.

Additionally, the Modified Project will be required to pay applicable impact fees which helps to fund capital and labor costs associated with police services. The potential for the Modified Project to cause substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, as a result, is less than significant. No new or expanded police protection facilities are required.

Project impacts related to police protection services are less than significant, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for mitigation in this issue area.

a-iii) Schools.

The Modified Project does not include any residential units and therefore will not directly increase the student population in the area, consistent with the Original Project. As required under the Original Project, the Modified Project will be required to pay the applicable school impact fees as allowed by the Leroy F. Greene School Facilities Act. Therefore, the Modified Project's environmental impacts related to schools will be less than significant, consistent with the Original Project's IS/MND.

The Modified Project will not involve any new impacts or need for mitigation in this issue area.

a-iv) Parks.

As discussed in a-iii) above, the Modified Project does not include any residential units. The Modified Project could increase the number of people in the area as a result of employment opportunities that the Modified Project provides. However, since there is not a direct increase in the number of residential units resulting from the Modified Project, the Modified Project will not substantially increase the need for additional parks. The Modified Project will have a less than significant impact relative to park facilities, consistent with the Original Project. See Section 3.16, Recreation, for a more detailed analysis.

This is consistent with Original Project's IS/MND. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

a-v) Other Public Facilities.

The Modified Project will not result in the need for other public facilities that are not addressed above or in Section 3.19, Utilities and Service Systems. The existing Lathrop Branch Library and Lathrop Senior Center discussed in the Environmental Setting above will not be impacted by the Modified Project as new residential units are not being created. Therefore, Modified Project will not result in a substantial need for new or expanded library or senior center facilities. The Modified Project will have no impact relative to public facilities not discussed in a-i through a-iii) above, consistent with the Original Project's IS/MND findings.

The Modified Project will not involve any new impacts or need for mitigation in this issue area.

3.16 RECREATION

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Physical deterioration of recreational facilities	Less than significant	No	No	No	None required
b) Construction or expansion of recreational facilities	No impact	No	No	No	None required

Environmental Setting

Refer to Environmental Setting in Section 3.15, Public Services, above.

Environmental Impacts and Mitigation Measures

a) Physical deterioration of recreational facilities.

The Modified Project includes pipe manufacturing and related office use and is surrounded by industrial development to the north, east, south, and west with Lathrop Road at its north end border. Additionally, as discussed in Section 3.15, Public Services, above, the Modified Project does not include the construction of residential uses. Therefore, there is no additional direct demand on park services and physical deterioration of recreational facilities will not occur as a result of the Modified Project. The Modified Project has a less than significant impact relative to this topic, consistent with the Original Project's IS/MND.

The Modified Project will not involve any new impacts or need for mitigation in this issue area.

b) Construction or expansion of recreational facilities.

The Modified Project does not include the development of recreational facilities, nor is the construction or expansion of existing recreational facilities required for the project. Therefore, implementation of the Modified Project will have no impact as it relates to recreational facilities and the potential to have an adverse physical effect on the environment, consistent with the Original Project.

The Modified Project will not involve any new impacts or need for mitigation in this issue area.

3.17 TRANSPORTATION

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Conflicts with Transportation Programs and Plans.	Less than significant	No	No	No	None required
b) Conflicts with CEQA Guidelines Section 15064.3(b)	Less than significant	No	No	No	None required
c) Hazards due to design feature or incompatible uses	Less than significant	No	No	No	None required
d) Adequate emergency vehicle access	Less than significant	No	No	No	None required

The analysis below is based on a Transportation Memorandum ("Addendum to the Scannell Industrial Development Project IS/MND for Jifco, Inc.) prepared for the Modified Project by Fehr and Peers and dated May 4, 2026. Appendix C contains a copy of the memorandum for reference.

Environmental Impacts and Mitigation Measures

a, b) Conflicts with Transportation Programs and Plans and CEQA Guidelines Section 15064.3(b).

The Transportation Memorandum evaluated Level of Service (LOS) for the Modified Project, which is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. The Traffic Memorandum assessed the trip generation associated with the Modified Project plus the existing conditions traffic volumes. Table 8 includes the Modified Project's Existing Plus Project conditions turning movement volumes at study intersections. AM and PM peak hour intersection operations under Cumulative Plus Project conditions for the Original and Modified Projects were also evaluated in the Traffic Memorandum, as shown in Table 9 below.

Table 8: Intersection Operations – Existing Plus Project Conditions

ID	Intersection	Traffic Control[1]	Level of Service (LOS)			
			Original Project		Modified Project	
			AM	PM	AM	PM
1	I-5 SB Ramps / Lathrop Road	Signal	B	B	B	B
2	I-5 NB Ramps / Lathrop Road	Signal	B	B	B	B
3	Lathrop Road / D Street	SSSC	A (C)	A (C)	A (B)	A (C)
4	SR 99 SB Ramps / Lathrop Road	Signal	B	B	B	B
5	SR 99 NB Ramps / Lathrop Road	Signal	B	B	B	B
6	Lathrop Road / Project Dwy	SSSC	A (A)	A (B)	A (A)	A (B)

Notes:

SSSC = Side Street Stop Control; LOS = Level of Service

1. For signalized intersections, average intersection delay is reported. For side-street stop-controlled intersections, average intersection delay and worst-case movement (in parentheses) are reported.

Source: Fehr & Peers, 2026 (Appendix C)

Table 9: Intersection Operations – Cumulative Plus Project Conditions

ID	Intersection	Traffic Control[1]	Level of Service (LOS)			
			Original Project		Modified Project	
			AM	PM	AM	PM
1	I-5 SB Ramps / Lathrop Road	Signal	D	D	D	D
2	I-5 NB Ramps / Lathrop Road	Signal	D	D	D	D
3	Lathrop Road / D Street	SSSC	A (F)	C (F)	A (F)	C (F)
4	SR 99 SB Ramps / Lathrop Road	Signal	C	C	C	C
5	SR 99 NB Ramps / Lathrop Road	Signal	C	C	C	C
6	Lathrop Road / Project Dwy	SSSC	A (C)	A (C)	A (C)	A (C)

Notes:

SSSC = Side Street Stop Control; LOS = Level of Service

1. For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side-street stop-controlled intersections, average intersection delay and worst-case movement (in parentheses) are reported.

Source: Fehr & Peers, 2026 (Appendix C)

Based on Table 8, implementation of the Modified Project is anticipated to maintain the same LOS at each study intersection as the Original Project. No operational deficiencies are identified, and no intersection improvements are required under Existing Plus Project conditions. Based on Table 9 and the Transportation Memorandum, although the Modified Project will result in minor changes to delay under Cumulative Plus Project conditions when compared to the Original Project, the LOS will remain unchanged. This is reasonable due to comparable number of peak hour trips generated by the Modified Project versus the Original Project.

Therefore, all study intersections will continue to operate at the same LOS identified for the Original Project for both existing and cumulative conditions. Accordingly, the Modified Project will not create new or more severe transportation impacts beyond those previously evaluated for the Original Project.

As discussed in the Original Project's IS/MND, Senate Bill 743 (SB 743) resulted in the CEQA Guidelines being amended to state that "generally, VMT is the most appropriate measure of transportation impacts." On September 14, 2020, the City of Lathrop City Council adopted Resolution No. 20-4784 to enact thresholds of significance and screening criteria for the purpose of analyzing transportation impacts under CEQA related to Vehicle Miles Traveled (VMT). These thresholds and screening criteria were used to evaluate the Original Project in the VMT Analysis (August 2021) and Transportation Analysis (September 2021) that were prepared by Fehr & Peers. These reports determined that the project-generated VMT would result in a less than significant transportation impact.

The Transportation Memorandum prepared for the Modified Project includes an updated analysis, including trip generation estimates associated with both administrative employees (Table 10) and truck trips (Table 11). The Modified Project's estimated trip generation rates are based on comparable staffing levels and truck trip volumes reported by Jifco, Inc.'s existing facilities in Livermore.

Table 10: Trip Generation of Modified Project – Passenger Vehicle Trips

Land Use	Quantity	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Jifco, Inc.	50 manufacturing employees	200	0	0	0	0	0	0
Jifco, Inc.	15 administrative employees	60	15	0	15	0	15	15
Building 3[1]	42.56 KSF	60	4	1	5	2	4	6
Project Passenger Vehicle Trips		**320**	**19**	**1**	**20**	**2**	**19**	**21**

Notes:

1. Based on ITE's General Warehouse land use category (Code 150) in the *Trip Generation Manual, 12th Edition.* The ITE description of this category states that it is primarily devoted to storage of materials, but it may include office and maintenance areas.

Source: Fehr & Peers, 2026 (Appendix C)

Table 11: Trip Generation of Modified Project – Heavy Vehicle (Truck) Trips

Land Use	Quantity	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Jifco, Inc.[1]	-	22	9	9	18	2	2	4
Building 3[2]	42.56 KSF	20	1	0	1	0	1	1
Project Truck Trips		**42**	**10**	**9**	**19**	**2**	**3**	**5**

Notes:

1. Based on truck logs provided by Jifco, Inc.'s Livermore facility.
2. Based on ITE's General Warehouse land use category (Code 150) in the *Trip Generation Manual, 12th Edition.* The ITE description of this category states that it is primarily devoted to storage of materials, but it may include office and maintenance areas.

Source: Fehr & Peers, 2026 (Appendix C)

The Transportation Memorandum also provides a trip generation comparison between the Original Project and Modified Project. As shown in Table 12 below, the Modified Project will generate fewer daily vehicle trips than the Original Project, resulting in a reduction of approximately 9 percent. The Modified Project will also generate fewer PM peak hour trips, with 26 trips compared to 40 trips under the Original Project, which results in a reduction of approximately 35 percent. Although the Modified Project will generate one additional trip during the AM peak hour, the incremental difference is negligible and does not indicate a material increase in travel demand.

Table 12: Trip Generation Comparison

Scenario	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
Original Project (General Industrial)	398	38	40
Modified Project	362	39	26
Net Change	-36	+1	-14
Percent Change	-9%	+3%	-35%

Source: Fehr & Peers, 2026 (Appendix C).

The overall daily trip generation most directly correlates with VMT and is lower for the Modified Project compared to the Original Project. Therefore, the Modified Project will have a less than significant impact as it relates to project-generated VMT, consistent with the Original Project.

The Modified Project will also be required to comply with the applicable city standards and CalTrans' Standard Specifications so as to not conflict with public roadway infrastructure improvements and circulation system. As a result, the Modified Project will not conflict with programs, plans, ordinances, or policies relative to the circulation system, resulting in a less than significant impact. The Modified Project will not involve any new impacts or need for mitigation in this issue area.

c, d) Hazards due to Design Feature or Incompatible Uses and Adequate Emergency Vehicle Access.

Access to the Modified Project will remain the same as the Original Project's access. The Original Project proposed the following vehicular access points for cars, trucks, and emergency vehicles:

- Access Point #1 (Lathrop Road): The access point is located at the northwest corner of the Project site connecting to Lathrop Road. With the access point being on the west side of the property it maximizes the spacing between the other existing driveways and intersections along Lathrop Road. The access point will allow right-in/right turn movements only since left turn movements are prohibited by the existing raised center median in Lathrop Road. Lathrop Road consists of two travel lanes plus a shoulder. Vehicles entering the Project site at this access point from Lathrop Road can utilize the right lane while other vehicles can continue through in the left lane consistent with how access works for the existing development to the west.

- Access Point #2 (D Street): The access point is located near the northeast corner of the Project site connecting to Street D. With the access point being at the south end of Street D it maximizes the distance from Lathrop Road therefore allowing the maximum amount of queuing possible if/when needed. The access point connects the Project to the existing D Street/Lathrop Road intersection which allows turn movements in all directions including an existing westbound turn pocket that vehicles entering the Project site may utilize.

Circulation within the site consists of vehicular access to all sides of each building, thereby creating a contiguous looping street pattern. Truck turning templates for the Modified Project were included in the Transportation Memorandum, which concluded that the proposed right-in/right-out project driveway would not accommodate an inbound WB-50 vehicle on Lathrop Road without encroachment onto the curb, and the outbound northbound right turn onto Lathrop Road would require use of the full driveway width, preventing simultaneous inbound movements. As a result, the Transportation Memorandum recommends the project team either widen the driveway to accommodate simultaneous inbound and outbound WB-50 truck movements or widen the driveway to accommodate inbound WB-50 truck access while restricting outbound truck movements. In contrast, the all-access project driveway would adequately accommodate simultaneous inbound and outbound turn movements for WB-50 vehicles to and from D Street.

Emergency vehicles arriving to and from the Modified Project will be able to enter via the primary access point on Lathrop Road or the secondary access point on D Street. Additionally, an emergency vehicle access gate will be provided that connects to APN: 198-040-34. An additional emergency access gate for vehicles to utilize during an emergency is also provided adjacent to the west side of Building 1.

All access points will be designed to City standards to accommodate turning requirements for fire trucks. These multiple entry/exit points provide flexibility for emergency vehicles to access or evacuate from multiple directions during an emergency. The access points will be designed for vehicle and pedestrian safety based on City standards taking into account the swept path of the vehicles, sidewalks with curb ramps, site distance, and any other relevant City standards. Therefore, each access point will not cause any safety, capacity, or sight distance issues, consistent with the Original Project. The Transportation Memorandum ultimately determined that the proposed driveways and site plan for the Modified Project will adequately accommodate emergency response vehicles, as well as garbage trucks for refuse collection operations on-site.

The Modified Project will not substantially increase hazards due to a geometric design or incompatible uses or result in inadequate emergency access. As a result, the Modified Project will have a less than significant impact related to this topic, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for mitigation in this issue area beyond what was previously determined under the Original Project.

3.18 TRIBAL CULTURAL RESOURCES

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a-i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources per Public Resources Code Section 5020.1(k), or	Less than significant with mitigation	No	No	No	Yes, CUL-1 and CUL-2
a-ii) A resource determined by the lead agency to be significant per Public Resources Code Section 5024.1, considering the significance of the resource to a California Native American tribe.	Less than significant with mitigation	No	No	No	Yes, CUL-1 and CUL-2

Environmental Setting

As noted in Section 3.5, Cultural Resources, the City of Lathrop lies within the northern portion of the ethnographic territory of the Yokuts people, who held portions of the San Joaquin Valley from the Tehachapi Mountains in the south to Stockton in the north.

During the preparation of the Original Project's IS/MND, AB 52 and SB 18 Tribal Consultation was completed, and no requests were made at that time for consultation. The purpose of this Addendum is to analyze the minor changes that have been made since the Original Project was analyzed. Since these changes do not result in significant impacts to tribal cultural resources, as discussed in a-i, a-ii) below, additional AB 52 consultation is not required. Additionally, the Modified Project does not include amendments to the General Plan, zoning designations, or a Specific Plan like the Original Project did. As a result, additional SB 18 consultation is not required either.

Environmental Impacts and Mitigation Measures

a-i, a-ii) Tribal Cultural Resources.

There are no properties or districts currently listed on the National Register of Historic Places or California Register of Historic Places for the City of Lathrop (Lathrop General Plan EIR Section 3.5.1).

As stated in the Original Project's IS/MND, no known Tribal Cultural Resources (TCRs) have been documented on the Project site; however, it is still possible for artifacts to be discovered during construction activities. The Modified Project will be required to halt construction activities if artifacts or unusual amounts of stone, bone, or shell are uncovered, and consult with an archaeologist for on-the-spot evaluation of the findings. This requirement is included as Mitigation Measure CUL-1 in Section 3.5, Cultural Resources, above to ensure that development of the Modified Project will have a less than significant impact on historic and archaeological resources, which is consistent with the requirements of the Original Project.

Additionally, as described in Section 3.5, Cultural Resources, above, CEQA Guidelines Section 15064.5(e) describes the procedure to be followed when human remains are uncovered in a location outside a dedicated cemetery. As required by existing law, all work in the vicinity of the find shall be halted, and the County Coroner shall be notified to determine if an investigation of the death is required, in accordance with California Health and Safety Code Section 7050.5. Compliance with the provisions of CEQA Guidelines Section 15064.5(e) will ensure that any human remains and associated grave goods encountered during Project construction will be treated with appropriate dignity.

Both Mitigation Measure CUL-1 and CUL-2 were included under the Original Project's IS/MND and will continue to be required for the Modified Project. Implementation of these mitigation measures will ensure that impacts on tribal cultural resources are less than significant.

Mitigation Measures:

Implement Mitigation Measures CUL-1 and CUL-2.

This is consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.19 UTILITIES AND SERVICE SYSTEMS

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Relocation or construction of utility facilities	Less than significant	No	No	No	None required
b) Water supplies	Less than significant	No	No	No	None required
c) Wastewater treatment capacity	Less than significant	No	No	No	None required
d) Solid waste capacity	Less than significant	No	No	No	None required
e) Compliance with solid waste statutes and regulations	Less than significant	No	No	No	None required

Environmental Impacts and Mitigation Measures

a-c) Relocation, Construction, and Capacity of Utility Facilities.

Potable water connection to the Modified Project site will occur via an 8" domestic water line that connects to the City of Lathrop water system. Additionally, the Modified Project will provide a twelve (12) inch fire water line that connects to the City of Lathrop's water main along Lathrop Road. The Modified Project will be required to pay the applicable connection fees to pay for their proportionate share of required funding to the City for the acquisition and delivery of treated potable water supplies to the Modified Project, consistent with the Original Project. Additionally, the City's existing water treatment facilities have adequate capacity to serve the Modified Project. Therefore, the construction or expansion of existing water treatment facilities is not required. There are adequate water supplies to support the Modified Project, consistent with the City's 2020 Urban Water Management Plan (UWMP). Therefore, the Modified Project will have a less than significant impact on water supply and water infrastructure, consistent with the Original Project.

A new sewer pump station, located at the northwest corner of the Modified Project site, will be installed with an eight (8) inch force main that would connect to the City's existing force main at the intersection of Lathrop Road and McKinley Avenue. The Modified Project will be required to pay City Capital Facility Fees (CFF) to develop the Project site and assist with adequate long-term wastewater treatment capacity, consistent with the Original Project. Therefore, a less than significant impact will occur as the construction of new wastewater treatment facilities or expansion of existing facilities will not be required for the Modified Project.

The Modified Project will provide a thirty-six (36) inch stormwater drainpipe that discharges into the on-site stormwater retention basin located on "Parcel 4," as shown on the Project Plans (Appendix A). The stormwater retention/infiltration basin will be designed according to the City of Lathrop's design and construction standards, and consistent the relevant multi-agency postconstruction stormwater standards manual. Therefore, storm drainage will be accommodated on-site and have a less than significant impact relative to this topic.

The Modified Project will extend dry utilities (electric, gas, cable, and phone) from existing facilities along Lathrop Road to each building as needed. Beyond the extension of these lines, the Modified Project will not require the construction or expansion of existing facilities in the city. Therefore, the Modified Project will have a less than significant impact on dry utility infrastructure, consistent with the Original Project.

All these facilities would be constructed either on the Project site or within the right-of-way of existing roads. As such, their construction would not have a significant environmental impact apart from development of the Project site in general. Consistent with the Original Project's IS/MND, the Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

d, e) Solid Waste Services.

Solid waste from Lathrop is primarily landfill at the Forward Sanitary Landfill. Per Section 3.15.4 of Lathrop's General Plan EIR, the Forward Sanitary Landfill has a remaining capacity of over 22,100,000 tons and a current maximum permitted throughput of 8,668 tons per day. The addition of the volume of solid waste associated with the Modified Project to the landfill will not exceed the landfills' remaining capacity. Per CalRecycle's website, the estimate waste generation rate for manufacturing/warehouse projects is 1.42 lb/100 sq ft/day. The Modified Project includes approximately 126,965 square feet of space. Using CalRecycle's estimated waste generation rate, the Modified Project will generate approximately 1,803 pounds, or 0.9 tons, of solid waste per day. Therefore, the existing landfill has adequate capacity to handle solid waste generated by the Modified Project.

Furthermore, the Modified Project will be required to comply with applicable state and local requirements related to solid waste, construction waste diversion, and recycling. As a result, the Modified Project will not interfere with regulations related to solid waste or generate waste in excess of the capacity of local infrastructure. The Modified Project will have a less than significant impact relative to this topic, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.20 WILDFIRE

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Emergency Response Plans and Emergency Evacuation Plans	Less than significant	No	No	No	None required
b) Exposure of Project Occupants to Wildfire Hazards	Less than significant	No	No	No	None required
c) Installation and Maintenance of Infrastructure	Less than significant	No	No	No	None required
d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes	Less than significant	No	No	No	None required

Environmental Setting

There are no State Responsibility Areas (SRAs) within the vicinity of the Lathrop Planning Area. In addition, there are no areas within the City of Lathrop that are categorized as a "Very High" Fire Hazard Severity Zone (FHSZ) by CalFire or a local agency (Lathrop General Plan EIR Section 3.16.1). Although this CEQA topic only applies to areas within an SRA or Very High FHSZ, this section was analyzed for the Original Project and therefore will be analyzed for the Modified Project below.

Environmental Impacts and Mitigation Measures

a) Emergency Response Plans and Emergency Evacuation Plans.

As stated above, the Project site is not part of a State Responsibility Area, and the Cal Fire map indicates the site is not designated within a Very High Fire Hazard Severity Zone or a zone of higher severity. As discussed in Section 3.9, Hazards and Hazardous Materials, Project construction is not expected to substantially obstruct emergency vehicles or any evacuations that may occur in the area, and Project operations will not obstruct any roadways. All driveways and internal roadways will be designed to accommodate emergency vehicles, including fire engines, which will promote efficient circulation and effective emergency response and evacuation. Therefore, construction and operation of the Modified Project will have a less than significant impact, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

b) Exposure of Project Occupants to Wildfire Hazards.

The Project site is currently vacant and covered with grasses and weeds. The Modified Project will reduce the existing fire hazard on the site by replacing existing vegetation with urban development. As stated above, Cal Fire maps indicate that the Project site is not in a high fire hazard zone. The Project site is also surrounded by urban development that is not at significant risk of wildfire. Therefore, the Modified Project will have a less than significant impact relative to this topic, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

c) Installation and Maintenance of Infrastructure.

The Modified Project proposes the development of industrial uses, including manufacturing and warehousing. The extension of utilities included with the Modified Project is not expected to exacerbate the wildfire risk but rather provide additional firefighting resources on-site, such as a 12" fire water line that will connect to the City of Lathrop's water main along Lathrop Road. Therefore, impacts from Project implementation will be less than significant relative to this topic, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

d) Risks from Runoff, Post-Fire Slope Instability, or Drainage Changes.

As analyzed under the Original Project's IS/MND, the Project site and surrounding area is relatively flat. Therefore, the potential for a landslide, as a result of runoff, post-fire slope instability, or drainage changes, in the Project site is essentially non-existent. There are also no natural streams that cross the Project site. As such, it is not expected that people or structures would be exposed to significant risks from changes resulting from fires in higher elevation areas, including downslope or downstream flooding or landslides. The Modified Project will have a less than impact related to risks from runoff, post-fire slope instability, or drainage changes, consistent with the Original Project's IS/MND. The Modified Project will not involve any new impacts or need for new or expanded mitigation in this issue area.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue Area	*Conclusion in Previous IS/MND*	*Does the project involve new impacts?*	*New circumstances involving new impacts?*	*New information requiring new analysis or verification?*	*Mitigation required?*
a) Findings on Biological and Cultural Resources	Less than significant	No	No	No	None required
b) Findings on Cumulatively Considerable Impacts	Less than significant	No	No	No	None required
c) Findings on Adverse Effects on Human Beings	Less than significant	No	No	No	None required

a) Findings on Biological and Cultural Resources.

This Addendum includes an analysis of the Modified Project's impacts associated with aesthetics, agricultural and forest resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. The analysis covers a broad spectrum of topics relative to the potential for the Modified Project to have environmental impacts. This includes the potential for the Modified Project to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. It was found that the Modified Project will have either no impact, a less than significant impact, or a less than significant impact with the implementation of mitigation measures, consistent with the Original Project. For the reasons presented throughout this Addendum, the Modified Project will not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. With the implementation of mitigation measures presented in this Addendum, the Modified Project will have a less than significant impact relative to this topic and remain consistent with the conclusions of the Original Project's IS/MND.

In short, the Modified Project involves the same potential impacts and recommended mitigation in these issue areas as described in the Original Project's IS/MND and will involve no new potential impacts or need for mitigation measures.

b) Findings on Cumulatively Considerable Impacts.

A cumulative impact is an environmental impact that may result from the combination of two or more environmental impacts associated with the Modified Project with each other, or the combination of one or more Project impacts with related environmental impacts caused by other projects.

As noted in the sections above, the Modified Project is consistent with the land use designation of the Lathrop General Plan. As such, the Modified Project is not expected to introduce any new or more severe environmental impacts not otherwise analyzed in the Lathrop General Plan EIR, including impacts related to noise, transportation, and air quality. The Traffic Memorandum (Appendix C) for the Modified Project considered potential cumulative impacts related to traffic. As discussed in Section 3.17, Transportation above, under all conditions (including cumulative plus project conditions), the Modified Project will not result in any impacts to the surrounding transportation network.

For project-specific effects identified as potentially significant, mitigation measures will reduce these effects to a level that will be less than significant, so the Modified Project will not make a considerable contribution to potential cumulative impacts. None of the potential environmental effects addressed individually in this Addendum will combine with other effects to result in a cumulatively considerable effect.

The Modified Project involves the same potential impacts and recommended mitigation in this issue area as described in the Original Project's IS/MND and will involve no new potential impacts or need for mitigation measures.

c) Findings on Adverse Effects on Human Beings.

The construction phase could affect surrounding neighbors through increased air emissions, noise, and traffic; however, the construction effects are temporary and are not substantial. The operational phase could also affect surrounding neighbors through increased air emissions, noise, and traffic; however, mitigation measures have been incorporated into the Modified Project that will reduce the impacts to a less than significant level. Additionally, compliance with applicable laws, regulations, and City ordinances and standards will help to reduce potential adverse effects. Therefore, the Modified Project will not cause substantial adverse effects on human beings. Implementation of the Modified Project will have a less than significant impact relative to this topic, consistent with the Original Project's IS/MND, and will involve no new potential impacts or need for mitigation measures.

4.0 REFERENCES

California Air Resources Board. 2017. California's 2017 Climate Change Scoping Plan. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents

California Air Resources Board. 2022. AB 32 Climate Change Scoping Plan. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan

California Air Resources Board. November 4, 2025. California Greenhouse Gas Emissions from 2000 to 2023: Trends of Emissions and Other Indicators. Available: https://ww2.arb.ca.gov/sites/default/files/2025-11/nc-2000_2023_ghg_inventory_trends.pdf

California Department of Conservation, Division of Mine Reclamation (DMR). 2021. Mineral Resources and Mineral Hazards Mapping Program (MRHMP). Available: https://maps.conservation.ca.gov/mineralresources/

California Department of Conservation, Division of Land Resources Protection. 2022. Farmland Mapping and Monitoring Program. San Joaquin County Important Farmland 2022. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanJoaquin.aspx

California Department of Conservation. 2026. Reported California Landslides database. Available: https://www.dgs.ca.gov/bsc/codes

California Department of Forestry and Fire Protection (CAL FIRE). 2007. Fire Hazard Severity Zones in State Responsibility Area (SRA). Adopted by CAL FIRE on October 2, 2007. Available at: http://frap.fire.ca.gov/webdata/maps/san_joaquin/fhszs_map.39.pdf

California Department of General Services. 2025. California Building Standards Code, 2025 Triennial Edition of Title 24. Available: https://www.dgs.ca.gov/bsc/codes

California Department of Toxic Substances Control (DTSC). 2017. EnviroStor database. Accessed on May 1, 2020. Available at: https://www.envirostor.dtsc.ca.gov/public/

City of Lathrop. June 2022. New Lathrop Police Department June 2022 Update. Available: https://www.ci.lathrop.ca.us/sites/default/files/fileattachments/police/page/141/new_lathrop_police_department_update_june_2022.pdf

City of Lathrop. Adopted September 19, 2022. City of Lathrop General Plan Update.

City of Lathrop. 2026. Lathrop Municipal Code.

City of Lathrop. 2021. 2020 Urban Water Management Plan for the City of Lathrop. June 2021. Available: https://www.ci.lathrop.ca.us/sites/default/files/fileattachments/public_works/page/1681/uwmp_2020_-_lathrop_w_appendices.pdf

De Novo Planning Group. September 9, 2021. Final Initial Study and Mitigated Negative Declaration for the Scannell Properties Industrial Project.

Fehr & Peers. August 2, 2021. Traffic Impact Analysis.

Fehr & Peers. May 4, 2026. Addendum to the Scannell Industrial Development Project IS/MND for Jifco, Inc.

Fernandez-Bou et. al. 2021. Available: https://www.sciencedirect.com/science/article/pii/S0048969722070632

Moore Biological Consultants. October 6, 2020. 1520 Lathrop Road, Lathrop, San Joaquin County, California: Biological Assessment.

Pacific Gas and Electric Company. November 6, 2025. Response Letter (Re: Gas and Electric Transmission and Distribution).

San Joaquin County. October 2024. Evacuation Annex. Available: https://www.sjgov.org/docs/default-source/covid-19/evacuation-plan.pdf?sfvrsn=932ed549_3

San Joaquin County. January 2023. San Joaquin County Local Hazard Mitigation Plan. Available: https://www.sjgov.org/docs/default-source/office-of-emergency-services-documents/lhmp/documents/2022-lhmp-10.18.22-version.pdf?sfvrsn=b7a69798_5

San Joaquin County Environmental Health Department. October 27, 2025. Response Letter (RE: SPR-25-113, Referral, SU-2500936; APN: 198-040-28 & 198-040-29)

San Joaquin County Office of Emergency Services. February 17, 2022. Emergency Operations Plan. Available: https://www.sjgov.org/department/oes/emergency-plans

San Joaquin Council of Governments. March 2018. 2018 Regional Transportation Plan / Sustainable Communities Strategy. Available: https://www.sjcog.org/DocumentCenter/View/3880/2018-RTP-SCS-PDEIR-Table-of-Contents?bidId=

San Joaquin Council of Governments. October 21, 2025. Response Letter (SJMSCP Response to Local Jurisdiction Advisory Agency Notice to SJCOG, Inc.).

San Joaquin Valley Air Pollution Control District. December 17, 2009. Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. Available: https://www.valleyair.org/media/dnsnicdv/3-ccap-final-lu-guidance-dec-17-2009.pdf

San Joaquin Valley Air Pollution Control District. 2026. Ambient Air Quality Standards & Attainment Status. Available: https://www.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/

San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Available: https://www.valleyair.org/media/g4nl3p0g/gamaqi.pdf

San Joaquin Valley Air Pollution Control District. November 5, 2025. Response Letter (Project: Jifco, Inc. – Site Plan Review 25-113).

Tracy Subbasin Groundwater Sustainability Agencies (GSAs). November 1, 2021. Tracy Subbasin Groundwater Sustainability Plan (GSP). Available: https://www.ci.lathrop.ca.us/publicworks/page/sustainable-groundwater-management

United States Department of Agriculture, Natural Resources Conservation Service. 2017. Web Soil Survey. Available: https://websoilsurvey.nrcs.usda.gov/app/

United States Department of Homeland Security, Federal Emergency Management Agency (FEMA). 2009. FEMA FIRM Flood Maps. Available: https://www.sjgov.org/docs/default-source/covid-19/evacuation-plan.pdf?sfvrsn=932ed549_3

United States Environmental Protection Agency. 2009. Final Rule: Rescission of the Greenhouse Gas Endangerment Finding and Motor Vehicle Greenhouse Gas Emission Standards Under the Clean Air Act. Available: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-rescission-greenhouse-gas-endangerment

United States Environmental Protection Agency. August 19, 2025. Fact Sheet on Requirements for Very Small Quantity Generators of Hazardous Waste. Available: https://www.epa.gov/hwgenerators/fact-sheet-requirements-very-small-quantity-generators-hazardous-waste

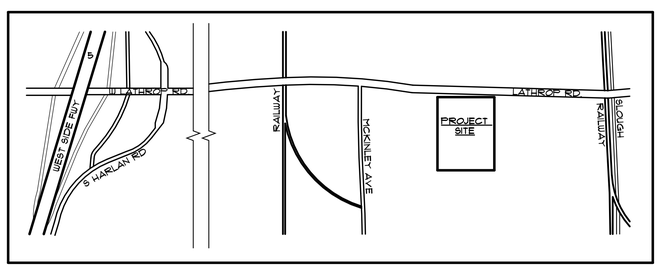


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GARTH RUFFNER LANDSCAPE ARCHITECT
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ROSEVILLE, CA 95746
(916) 797-2516

ELECTRICAL
BOSELY ELECTRIC COMPANY
935 ARDEN WAY
SACRAMENTO, CA 95815
(916) 568-5180

CIVIL
MILANI & ASSOCIATES
2655 STANWELL DRIVE, SUITE 105
CONCORD, CA 94520
(925) 674-9082



VICINITY PLAN
NTS

NORTH

PROJECT INFO

PROPERTY:		
APN:		198-040-280-000, 198-040-290-000
ADDRESS:		1520 LATHROP ROAD
CITY:		LATHROP, CA
JURISDICTION:		CITY OF LATHROP
ZONING:		IG GENERAL INDUSTRIAL
CONSTRUCTION TYPE:		II-B
OCCUPANCY:		B / F-2 / S-2
TOTAL PARCEL SIZE:		11.59 AC (504,813 SF)
BUILDING 1 (OFFICE)	1ST FLOOR-	6,178 SF (OFFICE), 2,865 SF (WAREHOUSE)
	2ND FLOOR-	5,605 SF
	COVERED PATIO-	1,815 SF
TOTAL:		16,463 SF
BUILDING 2:	1ST FLOOR-	39,621 SF
	2ND FLOOR-	688 SF
	COVERED AREA-	2,881 SF
TOTAL:		43,136 SF
BUILDING 3:		4,632 SF
BUILDING 4:		16,761 SF
	COVERED AREA-	22,938 SF
TOTAL:		44,451 SF
BUILDING 5:		22,849 SF
GROSS BUILDING AREA:		± 126,365 SF
BUILDING FOOTPRINT:		120,672 SF (24%)
FLOOR AREA RATIO:		25.2%
LANDSCAPE SF:		51,151 SF (10%)
HARDSCAPE SF:		333,115 SF (66%)

PARKING DATA

PARKING PROVIDED

DISABLED ACCESSIBLE PARKING:	4 SPACES
EVCS STALLS:	17 SPACES
(E) STANDARD PARKING STALLS:	76 SPACES
TOTAL PARKING PROVIDED:	97 SPACES

EV PARKING REQUIRED

EV CAPABLE PARKING:	17 SPACES
EV CHARGING STATIONS:	4 SPACES
VAN ACCESSIBLE EVCS:	1 SPACE
STANDARD ACCESSIBLE EVCS:	3 SPACES

EV PARKING PROVIDED

EV CAPABLE PARKING:	17 SPACES
EV CHARGING STATIONS:	4 SPACES
VAN ACCESSIBLE EVCS:	1 SPACE
STANDARD ACCESSIBLE EVCS:	3 SPACES

REQUIRED PARKING SUMMARY PER 17.76.020

USE	PARKING RATIO REQ'D	PARKING SPACES REQ'D
OFFICE- 11,783 SF	1 PER 400 SF	29 SPACES
WAREHOUSE- 2,865 SF	1 PER 2000 SF	1 SPACES
MANUFACTURING- 87,504 SF	1 PER 1000 SF	88 SPACES

PROPOSED PARKING SUMMARY

USE	PARKING RATIO PROPOSED	PARKING SPACES PROV'D
OFFICE- 11,783 SF	1 PER 400 SF	30 SPACES
WAREHOUSE- 2,865 SF	1 PER 2000 SF	2 SPACES
MANUFACTURING- 87,504 SF	1 PER 1350 SF	65 SPACES

SHEET INDEX

PRELIMINARY ARCH	
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A0.3	ENLARGED SITE PLAN
A0.4	SITE DETAILS
A0.5	SITE DETAILS
A0.6	CONTEXT PLAN
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A1.1	OFFICE- FIRST FLOOR PLAN
A1.2	OFFICE- SECOND FLOOR PLAN
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A1.4	OFFICE- ELEVATIONS
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A3.0	BUILDING 3&4- EGRESS
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A3.2	BUILDING 3&4- ELEVATIONS
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A5.0	BUILDING 5- EGRESS
A5.1	BUILDING 5- FLOOR PLAN
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A5.3	BUILDING 5- SECTIONS
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C-3	CONTEXTUAL SITE PLAN
C-4	MASTER SITE PLAN
C-5	COMPOSITE UTILITY PLAN
ELECTRICAL	
E1.1	SITE PLAN PHOTOMETRIC
LANDSCAPE	
LA	PREMLIMINARY LANDSCAPE PLAN

JIFCO, INC

W LATHROP RD.

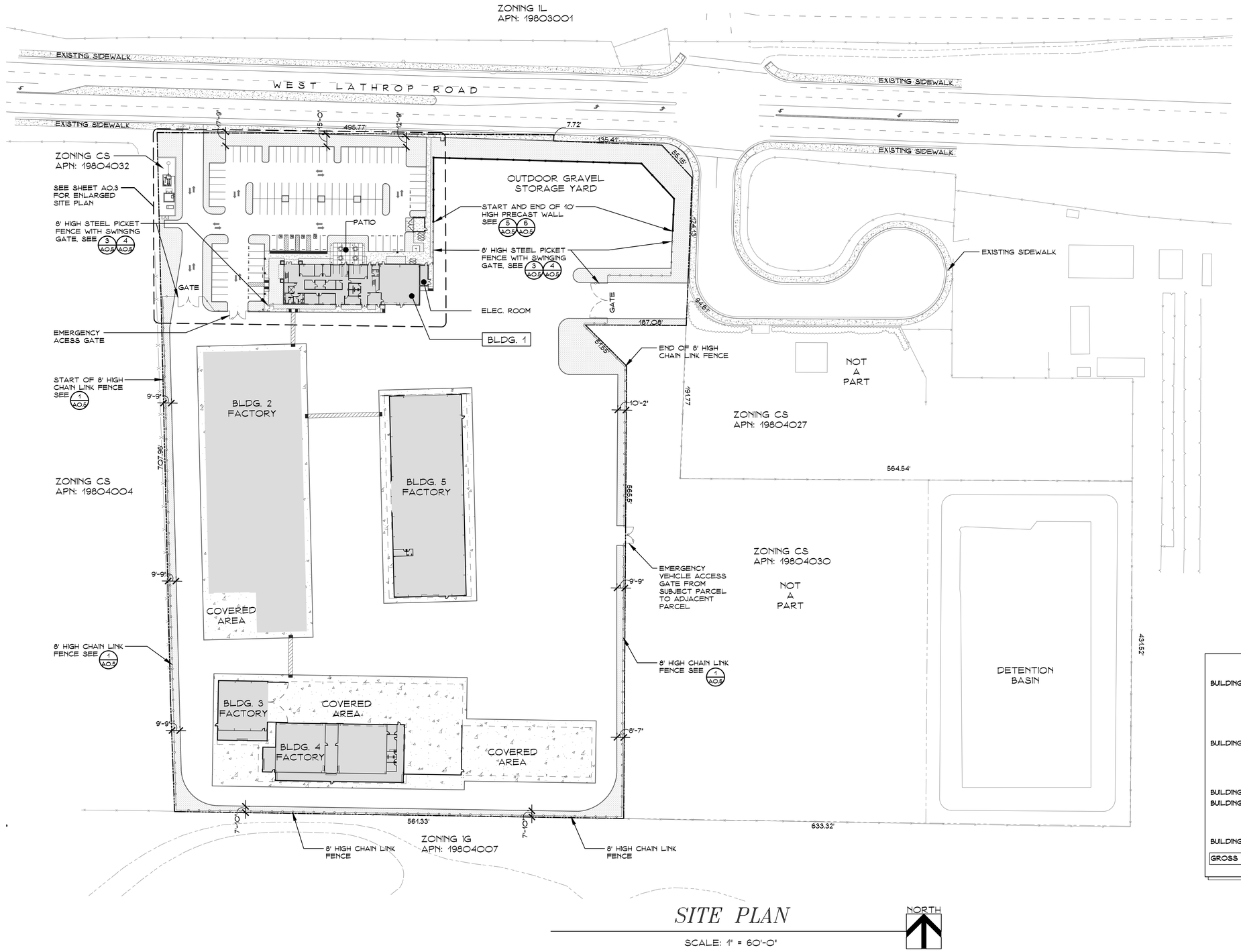
COVER SHEET

SCALE: AS INDICATED

SHEET
A0.1

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DATE: 12/22/25
PROJECT: 25-311



BUILDING INFO

BUILDING 1:	1ST FLOOR OFFICE:	6,178 S.F.
	1ST FLOOR WAREHOUSE:	2,865 S.F.
	2ND FLOOR: OFFICE	5,605 S.F.
	COVERED PATIO:	1,815 S.F.
	TOTAL:	16,463 S.F.
BUILDING 2:	1ST FLOOR MANUFACTURING:	39,621 S.F.
	2ND FLOOR MANUFACTURING:	688 S.F.
	COVERED AREA:	2,887 S.F.
	TOTAL:	43,196 S.F.
BUILDING 3:	MANUFACTURING	4,692 S.F.
BUILDING 4:	MANUFACTURING	16,767 S.F.
	COVERED AREA:	22,998 S.F.
	TOTAL:	44,457 S.F.
BUILDING 5:	MANUFACTURING	22,849 S.F.
GROSS BUILDING AREA:		+/- 126,965 S.F.

SITE PLAN

SCALE: 1" = 60'-0"

NORTH

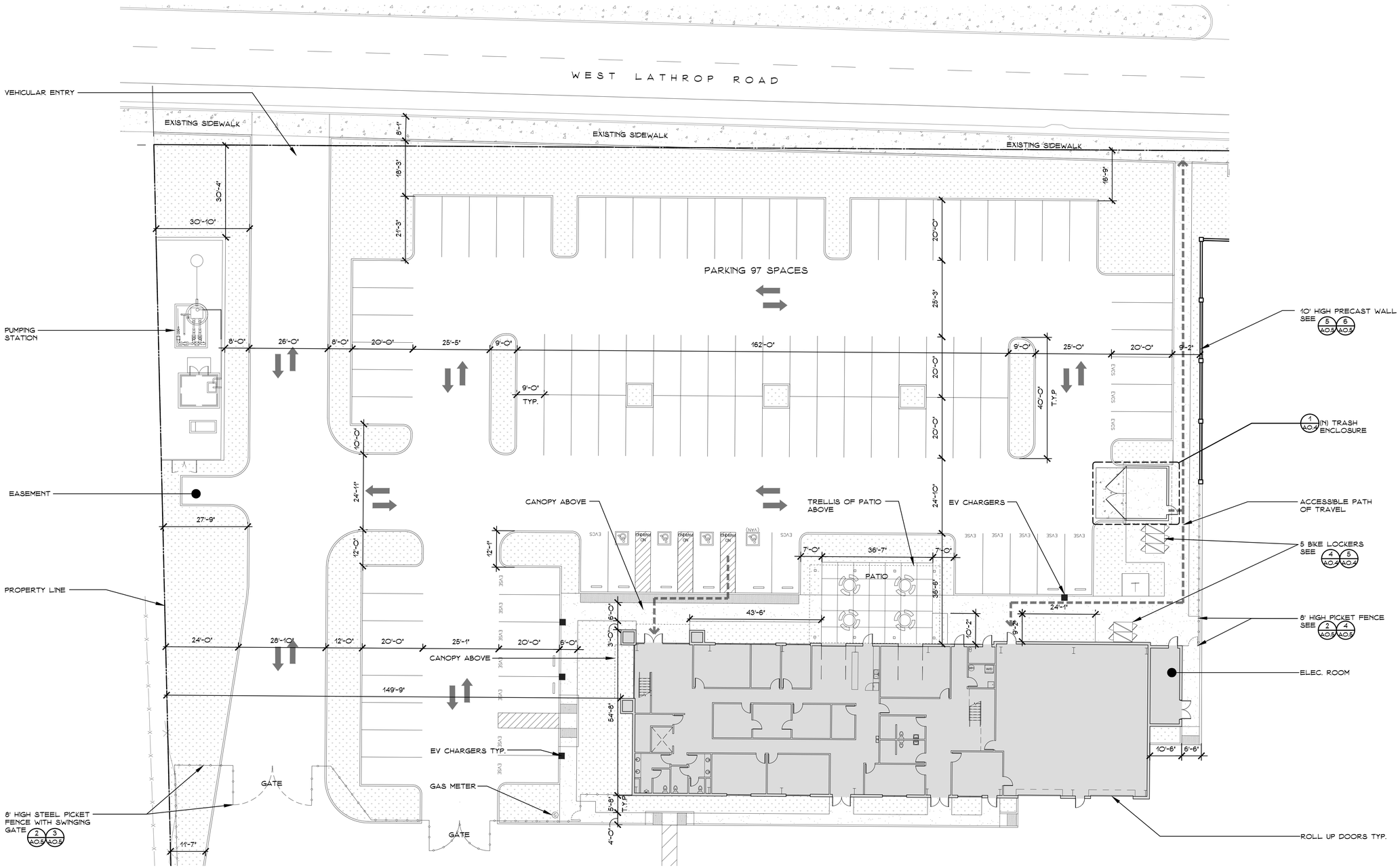
JIFCO, INC
W. LATHROP DR.

SITE PLAN

0 30 60 90 120 180 240

SHEET A0.2

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PROJECT: 25-311



ENLARGED SITE PLAN

SCALE: 1/16" = 1'-0"

NORTH

LEGEND

- (N) LANDSCAPE
- (N) NATURAL CONCRETE
- (N) COLORED CONCRETE

JIFCO, INC

W. LATHROP DR.

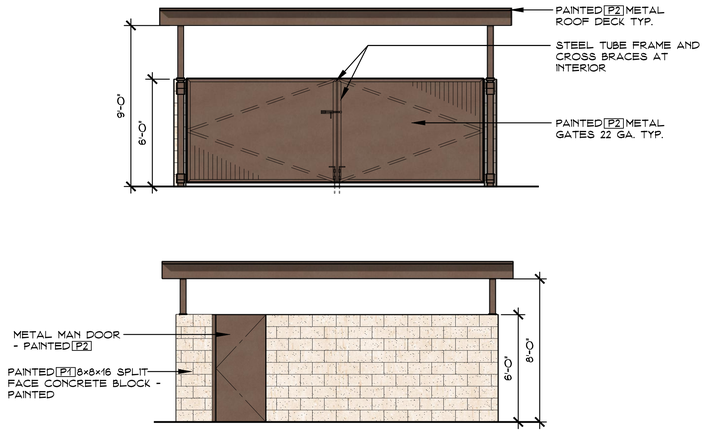
ENLARGED SITE PLAN

0 4 20 40 60 80 100

SHEET A0.3

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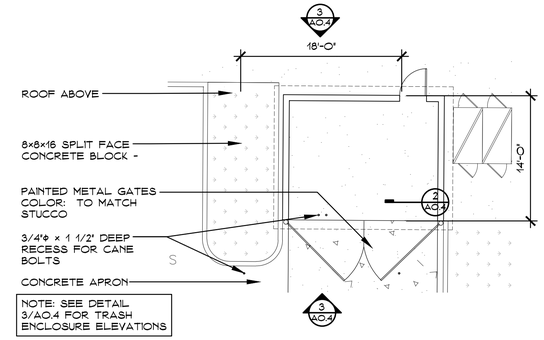
DATE: 10/17/25
PROJECT: 25-311



TRASH ENCLOSURE ELEVATIONS

3/A0.4

SCALE: 1/4" = 1'-0"



TRASH ENCLOSURE PLAN

1/A0.4

SCALE: 1/8" = 1'-0"

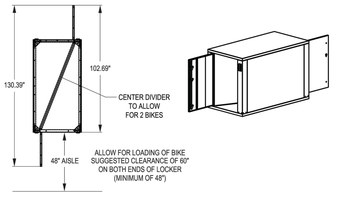
NORTH

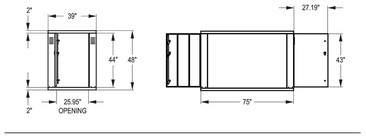
BELSON OUTDOORS

111 North River Road
North Aurora, IL 60542
Phone: (800) 323-5664
Fax: (630) 897-0573
sales@belson.com

Model # DL1002FP — **Dimension Sheet**

DURA LOCKER™ | DIVIDED 2 DOOR UNIT





www.belson.com

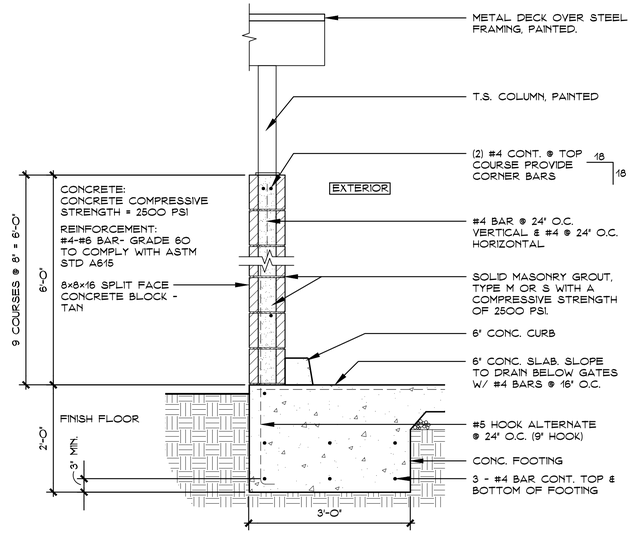
PROVIDE (3) STEEL BIKE LOCKERS BY BELSON OUTDOORS MODEL # DL1002FP OR EQUAL FOR STORAGE OF (2) BIKES. COLOR: POWDER COATED MESA TAN (NOT SHOWN)



BIKE LOCKER

4/A0.4

NOT TO SCALE



TRASH ENCLOSURE SECTION

2/A0.4

SCALE: 3/4" = 1'-0"

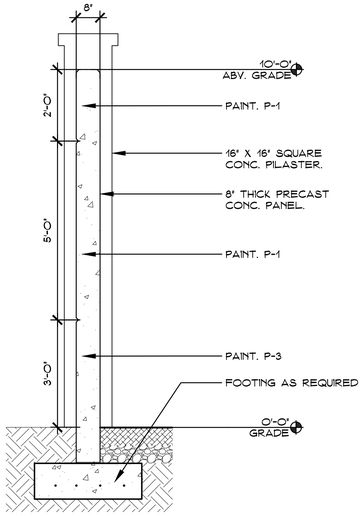
JIFCO, INC
W. LATHROP DR.

SITE DETAILS

SHEET
A0.4

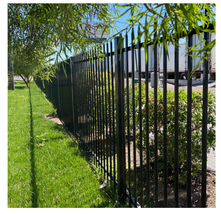
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DATE: 10/09/25
PROJECT: 25-311

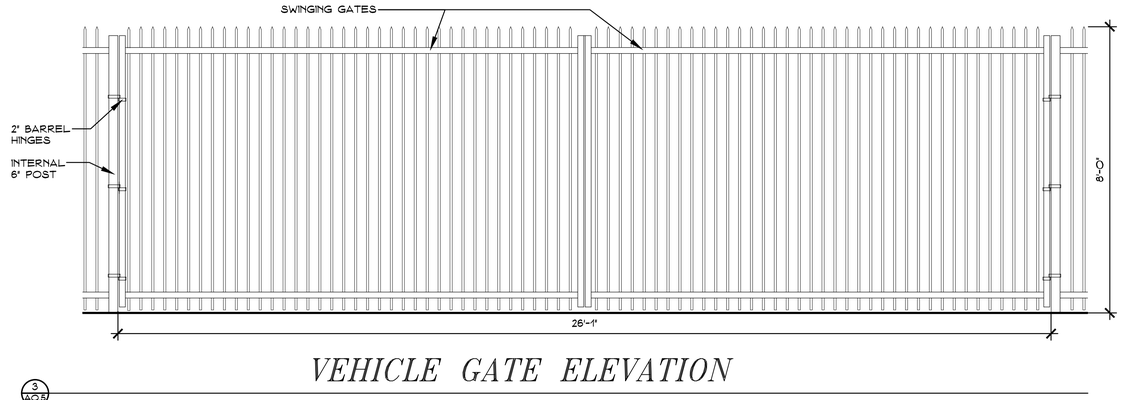


5 A0.5 *SCREEN WALL SECTION*

SCALE: 1/2" = 1'-0"

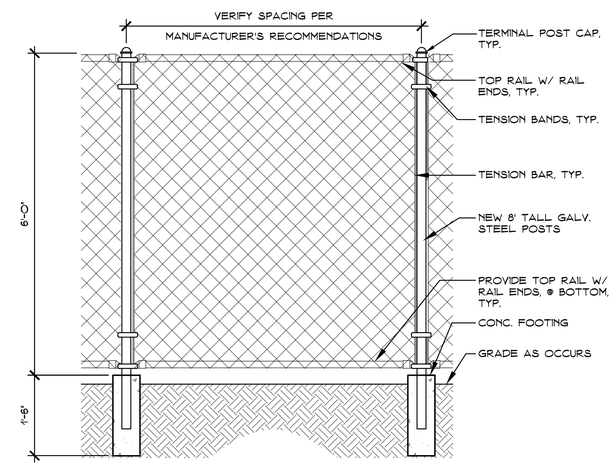


8' HIGH BLACK POWDER COATED STEEL FENCING TYPICAL UNLESS NOTED OTHERWISE. VANTAGE FENCING TO PROVIDE ALL FENCING AND GATES TO MATCH PHOTO



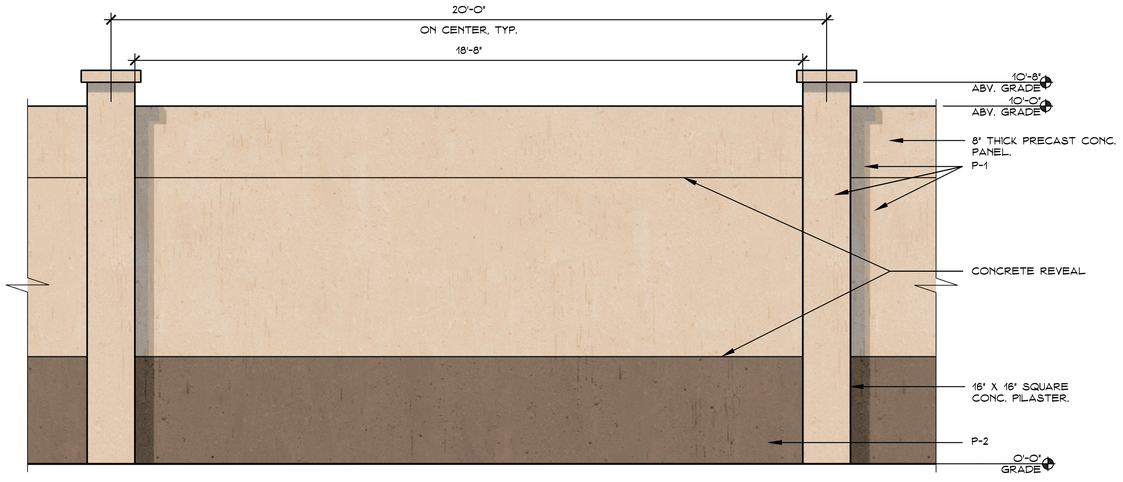
3 A0.5 *VEHICLE GATE ELEVATION*

SCALE: 1/2" = 1'-0"



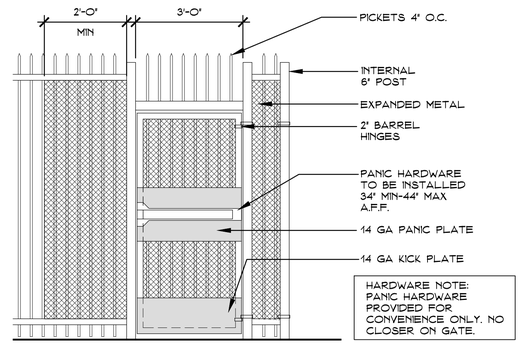
1 A0.5 *TYPICAL CHAIN LINK FENCE*

SCALE: 3/4" = 1'-0"



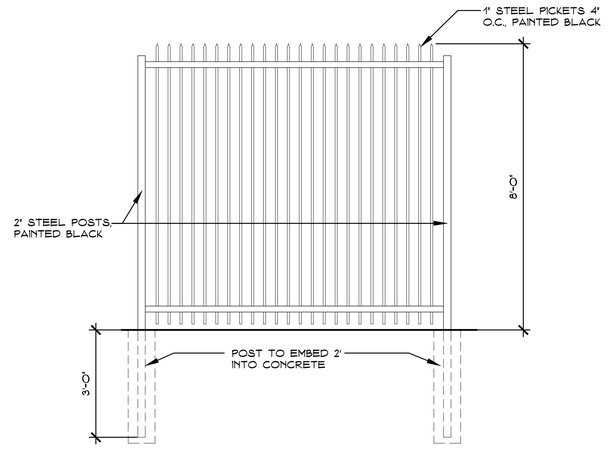
6 A0.5 *SCREEN WALL ELEVATION*

SCALE: 1/2" = 1'-0"



4 A0.5 *GATE ELEVATION*

SCALE: 1/2" = 1'-0"



2 A0.5 *TYPICAL FENCE ELEVATION*

SCALE: 1/2" = 1'-0"

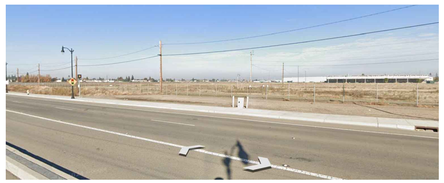
JIFCO, INC
W. LATHROP DR.

SITE DETAILS

SHEET A0.5

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DATE: 10/09/25
PROJECT: 25-311



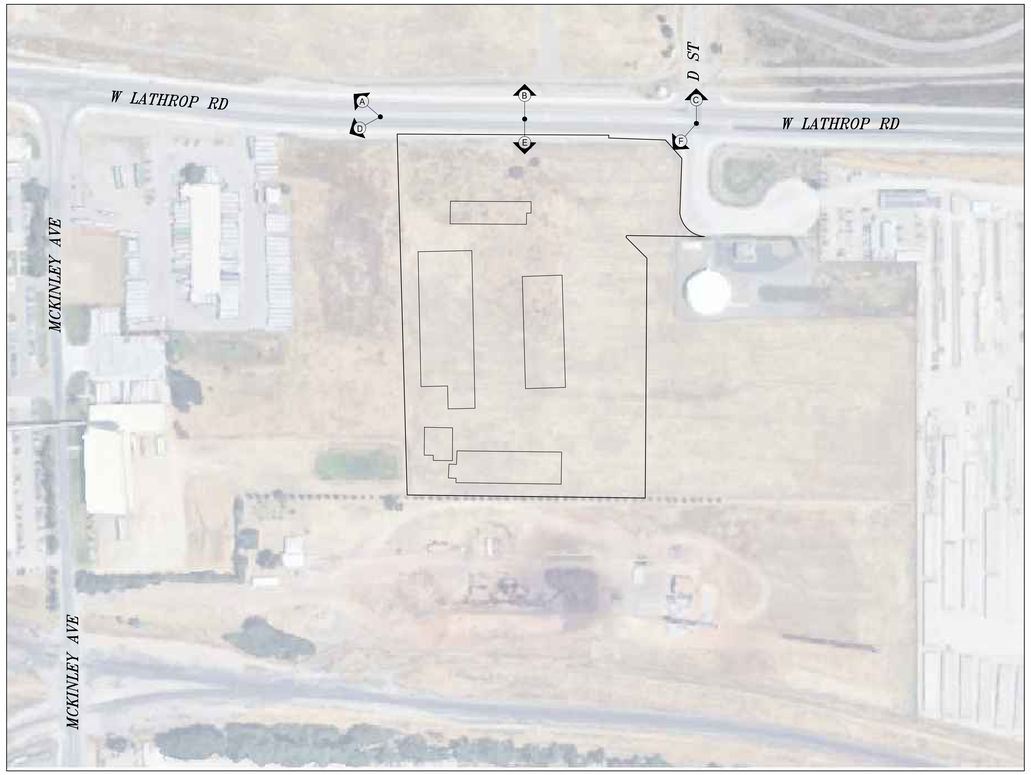
VIEW A



VIEW B



VIEW C

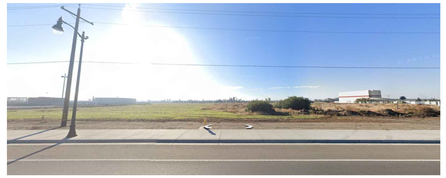


CONTEXT PLAN

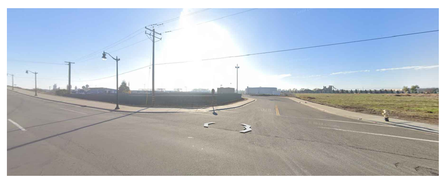
NORTH



VIEW D



VIEW E



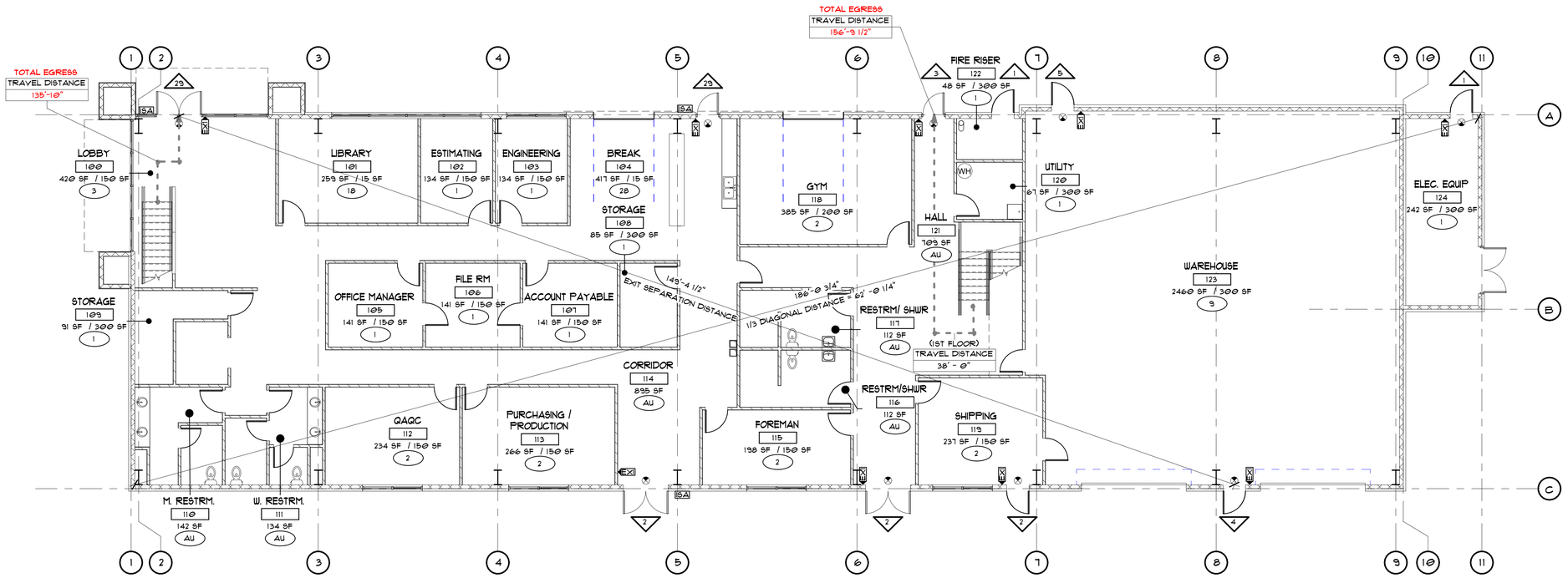
VIEW F

JIFCO, INC
W. LATHROP DR.

CONTEXT PLAN

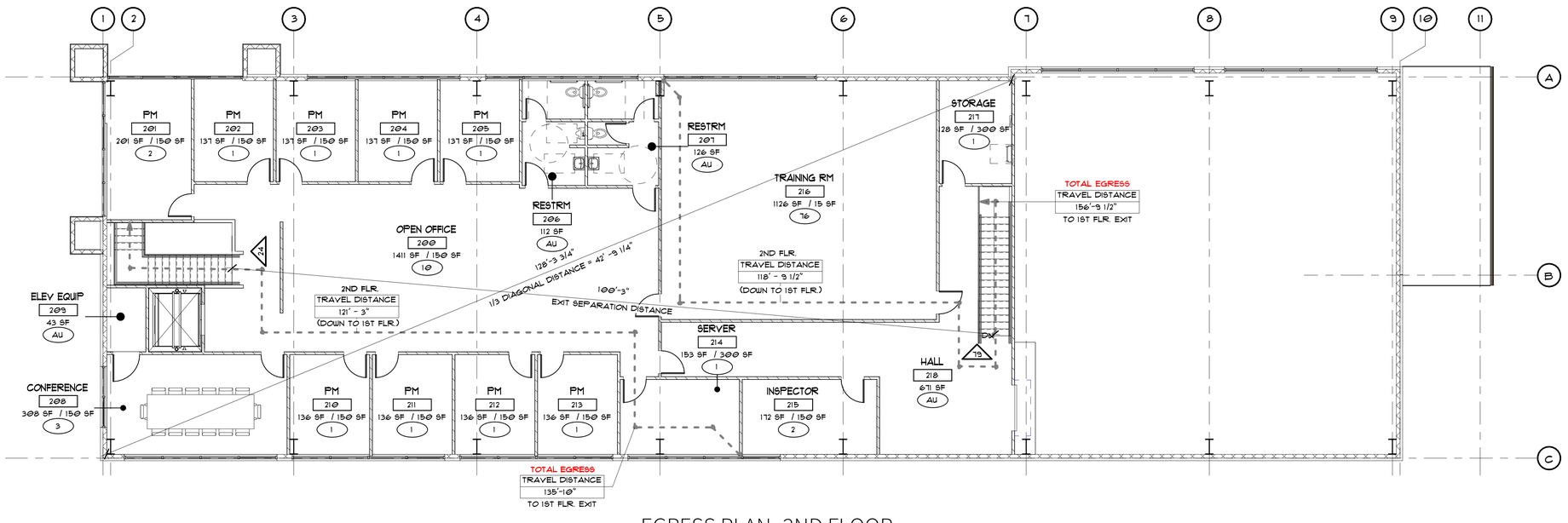
SHEET
A0.6

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PROJECT: 25-311



EGRESS PLAN- 1ST FLOOR

1/8" = 1'-0"



EGRESS PLAN- 2ND FLOOR

1/8" = 1'-0"

LEGEND

EX1, EX2, EX3 — SEE EXIT SIGNAGE

ROOM NAME — ROOM NAME
101 — ROOM NUMBER
XX SF / OLF — OCCUPANCY CALCULATION
OCC — OCCUPANCY TAG

AU — ACCESSORY USE- NO OCCUPANT LOAD

0 — TOTAL ACCUMULATED OCCUPANT LOAD THROUGH DOORWAY

EXIT SIGN

ISA — INTERNATIONAL SYMBOL OF ACCESSIBILITY ON OR ADJACENT TO ENTRANCES, LOCATED STRIKESIDE & MOUNTED 60" A.F.F. TO THE CENTER OF THE SIGN

PROJECT EXIT ACCESS TRAVEL DISTANCE (SEE PLAN)
EXIT ACCESS TRAVEL DISTANCE PER 2022 CBC 1017.2

EGRESS WIDTH CALCULATION

DOOR WIDTH / 0.2 = PERSONS ALLOWED THROUGH

(3'-0" WIDE) 33" / 0.2 = 165 PERSONS
(4'-0" WIDE) 45" / 0.2 = 225 PERSONS
(6'-0" WIDE) 66" / 0.2 = 330 PERSONS

EXITING

OCCUPANT LOAD FACTORS PER TABLE 1004.5

BUSINESS AREAS	150 GROSS
ASSEMBLY (UNCONCENTRATED)	15 NET
STORAGE	300 GROSS

EXITING OCCUPANT LOAD ANALYSIS

TOTAL OCCUPANT LOAD:	181 (1ST: 86, 2ND: 95)
TOTAL EXITS REQUIRED:	2 (TABLE 1006.3.3 CBC 2022)
TOTAL REQUIRED EXIT WIDTH: CBC 2022)	0.2 X 181 = 36.2" (SEC. 1005.3
ACTUAL EXIT WIDTH:	1ST: 468", 2ND: 89"
EXIT SEPARATION:	
MINIMUM EXIT SEPARATION:	1ST: 62'-0 1/4", 2ND: 42'-9 1/4" OK
ACTUAL EXIT SEPARATION:	1ST: 149'-4 1/2", 2ND: 100'-3"
MAXIMUM TRAVEL DISTANCE TO EXITS: 2022) 2022)	B = 300' (TABLE 1017.2 CBC A = 250' (TABLE 1017.2 CBC

EXIT SIGNAGE

TACTILE EXIT SIGNS PER SECTION 1013.4, 2022 CBC W/ CHARACTERS, SYMBOLS, & THEIR BACKGROUND HAVING A NON-GLARE FINISH & CONTRASTING COLOR PER SECTION 11B-703.2 & 703.5 2022 CBC. SIGNS SHALL BE CONTRACTED GRADE 2 BRAILLE PER SECTION 11B-703.3 2022 CBC W/ THE FOLLOWING WORDS, AS INDICATED,

EX1 = EXIT
EX2 = EXIT ROUTE
EX3 = EXIT STAIR

MOUNTING LOCATION AND HEIGHT:
TACTILE EXIT SIGNS SHALL BE LOCATED ON THE WALL ADJACENT TO THE LATCH. WHERE THERE IS NO WALL SPACE ON LATCH SIDE, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLE ON THE RIGHT. MOUNTING HEIGHT SHALL BE 48" MIN. A.F.F. MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60" MAX. A.F.F. MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MINIMUM BY 18" MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND A 45 DEGREE OPEN POSITION.

SIGN & IDENTIFICATION REQUIREMENTS

IDENTIFICATION SIGNS:
WHEN SIGNS IDENTIFY PERMANENT ROOMS & SPACES OF THE BUILDING OR SITE. THEY SHALL COMPLY W/ SECTION 11B-216.2 2022 CBC.

DIRECTIONAL & INFORMATIONAL SIGNS:
WHEN SIGNS DIRECT TO OR GIVE INFORMATION ABOUT PERMANENT ROOMS & FUNCTIONAL SPACES OF THE BUILDING OR SITE. THEY SHALL COMPLY W/ SECTION 11B-216.3 2022 CBC.

ACCESSIBILITY SIGNS:
WHEN SIGNS IDENTIFY, DIRECT TO OR GIVE INFORMATION ABOUT ACCESSIBLE ELEMENTS & FEATURES OF THE BUILDING OR SITE, THEY SHALL INCLUDE THE APPROPRIATE SYMBOL OF ACCESSIBILITY & SHALL COMPLY W/ SECTION 11B-703.6.2 & 11B-703.7.2.1 2022 CBC.

ASSEMBLY SIGNS:
ASSEMBLY OCCUPANCIES SHALL HAVE THE OCCUPANCY LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE. NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT.

NOTES

ALL EXTERIOR EXIT DOOR LANDINGS SHALL PROVIDE EMERGENCY ILLUMINATION. WALL PACKS/SCONCES PROVIDED PER ELECTRICAL DRAWINGS SHALL HAVE THE CAPACITY TO PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES (PER SECTION 1008.3.4 2022 CBC)

JIFCO, INC

W LATHROP RD.

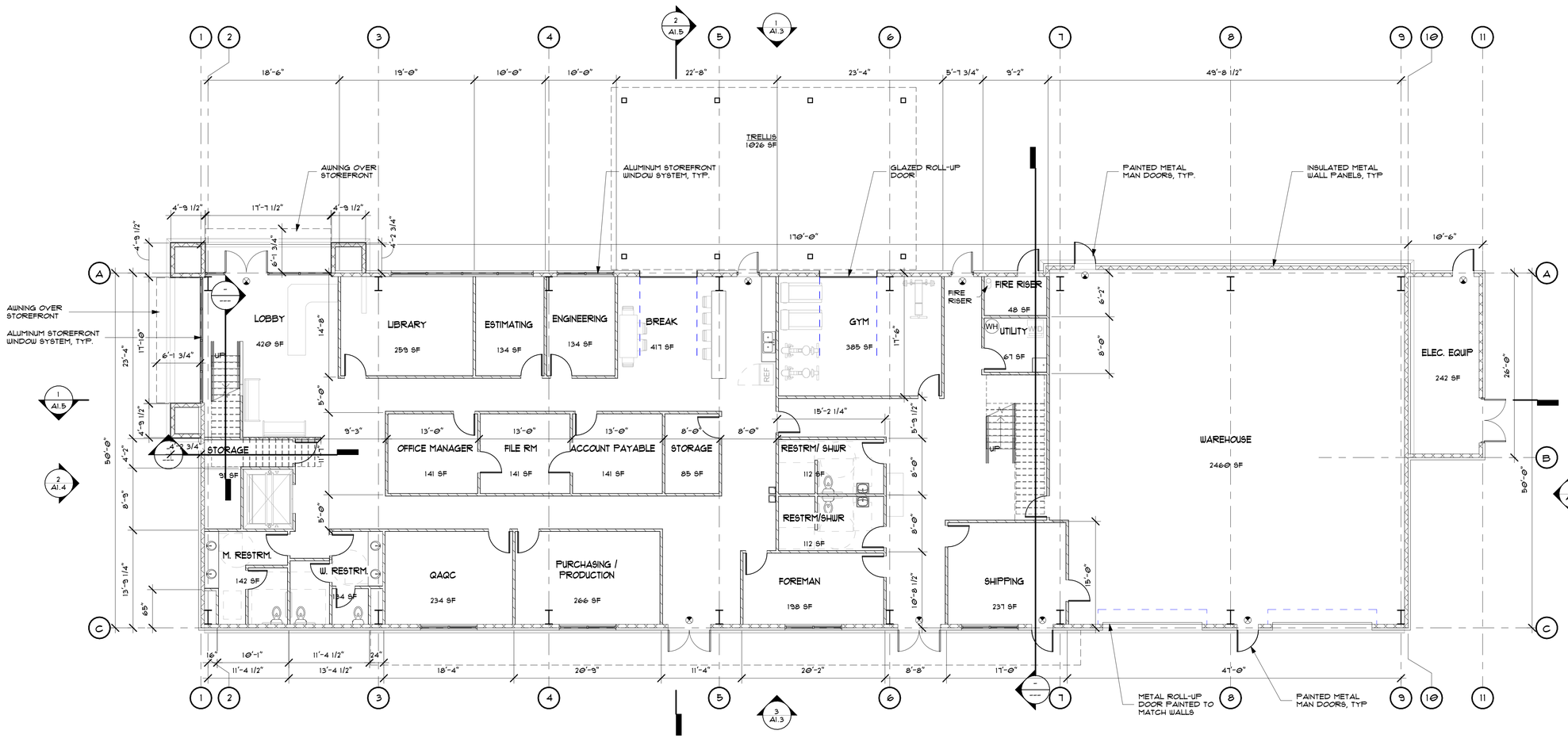
OFFICE- EGRESS

SCALE: AS INDICATED

SHEET
A1.0

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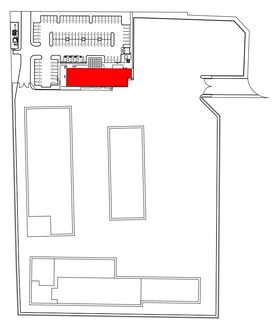
PRELIMINARY- FIRST FLOOR PLAN

1/8" = 1'-0"

NORTH

PROJECT DESCRIPTION

THE OFFICE BUILDING CONTAINS THREE PORTIONS: AN OFFICE BUILDING TO ACCOMMODATE THE ADMINISTRATION AND BUSINESS OF THE FACTORY BUILDINGS ON THE SAME LOT, A CHECK-IN AREA FOR WORKERS TO START AND END THEIR DAY, WITH A GYM AND TRAINING ROOM, AND AN ATTACHED WAREHOUSE FOR SHIPMENTS AND STORAGE.



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

OFFICE- FIRST FLOOR PLAN

0 8 16 32

1/8" = 1'-0"

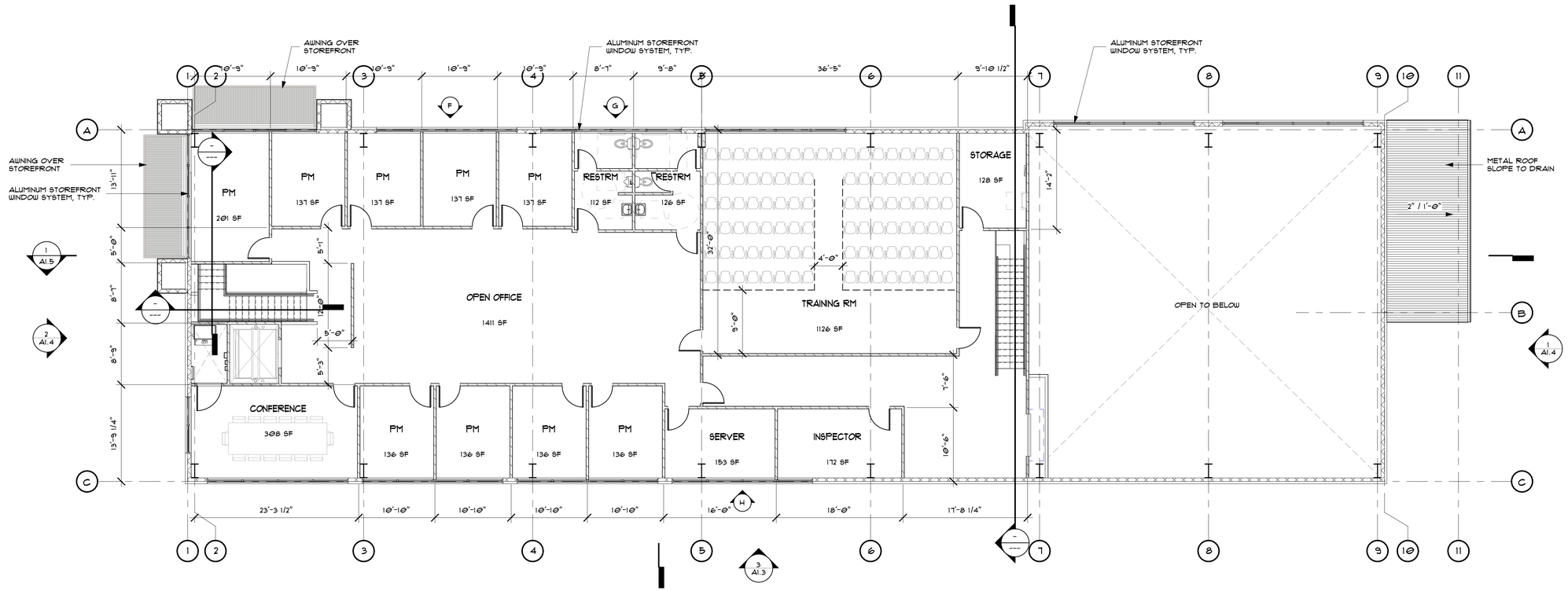
SCALE: AS INDICATED

SHEET A1.1

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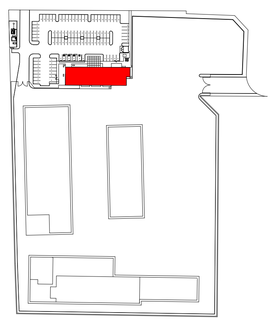
PROJECT: 25-311



PRELIMINARY- SECOND FLOOR PLAN

1/8" = 1'-0"

NORTH



KEY PLAN NORTH

JIFCO, INC

W LATHROP RD.

OFFICE- SECOND FLOOR PLAN

1/8" = 1'-0"

SCALE: AS INDICATED

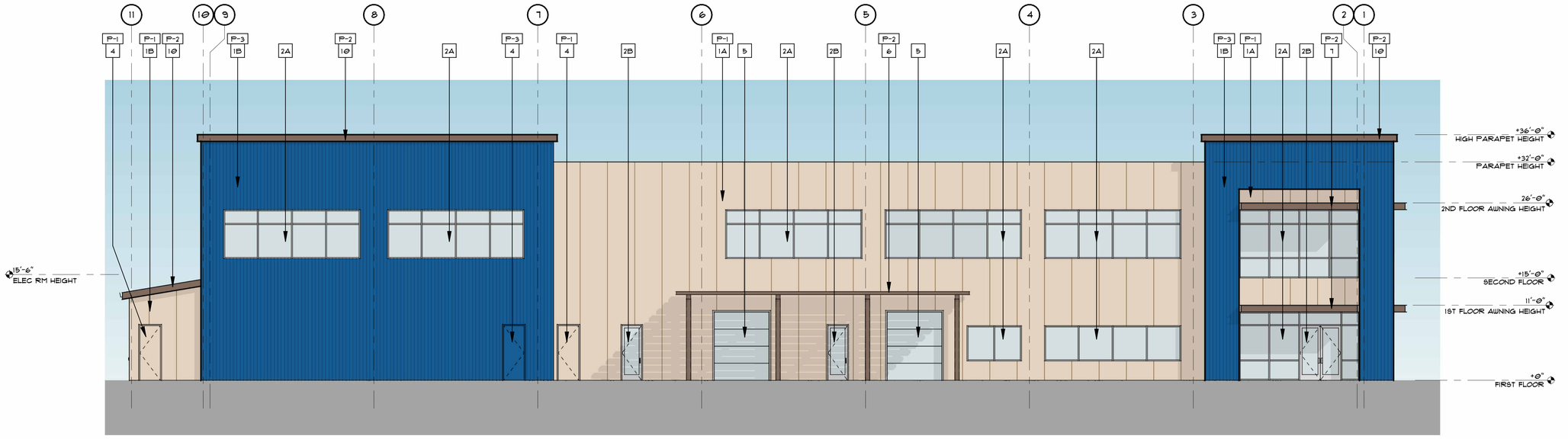
SHEET

A1.2

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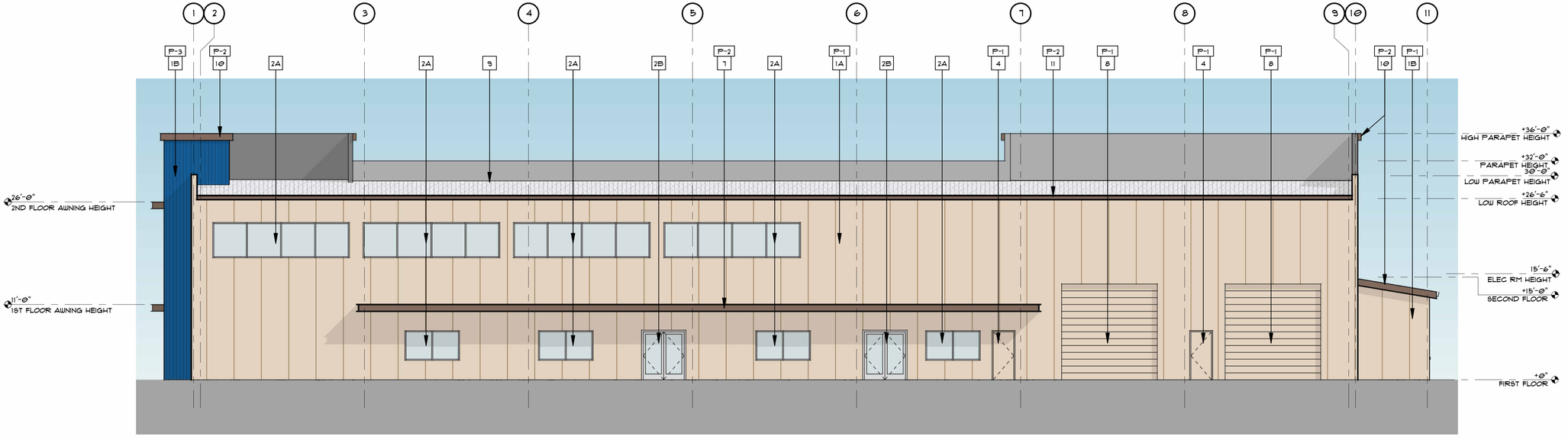
DATE: 7/28/2025

PROJECT: 25-311



NORTH ELEVATION

1/8" = 1'-0"



SOUTH ELEVATION

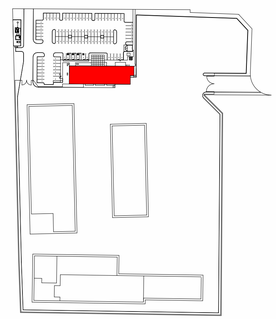
1/8" = 1'-0"

KEYNOTES

1A	METAL WALL PANELS- EMBOSSED
1B	METAL WALL PANELS- CORRUGATED VERTICAL
2A	CLEAR ANODIZED ALUMINUM STOREFRONT SYSTEM
2B	CLEAR ANODIZED ALUMINUM STOREFRONT DOOR
3	METAL ROOF
4	METAL MAN DOOR
5	GLASS SECTIONAL GARAGE DOOR
6	TRELLIS OVER PATIO
7	METAL CANOPY
8	ROLL-UP DOOR
9	TPO ROOF
10	TRIM- 1X12
11	GUTTER AT ROOF

PAINT LEGEND

P-1	DUNN EDWARDS OYSTER. DEC748.
P-2	DUNN EDWARDS BANNISTER BROWN. DE6069.
P-3	DUNN EDWARDS LAPIS. DE5846.



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

OFFICE- ELEVATIONS

0 8 16 32'

1/8" = 1'-0"

SCALE: AS INDICATED

SHEET

A1.3

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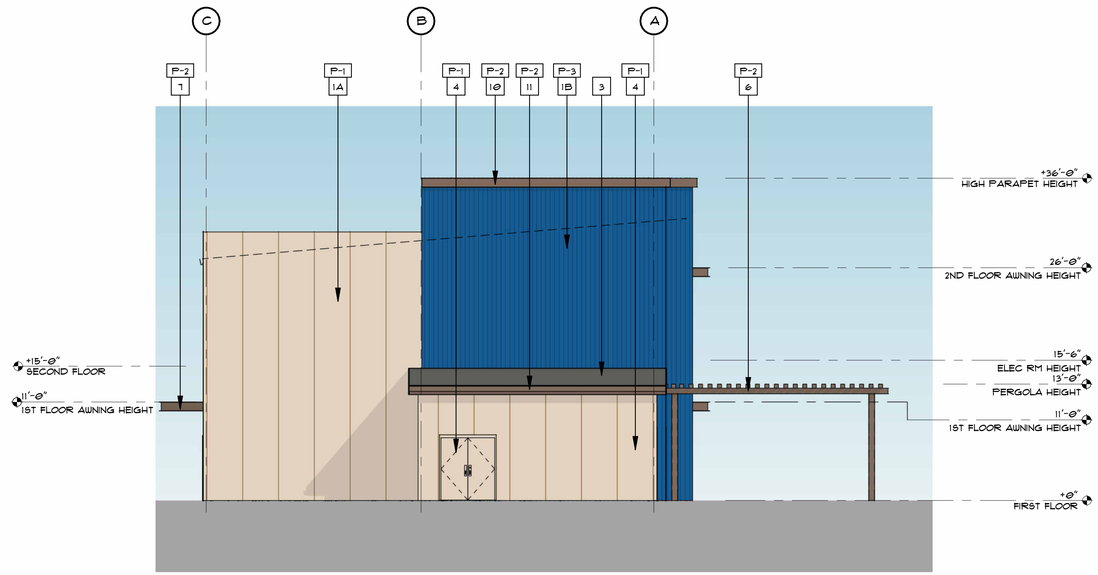
PROJECT: 25-311

KEYNOTES

1A	METAL WALL PANELS- EMBOSSED
1B	METAL WALL PANELS- CORRUGATED VERTICAL
2A	CLEAR ANODIZED ALUMINUM STOREFRONT SYSTEM
2B	CLEAR ANODIZED ALUMINUM STOREFRONT DOOR
3	METAL ROOF
4	METAL MAN DOOR
5	GLASS SECTIONAL GARAGE DOOR
6	TRELLIS OVER PATIO
7	METAL CANOPY
8	ROLL-UP DOOR
9	TPO ROOF
10	TRIM- 1X12
11	GUTTER AT ROOF

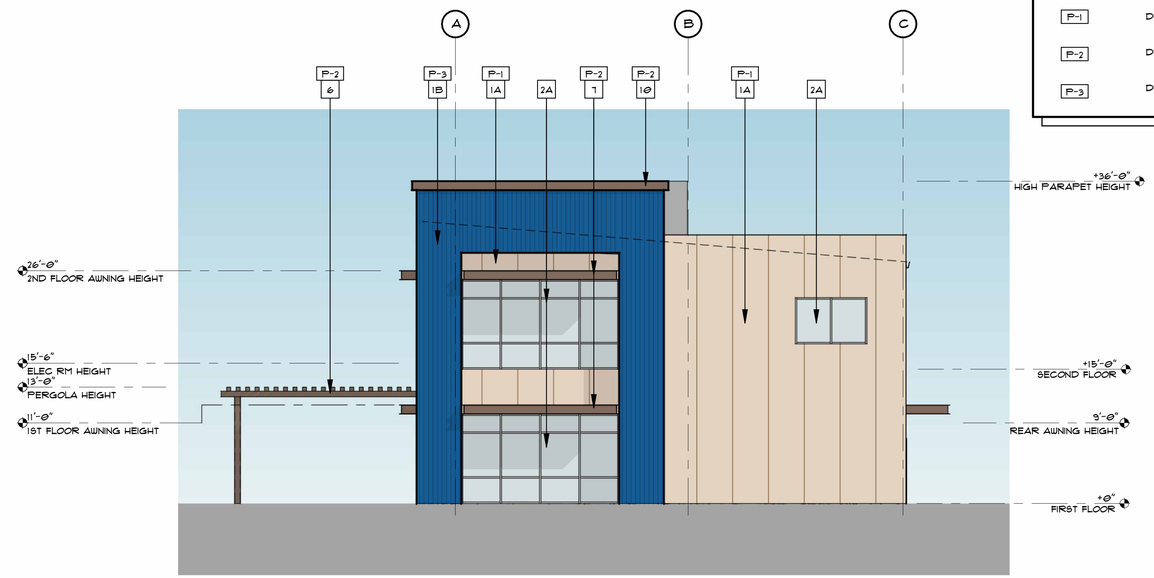
PAINT LEGEND

P-1	DUNN EDWARDS OYSTER. DEC748.
P-2	DUNN EDWARDS BANNISTER BROWN. DE6069.
P-3	DUNN EDWARDS LAPIS. DE5846.



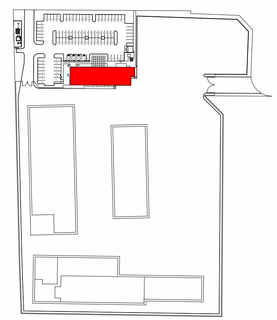
EAST ELEVATION

1/8" = 1'-0"



WEST ELEVATION

1/8" = 1'-0"



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

OFFICE- ELEVATIONS

0 8 16 32'

1/8" = 1'-0"

SCALE: AS INDICATED

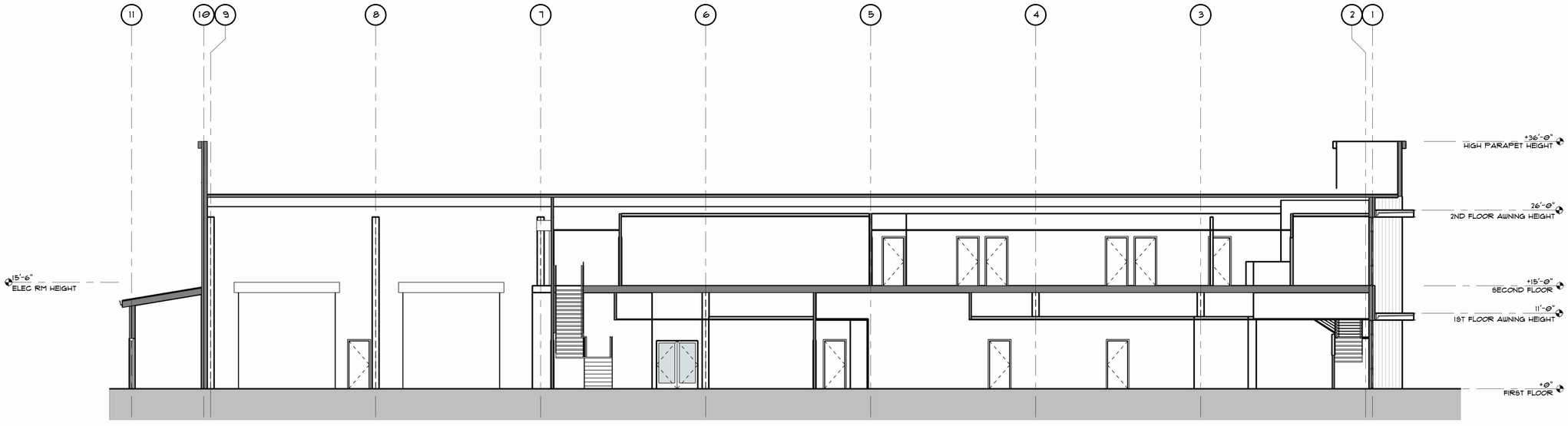
SHEET

A1.4

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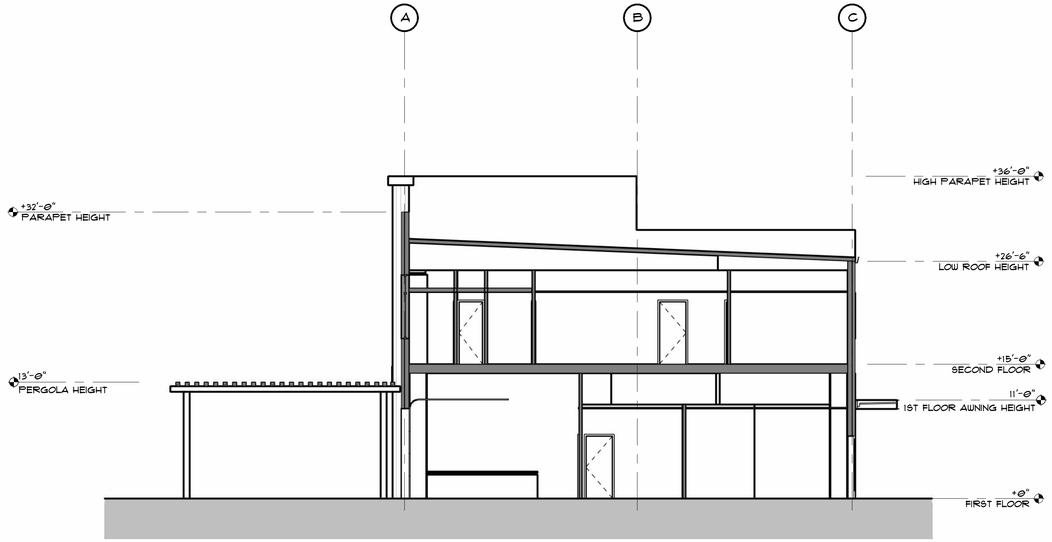
DATE: 7/28/2025

PROJECT: 25-311



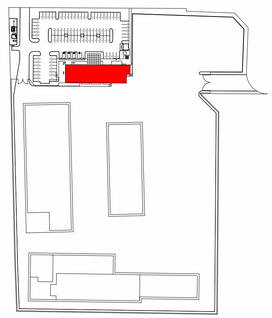
SECTION 1

1/8" = 1'-0"



SECTION 2

1/8" = 1'-0"



KEY PLAN NORTH

JIFCO, INC

W LATHROP RD.

OFFICE- SECTIONS

0 8 16 32

1/8" = 1'-0"

SCALE: AS INDICATED

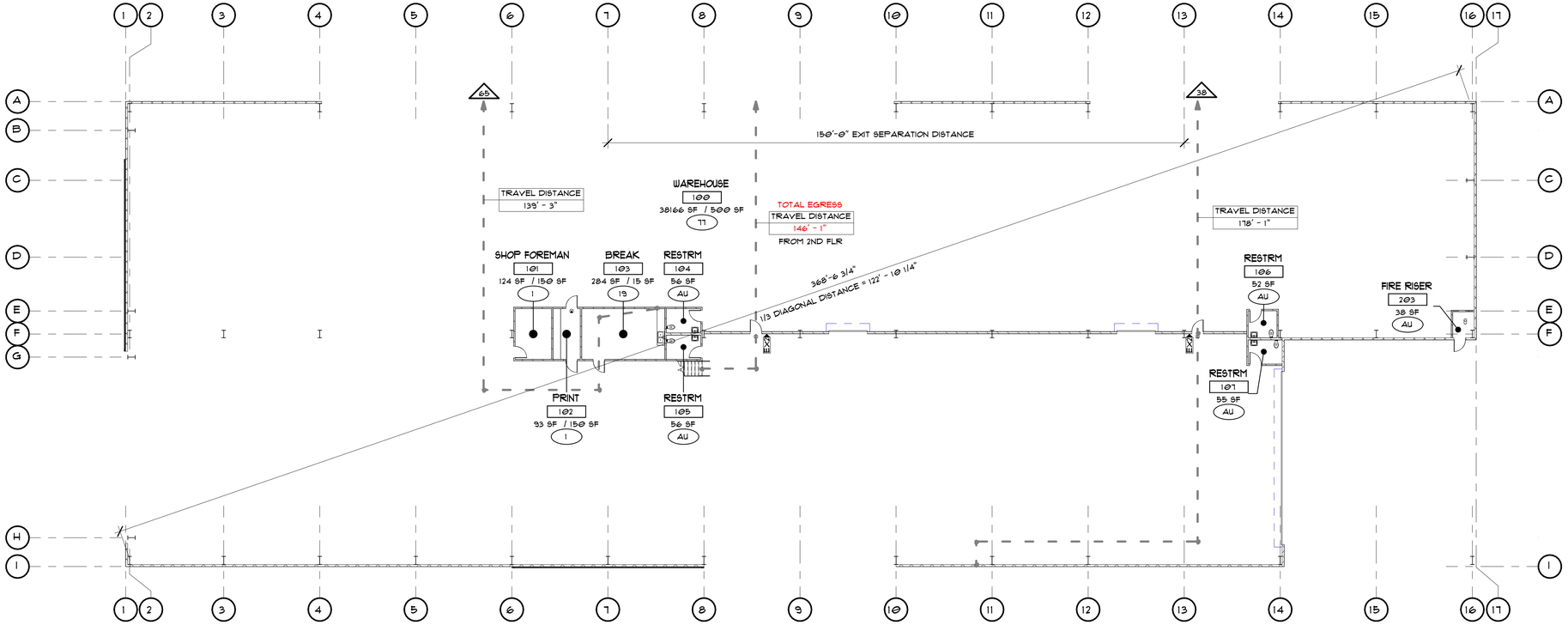
SHEET

A1.5

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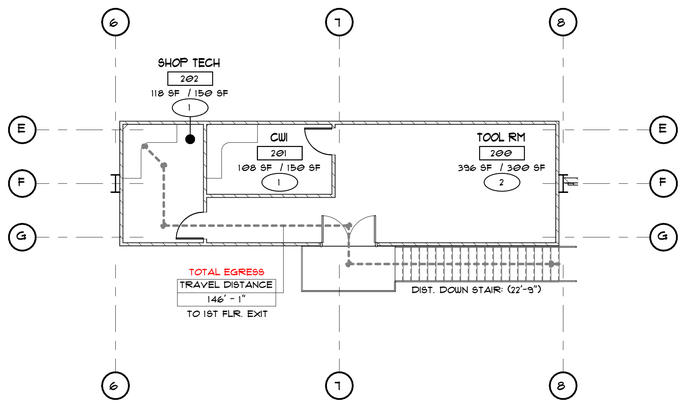
DATE: 7/28/2025

PROJECT: 25-311



EGRESS PLAN- 1ST FLOOR

1/16" = 1'-0"



EGRESS- 2ND FLOOR

1/8" = 1'-0"

LEGEND

- EX2 — SEE EXIT SIGNAGE
- ROOM NAME — ROOM NAME
- 101 — ROOM NUMBER
- XX SF / OLF — OCCUPANCY CALCULATION
- OCC — OCCUPANCY TAG
- AU — ACCESSORY USE- NO OCCUPANT LOAD
- 0 — TOTAL ACCUMULATED OCCUPANT LOAD THROUGH DOORWAY
- EXIT SIGN
- PROJECT EXIT ACCESS TRAVEL DISTANCE (SEE PLAN)
  EXIT ACCESS TRAVEL DISTANCE PER 2022 CBC 1017.2

EGRESS WIDTH CALCULATION

DOOR WIDTH / 0.2 = PERSONS ALLOWED THROUGH

(3'-0" WIDE) 33" / 0.2 = 165 PERSONS
(4'-0" WIDE) 48" / 0.2 = 225 PERSONS
(6'-0" WIDE) 66" / 0.2 = 330 PERSONS

EXITING

OCCUPANT LOAD FACTORS PER TABLE 1004.5

BUSINESS AREAS	150 GROSS
WAREHOUSE	500 GROSS

EXITING OCCUPANT LOAD ANALYSIS

TOTAL OCCUPANT LOAD:	102
TOTAL EXITS REQUIRED:	2 (TABLE 1006.3.3 CBC 2022)
TOTAL REQUIRED EXIT WIDTH: CBC 2022)	0.2 X 102 = 20.4" (SEC. 1005.3
ACTUAL EXIT WIDTH:	1ST: 138", 2ND: 44"
EXIT SEPARATION:	
MINIMUM EXIT SEPARATION:	122'-10 1/4" — OK
ACTUAL EXIT SEPARATION:	150'-0"
MAXIMUM TRAVEL DISTANCE TO EXITS: 2022)	F-2 = 400' (TABLE 1017.2 CBC

EXIT SIGNAGE

TACTILE EXIT SIGNS PER SECTION 1013.4, 2022 CBC W/ CHARACTERS, SYMBOLS, & THEIR BACKGROUND HAVING A NON-GLARE FINISH & CONTRASTING COLOR PER SECTION 11B-703.2 & 703.5 2022 CBC. SIGNS SHALL BE CONTRACTED GRADE 2 BRAILLE PER SECTION 11B-703.3 2022 CBC W/ THE FOLLOWING WORDS, AS INDICATED,

- EXIT = EXIT
- EXIT ROUTE = EXIT ROUTE

MOUNTING LOCATION AND HEIGHT:
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ASSEMBLY OCCUPANCIES SHALL HAVE THE OCCUPANCY LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT.

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JIFCO, INC

W LATHROP RD.

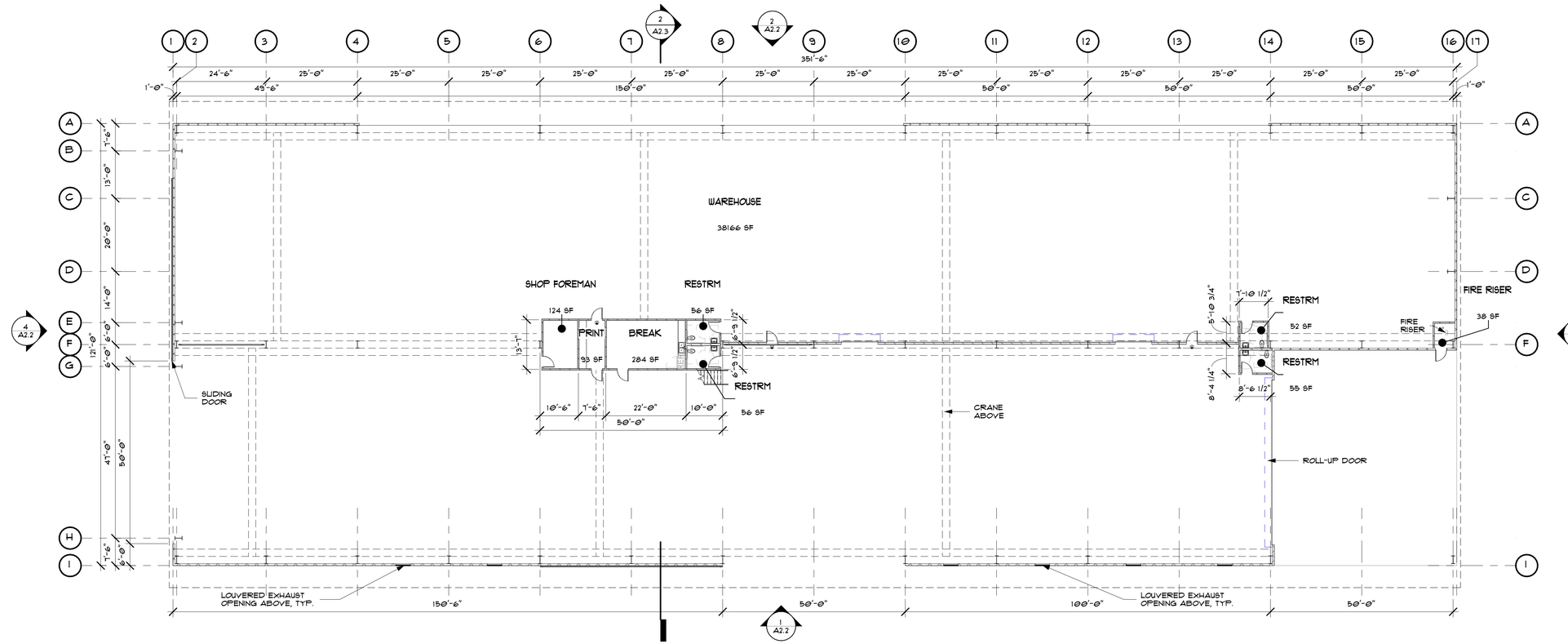
BUILDING 2- EGRESS

SCALE: AS INDICATED

SHEET
A2.0

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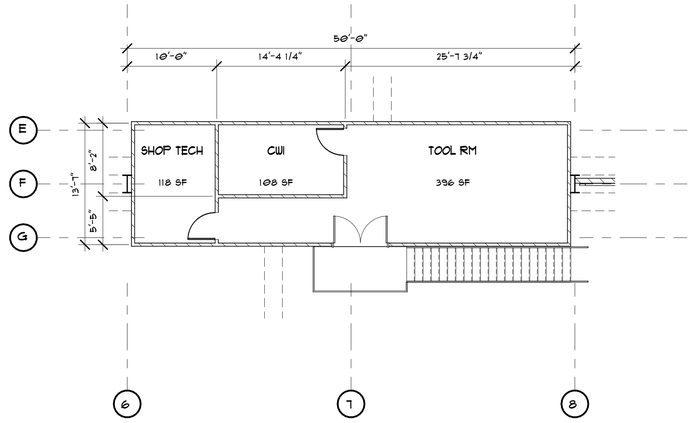
DATE: 7/28/2025
PROJECT: 25-311



PRELIMINARY- FIRST FLOOR PLAN

1/16" = 1'-0"

NORTH



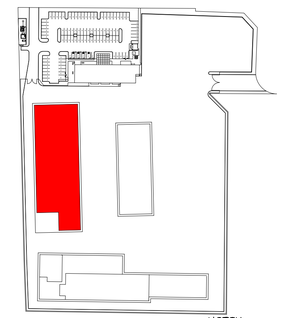
PRELIMINARY- SECOND FLOOR PLAN

1/8" = 1'-0"

NORTH

PROJECT DESCRIPTION

WAREHOUSE BUILDING FOR STORAGE AND FABRICATION OF METALS AND PIPE, INCLUDING WELDING, AS WELL AS OFFICE FOR MANAGEMENT AND INSPECTORS.



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 2- FLOOR PLAN

0 8' 16' 32'

1/8" = 1'-0"

SCALE: AS INDICATED

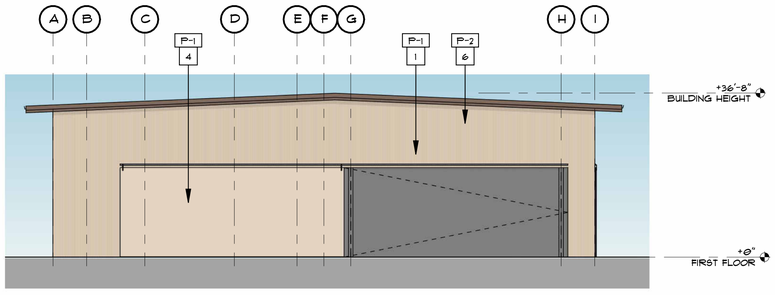
SHEET

A2.1

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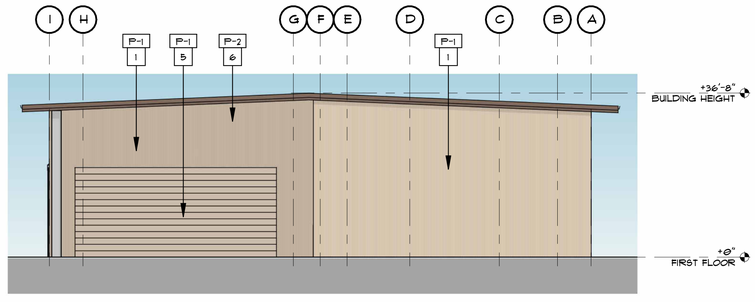
DATE: 7/28/2025

PROJECT: 25-311



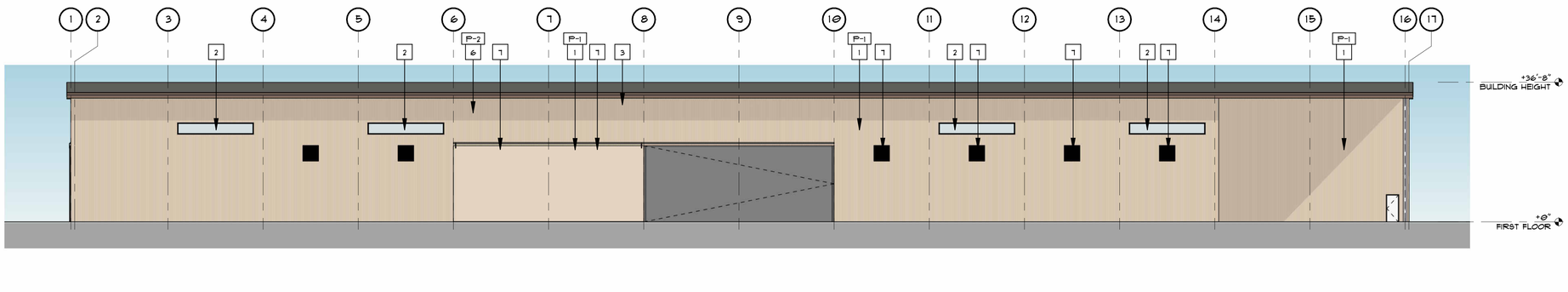
NORTH ELEVATION

1/16" = 1'-0"



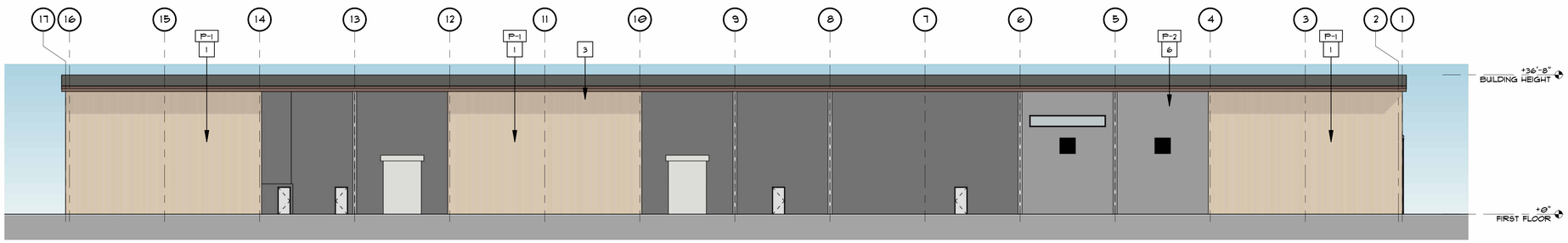
SOUTH ELEVATION

1/16" = 1'-0"



WEST ELEVATION

1/16" = 1'-0"



EAST ELEVATION

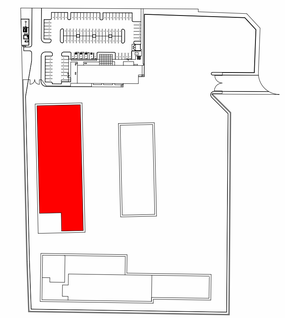
1/16" = 1'-0"

KEYNOTES

1	METAL WALL PANEL- CORRUGATED VERTICAL
2	CLEAR ANODIZED ALUMINUM WINDOW- 2'-0 X 3'-0
3	METAL ROOF
4	METAL BARN DOOR- 50'-0 X 20'-0
5	ROLL-UP DOOR- 45'-0 X 20'-0
6	FASCIA & GUTTER AT ROOF
7	LOUVERED EXHAUST OPENING

PAINT LEGEND

P-1	DUNN EDWARDS OYSTER. DEC748. PROVIDE TOUCH UP PAINT THROUGH MANUF.
P-2	DUNN EDWARDS BANNISTER BROWN. DE6069. PROVIDE TOUCH UP PAINT THROUGH MANUF.



KEY PLAN NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 2- ELEVATIONS

0 8 16 32'

1/8" = 1'-0"

SCALE: AS INDICATED

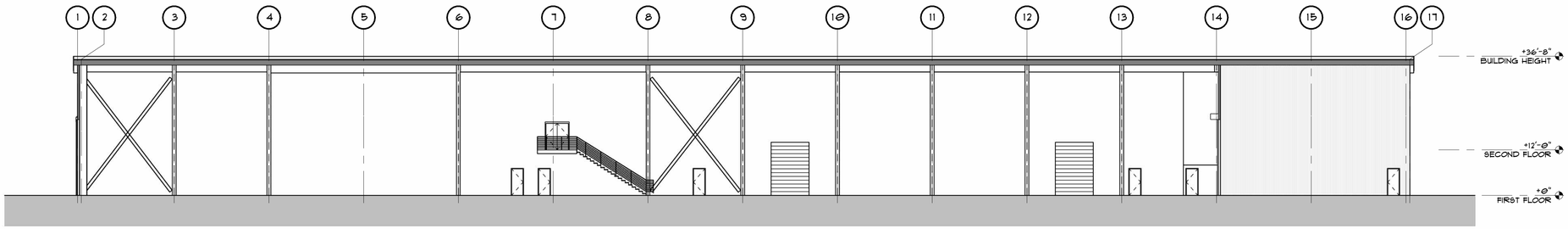
SHEET

A2.2

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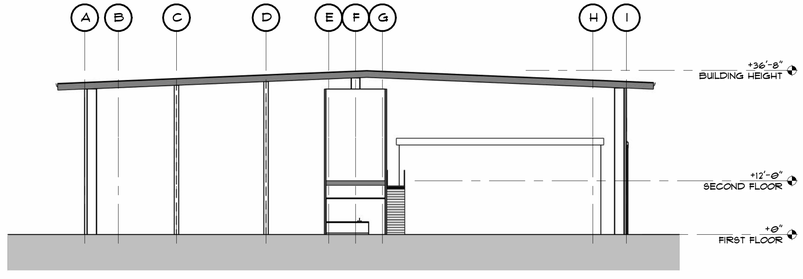
DATE: 7/28/2025

PROJECT: 25-311



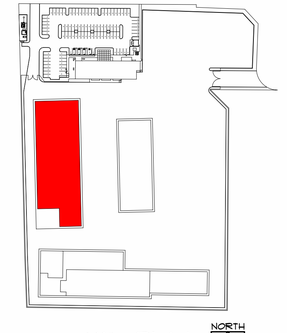
SECTION 1

1/16" = 1'-0"



SECTION 2

1/16" = 1'-0"



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 2- SECTIONS

0 8 16 32'

1/8" = 1'-0"

SCALE: AS INDICATED

SHEET

A2.3

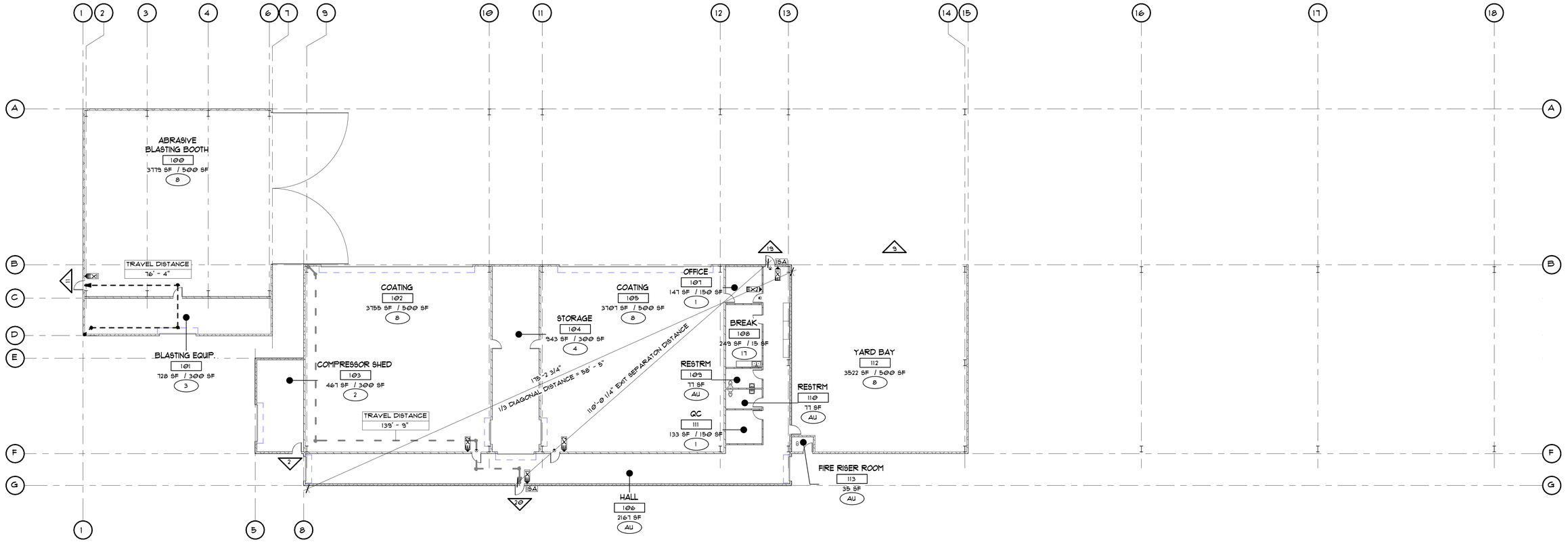
PERKINS, WILLIAMS & COTTERILL, INC.
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DATE: 7/28/2025

PROJECT: 25-311

EGRESS PLAN

1/16" = 1'-0"



LEGEND

- EX1 / EX2 — SEE EXIT SIGNAGE
- ROOM NAME — ROOM NAME
- 101 — ROOM NUMBER
- XX SF / OLF — OCCUPANCY CALCULATION
- OCC. — OCCUPANCY TAG
- AU — ACCESSORY USE- NO OCCUPANT LOAD
- 6 — TOTAL ACCUMULATED OCCUPANT LOAD THROUGH DOORWAY
- EXIT SIGN
- 15A — INTERNATIONAL SYMBOL OF ACCESSIBILITY ON OR ADJACENT TO ENTRANCES, LOCATED STRIKESIDE & MOUNTED 60" A.F.F. TO THE CENTER OF THE SIGN
- PROJECT EXIT ACCESS TRAVEL DISTANCE (SEE PLAN) EXIT ACCESS TRAVEL DISTANCE PER 2022 CBC 1017.2

EGRESS WIDTH CALCULATION

DOOR WIDTH / 0.2 = PERSONS ALLOWED THROUGH

(3'-0" WIDE) 33" / 0.2 = 165 PERSONS
(4'-0" WIDE) 45" / 0.2 = 225 PERSONS
(6'-0" WIDE) 66" / 0.2 = 330 PERSONS

EXITING

OCCUPANT LOAD FACTORS PER TABLE 1004.5

BUSINESS AREAS	150 GROSS
ASSEMBLY (UNCONCENTRATED)	15 NET

EXITING OCCUPANT LOAD ANALYSIS- BUILDING 3

TOTAL OCCUPANT LOAD:	11
TOTAL EXITS REQUIRED:	1 (TABLE 1006.3.3 CBC 2022)
TOTAL REQUIRED EXIT WIDTH:	0.2 X 11 = 2.2" (SEC. 1005.3 CBC 2022)
ACTUAL EXIT WIDTH:	36"

EXITING OCCUPANT LOAD ANALYSIS- BUILDING 4

TOTAL OCCUPANT LOAD:	58
TOTAL EXITS REQUIRED:	2 (TABLE 1006.3.3 CBC 2022)
TOTAL REQUIRED EXIT WIDTH:	0.2 X 58 = 12" (SEC. 1005.3 CBC 2022)
ACTUAL EXIT WIDTH:	108"
EXIT SEPARATION:	
MINIMUM EXIT SEPARATION:	58'-5" — OK.
ACTUAL EXIT SEPARATION:	116'-0 1/4"
MAXIMUM TRAVEL DISTANCE TO EXITS:	F = 400' (TABLE 1017.2 CBC 2022)

EXIT SIGNAGE

TACTILE EXIT SIGNS PER SECTION 1013.4, 2022 CBC W/ CHARACTERS, SYMBOLS, & THEIR BACKGROUND HAVING A NON-GLARE FINISH & CONTRASTING COLOR PER SECTION 11B-703.2 & 703.5 2022 CBC. SIGNS SHALL BE CONTRACTED GRADE 2 BRAILLE PER SECTION 11B-703.3 2022 CBC W/ THE FOLLOWING WORDS, AS INDICATED,

- EX1 = EXIT
- EX2 = EXIT ROUTE

MOUNTING LOCATION AND HEIGHT:
TACTILE EXIT SIGNS SHALL BE LOCATED ON THE WALL ADJACENT TO THE LATCH. WHERE THERE IS NO WALL SPACE ON LATCH SIDE, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLE ON THE RIGHT. MOUNTING HEIGHT SHALL BE 48" MIN. A.F.F. MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60" MAX. A.F.F. MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MINIMUM BY 18" MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND A 45 DEGREE OPEN POSITION.

SIGN & IDENTIFICATION REQUIREMENTS

IDENTIFICATION SIGNS:
WHEN SIGNS IDENTIFY PERMANENT ROOMS & SPACES OF THE BUILDING OR SITE. THEY SHALL COMPLY W/ SECTION 11B-216.2 2022 CBC.

DIRECTIONAL & INFORMATIONAL SIGNS:
WHEN SIGNS DIRECT TO OR GIVE INFORMATION ABOUT PERMANENT ROOMS & FUNCTIONAL SPACES OF THE BUILDING OR SITE. THEY SHALL COMPLY W/ SECTION 11B-216.3 2022 CBC.

ACCESSIBILITY SIGNS:
WHEN SIGNS IDENTIFY, DIRECT TO OR GIVE INFORMATION ABOUT ACCESSIBLE ELEMENTS & FEATURES OF THE BUILDING OR SITE, THEY SHALL INCLUDE THE APPROPRIATE SYMBOL OF ACCESSIBILITY & SHALL COMPLY W/ SECTION 11B-703.6.2 & 11B-703.1.2.1 2022 CBC.

ASSEMBLY SIGNS:
ASSEMBLY OCCUPANCIES SHALL HAVE THE OCCUPANCY LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE. NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT.

NOTES

ALL EXTERIOR EXIT DOOR LANDINGS SHALL PROVIDE EMERGENCY ILLUMINATION. WALL PACKS/SCONCES PROVIDED PER ELECTRICAL DRAWINGS SHALL HAVE THE CAPACITY TO PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES (PER SECTION 1008.3.4 2022 CBC)

JIFCO, INC

W LATHROP RD.

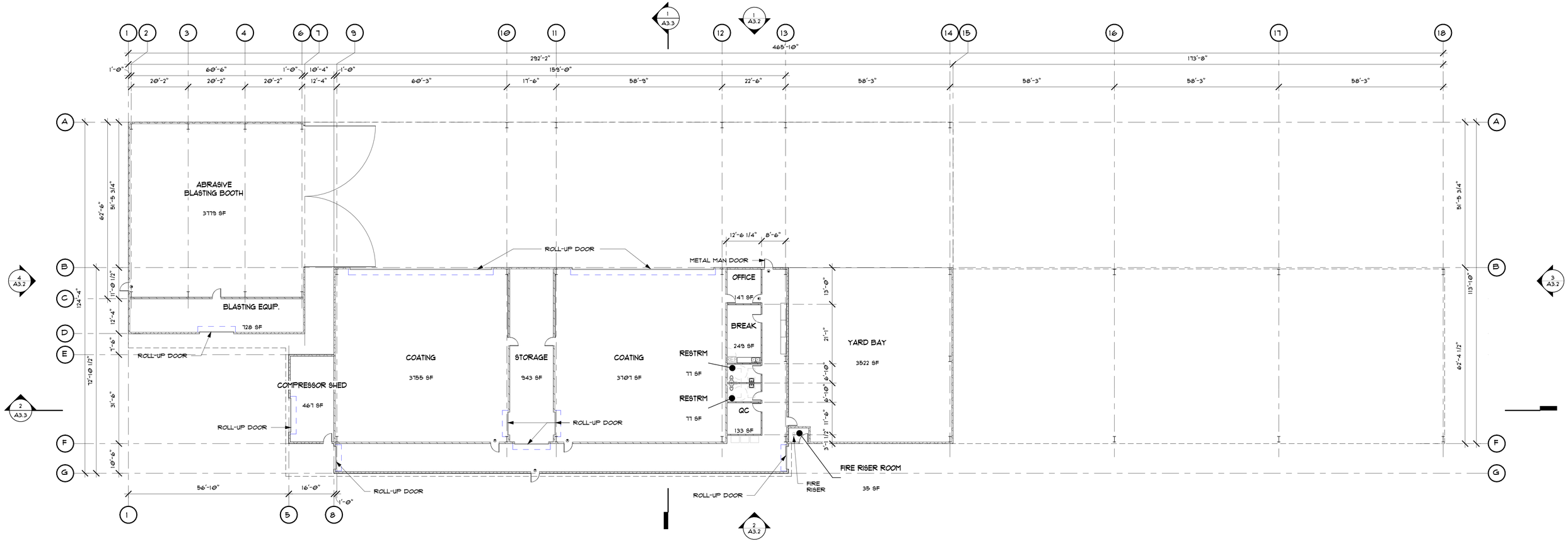
BUILDING 3&4- EGRESS

SCALE: AS INDICATED

SHEET
A3.0

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PROJECT: 25-311



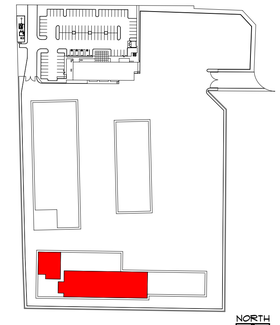
PRELIMINARY- FIRST FLOOR PLAN

1/16" = 1'-0"

NORTH

PROJECT DESCRIPTION

WAREHOUSE BUILDING FOR STORAGE AND FABRICATION OF METALS AND PIPE, INCLUDING SANDING IN AN ABRASIVE BLASTING BOOTH AND COATING AND LINING, AS WELL AS OFFICES FOR QUALITY CONTROL AND MANAGEMENT.



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 3&4- FLOOR PLAN

0 16 32 64

1/16" = 1'-0"

SCALE: AS INDICATED

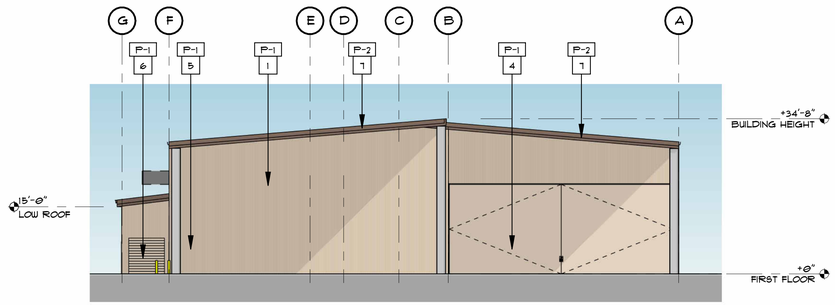
SHEET

A3.1

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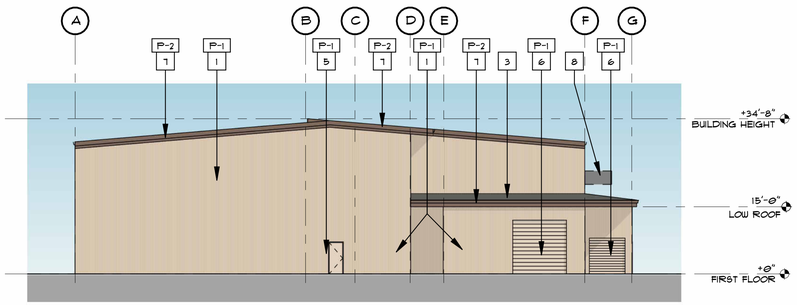
DATE: 7/28/2025

PROJECT: 25-311



EAST ELEVATION

1/16" = 1'-0"



WEST ELEVATION

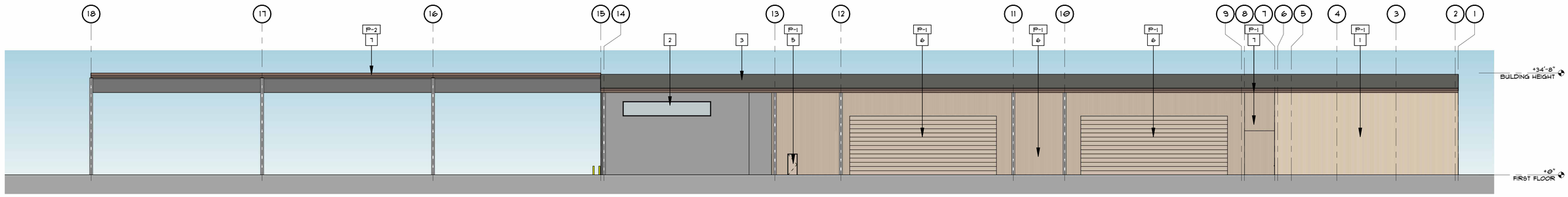
1/16" = 1'-0"

KEYNOTES

1	METAL WALL PANEL- CORRUGATED VERTICAL
2	CLEAR ANODIZED ALUMINUM WINDOW
3	METAL ROOF
4	METAL INDUSTRIAL DOOR- 50'-0 X 20'-0
5	METAL MAN DOOR
6	ROLL-UP DOOR- SIZE VARIES
7	FASCIA & GUTTER AT ROOF
8	MECHANICAL EQUIPMENT

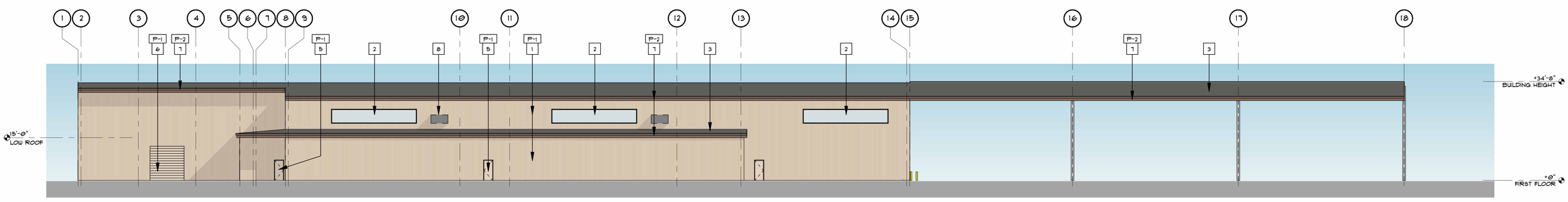
PAINT LEGEND

P-1	DUNN EDWARDS OYSTER. DEC748. PROVIDE TOUCH UP PAINT THROUGH MANUF.
P-2	DUNN EDWARDS BANNISTER BROWN. DE6069. PROVIDE TOUCH UP PAINT THROUGH MANUF.



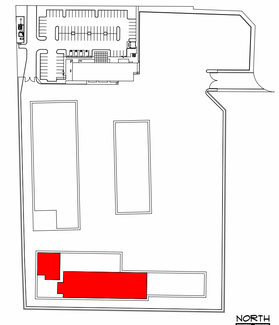
NORTH ELEVATION

1/16" = 1'-0"



SOUTH ELEVATION

1/16" = 1'-0"



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 3&4- ELEVATIONS

0 16 32 64'

1/16" = 1'-0"

SCALE: AS INDICATED

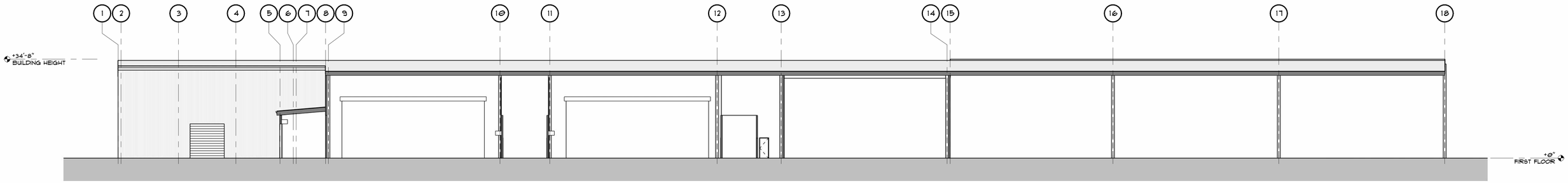
SHEET

A3.2

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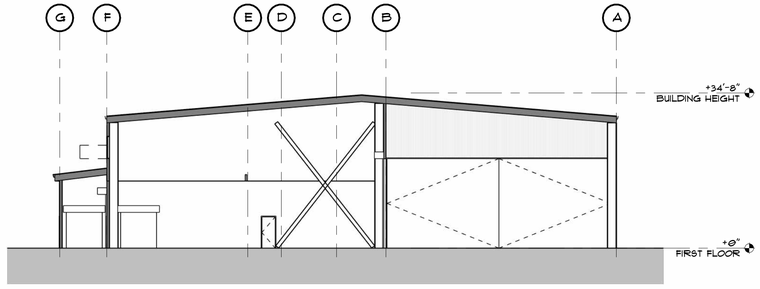
DATE: 7/28/2025

PROJECT: 25-311



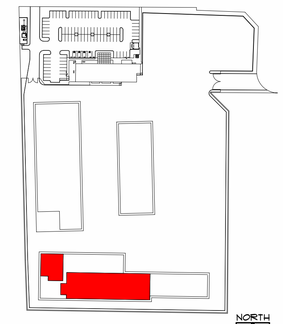
SECTION 1

1/16" = 1'-0"



SECTION 2

1/16" = 1'-0"



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 3&4- SECTIONS

0 16 32 64

1/16" = 1'-0"

SCALE: AS INDICATED

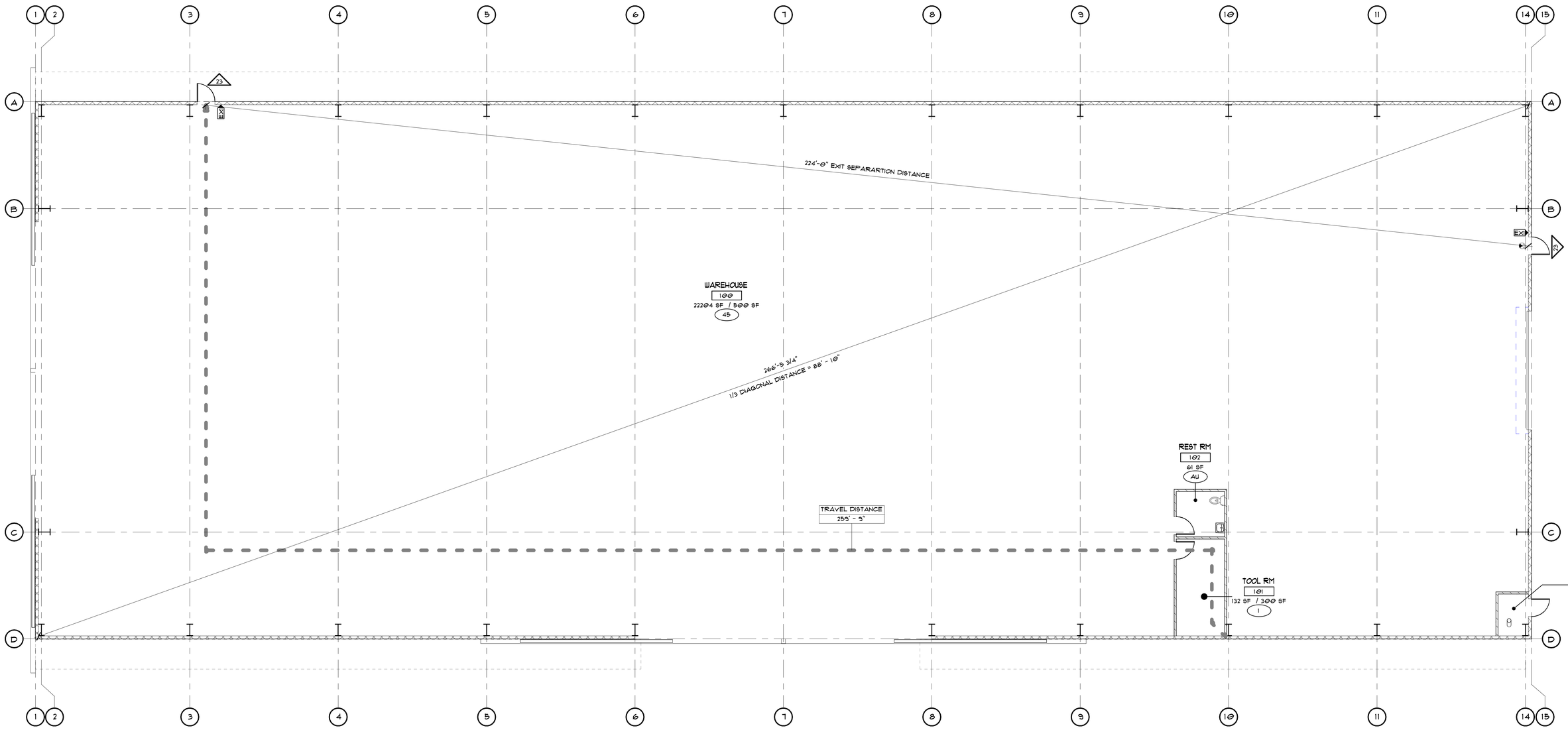
SHEET

A3.3

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DATE: 7/28/2025

PROJECT: 25-311



EGRESS PLAN

1/8" = 1'-0"

LEGEND

- EX1 / EX2 — SEE EXIT SIGNAGE
- ROOM NAME — ROOM NAME
- 101 — ROOM NUMBER
- XX SF / OLF — OCCUPANCY CALCULATION
- (OCC.) — OCCUPANCY TAG
- AU — ACCESSORY USE- NO OCCUPANT LOAD
- 0 — TOTAL ACCUMULATED OCCUPANT LOAD THROUGH DOORWAY
- EXIT SIGN
- ISA — INTERNATIONAL SYMBOL OF ACCESSIBILITY ON OR ADJACENT TO ENTRANCES, LOCATED STRIKESIDE & MOUNTED 60" A.F.F. TO THE CENTER OF THE SIGN
- PROJECT EXIT ACCESS TRAVEL DISTANCE (SEE PLAN) EXIT ACCESS TRAVEL DISTANCE PER 2022 CBC 1017.2

EGRESS WIDTH CALCULATION

DOOR WIDTH / 0.2 = PERSONS ALLOWED THROUGH

(3'-0" WIDE) 33" / 0.2 = 165 PERSONS
(4'-0" WIDE) 45" / 0.2 = 225 PERSONS
(6'-0" WIDE) 66" / 0.2 = 330 PERSONS

EXITING

OCCUPANT LOAD FACTORS PER TABLE 1004.5

BUSINESS AREAS	150 GROSS
ASSEMBLY (UNCONCENTRATED)	15 NET

EXITING OCCUPANT LOAD ANALYSIS

TOTAL OCCUPANT LOAD:	46
TOTAL EXITS REQUIRED:	2 (TABLE 1006.3.3 CBC 2022)
TOTAL REQUIRED EXIT WIDTH:	0.2 X 46 = 9.2" (SEC. 1005.3 CBC 2022)
ACTUAL EXIT WIDTH:	72"
EXIT SEPARATION:	
MINIMUM EXIT SEPARATION:	86'-10" — OK
ACTUAL EXIT SEPARATION:	224'-0" — OK
MAXIMUM TRAVEL DISTANCE TO EXITS:	F = 400' (TABLE 1017.2 CBC 2022)

EXIT SIGNAGE

TACTILE EXIT SIGNS PER SECTION 1013.4, 2022 CBC W/ CHARACTERS, SYMBOLS, & THEIR BACKGROUND HAVING A NON-GLARE FINISH & CONTRASTING COLOR PER SECTION 11B-703.2 & 703.5 2022 CBC. SIGNS SHALL BE CONTRACTED GRADE 2 BRAILLE PER SECTION 11B-703.3 2022 CBC W/ THE FOLLOWING WORDS, AS INDICATED,

- EX1 = EXIT
- EX2 = EXIT ROUTE

MOUNTING LOCATION AND HEIGHT:
TACTILE EXIT SIGNS SHALL BE LOCATED ON THE WALL ADJACENT TO THE LATCH. WHERE THERE IS NO WALL SPACE ON LATCH SIDE, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLE ON THE RIGHT. MOUNTING HEIGHT SHALL BE 48" MIN. A.F.F. MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60" MAX. A.F.F. MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MINIMUM BY 18" MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND A 45 DEGREE OPEN POSITION.

SIGN & IDENTIFICATION REQUIREMENTS

IDENTIFICATION SIGNS:
WHEN SIGNS IDENTIFY PERMANENT ROOMS & SPACES OF THE BUILDING OR SITE. THEY SHALL COMPLY W/ SECTION 11B-216.2 2022 CBC.

DIRECTIONAL & INFORMATIONAL SIGNS:
WHEN SIGNS DIRECT TO OR GIVE INFORMATION ABOUT PERMANENT ROOMS & FUNCTIONAL SPACES OF THE BUILDING OR SITE. THEY SHALL COMPLY W/ SECTION 11B-216.3 2022 CBC.

ACCESSIBILITY SIGNS:
WHEN SIGNS IDENTIFY, DIRECT TO OR GIVE INFORMATION ABOUT ACCESSIBLE ELEMENTS & FEATURES OF THE BUILDING OR SITE, THEY SHALL INCLUDE THE APPROPRIATE SYMBOL OF ACCESSIBILITY & SHALL COMPLY W/ SECTION 11B-703.6.2 & 11B-703.7.2.1 2022 CBC.

ASSEMBLY SIGNS:
ASSEMBLY OCCUPANCIES SHALL HAVE THE OCCUPANCY LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE. NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY FROM THE ROOM OR SPACE. POSTED SIGNS SHALL BE OF AN APPROVED LEGIBLE PERMANENT DESIGN SHALL BE MAINTAINED BY THE OWNER OR AUTHORIZED AGENT.

NOTES

ALL EXTERIOR EXIT DOOR LANDINGS SHALL PROVIDE EMERGENCY ILLUMINATION. WALL PACKS/SCONCES PROVIDED PER ELECTRICAL DRAWINGS SHALL HAVE THE CAPACITY TO PROVIDE POWER FOR A DURATION OF NOT LESS THAN 90 MINUTES (PER SECTION 1008.3.4 2022 CBC)

JIFCO, INC

W LATHROP RD.

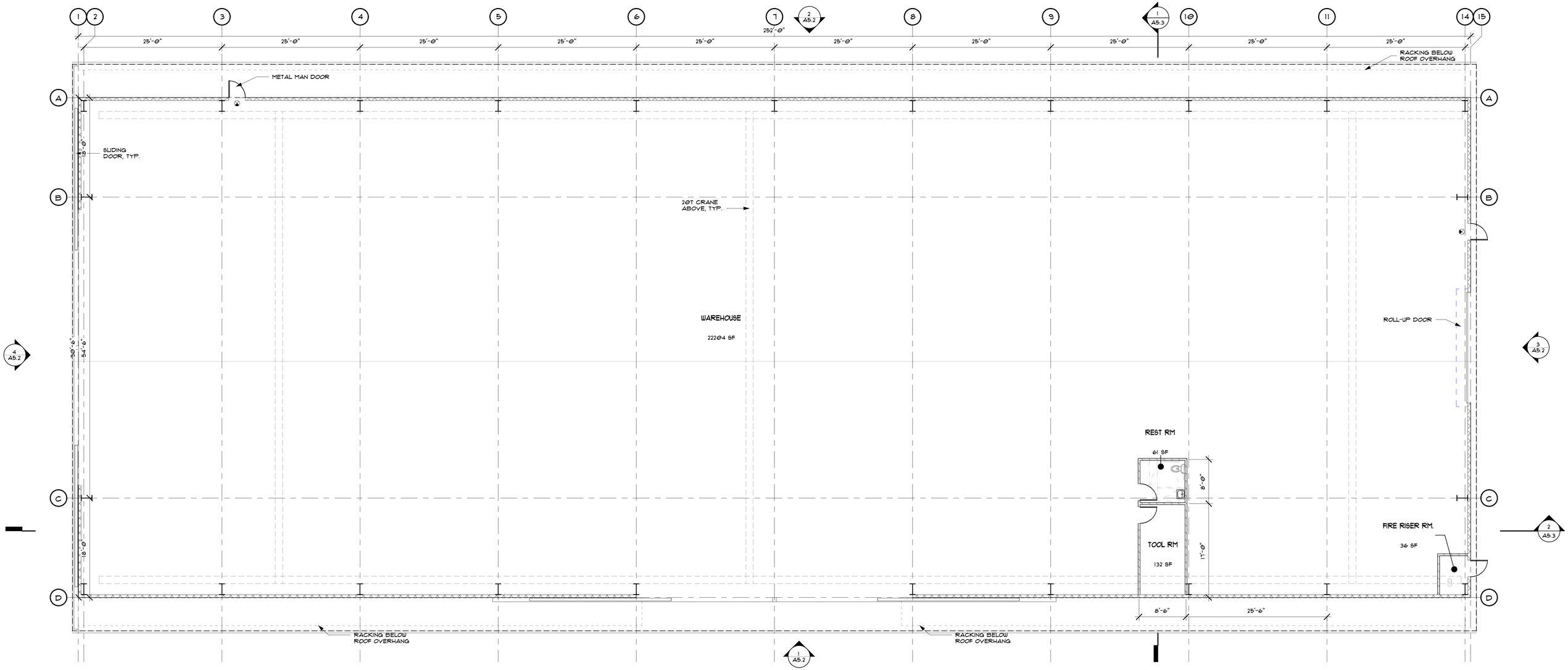
BUILDING 5- EGRESS

SCALE: AS INDICATED

SHEET
A5.0

PERKINS, WILLIAMS & COTTERILL, INC.
ARCHITECTS
3320 Data Drive, Suite 200 • Rancho Cordova, California 95670
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DATE: 6/10/2025
PROJECT: 25-311



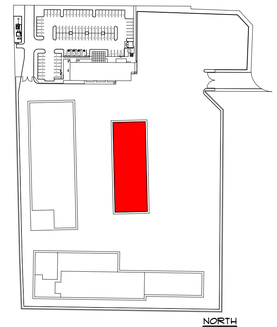
PRELIMINARY- FIRST FLOOR PLAN

1/8" = 1'-0"

NORTH

PROJECT DESCRIPTION

WAREHOUSE BUILDING FOR STORAGE AND FABRICATION OF METALS AND PIPE, INCLUDING WELDING.



KEY PLAN NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 5- FLOOR PLAN

0 8' 16' 32'

1/8" = 1'-0"

SCALE: AS INDICATED

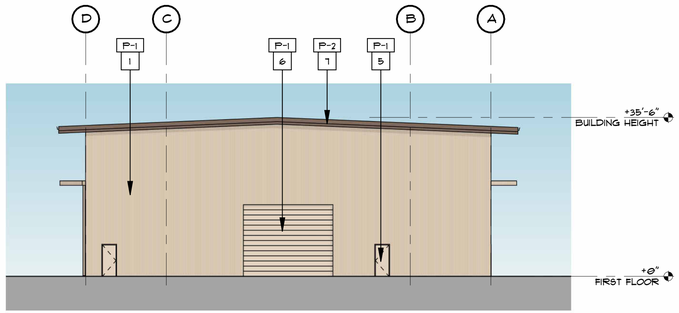
SHEET

A5.1

PERKINS, WILLIAMS & COTTERILL, INC.
ARCHITECTS
3320 Data Drive, Suite 200 • Rancho Cordova, California 95670
T (916) 851-1400 F (916) 851-1408 E pwcarch@pwcarchitects.com

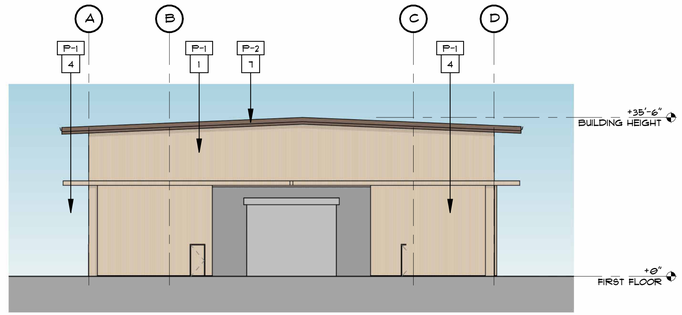
DATE: 6/10/2025

PROJECT: 25-311



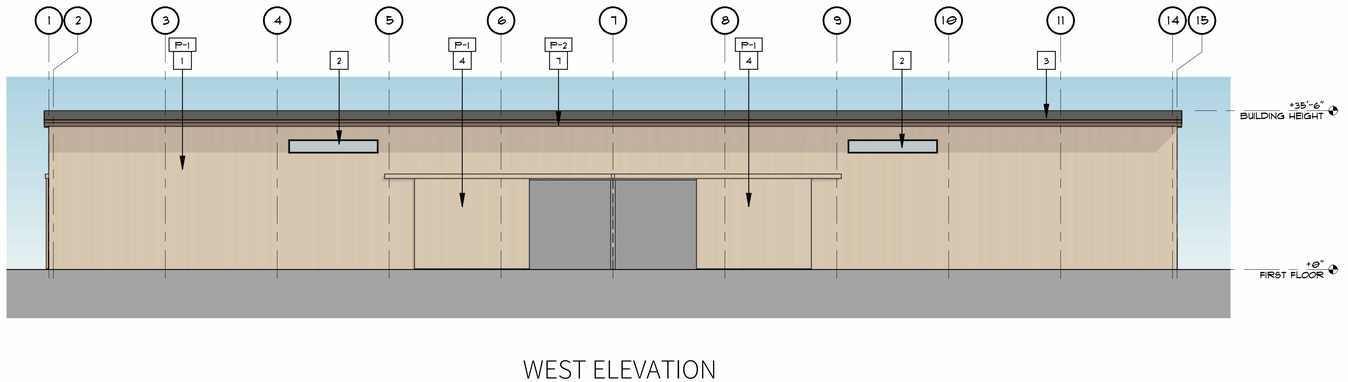
SOUTH ELEVATION

1/16" = 1'-0"



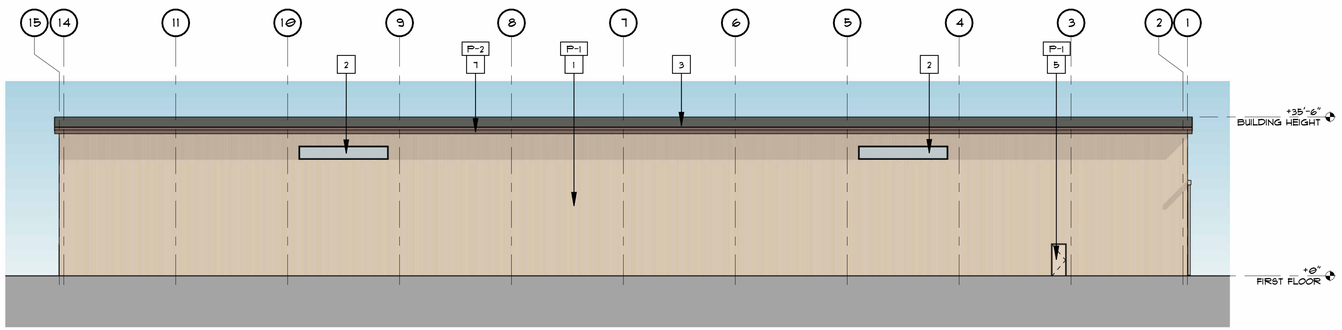
NORTH ELEVATION

1/16" = 1'-0"



WEST ELEVATION

1/16" = 1'-0"



EAST ELEVATION

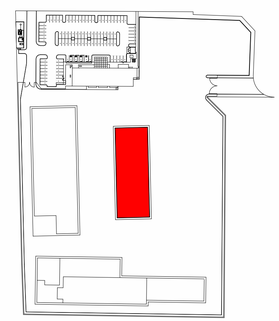
1/16" = 1'-0"

KEYNOTES

1	METAL WALL PANELS
2	DARK ANODIZED ALUMINUM WINDOW
3	METAL ROOF
4	METAL BARN DOOR- 50'-0 X 20'-0
5	METAL MAN DOOR
6	ROLL-UP DOOR
7	FASCIA & GUTTER AT ROOF

PAINT LEGEND

P-1	DUNN EDWARDS OYSTER. DEC748. PROVIDE TOUCH UP PAINT THROUGH MANUF.
P-2	DUNN EDWARDS BANNISTER BROWN. DE6069. PROVIDE TOUCH UP PAINT THROUGH MANUF.



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 5- ELEVATIONS

0 8' 16' 32'

1/8" = 1'-0"

SCALE: AS INDICATED

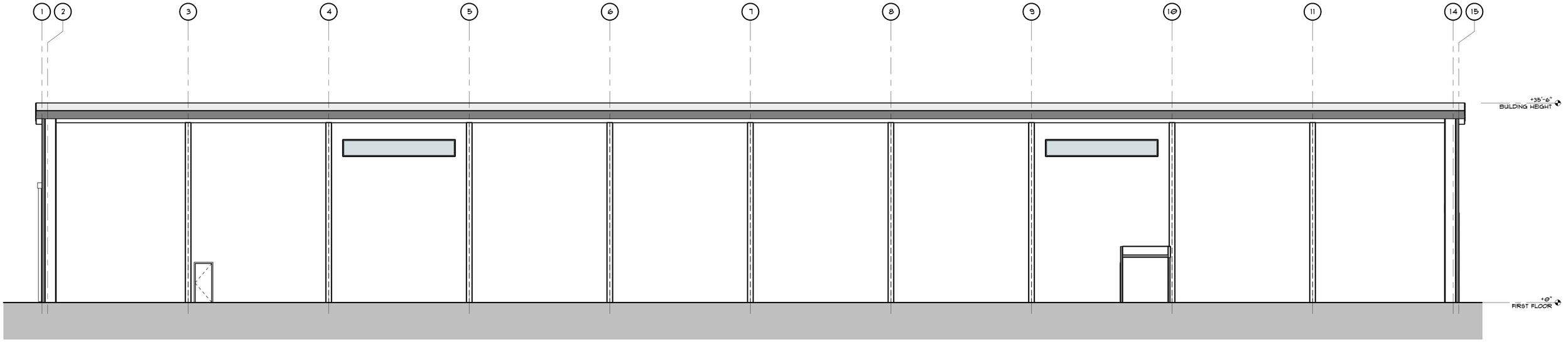
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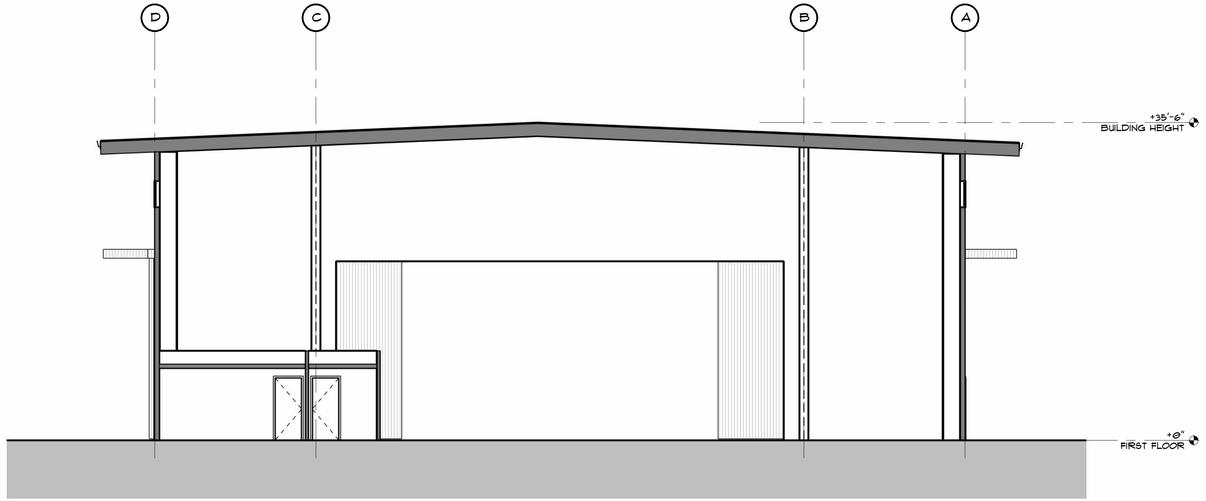
DATE: 6/10/2025

PROJECT: 25-311



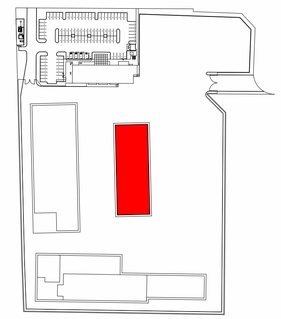
SECTION 1

1/8" = 1'-0"



SECTION 2

1/8" = 1'-0"



KEY PLAN

NORTH

JIFCO, INC

W LATHROP RD.

BUILDING 5- SECTIONS

0 8 16 32'

1/8" = 1'-0"

SCALE: AS INDICATED

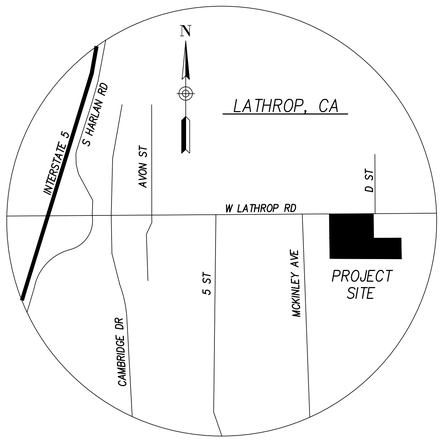
SHEET

A5.3

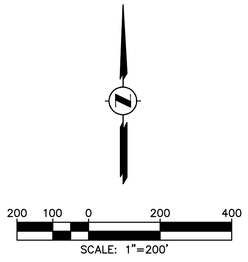
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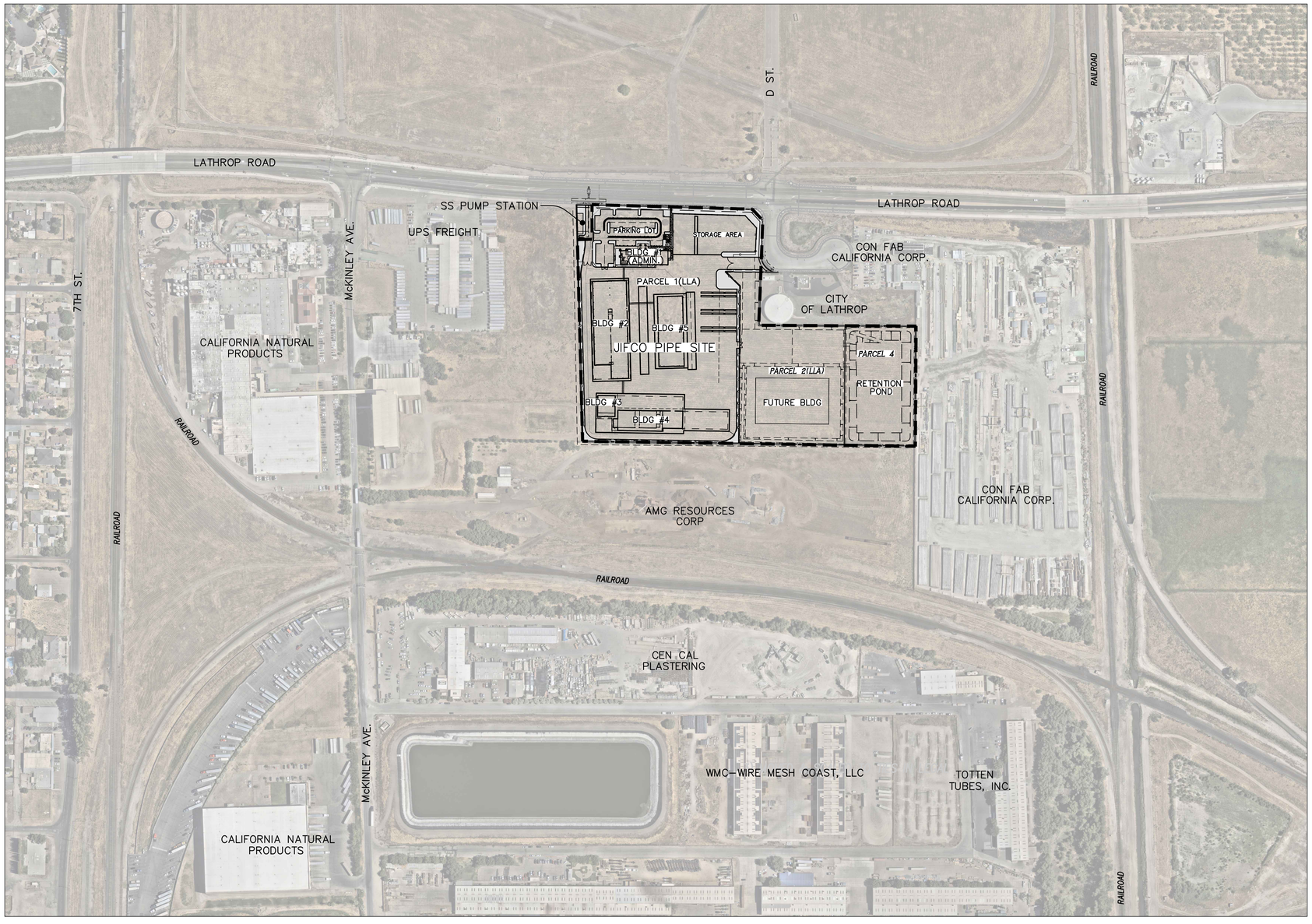
DATE: 6/10/2025

PROJECT: 25-311



VICINITY MAP
N.T.S.





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Storm Water Monitoring & Reporting
Land Development Engineering
Environmental Engineering
Municipal Engineering
Surveying & Mapping
Construction Staking

& Associates
MILANI

2655 Stanwell Drive, Suite 105
Concord, CA 94520
Phone: (925) 674-9082
Fax: (925) 674-9279
Web: www.milaniassociates.com

APN'S: 198-040-280-000, & 198-040-290-000

JIFCO, INC.

1520 LATHROP ROAD

DEVELOPMENT SITE PLAN

CONTEXTUAL SITE PLAN

CITY OF LATHROP — **SAN JOAQUIN COUNTY** — **CALIFORNIA**

DESIGNED UNDER THE DIRECTION OF:
MICHAEL E. MILANI — 8/22/2025 DATE
R.C.E. No. 35121 REGISTRATION EXPIRES 9/30/27 — L.S. No. 5311 REGISTRATION EXPIRES 12/31/25

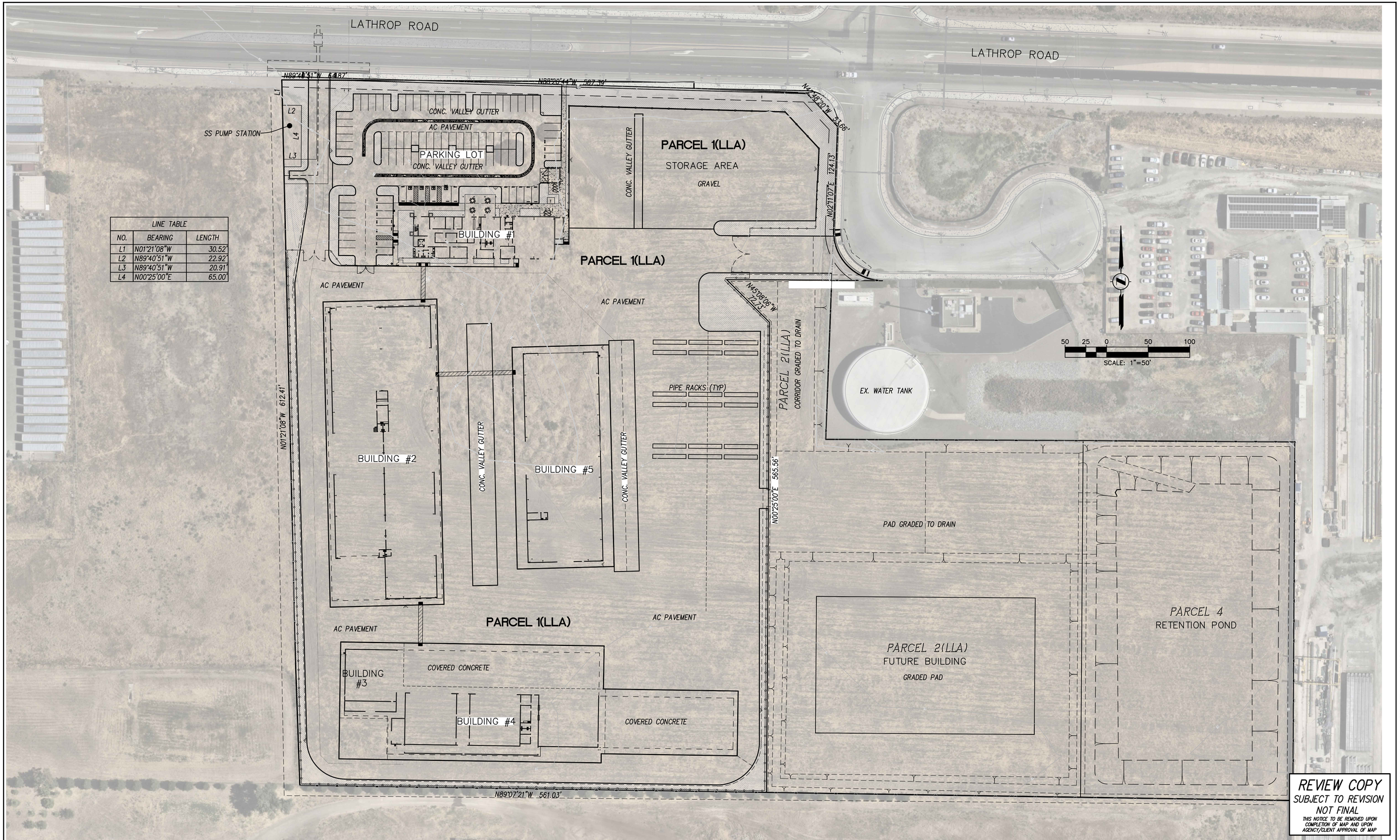
DESIGN: MEM/SMS	JOB NO: 3722
DRAWN: TKA/SMS	DATE: AUGUST 2025
CHECKED: MEM	SCALE: AS SHOWN

REGISTERED PROFESSIONAL ENGINEER — MICHAEL EUGENE MILANI — No. 35121 — EXP. 09/30/27 — CIVIL — STATE OF CALIFORNIA

NO.	REVISIONS	BY	APP	DATE

SHEET C-3 OF C-19 SHEETS

R:\Jobs\3722\DEVELOPMENT SITE PLAN\3722DSP.dwg SHT 3 CONTEXT 11-08-25 04:56:07 PM SeanSykowski



LINE TABLE		
NO.	BEARING	LENGTH
L1	N01°21'08"W	30.52'
L2	N89°40'51"W	22.92'
L3	N89°40'51"W	20.91'
L4	N00°25'00"E	65.00'

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JIFCO, INC.

1520 LATHROP ROAD

DEVELOPMENT SITE PLAN

MASTER SITE PLAN

CITY OF LATHROP — SAN JOAQUIN COUNTY — CALIFORNIA

DESIGNED UNDER THE DIRECTION OF:

MICHAEL E. MILANI — 8/22/2025 — DATE

R.C.E. No. 35121 REGISTRATION EXPIRES 9/30/27 — L.S. No. 5311 REGISTRATION EXPIRES 12/31/25

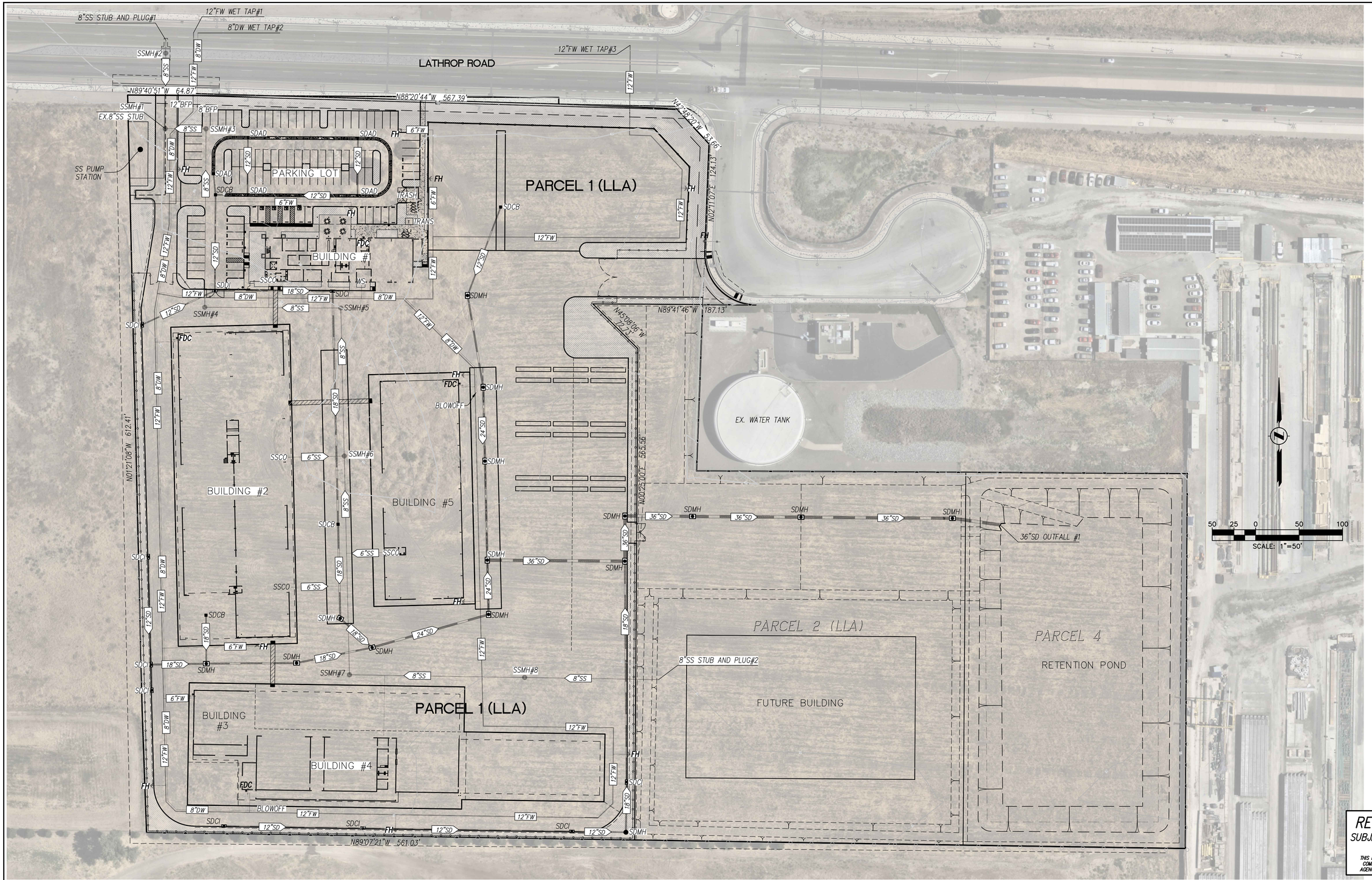
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CHECKED: MEM	SCALE: AS SHOWN

REGISTERED PROFESSIONAL ENGINEER — MICHAEL EUGENE MILANI — No. 35121 — EXP. 09/30/27 — CIVIL — STATE OF CALIFORNIA

NO.	REVISIONS	BY	APP	DATE

SHEET C-4 OF C-19 SHEETS

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JIFCO, INC.

1520 LATHROP ROAD

DEVELOPMENT SITE PLAN

COMPOSITE UTILITY PLAN

CITY OF LATHROP — SAN JOAQUIN COUNTY — CALIFORNIA

DESIGNED UNDER THE DIRECTION OF:
MICHAEL E. MILANI — 8/22/2025
R.C.E. No. 35121 REGISTRATION EXPIRES 9/30/27 — L.S. No. 5311 REGISTRATION EXPIRES 12/31/25

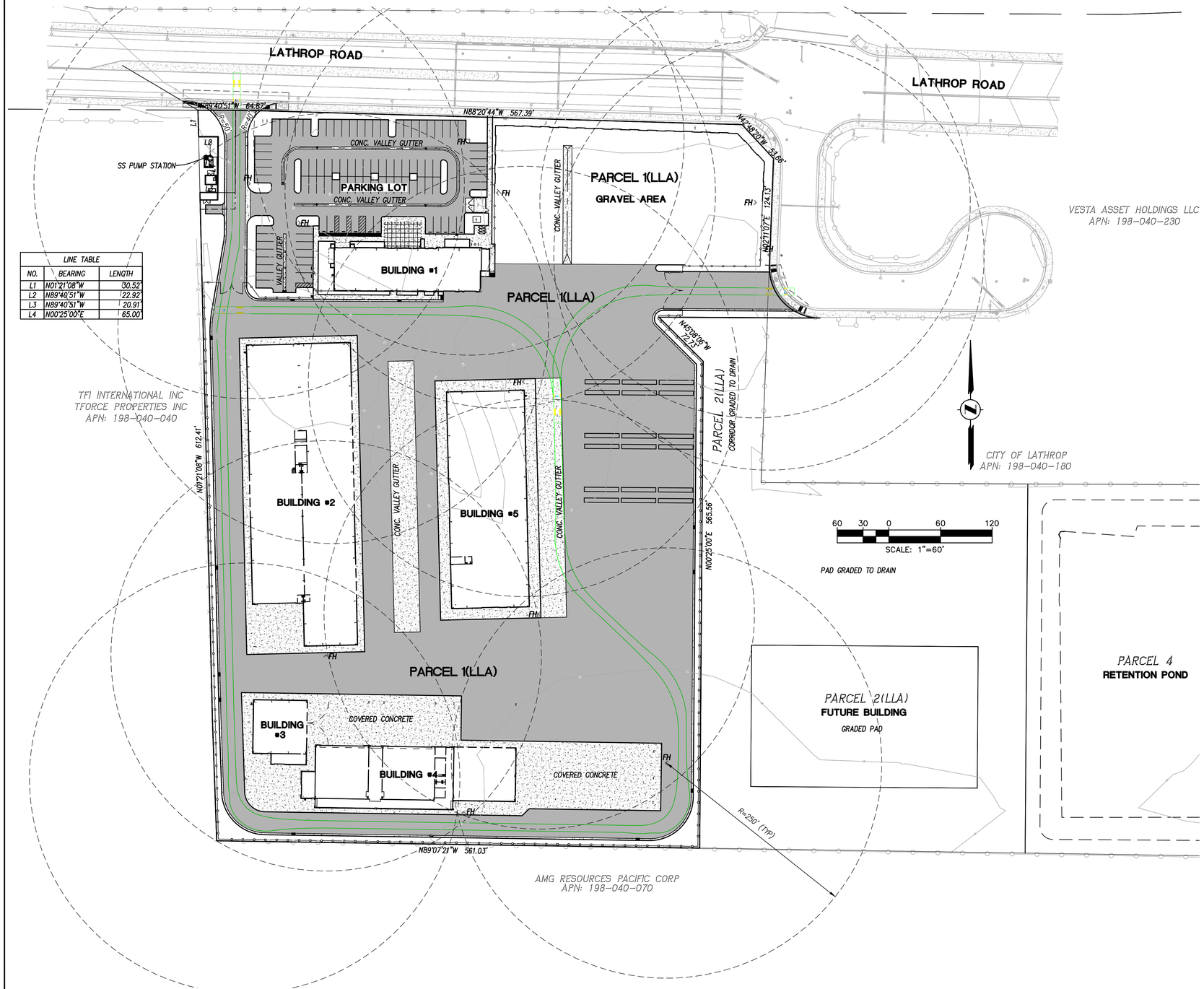
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DRAWN:	TKA/SMS	DATE:	AUGUST 2025
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NO.	REVISIONS	BY	APP	DATE

SHEET C-5 OF C-19 SHEETS

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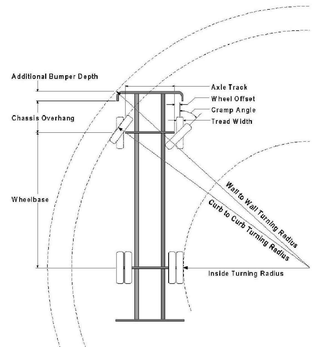


Turning Performance Analysis

10/20/2022

Bid Number: 589
Department: Lathrop Manteca Fire District

Chassis: Impel Chassis, Aerials, Single Axle, Ascendant
Body: Aerial, HD Ladder 107' ASL Single, Quint, Alum Body



Parameters:

*Inside Cramp Angle:	45°
Axle Track:	81.92 in.
Wheel Offset:	4.68 in.
Tread Width:	16.3 in.
Chassis Overhang:	78 in.
Additional Bumper Depth:	19 in.
Front Overhang:	97 in.
Wheelbase:	235.5 in.

Calculated Turning Radii:

Inside Turn:	18 ft. 7 in.
Curb to curb:	34 ft. 0 in.
Wall to wall:	39 ft. 1 in.

Category	Option	Description
Axle, Front, Custom	0648752	Axle, Front, Dana, D2200, 22,800 lb
Bumpers	0123625	Bumper, 19" Extended, Imp/Vel
Tires, Front	0594821	Tires, Front, Goodyear, G296 MSA, 425/65R22.50, 20 ply
Aerial Devices	0614515	Aerial, 107' ASL, Single Axle, 750# Tip Load
Wheels, Front	0019611	Wheels, Front, Alcoa, 22.50" x 12.25", Aluminum, Hub Pilot

Notes:

*Actual Inside cramp angle may be less than shown.

Curb to Curb turning radius calculated for 9.00 inch curb.

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JIFCO, INC.

1520 LATHROP ROAD

DEVELOPMENT SITE PLAN

FIRE DEPARTMENT ACCESS AND FIRE HYDRANT LOCATION PLAN

CITY OF LATHROP SAN JOAQUIN COUNTY CALIFORNIA

DESIGNED UNDER THE DIRECTION OF:
MICHAEL E. MILANI 8/22/2025
R.C.E. No. 35121 REGISTRATION EXPIRES 9/30/27 DATE L.S. No. 5311 REGISTRATION EXPIRES 12/31/25

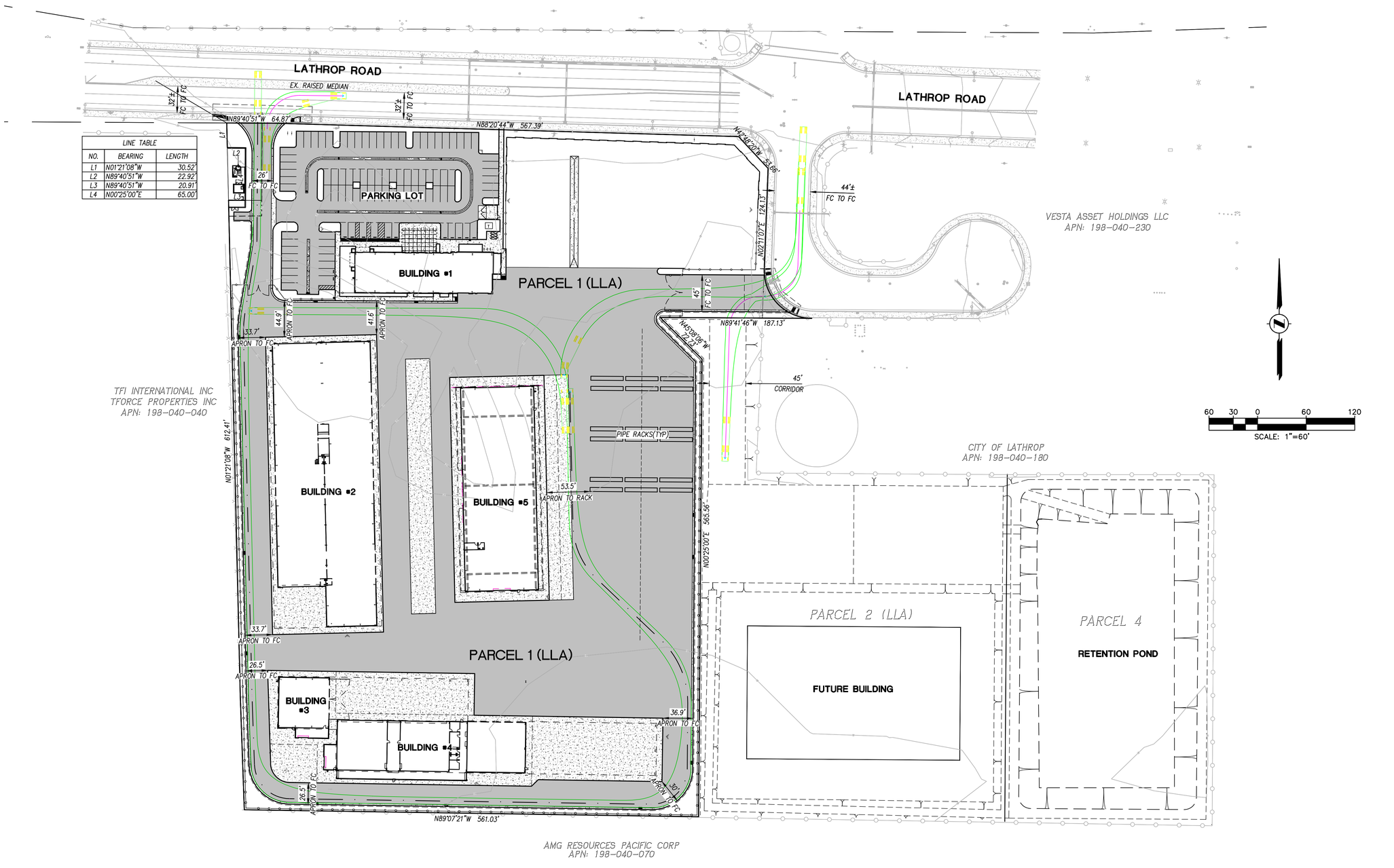
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DRAWN:	TKA/SMS	DATE:	AUGUST 2025
CHECKED:	MEM	SCALE:	AS SHOWN

REGISTERED PROFESSIONAL ENGINEER MICHAEL EUGENE MILANI No. 35121 EXP. 09/30/27 CIVIL STATE OF CALIFORNIA

NO.	REVISIONS	BY	APP	DATE

SHEET C-18 OF C-19 SHEETS

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JIFCO, INC.

1520 LATHROP ROAD

DEVELOPMENT SITE PLAN

TRUCK ACCESS EXHIBIT

CITY OF LATHROP — SAN JOAQUIN COUNTY — CALIFORNIA

DESIGNED UNDER THE DIRECTION OF:
MICHAEL E. MILANI — 8/22/2025
R.C.E. No. 35121 REGISTRATION EXPIRES 9/30/27 — DATE — L.S. No. 5311 REGISTRATION EXPIRES 12/31/25

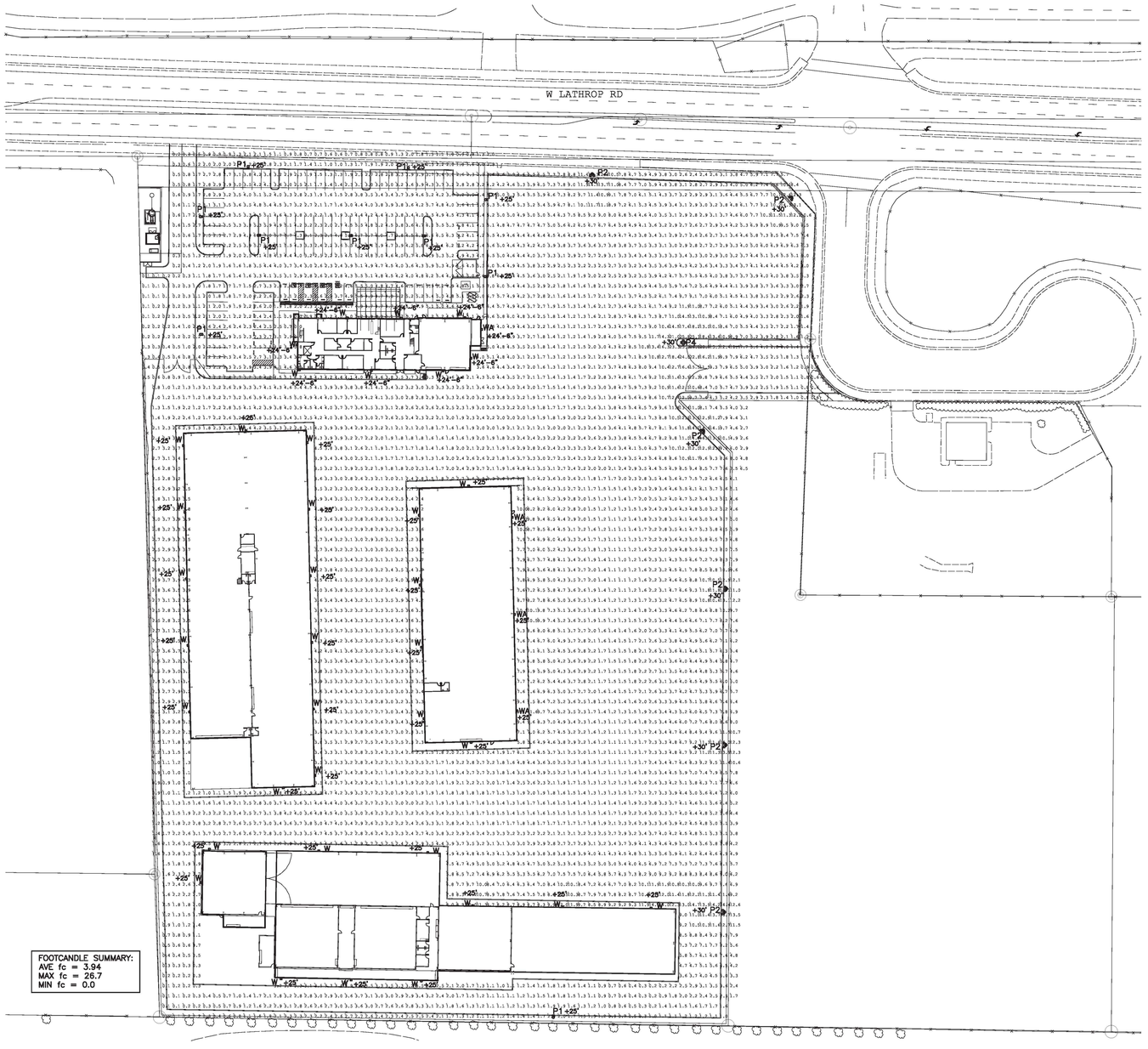
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REGISTERED PROFESSIONAL ENGINEER — MICHAEL EUGENE MILANI — No. 35121 EXP. 09/30/27 — CIVIL — STATE OF CALIFORNIA

NO.	REVISIONS	BY	APP	DATE

SHEET C-19 OF C-19 SHEETS

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SITE PLAN PHOTOMETRIC

SCALE: 1" = 60'-0"

NORTH

Project		Catalog #		Type	W, WA, P1, P2, P4
Prepared by		Notes		Date	10-31-25



Lumark

Prevail Discrete LED

Area / Site Luminaire

Product Features

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3,4
- Optical Configurations page 5
- Product Specifications page 5
- Energy and Performance Data page 5
- Control Options page 8

Product Certifications

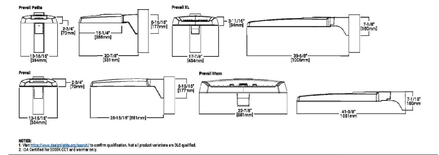
Quick Facts

- Direct-mounted discrete light engine for improved optical uniformity and visual comfort
- Lumen packages range from 4,300 - 68,000 nominal lumens (30W - 550W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 157 lumens per watt
- Standard universal quick mount arm with universal drill pattern

Connected Systems

- WaveLinx PRO Wireless
- WaveLinx LITE Wireless

Dimensional Details



NOTES:
1. See https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. DLC Certified for 5000K CCT and warmer only.

COOPER Lighting Solutions

P8A0002DEN page 1
June 6, 2024 8:54 PM

Bosley Electric COMPANY

COMMERCIAL AND INDUSTRIAL SERVICE AND CONTRACTING

935 Arden Way, Sacramento, CA 95815 (916) 568-5180 FAX (916) 568-5183

CA License No. 379245
NV License No. 0038979

BOSLEY ELECTRIC COMPANY
CLASSIFICATION B C-10
LICENSE NO. 379245
STATE OF CALIFORNIA

THESE PLANS HAVE BEEN PREPARED BY BOSLEY ELECTRIC FOR THEIR EXCLUSIVE USE IN ACCORDANCE WITH SECTION 6737.3 OF THE PROFESSIONAL ENGINEERS ACT AND ARE NOT TO BE USED FOR THE PURPOSE OF BIDDING OR INSTALLATION BY ANY OTHER CONTRACTOR.

JIFCO, INC

W. LATHROP DR.

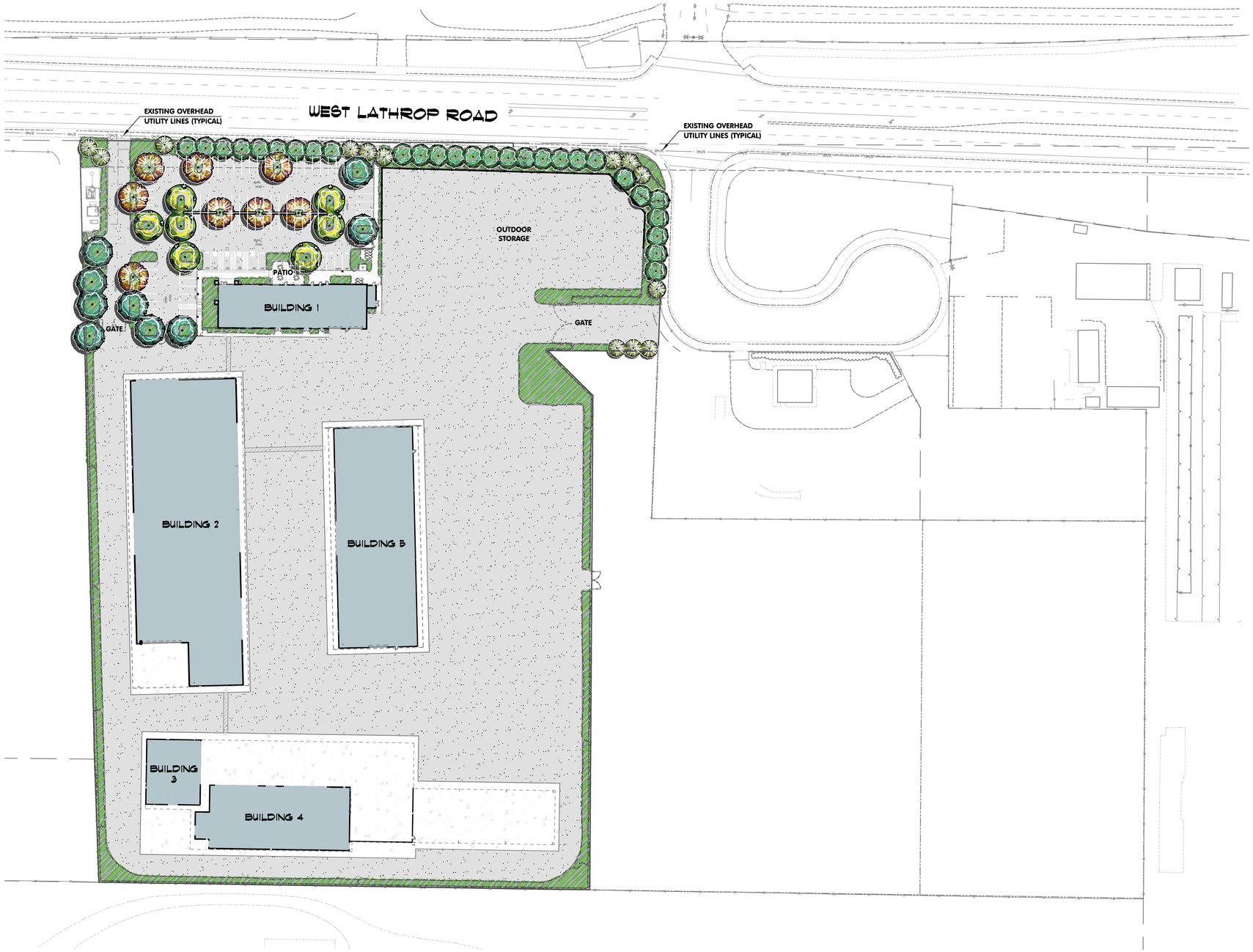
SITE PLAN PHOTOMETRIC

0 30 60 90 120 180 240

SHEET E1.1

PERKINS, WILLIAMS & COTTERILL, INC.
ARCHITECTS
3320 Data Drive, Suite 200 • Rancho Cordova, California 95670
T (916) 851-1400 F (916) 851-1408 E pwcarch@pwcarchitects.com

DATE: 10-31-2025
PROJECT: 25-311



LANDSCAPE CALCULATIONS:

TOTAL SITE AREA:	504,750 S.F.
LANDSCAPE AREA REQUIRED (10%):	50,475 S.F.
LANDSCAPE AREA PROVIDED (10.1%):	51,151 S.F.
TOTAL PARKING STALLS:	97
PARKING LOT TREES REQUIRED:	16
PARKING LOT TREES PROVIDED:	29
TOTAL TREES PROVIDED:	65

PARKING LOT SHADE CALCULATIONS:

TREE TYPE	AREA/ FULL	QUANTITY FULL	3/4	1/2	1/4	SUBTOTAL	TOTAL
25' DIA. TREES							
OLEA EUROPEA	490 S.F.	0	0	6	0	1470 S.F.	
						25' TOTAL:	1470 S.F.
35' DIA. TREES							
PISTACHIA CHINENSIS	962 S.F.	5	1	2	0	6494 S.F.	
QUERCUS ILEX	962 S.F.	0	2	4	0	3367 S.F.	
ULMUS PARVIFOLIA	962 S.F.	5	2	0	0	6253 S.F.	
						35' TOTAL:	16114 S.F.
						PARKING AREA:	34198 S.F.
						SHADE REQUIRED: 50%	17099 S.F.
						SHADE PROVIDED: 51%	17584 S.F.

PLANT LIST & LEGEND

SYMBOL	BOTANIC NAME/COMMON NAME	SIZE	QUANTITY	REMARKS
	CHILOPSIS LINEARIS 'TIMELESS BEAUTY/DESERT WILLOW	15 GALLON	13	STANDARD
	OLEA EUROPEA 'MAJESTIC BEAUTY/FRUITLESS OLIVE	15 GALLON	27	STANDARD
	PISTACIA CHINENSIS/CHINESE PISTACHE	15 GALLON	8	
	QUERCUS ILEX/HOLLY OAK	15 GALLON	10	LOW BRANCHED
	ULMUS PARVIFOLIA 'DRAKE/CHINESE ELM	15 GALLON	7	
	SHRUB & GROUNDCOVER AREA:			
	ACACIA REDOLENS "DESERT CARPET"/PROSTRATE ACACIA	1 GALLON		
	ARCTOSTAPHYLOS MANZANITA 'DR. HURD'/COMMON MANZANITA	5 GALLON		
	ARCTOSTAPHYLOS D. "HOWARD McMINN"/MANZANITA	5 GALLON		
	CISTUS COBARIENSIS 'LITTLE MISS SUNSHINE'/YELLOW ROCKROSE	5 GALLON		
	CISTUS HYBRIDUS/WHITE ROCKROSE	5 GALLON		
	CALLISTEMON V. 'LITTLE JOHN'/DWF. BOTTLE BRUSH	5 GALLON		
	COTONEASTER D. "LOWFAST"/PROSTRATE COTONEASTER	1 GALLON		
	CAREX DIVULSA/EURASIAN GRAY SEDGE	1 GALLON		
	DIETES BICOLOR	1 GALLON		
	DODONEA VISCOSA 'PURPUREA'/PURPLE HOP BUSH	5 GALLON		
	HETEROMELES ARBUTIFOLIA/TOYON	5 GALLON		
	LOMANDRA LONGIFOLIA 'LOMLON'/LIME TUFF MAT RUSH	1 GALLON		
	MAHONIA AQUIFOLIUM/OREGON GRAPE	5 GALLON		
	MUHLENBERGIA RIGENS/DEER GRASS	1 GALLON		
	MYOPORUM PARVIFOLIUM/CREEPING BOOBIALLA	1 GALLON		
	NERIUM OLEANDER "DWARF RED"/PETITE RED OLEANDER	5 GALLON		
	NEPETA X. FAASSENII/CATMINT	1 GALLON		
	ROSA CALIFORNICA/WILD ROSE	5 GALLON		
	SALVIA LEUCANTHA 'SANTA BARBARA'/COMPACT VELVET SAGE	1 GALLON		
	TULBAGHIA VIOLACEA/SOCIETY GARLIC	1 GALLON		
	WESTRINGIA FRUTICOSA 'MUNDI'/MUNDI COAST ROSEMARY	1 GALLON		

ULMUS PARVIFOLIA IS LISTED AS A "MODERATE" WATER USER IN THE STATE OF CALIFORNIA'S W.U.C.O.L.S. IV DATABASE. ALL OTHER PLANTS ARE LISTED AS "LOW" OR "VERY LOW".

Garth Ruffner Landscape Architect (916) 797-2576
4120 Douglas Blvd., Suite 306, #301, Roseville, CA 95746-5936
GarthRuffner.com California R.L.A. #2808

JIFCO, INC
W. LATHROP DR.

PRELIMINARY LANDSCAPE PLAN

1"=60'-0"

SHEET LA

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DATE: 01/13/2026
PROJECT: 25-311 (45029)

Jifco, Inc. Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Jifco, Inc.
Construction Start Date	1/1/2027
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40000
Precipitation (days)	9.00000
Location	37.82574933745052, -121.2680299818239
County	San Joaquin
City	Lathrop
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2104
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.43

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	42.5600	1000sqft	4.05000	42,560.0	17,641.0	—	—	—

Manufacturing	110.502	1000sqft	9.46000	110,502	51,151.0	—	—	—
General Office Building	14.6480	1000sqft	2.05000	14,648.0	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-10-C	Water Unpaved Construction Roads
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	39.0576	39.0342	10.4271	16.3232	0.02892	0.34760	0.78925	1.13685	0.32068	0.19379	0.51446	—	3,760.08	3,760.08	0.12256	0.15723	3.57688	3,813.57
Mit.	39.0576	39.0342	10.4271	16.3232	0.02892	0.34760	0.78925	1.13685	0.32068	0.19379	0.51446	—	3,760.08	3,760.08	0.12256	0.15723	3.57688	3,813.57
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.69342	3.11180	28.0226	28.8961	0.06093	1.17173	7.81325	8.98498	1.07799	3.97441	5.05241	—	6,759.26	6,759.26	0.27206	0.15875	0.09256	6,784.12
Mit.	3.69342	3.11180	28.0226	28.8961	0.06093	1.17173	7.81325	8.98498	1.07799	3.97441	5.05241	—	6,759.26	6,759.26	0.27206	0.15875	0.09256	6,784.12
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.59320	2.52049	8.58116	11.6588	0.02208	0.30694	0.94978	1.25672	0.28287	0.33405	0.61692	—	2,726.23	2,726.23	0.09576	0.09269	0.86465	2,757.11
Mit.	2.59320	2.52049	8.58116	11.6588	0.02208	0.30694	0.94978	1.25672	0.28287	0.33405	0.61692	—	2,726.23	2,726.23	0.09576	0.09269	0.86465	2,757.11
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.47326	0.45999	1.56606	2.12774	0.00403	0.05602	0.17334	0.22935	0.05162	0.06096	0.11259	—	451.359	451.359	0.01585	0.01535	0.14315	456.471
Mit.	0.47326	0.45999	1.56606	2.12774	0.00403	0.05602	0.17334	0.22935	0.05162	0.06096	0.11259	—	451.359	451.359	0.01585	0.01535	0.14315	456.471
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.55029	1.31028	10.4271	16.3232	0.02891	0.34760	0.78925	1.13685	0.32068	0.19379	0.51446	—	3,760.08	3,760.08	0.12255	0.15723	3.57688	3,813.57
2028	39.0576	39.0342	9.92622	16.0949	0.02892	0.31127	0.78925	1.10051	0.28725	0.19379	0.48103	—	3,730.43	3,730.43	0.12256	0.15111	3.15971	3,781.68
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.69342	3.11180	28.0226	28.8961	0.06093	1.17173	7.81325	8.98498	1.07799	3.97441	5.05241	—	6,759.26	6,759.26	0.27206	0.15875	0.09256	6,784.12
2028	1.44912	1.22061	10.0078	15.5031	0.02892	0.31127	0.78925	1.10051	0.28725	0.19379	0.48103	—	3,673.45	3,673.45	0.12560	0.15324	0.08187	3,722.34
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2027	1.21840	1.03474	8.58116	11.6588	0.02208	0.30694	0.94978	1.25672	0.28287	0.33405	0.61692	—	2,726.23	2,726.23	0.09576	0.09269	0.86465	2,757.11
2028	2.59320	2.52049	3.20508	5.00654	0.00895	0.10195	0.23282	0.33477	0.09404	0.05701	0.15105	—	1,134.57	1,134.57	0.03866	0.04354	0.39842	1,148.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.22236	0.18884	1.56606	2.12774	0.00403	0.05602	0.17334	0.22935	0.05162	0.06096	0.11259	—	451.359	451.359	0.01585	0.01535	0.14315	456.471
2028	0.47326	0.45999	0.58493	0.91369	0.00163	0.01861	0.04249	0.06110	0.01716	0.01040	0.02757	—	187.841	187.841	0.00640	0.00721	0.06596	190.215

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	0.00000	0.33657	0.30965	0.00000	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
2028	39.0078	38.9853	8.92495	12.9352	0.02340	0.30024	0.00000	0.30024	0.27622	0.00000	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	0.00000	2,405.68
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.63178	3.05170	27.9724	28.2794	0.06093	1.17173	7.66623	8.83797	1.07799	3.93995	5.01795	—	6,598.08	6,598.08	0.26765	0.05353	0.00000	6,620.72
2028	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	0.00000	0.30024	0.27622	0.00000	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	0.00000	2,405.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.05718	0.88599	7.97780	10.0558	0.01908	0.30094	0.50505	0.80599	0.27687	0.22506	0.50193	—	1,991.54	1,991.54	0.08079	0.01616	0.00000	1,998.37
2028	2.51366	2.45117	2.90502	4.22413	0.00741	0.09886	0.00000	0.09886	0.09095	0.00000	0.09095	—	761.025	761.025	0.03087	0.00617	0.00000	763.636
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.19294	0.16169	1.45595	1.83517	0.00348	0.05492	0.09217	0.14709	0.05053	0.04107	0.09160	—	329.722	329.722	0.01337	0.00267	0.00000	330.854
2028	0.45874	0.44734	0.53017	0.77090	0.00135	0.01804	0.00000	0.01804	0.01660	0.00000	0.01660	—	125.996	125.996	0.00511	0.00102	0.00000	126.429

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.31953	0.28040	1.03612	3.38522	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,363.00	1,363.00	0.02531	0.13778	3.57688	1,408.27
2028	0.28316	0.26824	1.00127	3.15964	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,332.97	1,332.97	0.02531	0.13166	3.15971	1,376.00
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.28199	0.26003	1.14128	2.73999	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,304.75	1,304.75	0.02987	0.13930	0.09256	1,347.10
2028	0.26431	0.22918	1.08283	2.56787	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,276.00	1,276.00	0.02835	0.13379	0.08187	1,316.66
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.16122	0.14876	0.60335	1.60307	0.00300	0.00600	0.44473	0.45073	0.00600	0.10899	0.11499	—	734.693	734.693	0.01497	0.07653	0.86465	758.737
2028	0.07954	0.06932	0.30005	0.78241	0.00154	0.00309	0.23282	0.23591	0.00309	0.05701	0.06010	—	373.544	373.544	0.00779	0.03736	0.39842	385.271
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.02942	0.02715	0.11011	0.29256	0.00055	0.00110	0.08116	0.08226	0.00110	0.01989	0.02099	—	121.637	121.637	0.00248	0.01267	0.14315	125.618
2028	0.01452	0.01265	0.05476	0.14279	0.00028	0.00056	0.04249	0.04305	0.00056	0.01040	0.01097	—	61.8444	61.8444	0.00129	0.00619	0.06596	63.7860

2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.55029	1.31028	10.4271	16.3232	0.02891	0.34760	0.78925	1.13685	0.32068	0.19379	0.51446	—	3,760.08	3,760.08	0.12255	0.15723	3.57688	3,813.57
2028	39.0576	39.0342	9.92622	16.0949	0.02892	0.31127	0.78925	1.10051	0.28725	0.19379	0.48103	—	3,730.43	3,730.43	0.12256	0.15111	3.15971	3,781.68
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.69342	3.11180	28.0226	28.8961	0.06093	1.17173	7.81325	8.98498	1.07799	3.97441	5.05241	—	6,759.26	6,759.26	0.27206	0.15875	0.09256	6,784.12
2028	1.44912	1.22061	10.0078	15.5031	0.02892	0.31127	0.78925	1.10051	0.28725	0.19379	0.48103	—	3,673.45	3,673.45	0.12560	0.15324	0.08187	3,722.34

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.21840	1.03474	8.58116	11.6588	0.02208	0.30694	0.94978	1.25672	0.28287	0.33405	0.61692	—	2,726.23	2,726.23	0.09576	0.09269	0.86465	2,757.11
2028	2.59320	2.52049	3.20508	5.00654	0.00895	0.10195	0.23282	0.33477	0.09404	0.05701	0.15105	—	1,134.57	1,134.57	0.03866	0.04354	0.39842	1,148.91
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.22236	0.18884	1.56606	2.12774	0.00403	0.05602	0.17334	0.22935	0.05162	0.06096	0.11259	—	451.359	451.359	0.01585	0.01535	0.14315	456.471
2028	0.47326	0.45999	0.58493	0.91369	0.00163	0.01861	0.04249	0.06110	0.01716	0.01040	0.02757	—	187.841	187.841	0.00640	0.00721	0.06596	190.215

2.2.5. Onsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	0.00000	0.33657	0.30965	0.00000	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
2028	39.0078	38.9853	8.92495	12.9352	0.02340	0.30024	0.00000	0.30024	0.27622	0.00000	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	0.00000	2,405.68
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.63178	3.05170	27.9724	28.2794	0.06093	1.17173	7.66623	8.83797	1.07799	3.93995	5.01795	—	6,598.08	6,598.08	0.26765	0.05353	0.00000	6,620.72
2028	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	0.00000	0.30024	0.27622	0.00000	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	0.00000	2,405.68
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.05718	0.88599	7.97780	10.0558	0.01908	0.30094	0.50505	0.80599	0.27687	0.22506	0.50193	—	1,991.54	1,991.54	0.08079	0.01616	0.00000	1,998.37
2028	2.51366	2.45117	2.90502	4.22413	0.00741	0.09886	0.00000	0.09886	0.09095	0.00000	0.09095	—	761.025	761.025	0.03087	0.00617	0.00000	763.636
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.19294	0.16169	1.45595	1.83517	0.00348	0.05492	0.09217	0.14709	0.05053	0.04107	0.09160	—	329.722	329.722	0.01337	0.00267	0.00000	330.854
2028	0.45874	0.44734	0.53017	0.77090	0.00135	0.01804	0.00000	0.01804	0.01660	0.00000	0.01660	—	125.996	125.996	0.00511	0.00102	0.00000	126.429

2.2.6. Offsite Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.31953	0.28040	1.03612	3.38522	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,363.00	1,363.00	0.02531	0.13778	3.57688	1,408.27
2028	0.28316	0.26824	1.00127	3.15964	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,332.97	1,332.97	0.02531	0.13166	3.15971	1,376.00
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.28199	0.26003	1.14128	2.73999	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,304.75	1,304.75	0.02987	0.13930	0.09256	1,347.10
2028	0.26431	0.22918	1.08283	2.56787	0.00551	0.01103	0.78925	0.80028	0.01103	0.19379	0.20482	—	1,276.00	1,276.00	0.02835	0.13379	0.08187	1,316.66
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.16122	0.14876	0.60335	1.60307	0.00300	0.00600	0.44473	0.45073	0.00600	0.10899	0.11499	—	734.693	734.693	0.01497	0.07653	0.86465	758.737
2028	0.07954	0.06932	0.30005	0.78241	0.00154	0.00309	0.23282	0.23591	0.00309	0.05701	0.06010	—	373.544	373.544	0.00779	0.03736	0.39842	385.271
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.02942	0.02715	0.11011	0.29256	0.00055	0.00110	0.08116	0.08226	0.00110	0.01989	0.02099	—	121.637	121.637	0.00248	0.01267	0.14315	125.618
2028	0.01452	0.01265	0.05476	0.14279	0.00028	0.00056	0.04249	0.04305	0.00056	0.01040	0.01097	—	61.8444	61.8444	0.00129	0.00619	0.06596	63.7860

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.09309	8.61148	4.81027	40.8675	0.09044	0.18249	7.12910	7.31159	0.17553	1.81300	1.98853	175.565	11,157.9	11,333.5	18.3561	0.55966	52.7699	12,011.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.54476	7.15156	5.26237	28.9370	0.08405	0.16957	7.12910	7.29867	0.16577	1.81300	1.97877	175.565	10,524.8	10,700.3	18.3887	0.58782	29.4213	11,364.6

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.22281	6.87015	4.09910	25.2097	0.06501	0.15916	5.18768	5.34683	0.15482	1.31940	1.47423	175.565	8,573.84	8,749.40	18.2906	0.47519	36.3748	9,384.65
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.31816	1.25380	0.74809	4.60078	0.01187	0.02905	0.94675	0.97580	0.02826	0.24079	0.26905	29.0667	1,419.50	1,448.56	3.02821	0.07867	6.02226	1,553.74

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.83800	3.53392	3.34128	32.3911	0.08156	0.06255	7.12910	7.19165	0.05876	1.81300	1.87176	—	8,320.80	8,320.80	0.28798	0.35673	23.9702	8,458.28
Area	5.10025	5.00015	0.06137	7.29403	0.00044	0.01296	—	0.01296	0.00979	—	0.00979	—	29.9944	29.9944	0.00126	0.00026	—	30.1025
Energy	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	2,736.96	2,736.96	0.31971	0.02390	—	2,752.08
Water	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Waste	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Total	9.09309	8.61148	4.81027	40.8675	0.09044	0.18249	7.12910	7.31159	0.17553	1.81300	1.98853	175.565	11,157.9	11,333.5	18.3561	0.55966	52.7699	12,011.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.58790	3.27212	3.85475	27.7547	0.07560	0.06259	7.12910	7.19169	0.05879	1.81300	1.87179	—	7,717.63	7,717.63	0.32187	0.38515	0.62153	7,841.07
Area	3.80202	3.80202	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	2,736.96	2,736.96	0.31971	0.02390	—	2,752.08
Water	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Waste	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Total	7.54476	7.15156	5.26237	28.9370	0.08405	0.16957	7.12910	7.29867	0.16577	1.81300	1.97877	175.565	10,524.8	10,700.3	18.3887	0.58782	29.4213	11,364.6

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.62573	2.39985	2.66122	20.4303	0.05635	0.04579	5.18768	5.23347	0.04301	1.31940	1.36242	—	5,751.91	5,751.91	0.22309	0.27239	7.57498	5,846.24
Area	4.44225	4.39288	0.03027	3.59706	0.00021	0.00639	—	0.00639	0.00483	—	0.00483	—	14.7917	14.7917	0.00062	0.00013	—	14.8451
Energy	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	2,736.96	2,736.96	0.31971	0.02390	—	2,752.08
Water	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Waste	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Total	7.22281	6.87015	4.09910	25.2097	0.06501	0.15916	5.18768	5.34683	0.15482	1.31940	1.47423	175.565	8,573.84	8,749.40	18.2906	0.47519	36.3748	9,384.65
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.47919	0.43797	0.48567	3.72853	0.01028	0.00836	0.94675	0.95511	0.00785	0.24079	0.24864	—	952.295	952.295	0.03694	0.04510	1.25412	967.911
Area	0.81071	0.80170	0.00552	0.65646	0.00004	0.00117	—	0.00117	0.00088	—	0.00088	—	2.44894	2.44894	0.00010	0.00002	—	2.45777
Energy	0.02826	0.01413	0.25689	0.21579	0.00154	0.01952	—	0.01952	0.01952	—	0.01952	—	453.135	453.135	0.05293	0.00396	—	455.638
Water	—	—	—	—	—	—	—	—	—	—	—	12.0554	11.6175	23.6729	1.23802	0.02960	—	63.4436
Waste	—	—	—	—	—	—	—	—	—	—	—	17.0114	0.00000	17.0114	1.70022	0.00000	—	59.5169
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.76813	4.76813
Total	1.31816	1.25380	0.74809	4.60078	0.01187	0.02905	0.94675	0.97580	0.02826	0.24079	0.26905	29.0667	1,419.50	1,448.56	3.02821	0.07867	6.02226	1,553.74

2.5. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.83800	3.53392	3.34128	32.3911	0.08156	0.06255	7.12910	7.19165	0.05876	1.81300	1.87176	—	8,320.80	8,320.80	0.28798	0.35673	23.9702	8,458.28
Area	5.10025	5.00015	0.06137	7.29403	0.00044	0.01296	—	0.01296	0.00979	—	0.00979	—	29.9944	29.9944	0.00126	0.00026	—	30.1025
Energy	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	2,736.96	2,736.96	0.31971	0.02390	—	2,752.08
Water	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Waste	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Total	9.09309	8.61148	4.81027	40.8675	0.09044	0.18249	7.12910	7.31159	0.17553	1.81300	1.98853	175.565	11,157.9	11,333.5	18.3561	0.55966	52.7699	12,011.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.58790	3.27212	3.85475	27.7547	0.07560	0.06259	7.12910	7.19169	0.05879	1.81300	1.87179	—	7,717.63	7,717.63	0.32187	0.38515	0.62153	7,841.07
Area	3.80202	3.80202	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	2,736.96	2,736.96	0.31971	0.02390	—	2,752.08
Water	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Waste	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Total	7.54476	7.15156	5.26237	28.9370	0.08405	0.16957	7.12910	7.29867	0.16577	1.81300	1.97877	175.565	10,524.8	10,700.3	18.3887	0.58782	29.4213	11,364.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.62573	2.39985	2.66122	20.4303	0.05635	0.04579	5.18768	5.23347	0.04301	1.31940	1.36242	—	5,751.91	5,751.91	0.22309	0.27239	7.57498	5,846.24
Area	4.44225	4.39288	0.03027	3.59706	0.00021	0.00639	—	0.00639	0.00483	—	0.00483	—	14.7917	14.7917	0.00062	0.00013	—	14.8451
Energy	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	2,736.96	2,736.96	0.31971	0.02390	—	2,752.08
Water	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Waste	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Total	7.22281	6.87015	4.09910	25.2097	0.06501	0.15916	5.18768	5.34683	0.15482	1.31940	1.47423	175.565	8,573.84	8,749.40	18.2906	0.47519	36.3748	9,384.65
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.47919	0.43797	0.48567	3.72853	0.01028	0.00836	0.94675	0.95511	0.00785	0.24079	0.24864	—	952.295	952.295	0.03694	0.04510	1.25412	967.911
Area	0.81071	0.80170	0.00552	0.65646	0.00004	0.00117	—	0.00117	0.00088	—	0.00088	—	2.44894	2.44894	0.00010	0.00002	—	2.45777
Energy	0.02826	0.01413	0.25689	0.21579	0.00154	0.01952	—	0.01952	0.01952	—	0.01952	—	453.135	453.135	0.05293	0.00396	—	455.638
Water	—	—	—	—	—	—	—	—	—	—	—	12.0554	11.6175	23.6729	1.23802	0.02960	—	63.4436
Waste	—	—	—	—	—	—	—	—	—	—	—	17.0114	0.00000	17.0114	1.70022	0.00000	—	59.5169
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.76813	4.76813
Total	1.31816	1.25380	0.74809	4.60078	0.01187	0.02905	0.94675	0.97580	0.02826	0.24079	0.26905	29.0667	1,419.50	1,448.56	3.02821	0.07867	6.02226	1,553.74

3. Construction Emissions Details

3.1. Site Preparation (2027)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63178	3.05170	27.9724	28.2794	0.04891	1.17173	—	1.17173	1.07799	—	1.07799	—	5,297.82	5,297.82	0.21490	0.04298	—	5,316.00
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09950	0.08361	0.76637	0.77478	0.00134	0.03210	—	0.03210	0.02953	—	0.02953	—	145.146	145.146	0.00589	0.00118	—	145.644
Dust From Material Movement	—	—	—	—	—	—	0.21003	0.21003	—	0.10794	0.10794	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01816	0.01526	0.13986	0.14140	0.00024	0.00586	—	0.00586	0.00539	—	0.00539	—	24.0305	24.0305	0.00097	0.00019	—	24.1130
Dust From Material Movement	—	—	—	—	—	—	0.03833	0.03833	—	0.01970	0.01970	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06164	0.06010	0.05020	0.61678	0.00000	0.00000	0.14701	0.14701	0.00000	0.03446	0.03446	—	141.034	141.034	0.00386	0.00613	0.01266	142.970
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00169	0.00165	0.00122	0.01739	0.00000	0.00000	0.00400	0.00400	0.00000	0.00094	0.00094	—	3.96035	3.96035	0.00008	0.00017	0.00579	4.01830
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00031	0.00030	0.00022	0.00317	0.00000	0.00000	0.00073	0.00073	0.00000	0.00017	0.00017	—	0.65568	0.65568	0.00001	0.00003	0.00096	0.66528
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63178	3.05170	27.9724	28.2794	0.04891	1.17173	—	1.17173	1.07799	—	1.07799	—	5,297.82	5,297.82	0.21490	0.04298	—	5,316.00
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09950	0.08361	0.76637	0.77478	0.00134	0.03210	—	0.03210	0.02953	—	0.02953	—	145.146	145.146	0.00589	0.00118	—	145.644
Dust From Material Movement	—	—	—	—	—	—	0.21003	0.21003	—	0.10794	0.10794	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01816	0.01526	0.13986	0.14140	0.00024	0.00586	—	0.00586	0.00539	—	0.00539	—	24.0305	24.0305	0.00097	0.00019	—	24.1130

Dust From Material Movement	—	—	—	—	—	—	0.03833	0.03833	—	0.01970	0.01970	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06164	0.06010	0.05020	0.61678	0.00000	0.00000	0.14701	0.14701	0.00000	0.03446	0.03446	—	141.034	141.034	0.00386	0.00613	0.01266	142.970
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00169	0.00165	0.00122	0.01739	0.00000	0.00000	0.00400	0.00400	0.00000	0.00094	0.00094	—	3.96035	3.96035	0.00008	0.00017	0.00579	4.01830
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00031	0.00030	0.00022	0.00317	0.00000	0.00000	0.00073	0.00073	0.00000	0.00017	0.00017	—	0.65568	0.65568	0.00001	0.00003	0.00096	0.66528
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Grading (2027)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.50534	2.94546	25.5801	27.2816	0.06093	1.04307	—	1.04307	0.95962	—	0.95962	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28811	0.24209	2.10247	2.24233	0.00501	0.08573	—	0.08573	0.07887	—	0.07887	—	542.308	542.308	0.02200	0.00440	—	544.169
Dust From Material Movement	—	—	—	—	—	—	0.29502	0.29502	—	0.11712	0.11712	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05258	0.04418	0.38370	0.40922	0.00091	0.01565	—	0.01565	0.01439	—	0.01439	—	89.7852	89.7852	0.00364	0.00073	—	90.0934

Dust From Material Movement	—	—	—	—	—	—	0.05384	0.05384	—	0.02137	0.02137	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07045	0.06869	0.05737	0.70489	0.00000	0.00000	0.16801	0.16801	0.00000	0.03938	0.03938	—	161.182	161.182	0.00441	0.00701	0.01447	163.395
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00579	0.00565	0.00418	0.05963	0.00000	0.00000	0.01373	0.01373	0.00000	0.00322	0.00322	—	13.5783	13.5783	0.00029	0.00058	0.01984	13.7770
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00106	0.00103	0.00076	0.01088	0.00000	0.00000	0.00251	0.00251	0.00000	0.00059	0.00059	—	2.24805	2.24805	0.00005	0.00010	0.00328	2.28094
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.50534	2.94546	25.5801	27.2816	0.06093	1.04307	—	1.04307	0.95962	—	0.95962	—	6,598.08	6,598.08	0.26765	0.05353	—	6,620.72
Dust From Material Movement	—	—	—	—	—	—	3.58940	3.58940	—	1.42496	1.42496	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28811	0.24209	2.10247	2.24233	0.00501	0.08573	—	0.08573	0.07887	—	0.07887	—	542.308	542.308	0.02200	0.00440	—	544.169
Dust From Material Movement	—	—	—	—	—	—	0.29502	0.29502	—	0.11712	0.11712	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05258	0.04418	0.38370	0.40922	0.00091	0.01565	—	0.01565	0.01439	—	0.01439	—	89.7852	89.7852	0.00364	0.00073	—	90.0934
Dust From Material Movement	—	—	—	—	—	—	0.05384	0.05384	—	0.02137	0.02137	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07045	0.06869	0.05737	0.70489	0.00000	0.00000	0.16801	0.16801	0.00000	0.03938	0.03938	—	161.182	161.182	0.00441	0.00701	0.01447	163.395
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00579	0.00565	0.00418	0.05963	0.00000	0.00000	0.01373	0.01373	0.00000	0.00322	0.00322	—	13.5783	13.5783	0.00029	0.00058	0.01984	13.7770
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00106	0.00103	0.00076	0.01088	0.00000	0.00000	0.00251	0.00251	0.00000	0.00059	0.00059	—	2.24805	2.24805	0.00005	0.00010	0.00328	2.28094
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Building Construction (2027)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66957	0.56029	5.10896	7.03865	0.01273	0.18311	—	0.18311	0.16846	—	0.16846	—	1,304.09	1,304.09	0.05290	0.01058	—	1,308.56
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12220	0.10225	0.93239	1.28455	0.00232	0.03342	—	0.03342	0.03074	—	0.03074	—	215.906	215.906	0.00876	0.00175	—	216.647
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27929	0.25665	0.15258	3.08707	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	614.793	614.793	0.01064	0.02264	1.92874	623.735
Vendor	0.04024	0.02376	0.88355	0.29815	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	748.207	748.207	0.01467	0.11514	1.64815	784.533
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24296	0.23688	0.19786	2.43093	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	555.864	555.864	0.01521	0.02416	0.04990	563.495
Vendor	0.03903	0.02315	0.94342	0.30906	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	748.885	748.885	0.01467	0.11514	0.04266	783.606
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13218	0.12887	0.09532	1.36121	0.00000	0.00000	0.31340	0.31340	0.00000	0.07343	0.07343	—	309.951	309.951	0.00662	0.01315	0.45291	314.487
Vendor	0.02156	0.01259	0.50263	0.16484	0.00300	0.00600	0.11359	0.11959	0.00600	0.03140	0.03740	—	407.203	407.203	0.00798	0.06264	0.38611	426.455
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02412	0.02352	0.01740	0.24842	0.00000	0.00000	0.05720	0.05720	0.00000	0.01340	0.01340	—	51.3160	51.3160	0.00110	0.00218	0.07498	52.0669
Vendor	0.00393	0.00230	0.09173	0.03008	0.00055	0.00110	0.02073	0.02183	0.00110	0.00573	0.00683	—	67.4171	67.4171	0.00132	0.01037	0.06393	70.6045
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66957	0.56029	5.10896	7.03865	0.01273	0.18311	—	0.18311	0.16846	—	0.16846	—	1,304.09	1,304.09	0.05290	0.01058	—	1,308.56
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12220	0.10225	0.93239	1.28455	0.00232	0.03342	—	0.03342	0.03074	—	0.03074	—	215.906	215.906	0.00876	0.00175	—	216.647
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.27929	0.25665	0.15258	3.08707	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	614.793	614.793	0.01064	0.02264	1.92874	623.735
Vendor	0.04024	0.02376	0.88355	0.29815	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	748.207	748.207	0.01467	0.11514	1.64815	784.533
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24296	0.23688	0.19786	2.43093	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	555.864	555.864	0.01521	0.02416	0.04990	563.495
Vendor	0.03903	0.02315	0.94342	0.30906	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	748.885	748.885	0.01467	0.11514	0.04266	783.606
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13218	0.12887	0.09532	1.36121	0.00000	0.00000	0.31340	0.31340	0.00000	0.07343	0.07343	—	309.951	309.951	0.00662	0.01315	0.45291	314.487
Vendor	0.02156	0.01259	0.50263	0.16484	0.00300	0.00600	0.11359	0.11959	0.00600	0.03140	0.03740	—	407.203	407.203	0.00798	0.06264	0.38611	426.455
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02412	0.02352	0.01740	0.24842	0.00000	0.00000	0.05720	0.05720	0.00000	0.01340	0.01340	—	51.3160	51.3160	0.00110	0.00218	0.07498	52.0669
Vendor	0.00393	0.00230	0.09173	0.03008	0.00055	0.00110	0.02073	0.02183	0.00110	0.00573	0.00683	—	67.4171	67.4171	0.00132	0.01037	0.06393	70.6045
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Building Construction (2028)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33156	0.27745	2.49759	3.61984	0.00655	0.08402	—	0.08402	0.07730	—	0.07730	—	670.913	670.913	0.02722	0.00544	—	673.215
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06051	0.05063	0.45581	0.66062	0.00120	0.01533	—	0.01533	0.01411	—	0.01411	—	111.077	111.077	0.00451	0.00090	—	111.458
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24904	0.24448	0.14954	2.87434	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	602.858	602.858	0.01064	0.02264	1.72449	611.596
Vendor	0.03412	0.02376	0.85173	0.28530	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	730.112	730.112	0.01467	0.10902	1.43523	764.402

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23080	0.20663	0.17674	2.27227	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	545.196	545.196	0.01369	0.02416	0.04473	552.783
Vendor	0.03351	0.02254	0.90609	0.29561	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	730.801	730.801	0.01467	0.10963	0.03714	763.873
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06501	0.05825	0.04818	0.64822	0.00000	0.00000	0.16121	0.16121	0.00000	0.03777	0.03777	—	156.364	156.364	0.00340	0.00634	0.20837	158.546
Vendor	0.00921	0.00631	0.24793	0.08120	0.00154	0.00309	0.05843	0.06152	0.00309	0.01615	0.01924	—	204.398	204.398	0.00410	0.03051	0.17301	213.765
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01186	0.01063	0.00879	0.11830	0.00000	0.00000	0.02942	0.02942	0.00000	0.00689	0.00689	—	25.8879	25.8879	0.00056	0.00105	0.03450	26.2490
Vendor	0.00168	0.00115	0.04525	0.01482	0.00028	0.00056	0.01066	0.01123	0.00056	0.00295	0.00351	—	33.8404	33.8404	0.00068	0.00505	0.02864	35.3913
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.18481	0.99143	8.92495	12.9352	0.02340	0.30024	—	0.30024	0.27622	—	0.27622	—	2,397.46	2,397.46	0.09725	0.01945	—	2,405.68
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.33156	0.27745	2.49759	3.61984	0.00655	0.08402	—	0.08402	0.07730	—	0.07730	—	670.913	670.913	0.02722	0.00544	—	673.215
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.06051	0.05063	0.45581	0.66062	0.00120	0.01533	—	0.01533	0.01411	—	0.01411	—	111.077	111.077	0.00451	0.00090	—	111.458
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24904	0.24448	0.14954	2.87434	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	602.858	602.858	0.01064	0.02264	1.72449	611.596
Vendor	0.03412	0.02376	0.85173	0.28530	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	730.112	730.112	0.01467	0.10902	1.43523	764.402
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23080	0.20663	0.17674	2.27227	0.00000	0.00000	0.57943	0.57943	0.00000	0.13582	0.13582	—	545.196	545.196	0.01369	0.02416	0.04473	552.783
Vendor	0.03351	0.02254	0.90609	0.29561	0.00551	0.01103	0.20982	0.22085	0.01103	0.05797	0.06900	—	730.801	730.801	0.01467	0.10963	0.03714	763.873

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06501	0.05825	0.04818	0.64822	0.00000	0.00000	0.16121	0.16121	0.00000	0.03777	0.03777	—	156.364	156.364	0.00340	0.00634	0.20837	158.546
Vendor	0.00921	0.00631	0.24793	0.08120	0.00154	0.00309	0.05843	0.06152	0.00309	0.01615	0.01924	—	204.398	204.398	0.00410	0.03051	0.17301	213.765
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01186	0.01063	0.00879	0.11830	0.00000	0.00000	0.02942	0.02942	0.00000	0.00689	0.00689	—	25.8879	25.8879	0.00056	0.00105	0.03450	26.2490
Vendor	0.00168	0.00115	0.04525	0.01482	0.00028	0.00056	0.01066	0.01123	0.00056	0.00295	0.00351	—	33.8404	33.8404	0.00068	0.00505	0.02864	35.3913
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Paving (2028)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81550	0.68524	6.62754	9.90989	0.01395	0.25554	—	0.25554	0.23510	—	0.23510	—	1,511.03	1,511.03	0.06129	0.01226	—	1,516.22
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.04468	0.03755	0.36315	0.54301	0.00076	0.01400	—	0.01400	0.01288	—	0.01288	—	82.7962	82.7962	0.00336	0.00067	—	83.0803
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00815	0.00685	0.06628	0.09910	0.00014	0.00256	—	0.00256	0.00235	—	0.00235	—	13.7079	13.7079	0.00056	0.00011	—	13.7549
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05416	0.05317	0.03252	0.62510	0.00000	0.00000	0.12601	0.12601	0.00000	0.02954	0.02954	—	131.107	131.107	0.00231	0.00492	0.37503	133.007
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00277	0.00248	0.00205	0.02760	0.00000	0.00000	0.00686	0.00686	0.00000	0.00161	0.00161	—	6.65838	6.65838	0.00014	0.00027	0.00887	6.75128
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00051	0.00045	0.00037	0.00504	0.00000	0.00000	0.00125	0.00125	0.00000	0.00029	0.00029	—	1.10237	1.10237	0.00002	0.00004	0.00147	1.11775
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81550	0.68524	6.62754	9.90989	0.01395	0.25554	—	0.25554	0.23510	—	0.23510	—	1,511.03	1,511.03	0.06129	0.01226	—	1,516.22
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04468	0.03755	0.36315	0.54301	0.00076	0.01400	—	0.01400	0.01288	—	0.01288	—	82.7962	82.7962	0.00336	0.00067	—	83.0803
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00815	0.00685	0.06628	0.09910	0.00014	0.00256	—	0.00256	0.00235	—	0.00235	—	13.7079	13.7079	0.00056	0.00011	—	13.7549

Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05416	0.05317	0.03252	0.62510	0.00000	0.00000	0.12601	0.12601	0.00000	0.02954	0.02954	—	131.107	131.107	0.00231	0.00492	0.37503	133.007
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00277	0.00248	0.00205	0.02760	0.00000	0.00000	0.00686	0.00686	0.00000	0.00161	0.00161	—	6.65838	6.65838	0.00014	0.00027	0.00887	6.75128
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00051	0.00045	0.00037	0.00504	0.00000	0.00000	0.00125	0.00125	0.00000	0.00029	0.00029	—	1.10237	1.10237	0.00002	0.00004	0.00147	1.11775
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Architectural Coating (2028)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12985	0.10731	0.80814	1.11833	0.00173	0.01536	—	0.01536	0.01413	—	0.01413	—	133.517	133.517	0.00542	0.00108	—	133.975
Architectural Coatings	38.8780	38.8780	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00711	0.00588	0.04428	0.06128	0.00009	0.00084	—	0.00084	0.00077	—	0.00077	—	7.31600	7.31600	0.00030	0.00006	—	7.34111
Architectural Coatings	2.13030	2.13030	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00130	0.00107	0.00808	0.01118	0.00002	0.00015	—	0.00015	0.00014	—	0.00014	—	1.21125	1.21125	0.00005	0.00001	—	1.21540
Architectural Coatings	0.38878	0.38878	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04981	0.04890	0.02991	0.57487	0.00000	0.00000	0.11589	0.11589	0.00000	0.02716	0.02716	—	120.572	120.572	0.00213	0.00453	0.34490	122.319
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00255	0.00228	0.00189	0.02538	0.00000	0.00000	0.00631	0.00631	0.00000	0.00148	0.00148	—	6.12335	6.12335	0.00013	0.00025	0.00816	6.20878
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00046	0.00042	0.00034	0.00463	0.00000	0.00000	0.00115	0.00115	0.00000	0.00027	0.00027	—	1.01379	1.01379	0.00002	0.00004	0.00135	1.02793
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.3. Onsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.12985	0.10731	0.80814	1.11833	0.00173	0.01536	—	0.01536	0.01413	—	0.01413	—	133.517	133.517	0.00542	0.00108	—	133.975
Architectural Coatings	38.8780	38.8780	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00711	0.00588	0.04428	0.06128	0.00009	0.00084	—	0.00084	0.00077	—	0.00077	—	7.31600	7.31600	0.00030	0.00006	—	7.34111
Architectural Coatings	2.13030	2.13030	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00130	0.00107	0.00808	0.01118	0.00002	0.00015	—	0.00015	0.00014	—	0.00014	—	1.21125	1.21125	0.00005	0.00001	—	1.21540
Architectural Coatings	0.38878	0.38878	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.4. Offsite - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04981	0.04890	0.02991	0.57487	0.00000	0.00000	0.11589	0.11589	0.00000	0.02716	0.02716	—	120.572	120.572	0.00213	0.00453	0.34490	122.319
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00255	0.00228	0.00189	0.02538	0.00000	0.00000	0.00631	0.00631	0.00000	0.00148	0.00148	—	6.12335	6.12335	0.00013	0.00025	0.00816	6.20878
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00046	0.00042	0.00034	0.00463	0.00000	0.00000	0.00115	0.00115	0.00000	0.00027	0.00027	—	1.01379	1.01379	0.00002	0.00004	0.00135	1.02793
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.36121	0.33259	0.31446	3.04844	0.00768	0.00589	0.67094	0.67683	0.00553	0.17063	0.17616	—	783.098	783.098	0.02710	0.03357	2.25591	796.037
Manufacturing	2.89465	2.66531	2.52002	24.4296	0.06152	0.04718	5.37683	5.42400	0.04432	1.36738	1.41169	—	6,275.62	6,275.62	0.21720	0.26905	18.0785	6,379.30
General Office Building	0.58214	0.53602	0.50680	4.91303	0.01237	0.00949	1.08133	1.09082	0.00891	0.27499	0.28390	—	1,262.08	1,262.08	0.04368	0.05411	3.63575	1,282.94
Total	3.83800	3.53392	3.34128	32.3911	0.08156	0.06255	7.12910	7.19165	0.05876	1.81300	1.87176	—	8,320.80	8,320.80	0.28798	0.35673	23.9702	8,458.28
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33767	0.30795	0.36278	2.61208	0.00711	0.00589	0.67094	0.67683	0.00553	0.17063	0.17616	—	726.332	726.332	0.03029	0.03625	0.05849	737.949
Manufacturing	2.70603	2.46786	2.90729	20.9328	0.05702	0.04720	5.37683	5.42403	0.04434	1.36738	1.41172	—	5,820.70	5,820.70	0.24275	0.29048	0.46876	5,913.80
General Office Building	0.54421	0.49631	0.58468	4.20978	0.01147	0.00949	1.08133	1.09082	0.00892	0.27499	0.28391	—	1,170.60	1,170.60	0.04882	0.05842	0.09427	1,189.32
Total	3.58790	3.27212	3.85475	27.7547	0.07560	0.06259	7.12910	7.19169	0.05879	1.81300	1.87179	—	7,717.63	7,717.63	0.32187	0.38515	0.62153	7,841.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.06162	0.05632	0.06245	0.47946	0.00132	0.00107	0.12174	0.12282	0.00101	0.03096	0.03197	—	122.458	122.458	0.00475	0.00580	0.16127	124.466
Manufacturing	0.34240	0.31294	0.34703	2.66414	0.00735	0.00597	0.67648	0.68245	0.00561	0.17205	0.17766	—	680.442	680.442	0.02639	0.03222	0.89611	691.600

General Office Building	0.07518	0.06871	0.07619	0.58493	0.00161	0.00131	0.14853	0.14984	0.00123	0.03778	0.03901	—	149.395	149.395	0.00579	0.00707	0.19675	151.845
Total	0.47919	0.43797	0.48567	3.72853	0.01028	0.00836	0.94675	0.95511	0.00785	0.24079	0.24864	—	952.295	952.295	0.03694	0.04510	1.25412	967.911

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.36121	0.33259	0.31446	3.04844	0.00768	0.00589	0.67094	0.67683	0.00553	0.17063	0.17616	—	783.098	783.098	0.02710	0.03357	2.25591	796.037
Manufacturing	2.89465	2.66531	2.52002	24.4296	0.06152	0.04718	5.37683	5.42400	0.04432	1.36738	1.41169	—	6,275.62	6,275.62	0.21720	0.26905	18.0785	6,379.30
General Office Building	0.58214	0.53602	0.50680	4.91303	0.01237	0.00949	1.08133	1.09082	0.00891	0.27499	0.28390	—	1,262.08	1,262.08	0.04368	0.05411	3.63575	1,282.94
Total	3.83800	3.53392	3.34128	32.3911	0.08156	0.06255	7.12910	7.19165	0.05876	1.81300	1.87176	—	8,320.80	8,320.80	0.28798	0.35673	23.9702	8,458.28
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.33767	0.30795	0.36278	2.61208	0.00711	0.00589	0.67094	0.67683	0.00553	0.17063	0.17616	—	726.332	726.332	0.03029	0.03625	0.05849	737.949
Manufacturing	2.70603	2.46786	2.90729	20.9328	0.05702	0.04720	5.37683	5.42403	0.04434	1.36738	1.41172	—	5,820.70	5,820.70	0.24275	0.29048	0.46876	5,913.80
General Office Building	0.54421	0.49631	0.58468	4.20978	0.01147	0.00949	1.08133	1.09082	0.00892	0.27499	0.28391	—	1,170.60	1,170.60	0.04882	0.05842	0.09427	1,189.32

Total	3.58790	3.27212	3.85475	27.7547	0.07560	0.06259	7.12910	7.19169	0.05879	1.81300	1.87179	—	7,717.63	7,717.63	0.32187	0.38515	0.62153	7,841.07
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.06162	0.05632	0.06245	0.47946	0.00132	0.00107	0.12174	0.12282	0.00101	0.03096	0.03197	—	122.458	122.458	0.00475	0.00580	0.16127	124.466
Manufacturing	0.34240	0.31294	0.34703	2.66414	0.00735	0.00597	0.67648	0.68245	0.00561	0.17205	0.17766	—	680.442	680.442	0.02639	0.03222	0.89611	691.600
General Office Building	0.07518	0.06871	0.07619	0.58493	0.00161	0.00131	0.14853	0.14984	0.00123	0.03778	0.03901	—	149.395	149.395	0.00579	0.00707	0.19675	151.845
Total	0.47919	0.43797	0.48567	3.72853	0.01028	0.00836	0.94675	0.95511	0.00785	0.24079	0.24864	—	952.295	952.295	0.03694	0.04510	1.25412	967.911

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	248.189	248.189	0.04015	0.00487	—	250.643
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	637.925	637.925	0.10320	0.01251	—	644.233
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	171.331	171.331	0.02772	0.00336	—	173.025
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,057.44	1,057.44	0.17107	0.02074	—	1,067.90

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	248.189	248.189	0.04015	0.00487	—	250.643
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	637.925	637.925	0.10320	0.01251	—	644.233
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	171.331	171.331	0.02772	0.00336	—	173.025
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,057.44	1,057.44	0.17107	0.02074	—	1,067.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	41.0905	41.0905	0.00665	0.00081	—	41.4968
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	105.616	105.616	0.01709	0.00207	—	106.660
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	28.3657	28.3657	0.00459	0.00056	—	28.6462
Total	—	—	—	—	—	—	—	—	—	—	—	—	175.072	175.072	0.02832	0.00343	—	176.803

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	—	248.189	248.189	0.04015	0.00487	—	250.643
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	637.925	637.925	0.10320	0.01251	—	644.233
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	171.331	171.331	0.02772	0.00336	—	173.025
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,057.44	1,057.44	0.17107	0.02074	—	1,067.90
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	248.189	248.189	0.04015	0.00487	—	250.643
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	637.925	637.925	0.10320	0.01251	—	644.233
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	171.331	171.331	0.02772	0.00336	—	173.025
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,057.44	1,057.44	0.17107	0.02074	—	1,067.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	41.0905	41.0905	0.00665	0.00081	—	41.4968
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	105.616	105.616	0.01709	0.00207	—	106.660
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	28.3657	28.3657	0.00459	0.00056	—	28.6462
Total	—	—	—	—	—	—	—	—	—	—	—	—	175.072	175.072	0.02832	0.00343	—	176.803

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00699	0.00349	0.06350	0.05334	0.00038	0.00483	—	0.00483	0.00483	—	0.00483	—	75.7671	75.7671	0.00671	0.00014	—	75.9773
Manufacturing	0.13536	0.06768	1.23053	1.03364	0.00738	0.09352	—	0.09352	0.09352	—	0.09352	—	1,468.23	1,468.23	0.12994	0.00276	—	1,472.30
General Office Building	0.01249	0.00625	0.11358	0.09541	0.00068	0.00863	—	0.00863	0.00863	—	0.00863	—	135.525	135.525	0.01199	0.00026	—	135.901
Total	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	1,679.52	1,679.52	0.14864	0.00316	—	1,684.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00699	0.00349	0.06350	0.05334	0.00038	0.00483	—	0.00483	0.00483	—	0.00483	—	75.7671	75.7671	0.00671	0.00014	—	75.9773
Manufacturing	0.13536	0.06768	1.23053	1.03364	0.00738	0.09352	—	0.09352	0.09352	—	0.09352	—	1,468.23	1,468.23	0.12994	0.00276	—	1,472.30
General Office Building	0.01249	0.00625	0.11358	0.09541	0.00068	0.00863	—	0.00863	0.00863	—	0.00863	—	135.525	135.525	0.01199	0.00026	—	135.901
Total	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	1,679.52	1,679.52	0.14864	0.00316	—	1,684.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No	0.00127	0.00064	0.01159	0.00973	0.00007	0.00088	—	0.00088	0.00088	—	0.00088	—	12.5441	12.5441	0.00111	0.00002	—	12.5789
Manufacturing	0.02470	0.01235	0.22457	0.18864	0.00135	0.01707	—	0.01707	0.01707	—	0.01707	—	243.082	243.082	0.02151	0.00046	—	243.756
General Office Building	0.00228	0.00114	0.02073	0.01741	0.00012	0.00158	—	0.00158	0.00158	—	0.00158	—	22.4377	22.4377	0.00199	0.00004	—	22.4999
Total	0.02826	0.01413	0.25689	0.21579	0.00154	0.01952	—	0.01952	0.01952	—	0.01952	—	278.063	278.063	0.02461	0.00052	—	278.835

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00699	0.00349	0.06350	0.05334	0.00038	0.00483	—	0.00483	0.00483	—	0.00483	—	75.7671	75.7671	0.00671	0.00014	—	75.9773
Manufacturing	0.13536	0.06768	1.23053	1.03364	0.00738	0.09352	—	0.09352	0.09352	—	0.09352	—	1,468.23	1,468.23	0.12994	0.00276	—	1,472.30
General Office Building	0.01249	0.00625	0.11358	0.09541	0.00068	0.00863	—	0.00863	0.00863	—	0.00863	—	135.525	135.525	0.01199	0.00026	—	135.901
Total	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	1,679.52	1,679.52	0.14864	0.00316	—	1,684.18
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	0.00699	0.00349	0.06350	0.05334	0.00038	0.00483	—	0.00483	0.00483	—	0.00483	—	75.7671	75.7671	0.00671	0.00014	—	75.9773
Manufacturing	0.13536	0.06768	1.23053	1.03364	0.00738	0.09352	—	0.09352	0.09352	—	0.09352	—	1,468.23	1,468.23	0.12994	0.00276	—	1,472.30
General Office Building	0.01249	0.00625	0.11358	0.09541	0.00068	0.00863	—	0.00863	0.00863	—	0.00863	—	135.525	135.525	0.01199	0.00026	—	135.901
Total	0.15484	0.07742	1.40761	1.18240	0.00845	0.10698	—	0.10698	0.10698	—	0.10698	—	1,679.52	1,679.52	0.14864	0.00316	—	1,684.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.00127	0.00064	0.01159	0.00973	0.00007	0.00088	—	0.00088	0.00088	—	0.00088	—	12.5441	12.5441	0.00111	0.00002	—	12.5789
Manufacturing	0.02470	0.01235	0.22457	0.18864	0.00135	0.01707	—	0.01707	0.01707	—	0.01707	—	243.082	243.082	0.02151	0.00046	—	243.756
General Office Building	0.00228	0.00114	0.02073	0.01741	0.00012	0.00158	—	0.00158	0.00158	—	0.00158	—	22.4377	22.4377	0.00199	0.00004	—	22.4999
Total	0.02826	0.01413	0.25689	0.21579	0.00154	0.01952	—	0.01952	0.01952	—	0.01952	—	278.063	278.063	0.02461	0.00052	—	278.835

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	3.58899	3.58899	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.21303	0.21303	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.29823	1.19812	0.06137	7.29403	0.00044	0.01296	—	0.01296	0.00979	—	0.00979	—	29.9944	29.9944	0.00126	0.00026	—	30.1025
Total	5.10025	5.00015	0.06137	7.29403	0.00044	0.01296	—	0.01296	0.00979	—	0.00979	—	29.9944	29.9944	0.00126	0.00026	—	30.1025
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.58899	3.58899	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.21303	0.21303	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.80202	3.80202	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.65499	0.65499	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03888	0.03888	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11684	0.10783	0.00552	0.65646	0.00004	0.00117	—	0.00117	0.00088	—	0.00088	—	2.44894	2.44894	0.00010	0.00002	—	2.45777

Total	0.81071	0.80170	0.00552	0.65646	0.00004	0.00117	—	0.00117	0.00088	—	0.00088	—	2.44894	2.44894	0.00010	0.00002	—	2.45777

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.58899	3.58899	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.21303	0.21303	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.29823	1.19812	0.06137	7.29403	0.00044	0.01296	—	0.01296	0.00979	—	0.00979	—	29.9944	29.9944	0.00126	0.00026	—	30.1025
Total	5.10025	5.00015	0.06137	7.29403	0.00044	0.01296	—	0.01296	0.00979	—	0.00979	—	29.9944	29.9944	0.00126	0.00026	—	30.1025
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	3.58899	3.58899	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.21303	0.21303	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.80202	3.80202	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	0.65499	0.65499	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03888	0.03888	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11684	0.10783	0.00552	0.65646	0.00004	0.00117	—	0.00117	0.00088	—	0.00088	—	2.44894	2.44894	0.00010	0.00002	—	2.45777
Total	0.81071	0.80170	0.00552	0.65646	0.00004	0.00117	—	0.00117	0.00088	—	0.00088	—	2.44894	2.44894	0.00010	0.00002	—	2.45777

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.8596	18.1722	37.0318	1.93677	0.04630	—	99.2497
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	48.9667	47.2551	96.2217	5.02862	0.12022	—	257.764
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.98881	4.74327	9.73208	0.51231	0.01225	—	26.1896
Total	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.8596	18.1722	37.0318	1.93677	0.04630	—	99.2497
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	48.9667	47.2551	96.2217	5.02862	0.12022	—	257.764
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.98881	4.74327	9.73208	0.51231	0.01225	—	26.1896
Total	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3.12242	3.00862	6.13104	0.32066	0.00767	—	16.4319
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	8.10699	7.82361	15.9306	0.83255	0.01990	—	42.6757
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.82595	0.78530	1.61126	0.08482	0.00203	—	4.33598
Total	—	—	—	—	—	—	—	—	—	—	—	12.0554	11.6175	23.6729	1.23802	0.02960	—	63.4436

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.8596	18.1722	37.0318	1.93677	0.04630	—	99.2497
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	48.9667	47.2551	96.2217	5.02862	0.12022	—	257.764

General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.98881	4.74327	9.73208	0.51231	0.01225	—	26.1896
Total	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	18.8596	18.1722	37.0318	1.93677	0.04630	—	99.2497
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	48.9667	47.2551	96.2217	5.02862	0.12022	—	257.764
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.98881	4.74327	9.73208	0.51231	0.01225	—	26.1896
Total	—	—	—	—	—	—	—	—	—	—	—	72.8151	70.1705	142.986	7.47771	0.17877	—	383.203
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3.12242	3.00862	6.13104	0.32066	0.00767	—	16.4319
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	8.10699	7.82361	15.9306	0.83255	0.01990	—	42.6757
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.82595	0.78530	1.61126	0.08482	0.00203	—	4.33598
Total	—	—	—	—	—	—	—	—	—	—	—	12.0554	11.6175	23.6729	1.23802	0.02960	—	63.4436

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	21.5610	0.00000	21.5610	2.15494	0.00000	—	75.4346
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	73.8467	0.00000	73.8467	7.38072	0.00000	—	258.365
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7.34177	0.00000	7.34177	0.73378	0.00000	—	25.6864
Total	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	21.5610	0.00000	21.5610	2.15494	0.00000	—	75.4346
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	73.8467	0.00000	73.8467	7.38072	0.00000	—	258.365
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7.34177	0.00000	7.34177	0.73378	0.00000	—	25.6864
Total	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3.56967	0.00000	3.56967	0.35678	0.00000	—	12.4891

Manufacturing	—	—	—	—	—	—	—	—	—	—	—	12.2262	0.00000	12.2262	1.22196	0.00000	—	42.7752
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.21551	0.00000	1.21551	0.12149	0.00000	—	4.25267
Total	—	—	—	—	—	—	—	—	—	—	—	17.0114	0.00000	17.0114	1.70022	0.00000	—	59.5169

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	21.5610	0.00000	21.5610	2.15494	0.00000	—	75.4346
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	73.8467	0.00000	73.8467	7.38072	0.00000	—	258.365
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7.34177	0.00000	7.34177	0.73378	0.00000	—	25.6864
Total	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	21.5610	0.00000	21.5610	2.15494	0.00000	—	75.4346
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	73.8467	0.00000	73.8467	7.38072	0.00000	—	258.365

General Office Building	—	—	—	—	—	—	—	—	—	—	—	7.34177	0.00000	7.34177	0.73378	0.00000	—	25.6864
Total	—	—	—	—	—	—	—	—	—	—	—	102.750	0.00000	102.750	10.2694	0.00000	—	359.486
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	3.56967	0.00000	3.56967	0.35678	0.00000	—	12.4891
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	12.2262	0.00000	12.2262	1.22196	0.00000	—	42.7752
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.21551	0.00000	1.21551	0.12149	0.00000	—	4.25267
Total	—	—	—	—	—	—	—	—	—	—	—	17.0114	0.00000	17.0114	1.70022	0.00000	—	59.5169

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7642	28.7642
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03562	0.03562
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Manufac	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7642	28.7642
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03562	0.03562
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufac turing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.76224	4.76224
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00590	0.00590
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.76813	4.76813

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufac turing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7642	28.7642
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03562	0.03562
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufac turing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7642	28.7642
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03562	0.03562

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28.7998	28.7998
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.76224	4.76224
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00590	0.00590
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.76813	4.76813

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/30/2027	2/13/2027	5.00000	10.00000	—
Grading	Grading	2/14/2027	3/28/2027	5.00000	30.0000	—
Building Construction	Building Construction	3/29/2027	5/22/2028	5.00000	300.000	—
Paving	Paving	5/23/2028	6/20/2028	5.00000	20.0000	—
Architectural Coating	Architectural Coating	6/21/2028	7/19/2028	5.00000	20.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000

Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Site Preparation	Worker	17.5000	11.8900	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20.0000	11.8900	LDA,LDT1,LDT2
Grading	Vendor	—	9.10000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	68.9734	11.8900	LDA,LDT1,LDT2
Building Construction	Vendor	27.4877	9.10000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	11.8900	LDA,LDT1,LDT2
Paving	Vendor	—	9.10000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	13.7947	11.8900	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	17.5000	11.8900	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20.0000	11.8900	LDA,LDT1,LDT2

Grading	Vendor	—	9.10000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	68.9734	11.8900	LDA,LDT1,LDT2
Building Construction	Vendor	27.4877	9.10000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	11.8900	LDA,LDT1,LDT2
Paving	Vendor	—	9.10000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	13.7947	11.8900	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	251,565	83,855.0	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0000	0.00000	0.00000
Grading	—	—	90.0000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Unrefrigerated Warehouse-No Rail	0.00000	0%
Paving	Manufacturing	0.00000	0%
Paving	General Office Building	0.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	203.983	0.03300	0.00400
2028	0.00000	203.983	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	88.5248	88.5248	88.5248	32,311.6	942.291	942.291	942.291	343,936

Manufacturing	434.273	709.423	562.455	179,540	4,622.56	7,551.36	5,986.98	1,911,095
General Office Building	142.672	32.3721	10.2536	39,419.1	1,518.65	344.580	109.143	419,592

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	88.5248	88.5248	88.5248	32,311.6	942.291	942.291	942.291	343,936
Manufacturing	434.273	709.423	562.455	179,540	4,622.56	7,551.36	5,986.98	1,911,095
General Office Building	142.672	32.3721	10.2536	39,419.1	1,518.65	344.580	109.143	419,592

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
Manufacturing	Wood Fireplaces	0	0
Manufacturing	Gas Fireplaces	0	0
Manufacturing	Propane Fireplaces	0	0
Manufacturing	Electric Fireplaces	0	0

Manufacturing	No Fireplaces	0	0
Manufacturing	Conventional Wood Stoves	0	0
Manufacturing	Catalytic Wood Stoves	0	0
Manufacturing	Non-Catalytic Wood Stoves	0	0
Manufacturing	Pellet Wood Stoves	0	0
General Office Building	Wood Fireplaces	0	0
General Office Building	Gas Fireplaces	0	0
General Office Building	Propane Fireplaces	0	0
General Office Building	Electric Fireplaces	0	0
General Office Building	No Fireplaces	0	0
General Office Building	Conventional Wood Stoves	0	0
General Office Building	Catalytic Wood Stoves	0	0
General Office Building	Non-Catalytic Wood Stoves	0	0
General Office Building	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	251,565	83,855.0	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value

Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	444,100	203.983	0.0330	0.0040	236,414
Manufacturing	1,141,481	203.983	0.0330	0.0040	4,581,259
General Office Building	306,573	203.983	0.0330	0.0040	422,873

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	444,100	203.983	0.0330	0.0040	236,414
Manufacturing	1,141,481	203.983	0.0330	0.0040	4,581,259
General Office Building	306,573	203.983	0.0330	0.0040	422,873

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	9,842,000	247,610
Manufacturing	25,553,588	717,958
General Office Building	2,603,444	0.00000

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	9,842,000	247,610
Manufacturing	25,553,588	717,958
General Office Building	2,603,444	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	40.0064	0.00000
Manufacturing	137.022	0.00000
General Office Building	13.6226	0.00000

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	40.0064	0.00000
Manufacturing	137.022	0.00000
General Office Building	13.6226	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088.00	0.30000	4.00000	4.00000	18.0000

General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.14.2. Mitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088.00	0.30000	4.00000	4.00000	18.0000
General Office Building	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18.8600	annual days of extreme heat
Extreme Precipitation	2.40000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	13.4100	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	57.0629
AQ-PM	53.2296
AQ-DPM	53.5408
Drinking Water	98.2016
Lead Risk Housing	13.5602

Pesticides	84.4483
Toxic Releases	47.3118
Traffic	56.4375
Effect Indicators	—
CleanUp Sites	90.1456
Groundwater	99.6845
Haz Waste Facilities/Generators	92.2568
Impaired Water Bodies	86.9593
Solid Waste	84.7652
Sensitive Population	—
Asthma	69.3794
Cardio-vascular	54.9103
Low Birth Weights	67.9240
Socioeconomic Factor Indicators	—
Education	55.5302
Housing	10.5450
Linguistic	58.2217
Poverty	45.3643
Unemployment	60.5674

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	47.86346721
Employed	21.69896061
Median HI	53.50955986
Education	—

Bachelor's or higher	47.7223149
High school enrollment	13.5249583
Preschool enrollment	50.42987296
Transportation	—
Auto Access	85.40998332
Active commuting	18.3498011
Social	—
2-parent households	40.99833184
Voting	72.46246632
Neighborhood	—
Alcohol availability	84.01129219
Park access	41.28063647
Retail density	18.9272424
Supermarket access	35.54471962
Tree canopy	34.71063775
Housing	—
Homeownership	64.8659053
Housing habitability	69.85756448
Low-inc homeowner severe housing cost burden	40.10008982
Low-inc renter severe housing cost burden	74.20762223
Uncrowded housing	60.05389452
Health Outcomes	—
Insured adults	32.31104838
Arthritis	15.6
Asthma ER Admissions	25.2
High Blood Pressure	6.0
Cancer (excluding skin)	24.3
Asthma	46.1

Coronary Heart Disease	6.8
Chronic Obstructive Pulmonary Disease	25.1
Diagnosed Diabetes	31.9
Life Expectancy at Birth	48.2
Cognitively Disabled	72.6
Physically Disabled	69.8
Heart Attack ER Admissions	20.0
Mental Health Not Good	48.5
Chronic Kidney Disease	27.1
Obesity	41.7
Pedestrian Injuries	81.9
Physical Health Not Good	43.5
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	41.7
Current Smoker	38.5
No Leisure Time for Physical Activity	42.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	82.5
English Speaking	26.9
Foreign-born	72.3
Outdoor Workers	45.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	72.2
Traffic Density	71.1

Traffic Access	0.0
Other Indices	—
Hardship	56.7
Other Decision Support	—
2016 Voting	47.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	86.0000
Healthy Places Index Score for Project Location (b)	42.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification

Land Use	Building 3 per the Scannell Properties Project is 42,560 sq. ft. on a 4.05 net acre parcel. Landscape area for Building 3 calculated at 10% of the site area. Jifco Inc., Project consists of 110,502 sq. ft. of Manufacturing building space and 14,648 sq. ft. of office and warehouse space (11,783 sq. ft. office, 2,865 sq. ft. 1st floor warehouse, and 1,815 sq. ft. covered patio).
Construction: Construction Phases	Demolition removed from Construction Phase table as no demolition is proposed. No structures on-site.
Operations: Vehicle Data	Trip rate for Warehouse updated to reflect Scannell Initial Study CalEEMod and Traffic Study by Fehr & Peers.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.97704	4.05000
Landscape Area	sq. ft	—	17,641.0
Lot Area	acre	2.53678	9.46000
Landscape Area	sq. ft	—	51,151.0
Lot Area	acre	0.33627	2.05000
Landscape Area	sq. ft	—	0.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Unrefrigerated Warehouse-No Rail	Weekday Trip Rate	size/day	1.74000	2.08000
Unrefrigerated Warehouse-No Rail	Saturday Trip Rate	size/day	1.74000	2.08000
Unrefrigerated Warehouse-No Rail	Sunday Trip Rate	size/day	1.74000	2.08000

Memo

Date: May 4, 2026

To: David Niskanen – J.B. Anderson Land Use Planning

From: Feslia Chen, Fehr & Peers

Subject: Addendum to the Scannell Industrial Development Project IS/MND for Jifco, Inc.

Introduction

The City of Lathrop approved the Scannell Industrial Development project in 2021 for general industrial use (i.e., the "approved project"). The project applicant recently identified Jifco, Inc. as a prospective tenant and proposed a partially modified site plan to accommodate Jifco, Inc. (i.e., the "modified project"). Jifco, Inc. is a specific industrial use with known employee and truck trip characteristics that differ from those assumed under the approved project. This memorandum presents the methodology and findings of an analysis evaluating whether the modified project would result in additional CEQA impacts or operational deficiencies relative to the previously approved project. **Figure 1** shows the project location. As with the approved project, the modified project is analyzed under Existing Plus Project and Cumulative Plus Project conditions.

Project Description

The Scannell Industrial Development project is located on the south side of Lathrop Road, between McKinley Avenue and D Street, in the City of Lathrop. The project site is surrounded by existing industrial uses to the north, south, east, and west.

The approved project consists of three industrial buildings totaling 191,160 square feet. Under the proposed modified project, two of the three industrial buildings would be replaced by a modified site plan for Jifco, Inc., while the third building located on Assessor's Parcel Number (APN) 198-040-34, along with the on-site stormwater detention basin on APN 198-040-31, would remain as previously approved under the original project.

Jifco, Inc. is a manufacturing enterprise that produces pipes for private and municipal water agencies. The modified project includes the development of five Jifco buildings totaling 126,965 square feet plus Building 3 of the previously approved project.

The modified site would include one office and four manufacturing facilities. Designated automobile parking areas will be available surrounding the proposed office and storage building (Building #1). In addition, the proposed modified project includes outdoor storage of finished materials, which would

be located at the northeast corner of the project site**. Figure 2** shows the proposed modified project site plan.

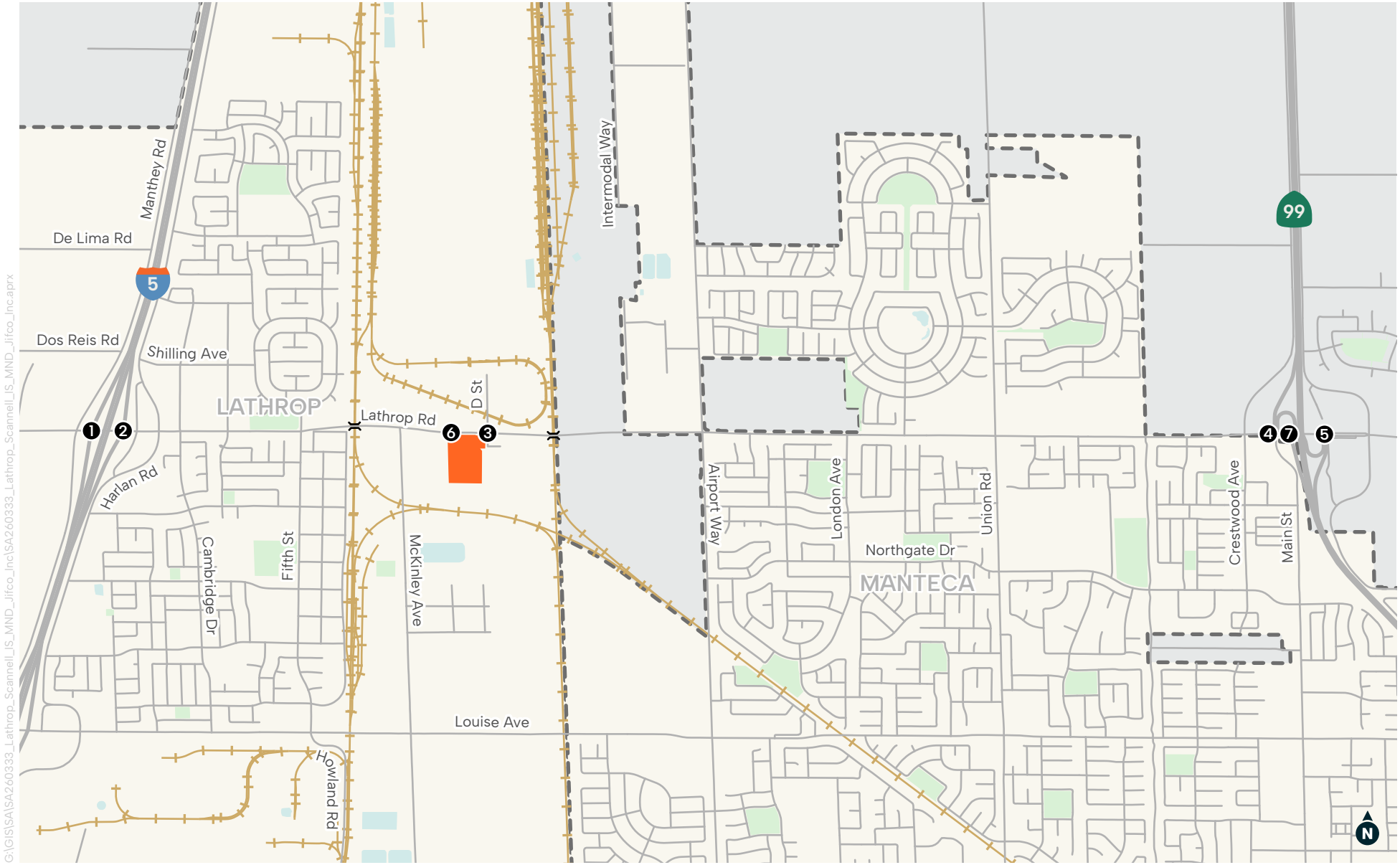
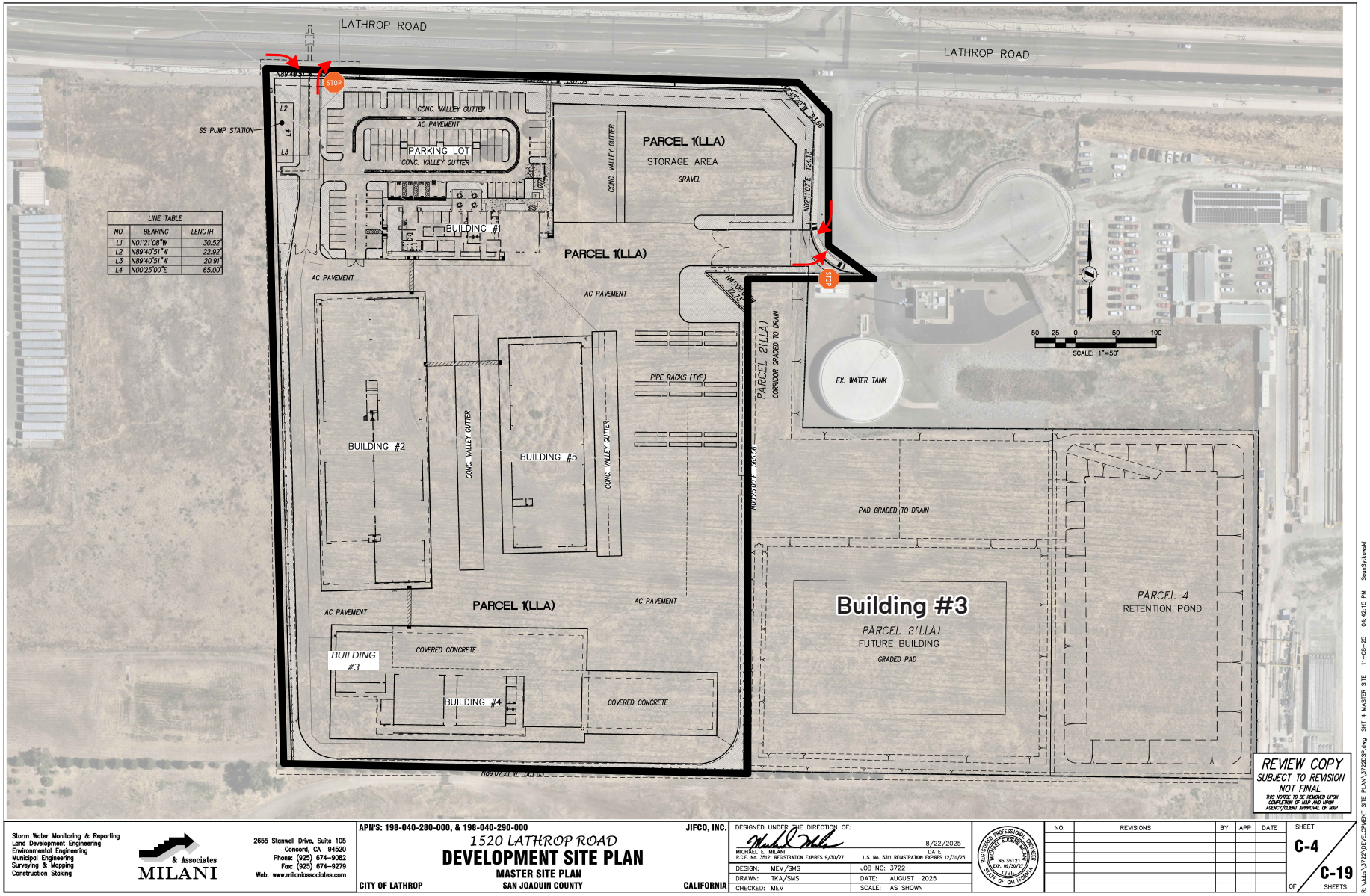


FIGURE 1

Project Location and Study Intersections

Fehr & Peers



Jifco, Inc Project Site

Permitted Turning Movement

Stop Sign

FIGURE 2

Project Site Plan

Travel Characteristics

Due to the unique manufacturing operations associated with the modified project, the resulting travel characteristics are expected to differ from those of the previously approved project.

Project Trip Generation

The project is expected to employ approximately 65 workers, including 15 administrative employees in the office building and 50 employees in the manufacturing buildings. Manufacturing operations would occur across two shifts, five to six days per week, with the morning shift operating from 5:30 AM to 2:30 PM and the afternoon/evening shift from 3:30 PM to 12:30 AM. Trip generation analysis typically focuses on the weekday morning period from 7:00 to 9:00 AM and evening peak period from 4:00 to 6:00 PM. The proposed manufacturing operations would occur outside of these peak periods; therefore, trips generated by the 50 manufacturing employees would not contribute to peak hour traffic conditions and are not included in the peak hour traffic operations analysis in this study.

Based on coordination with Jifco, Inc. regarding its Livermore facility operations, the administrative shift is expected to occur from 7:00 A.M. to 3:30 P.M. However, the official project description indicates general operating hours between 7:00 A.M. and 9:00 P.M. Accordingly, a conservative assumption was applied for analysis purposes, whereby all fifteen administrative employees are assumed to arrive at 7:00 A.M. and depart at 4:00 P.M., consistent with a traditional eight-hour work shift. In addition, all employees are conservatively assumed to travel as single-occupant vehicle drivers and to exit and re-enter the project site at least once during their shift.[1]

Trip generation for Building 3 of the original project was updated to reflect published trip rates from the most current version of the Institute of Transportation Engineers' *Trip Generation Manual, 12th Edition* (2026).

Table 1 summarizes the estimated trip generation associated with the administrative employees.

Jifco, Inc. provided four months of truck activity logs for its Livermore facility, covering December 2025 through March 2026, which represents the site's yearly peak truck activity period. The Livermore facility employs 45 manufacturing employees, while the proposed Lathrop facility is expected to employ 50 manufacturing employees. Based on the comparable staffing levels, production activities at the two facilities were assumed to be similar in scale. Accordingly, the maximum truck trip volumes reported in the Livermore facility logs were used as a conservative estimate of truck trips generated by the modified project.

Table 2 shows the estimated project trip generation for truck trips.

Based on the above data and assumptions, the modified project would result in a total of 362 daily trips, 39 AM peak hour trips, and 26 PM peak hour trips.

[1] This results in 4 daily trips per employee including 1 inbound trip at the beginning of the shift, 1 exit and 1 re-enter trip during the shift (such as for a meal or other work purposes), and a final exit at the end of the shift.

Table 1. Trip Generation of Modified Project – Passenger Vehicle Trips

Land Use	Quantity	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Jifco, Inc.	50 manufacturing employees	200	0	0	0	0	0	0
Jifco, Inc.	15 administrative employees	60	15	0	15	0	15	15
Building 3[1]	42.56 KSF	60	4	1	5	2	4	6
Project Passenger Vehicle Trips		**320**	**19**	**1**	**20**	**2**	**19**	**21**

Notes:
1. Based on ITE's General Warehouse land use category (Code 150) in the *Trip Generation Manual, 12th Edition*. The ITE description of this category states that it is primarily devoted to storage of materials, but it may include office and maintenance areas.

Source: Fehr & Peers, 2026

Table 2. Trip Generation of Modified Project – Heavy Vehicle (Truck) Trips

Land Use	Quantity	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Jifco, Inc[1].	-	22	9	9	18	2	2	4
Building 3 [2]	42.56 KSF	20	1	0	1	0	1	1
Project Truck Trips		**42**	**10**	**9**	**19**	**2**	**3**	**5**

Notes:
1. Based on truck logs provided by Jifco, Inc.'s Livermore facility.
2. Based on ITE's General Warehouse land use category (Code 150) in the *Trip Generation Manual, 12th Edition*. The ITE description of this category states that it is primarily devoted to storage of materials, but it may include office and maintenance areas.

Source: Fehr & Peers, 2026.

Tables 3 and 4 compare trip generation between the approved project and the modified project. The modified project would result in the same number of daily passenger vehicle trips but a reduction of 38% AM peak hour and 42% PM peak hour passenger vehicle trips. The modified project would generate 46% fewer daily truck trips; however, the peak hour truck trips would increase from 6 to 19 in the AM peak hour and from 4 to 5 in the PM peak hour.

Table 3. Comparison of Approved and Modified Projects – Passenger Vehicle Trips

Land Use	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Approved Project	320	27	5	32	10	26	36
Modified Project	320	19	1	20	2	19	21
Difference	0	-8	-4	-12	-8	-7	-15

Source: Fehr & Peers, 2026

Table 4. Comparison of Approved and Modified Projects – Truck Trips

Land Use	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Approved Project	78	3	3	6	2	2	4
Modified Project	42	10	9	19	2	3	5
Difference	-36	+7	+6	+13	0	+1	+1

Source: Fehr & Peers, 2026.

Project Trip Distribution

This study uses the passenger vehicle trip distribution developed for the *Scannell Industrial Development Project – Transportation Analysis* report (Fehr & Peers, September 2021). The trip distribution is based on the proposed site access locations, observed directional travel patterns, and outputs from the City of Lathrop Travel Demand Model (TDM).

Passenger vehicle trip distribution for Existing Plus Project conditions was developed using the City of Lathrop TDM under 2020 Base Year conditions. Passenger vehicle trip distribution for Cumulative Plus Project conditions was derived from the applicable cumulative year TDM. Accordingly, separate trip distribution percentages were established for the Existing Plus Project and Cumulative Plus Project scenarios. **Figures 3 and 4** display project passenger vehicle trip distribution for Existing Plus Project and Cumulative Plus Project conditions, respectively.

Truck trip distribution percentages for the proposed Jifco, Inc. facility were developed based on coordination with Jifco, Inc. staff and their understanding of regional market share and expected operational characteristics. Truck routing assumptions were consistent with the approved project, which took into account the City of Lathrop's designated truck route network. Trucks were assumed to comply with local policies, including the prohibition of truck traffic on Lathrop Road between Harlan Road and McKinley Avenue. **Figure 5** displays project truck trip distribution.

Project Trip Assignment

Under the modified project, site access would remain the same as in the approved project, which would include one right in/right out driveway on Lathrop Road and one full access driveway on D Street. The D Street driveway would provide access to the Lathrop Road/D Street intersection, which is a full access intersection; therefore, it is anticipated that all westbound inbound and outbound trips would use this intersection. **Figure 6** displays the project trips for Existing Plus Project conditions.

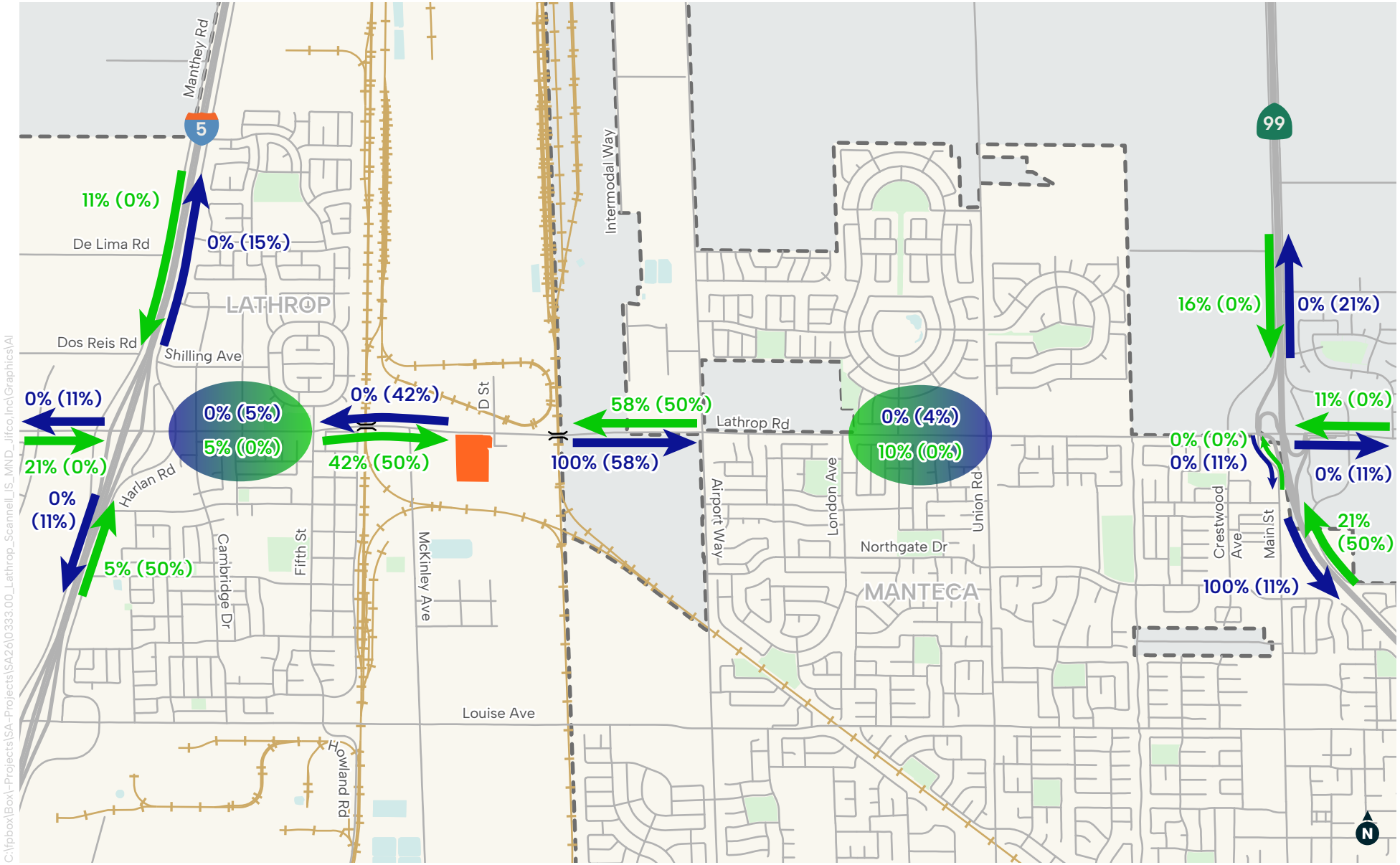


FIGURE 3

Passenger Vehicle Trip Distribution (Existing Plus Project Conditions)

AM% (PM%) Inbound Percentage

AM% (PM%) Outbound Percentage

Project Site

Railroad

Park

Waterbody

City Limits

Fehr & Peers

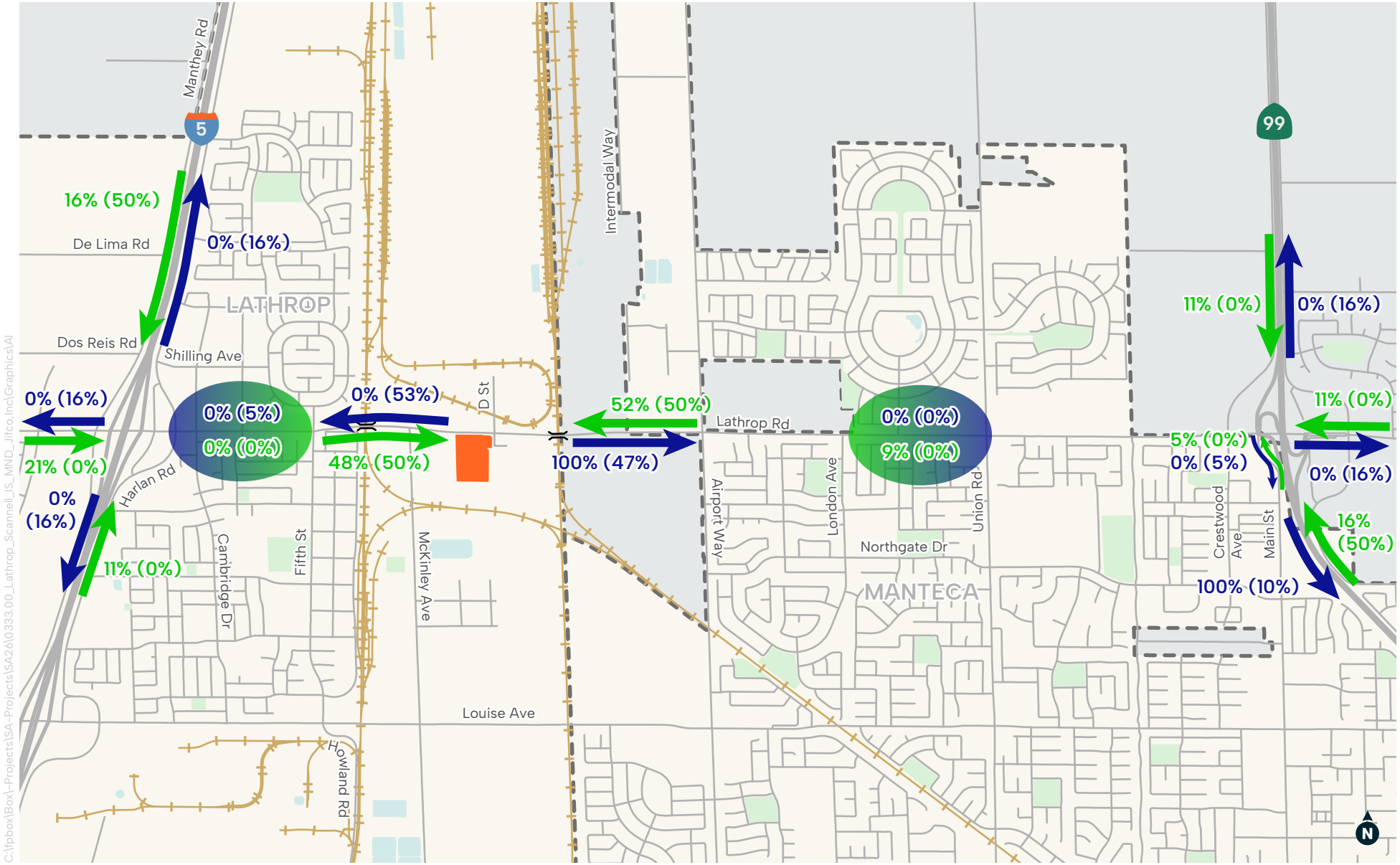


FIGURE 4

Passenger Vehicle Trip Distribution (Cumulative Plus Project Conditions)

AM% (PM%) Inbound Percentage

AM% (PM%) Outbound Percentage

Project Site

Railroad

Park

Waterbody

City Limits

Fehr & Peers

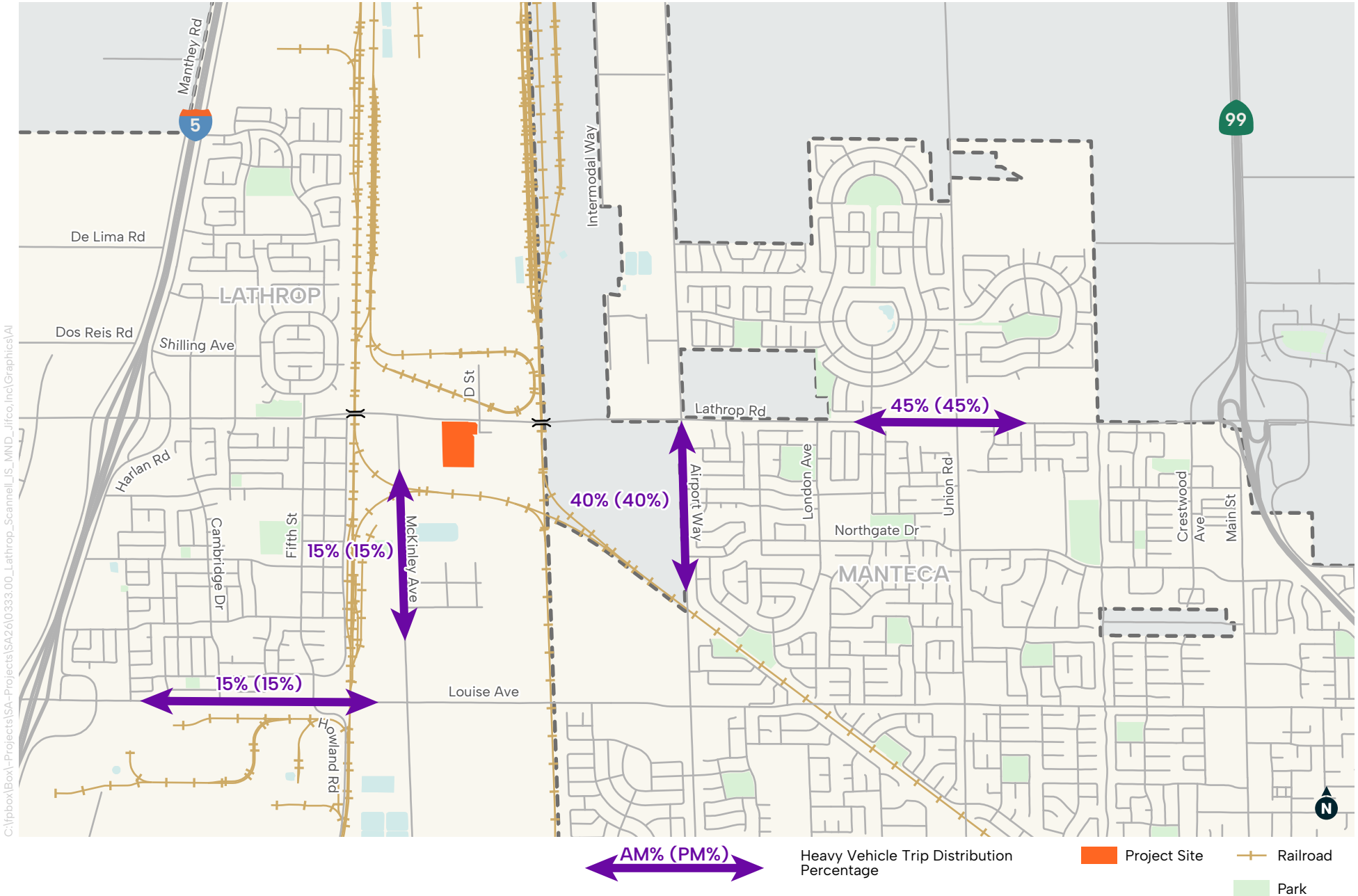
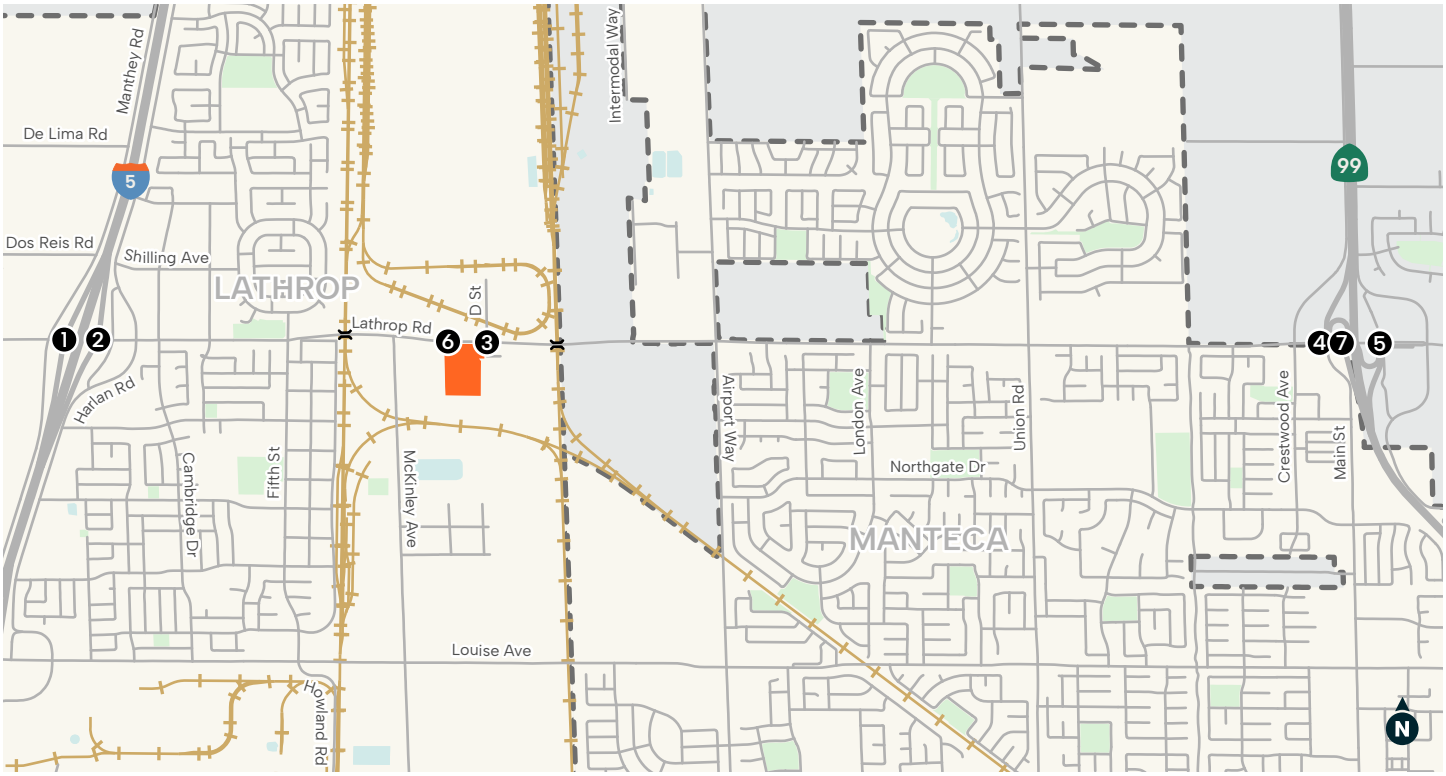


FIGURE 5

Heavy Vehicle Project Trip Distribution

Fehr & Peers

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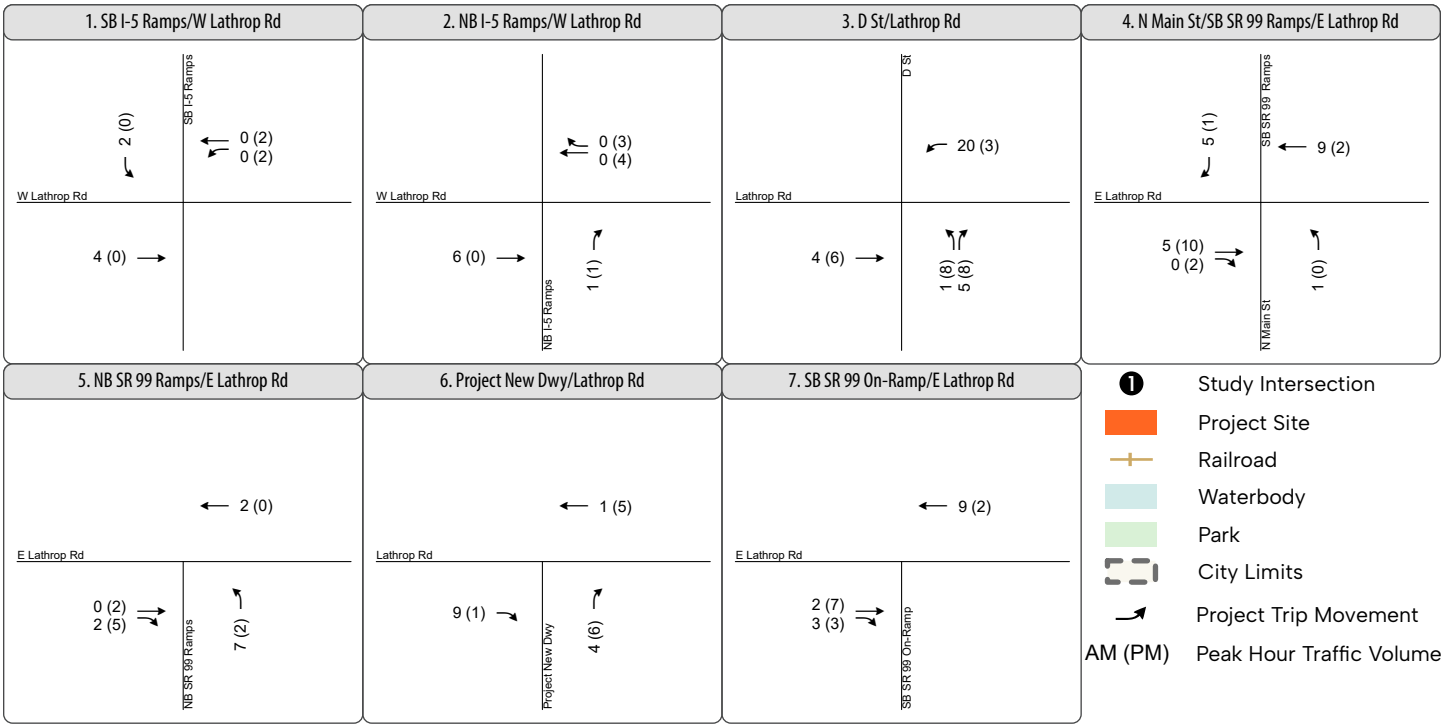


FIGURE 6

Project Trips Existing Conditions

Traffic Operations Analysis

The study intersections are analyzed using procedures and methodologies contained in the *Highway Capacity Manual, 6th Edition* (Transportation Research Board, 2016).[2] These methodologies are applied using the Synchro 12 capacity analysis software which considers traffic volumes, lane configurations, signal timings, signal coordination, and other pertinent parameters of intersection operations. Individual peak hour volumes, peak hour factors, and heavy vehicle percentages are used for the study intersections.

The study intersections are analyzed using the concept of Level of Service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions. For signalized intersections, LOS is based on the average delay experienced by all vehicles passing through the intersection. For side-street stop-controlled intersections, LOS is based on the average delay experienced by all vehicles passing through the intersection and delay experienced by vehicles making the worst-case movement at the intersection. **Table 5** displays the delay range associated with each LOS category for signalized and unsignalized intersections.

Table 5. Intersection Level of Service (LOS) Criteria

LOS	Description (for Signalized Intersections)	Average Delay (seconds/vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Operations with very low delay occurring with favorable traffic signal progression and/or short cycle lengths.	< 10.0	< 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.0 to < 20.0	10.0 to > 15.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.0 to < 35.0	15.0 to > 25.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.0 to < 55.0	25.0 to > 35.0
E	Operations with high delay values indicating poor progression, and long cycle lengths. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.0 to < 80.0	35.0 to > 50.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	>= 80.0	>= 50.0

Note: LOS = level of service; V/C ratio = volume-to-capacity ratio
Source: Transportation Research Board, 2016

[2] Although a newer edition of the *Highway Capacity Manual* (i.e., the 7th edition) was released in 2022, this study used 6th edition procedures and methodologies consistent with the 2021 study. This approach was selected to maintain consistency with the approved project and to allow for a direct comparison of results between the approved and modified projects.

Existing Plus Project Conditions

To evaluate whether the modified project would exacerbate traffic operations, the analysis retained the same baseline traffic volumes as those used for the previously approved project. Accordingly, no new traffic counts were collected for this study. Trip generation associated with the modified project was added to existing conditions traffic volumes. **Figure 7** displays the Existing Plus Project conditions turning movement volumes at study intersections.

Table 6 displays the AM and PM peak hour intersection operations under Existing Plus Project conditions for the approved and modified projects.

Table 6. Intersection Operations – Existing Plus Project Conditions

ID	Intersection	Traffic Control[1]	Peak Hour Delay/LOS [2]			
			Approved Project		Modified Project	
			AM	PM	AM	PM
1	I-5 SB Ramps/Lathrop Rd	Signal	18 / B	17 / B	18 / B	17 / B
2	I-5 NB Ramps/Lathrop Rd	Signal	16 / B	19 / B	16 / B	19 / B
3	Lathrop Road/D St	SSSC	1 (15) / A (C)	1 (21) / A (C)	1 (13) / A (B)	1 (19) / A (C)
4	SR 99 SB Ramps/Lathrop Rd	Signal	15 / B	18 / B	15 / B	18 / B
5	SR 99 NB Ramps/Lathrop Rd	Signal	12 / B	12 / B	12 / B	12 / B
6	Lathrop Rd/Project Dwy	SSSC	1 (10) / A (A)	1 (11) / A (B)	<1(10) / A (A)	<1 (11) / A (B)

Notes:
SSSC = Side Street Stop Control; LOS = Level of Service

1. For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side-street stop-controlled intersections, average intersection delay and worst-case movement (in parentheses) are reported.
2. Delay is reported to the nearest second.

Source: Fehr & Peers, 2026

Traffic operations at the study intersections are projected to remain at the same LOS with the implementation of the modified project as with the approved project. No operational deficiencies are identified, and no intersection improvements are required under Existing Plus Project conditions.

Cumulative Plus Project Conditions

All roadway assumptions for cumulative conditions are consistent with those assumed for the approved project. This approach allows for a direct operational comparison between the approved project and the modified project. The following assumptions were included as part of the cumulative conditions analysis for the approved project in the 2021 study:

- Lathrop Road/I-5 SB Ramps:
    - Realign the southbound I-5 off-ramp to intersect Lathrop Road approximately 200 feet west of the existing off-ramp location

- Modify the southbound approach to include two left turn lanes and two right turn lanes
- Modify the eastbound approach to include three through lanes
- Modify the westbound approach to include two through lanes, one shared through/right turn lane, and one right turn lane

- Lathrop Road/I-5 NB Ramps:
  - Modify the northbound approach to include one left turn lane, one shared through/left turn lane, and two right turn lanes
  - Modify the eastbound approach to include two left turn lanes and two through lanes
  - Modify the westbound approach to include one through lane, one shared through/right turn lane, and one right turn lane

The following Synchro inputs were used for the cumulative year analysis:

- Coordinated signal timing
- Custom phasing on the I-5 SB off-ramp at Lathrop Road
- Optimized signal timings and offsets

Table 7 displays the AM and PM peak hour intersection operations under Cumulative Plus Project conditions for the approved and modified projects. **Figure 8** shows the cumulative conditions project trips.

Figure 9 displays the Cumulative Plus Project conditions turning movement forecasts at the study intersections.

Table 7. Intersection Operations – Cumulative Plus Project Conditions

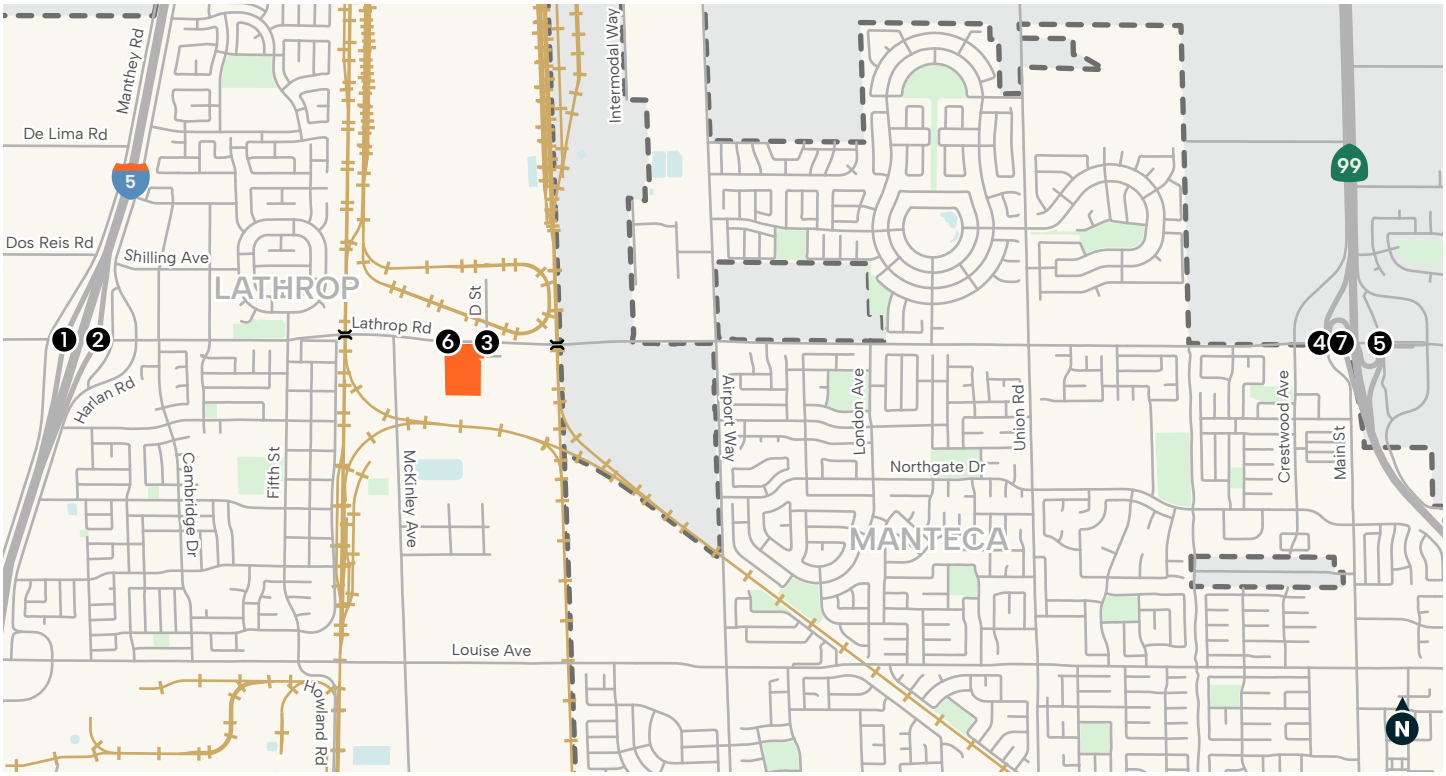
ID	Intersection	Traffic Control [1]	Peak Hour LOS/Delay [2]			
			Approved Project		Modified Project	
			AM	PM	AM	PM
1	I-5 SB Ramps/Lathrop Rd	Signal	41 / D	51 / D	41 / D	50 / D
2	I-5 NB Ramps/Lathrop Rd	Signal	48 / D	55 / D	48 / D	55 / D
3	Lathrop Road/D St	SSSC	3 (359) / A (F)	20 (>1,000) / C (F)	2 (261) / A (F)	15 (>1,000) / C (F)
4	SR 99 SB Ramps/Lathrop Rd	Signal	29 / C	27 / C	29 / C	27 / C
5	SR 99 NB Ramps/Lathrop Rd	Signal	29 / C	29 / C	29 / C	29 / C
6	Lathrop Rd/Project Dwy	SSSC	<1 (16) / A (C)	<1 (21) / A (C)	<1 (16) / A (C)	<1 (21) / A (C)

Notes:
SSSC = Side Street Stop Control; LOS = Level of Service
1. For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. For side street stop-controlled intersections, average intersection delay and worst-case movement (in parentheses) are reported.
2. Delay is reported to the nearest second.

Source: Fehr & Peers, 2026.

The modified project would result in minor changes to delay under Cumulative Plus Project conditions when compared to the approved project. LOS would remain unchanged. This is reasonable due to comparable number of peak hour trips generated by the modified project versus the approved project.

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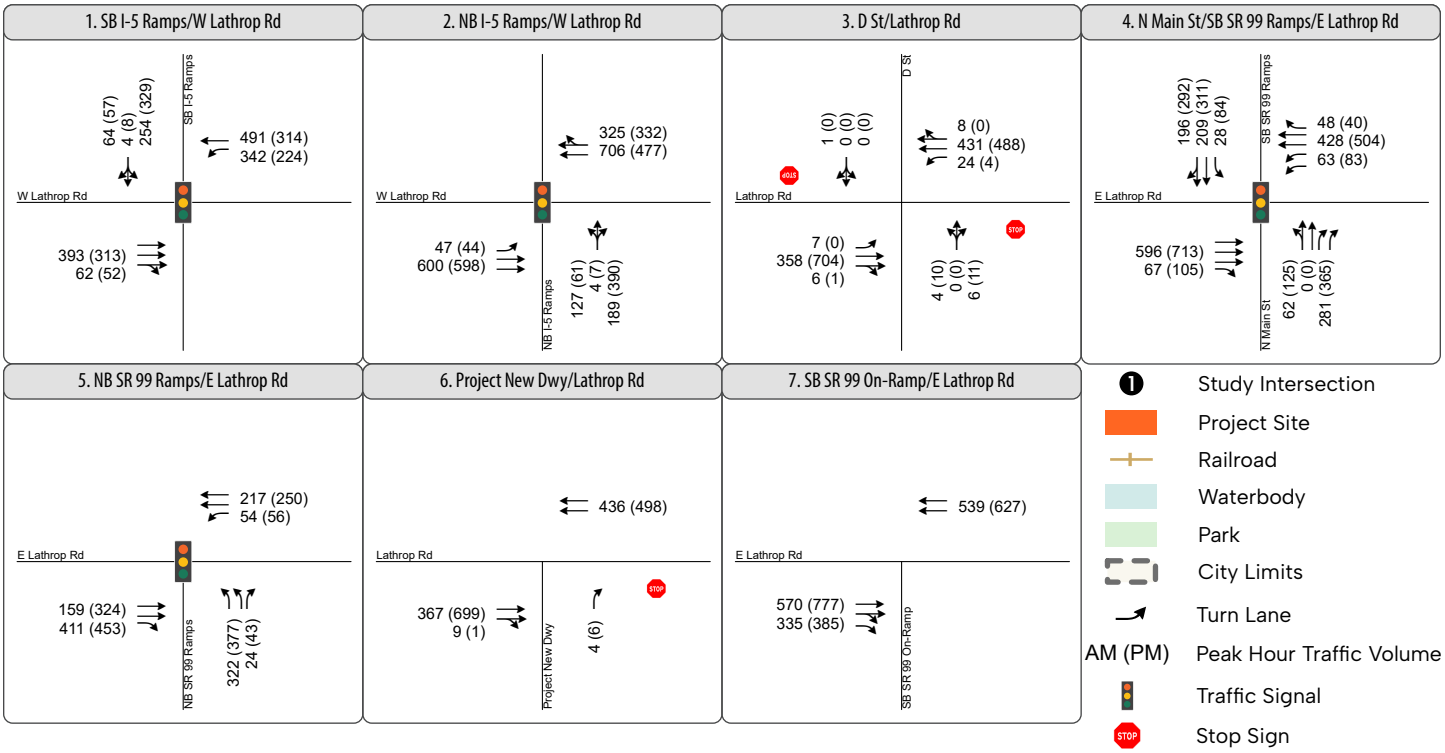
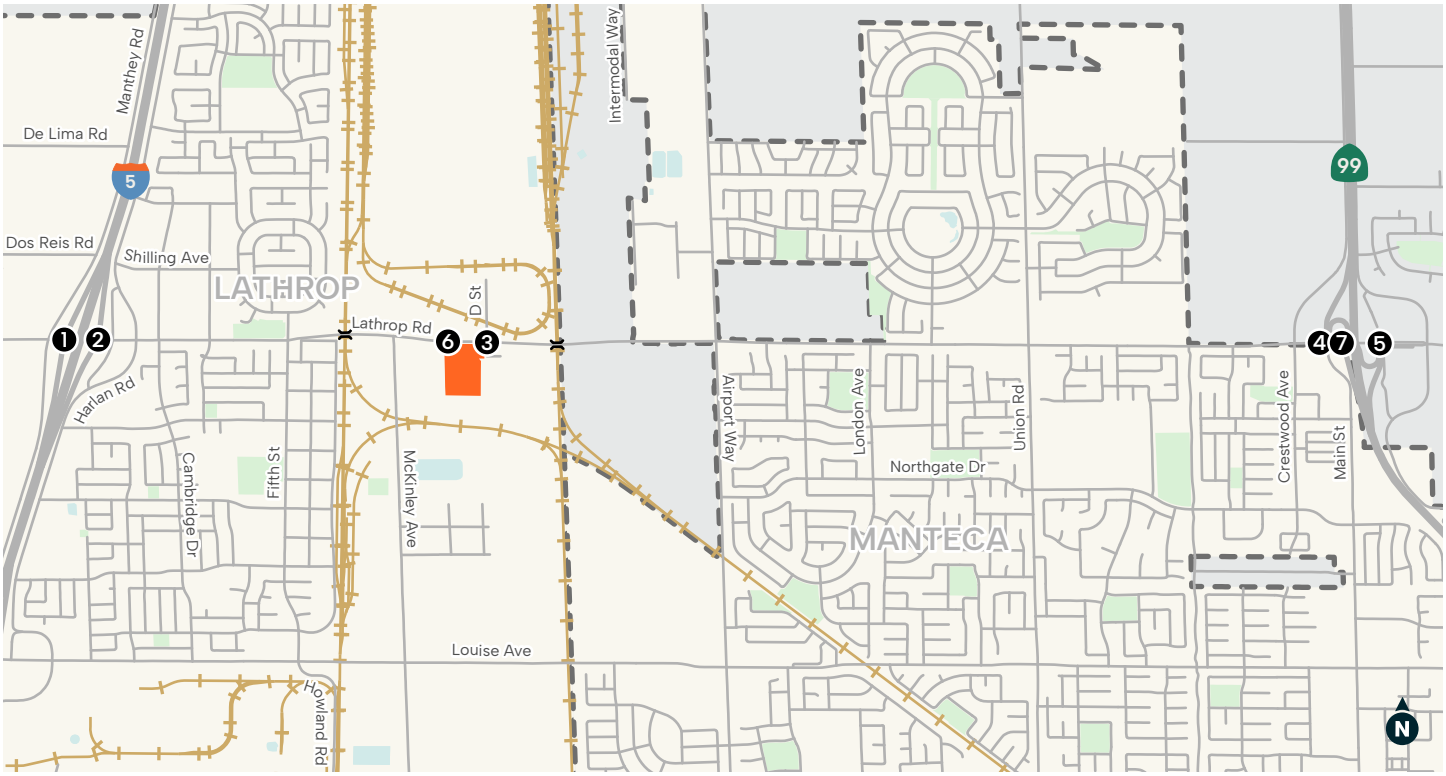


FIGURE 7

Peak Hour Traffic Volume & Lane Configurations – Existing Plus Project Conditions

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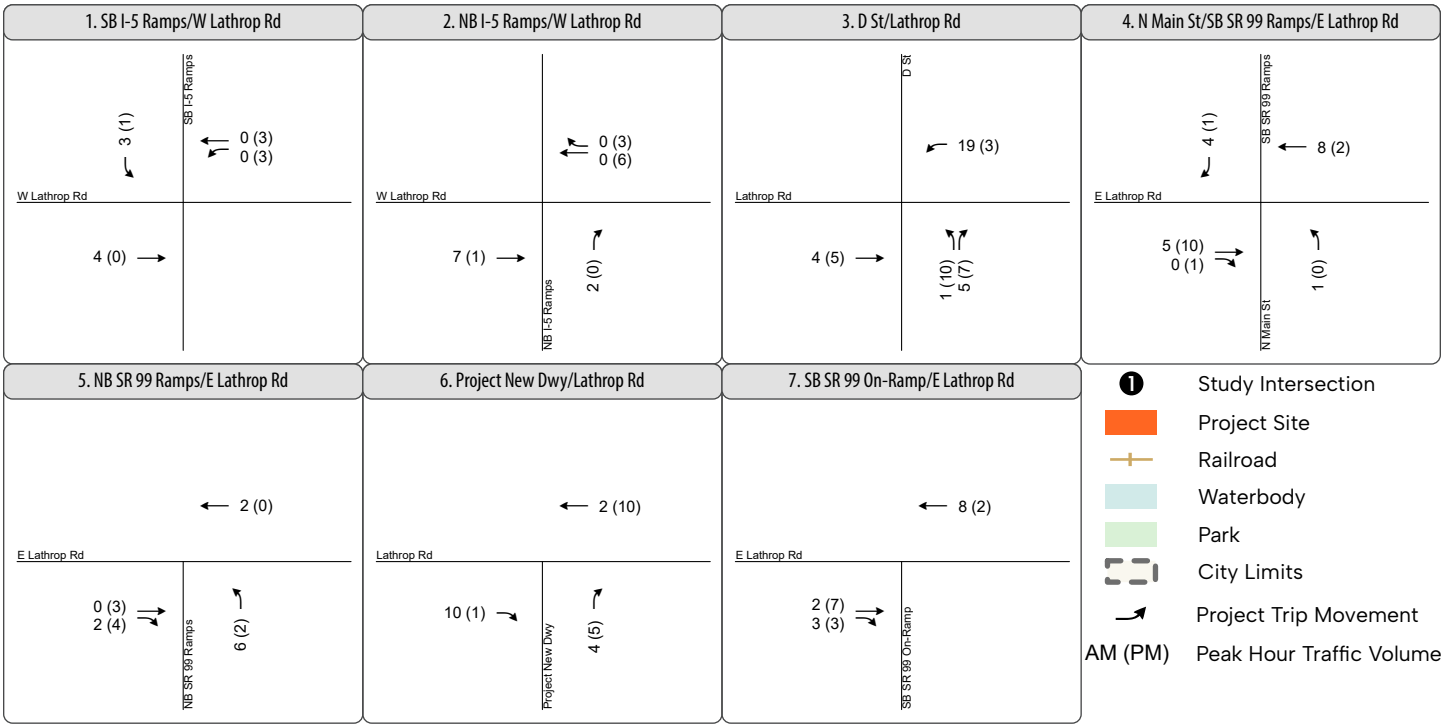
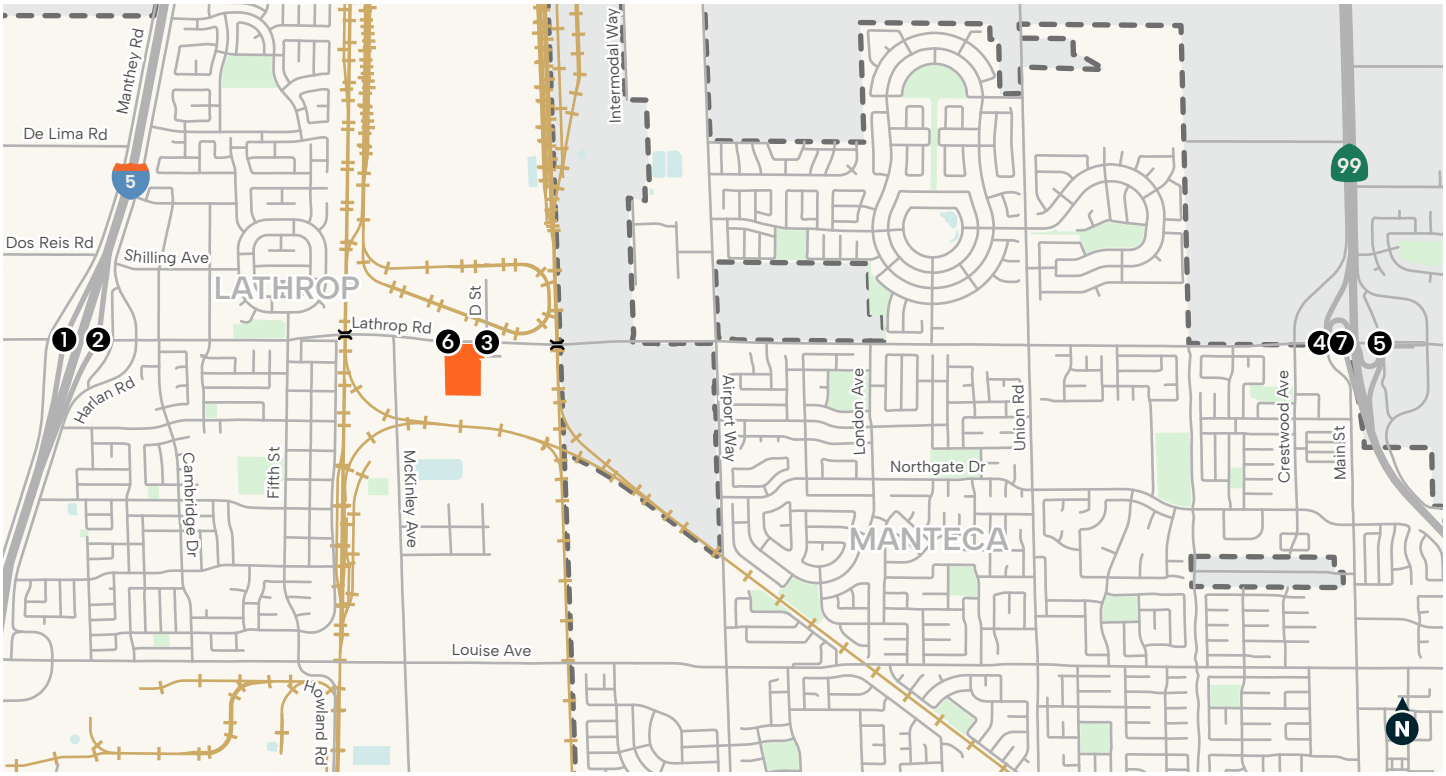


FIGURE 8

Project Trips Cumulative Conditions

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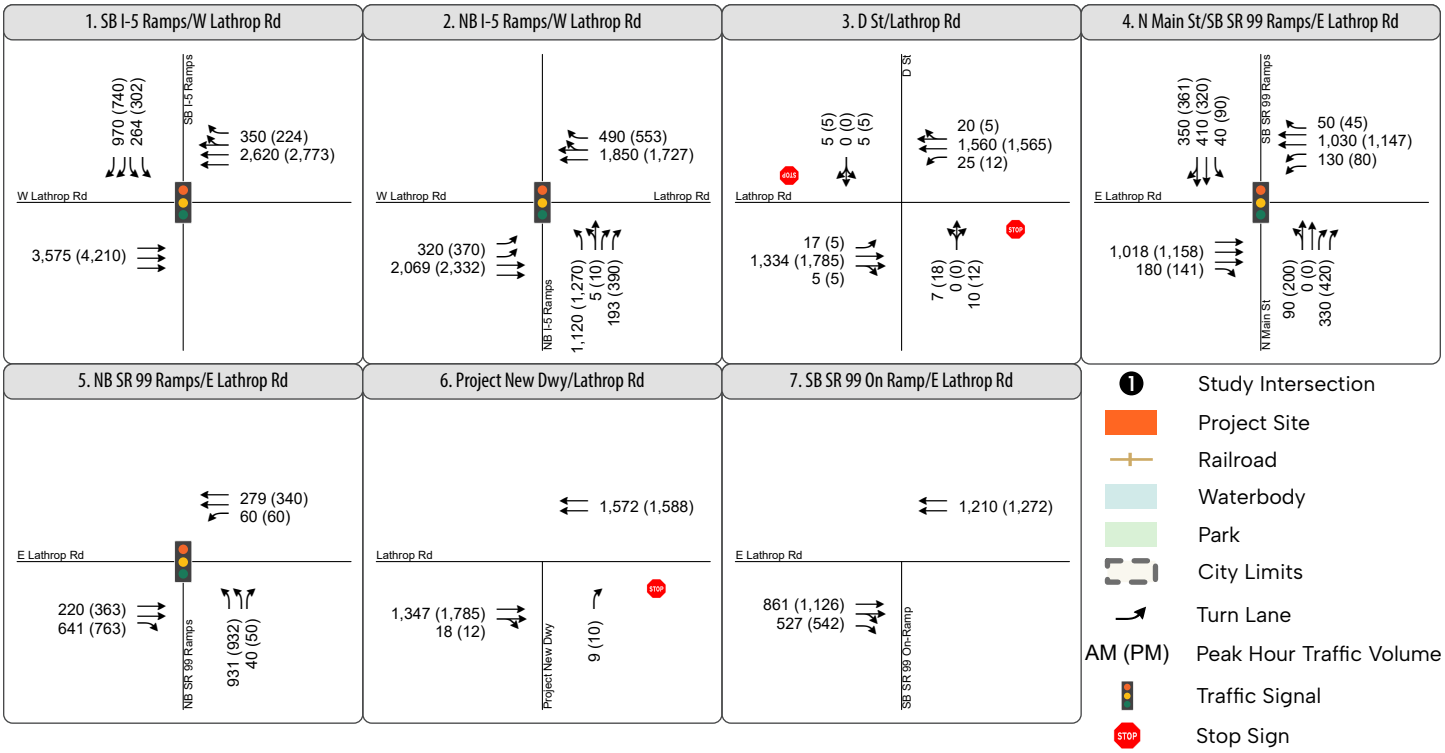


FIGURE 9

Peak Hour Traffic Volume & Lane Configurations – Cumulative Plus Project Conditions

Site Access and Emergency Access Evaluation

As shown in **Figure 2**, site access for the modified project is proposed via one right-in/right-out driveway on Lathrop Road and one full-access driveway on D Street. An existing raised median on Lathrop Road would prevent illegal left-turns at the right-in/right-out driveway.

Truck turning and site access feasibility for WB-50 semi-trailers, emergency fire vehicles, and refuse collection vehicles were previously evaluated for the approved project in the 2021 study. Turning movement templates were prepared at that time to demonstrate that the proposed driveways provided adequate maneuvering space for large vehicles and emergency access. Based on information provided by Jifco, Inc., the anticipated truck types accessing the site are expected to be similar to those evaluated for the approved project.

Since the revised building layout of the modified project differs from that of the approved project, truck turning templates were developed for the modified project based on the site plan prepared by Perkins, Williams & Cotterill, Inc updated on March 23, 2026. As shown on Exhibit A of the truck turning templates (Appendix) the proposed right-in/right-out project driveway would not accommodate an inbound WB-50 vehicle on Lathrop Road without encroachment onto the curb, and the outbound northbound right turn onto Lathrop Road would require use of the full driveway width, preventing simultaneous inbound movements. It is recommended the project team either widen the driveway to accommodate simultaneous inbound and outbound WB-50 truck movements or widen the driveway to accommodate inbound WB-50 truck access while restricting outbound truck movements. In contrast, the all access project driveway would adequately accommodate simultaneous inbound and outbound turn movements for WB-50 vehicles to and from D Street. Turning template also demonstrated that a WB-50 would not be able to make a southbound right turn around the covered concrete area of building 4.

The analysis also showed that the proposed driveways and modified site plan would adequately accommodate emergency response vehicles. In addition, a refuse collection area is located at the southeast corner of the passenger vehicle parking lot. A separate turning template was prepared for a City of Lathrop standard garbage truck, which demonstrated that the proposed right-in/right-out driveway and internal circulation would adequately accommodate refuse collection operations.

Signal Warrant Analysis

The 2021 report conducted a peak hour signal warrant analysis (consistent with methodologies in the 2014 Caltrans' *California Manual on Uniform Traffic Control Devices*) for the Lathrop Road/D Street intersection under Cumulative Plus Project conditions. Results of 2021 analysis indicated traffic volumes on the minor street would not satisfy the warrant for installation of a traffic signal in the AM and PM peak hours.

The peak hour signal warrant analysis was reevaluated with the modified project, and the intersection did not satisfy the signal warrant criteria under either peak hour.

The approved project identified the need for a traffic signal at this intersection due to high minor-street delay, left-turn access to and from D Street, and heavy truck activity. Installation of a signal or payment of a fair-share contribution toward future signal installation was recommended.

Vehicle Miles Traveled Evaluation

A qualitative Vehicle Miles Traveled (VMT) analysis was previously completed for the approved project under existing (base year 2020) and cumulative (2040) conditions using the City of Lathrop TDM. See *Scannell Industrial Project Vehicle Miles Traveled Analysis* (Fehr & Peers, 2021) for details.

The 2021 study assumed a general industrial land use designation and evaluated the approved project's VMT impact based on its home-based work VMT per industrial employee compared to the applicable citywide averages. The approved project was found to generate home-based work VMT per employee that did not exceed the existing or cumulative citywide average for industrial uses (see **Table 8**) and, therefore, was determined not to result in a significant transportation impact under CEQA.

Table 9 shows that the modified project would generate fewer daily vehicle trips than the approved project, a reduction of approximately 9 percent. The modified project would also generate fewer PM peak hour trips, with 26 trips compared to 40 trips under the approved project, a reduction of approximately 35 percent.

Table 8. VMT Analysis – Approved Project

Scenario	Home-Based Work VMT per Industrial Employee
Existing – Citywide Average	38.9
Existing - Proposed Project	37.2
Cumulative – Citywide Average	39.0
Cumulative - Proposed Project	36.8

Notes: Results based on outputs from the City of Lathrop base year and cumulative year TDMs.
Source: Fehr & Peers, 2021.

Table 9. Trip Generation Comparison

Scenario	Daily Trips	AM Peak Hour Trips	PM Peak Hour Trips
Approved Project (General Industrial)	398	38	40
Modified Project	362	39	26
Net Change	-36	+1	-14
Percent Change	-9%	+3%	-35%

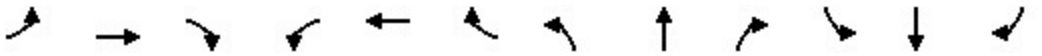
Source: Fehr & Peers, 2026.

While the modified project would generate one additional trip during the AM peak hour (39 trips compared to 38 trips), this incremental difference is negligible and does not represent a material increase in travel demand. Importantly, the overall daily trip generation—which most directly correlates with total VMT—is lower for the modified project compared to the approved project.

Moreover, the project site, surrounding roadway network, and regional context remain unchanged from the approved project. Because VMT is directly related to the number of trips and travel distances, a project that generates fewer trips within the same geographic context would be expected to generate an equal or lower level of VMT.

Because the approved project was previously determined to result in a less-than-significant VMT impact, and the modified project would generate fewer overall trips within the same geographic and transportation context, the modified project would not result in a new or more severe VMT impact for CEQA purposes. Accordingly, the modified project would continue to have a less-than-significant VMT impact.

APPENDIX



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	393	62	342	491	0	0	0	0	254	4	64
Future Volume (veh/h)	0	393	62	342	491	0	0	0	0	254	4	64
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1811	1811	1811	1811	0				1811	1811	1811
Adj Flow Rate, veh/h	0	414	65	360	517	0				267	4	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	6	6	6	6	0				6	6	6
Cap, veh/h	0	821	126	413	915	0				391	6	98
Arrive On Green	0.00	0.19	0.19	0.24	0.51	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	4487	664	1725	1811	0				1331	20	334
Grp Volume(v), veh/h	0	313	166	360	517	0				338	0	0
Grp Sat Flow(s),veh/h/ln	0	1648	1692	1725	1811	0				1684	0	0
Q Serve(g_s), s	0.0	4.5	4.6	10.6	10.4	0.0				9.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.5	4.6	10.6	10.4	0.0				9.3	0.0	0.0
Prop In Lane	0.00		0.39	1.00		0.00				0.79		0.20
Lane Grp Cap(c), veh/h	0	626	321	413	915	0				495	0	0
V/C Ratio(X)	0.00	0.50	0.52	0.87	0.57	0.00				0.68	0.00	0.00
Avail Cap(c_a), veh/h	0	2190	1124	655	1203	0				1598	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	19.1	19.2	19.3	9.0	0.0				16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.2	4.7	0.5	0.0				3.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.6	1.8	4.0	2.8	0.0				3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	19.7	20.3	24.0	9.5	0.0				20.0	0.0	0.0
LnGrp LOS		B	C	C	A					B		
Approach Vol, veh/h		479			877						338	
Approach Delay, s/veh		19.9			15.5						20.0	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.6	14.6		21.5		31.2
Change Period (Y+Rc), s	4.0	4.6		6.0		4.6
Max Green Setting (Gmax), s	20.0	35.0		50.0		35.0
Max Q Clear Time (g_c+I1), s	12.6	6.6		11.3		12.4
Green Ext Time (p_c), s	0.1	3.0		4.2		2.7

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		17.6	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	600	0	0	706	325	127	4	189	0	0	0
Future Volume (veh/h)	47	600	0	0	706	325	127	4	189	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1811	1811	0	0	1811	1811	1811	1811	1811			
Adj Flow Rate, veh/h	49	632	0	0	743	342	134	4	199			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	6	6	0	0	6	6	6	6	6			
Cap, veh/h	81	1816	0	0	946	435	187	6	278			
Arrive On Green	0.05	0.53	0.00	0.00	0.41	0.41	0.29	0.29	0.29			
Sat Flow, veh/h	1725	3532	0	0	2380	1053	639	19	950			
Grp Volume(v), veh/h	49	632	0	0	558	527	337	0	0			
Grp Sat Flow(s),veh/h/ln	1725	1721	0	0	1721	1622	1608	0	0			
Q Serve(g_s), s	1.6	6.3	0.0	0.0	16.7	16.7	11.1	0.0	0.0			
Cycle Q Clear(g_c), s	1.6	6.3	0.0	0.0	16.7	16.7	11.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.65	0.40		0.59			
Lane Grp Cap(c), veh/h	81	1816	0	0	711	670	471	0	0			
V/C Ratio(X)	0.61	0.35	0.00	0.00	0.78	0.79	0.72	0.00	0.00			
Avail Cap(c_a), veh/h	583	2037	0	0	1018	960	1360	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	27.7	8.1	0.0	0.0	15.1	15.1	18.7	0.0	0.0			
Incr Delay (d2), s/veh	2.7	0.1	0.0	0.0	2.5	2.6	4.3	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	1.7	0.0	0.0	5.5	5.2	4.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.4	8.2	0.0	0.0	17.5	17.7	23.0	0.0	0.0			
LnGrp LOS	C	A			B	B	C					
Approach Vol, veh/h		681			1085			337				
Approach Delay, s/veh		9.8			17.6			23.0				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		35.8			6.8	29.0		23.3				
Change Period (Y+Rc), s		4.6			4.0	4.6		6.0				
Max Green Setting (Gmax), s		35.0			20.0	35.0		50.0				
Max Q Clear Time (g_c+I1), s		8.3			3.6	18.7		13.1				
Green Ext Time (p_c), s		3.8			0.0	5.7		4.3				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.9									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	358	6	24	431	8	4	0	6	0	0	1
Future Vol, veh/h	7	358	6	24	431	8	4	0	6	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	250	-	-	-	-	-	-	-	-
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	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	8	389	7	26	468	9	4	0	7	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	477	0	0	396	0	0	695	938	198	736	937	239
Stage 1	-	-	-	-	-	-	409	409	-	525	525	-
Stage 2	-	-	-	-	-	-	286	529	-	211	412	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1034	-	-	1111	-	-	316	251	789	294	251	741
Stage 1	-	-	-	-	-	-	572	577	-	486	510	-
Stage 2	-	-	-	-	-	-	678	508	-	752	575	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1034	-	-	1111	-	-	308	243	789	285	243	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	308	243	-	285	243	-
Stage 1	-	-	-	-	-	-	567	572	-	482	498	-
Stage 2	-	-	-	-	-	-	661	496	-	740	570	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.2	0.4	12.6	9.9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	486	1034	-	-	1111	-	-	741
HCM Lane V/C Ratio	0.022	0.007	-	-	0.023	-	-	0.001
HCM Ctrl Dly (s/v)	12.6	8.5	-	-	8.3	-	-	9.9
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q (veh)	0.1	0	-	-	0.1	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	596	67	63	428	48	62	0	281	28	209	196
Future Volume (veh/h)	0	596	67	63	428	48	62	0	281	28	209	196
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	0	621	70	66	446	50	65	0	293	29	218	204
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	0	1288	444	202	1545	689	0	581	456	57	512	456
Arrive On Green	0.00	0.29	0.29	0.06	0.45	0.45	0.00	0.00	0.17	0.03	0.30	0.30
Sat Flow, veh/h	0	4781	1535	3346	3441	1535	0	3441	2701	1725	1722	1533
Grp Volume(v), veh/h	0	621	70	66	446	50	0	0	293	29	218	204
Grp Sat Flow(s),veh/h/ln	0	1485	1535	1673	1721	1535	0	1721	1351	1725	1721	1535
Q Serve(g_s), s	0.0	5.7	1.7	0.9	4.0	0.9	0.0	0.0	5.0	0.8	5.0	5.3
Cycle Q Clear(g_c), s	0.0	5.7	1.7	0.9	4.0	0.9	0.0	0.0	5.0	0.8	5.0	5.3
Prop In Lane	0.00		1.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1288	444	202	1545	689	0	581	456	57	512	456
V/C Ratio(X)	0.00	0.48	0.16	0.33	0.29	0.07	0.00	0.00	0.64	0.51	0.43	0.45
Avail Cap(c_a), veh/h	0	4521	1558	1019	3492	1558	0	2095	1645	525	1048	935
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.5	13.0	22.2	8.6	7.7	0.0	0.0	19.1	23.4	13.9	14.0
Incr Delay (d2), s/veh	0.0	0.4	0.2	1.0	0.1	0.1	0.0	0.0	2.0	7.6	0.8	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.5	0.5	0.4	1.2	0.2	0.0	0.0	1.4	0.4	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	14.9	13.3	23.2	8.7	7.8	0.0	0.0	21.1	31.0	14.8	15.0
LnGrp LOS		B	B	C	A	A			C	C	B	B
Approach Vol, veh/h		691			562			293			451	
Approach Delay, s/veh		14.7			10.4			21.1			15.9	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	7.9	20.2	0.0	21.2		28.1	6.3	14.8
Change Period (Y+Rc), s	4.9	* 6	4.7	6.5		6.0	4.7	* 6.5
Max Green Setting (Gmax), s	15.0	* 50	15.0	30.0		50.0	15.0	* 30
Max Q Clear Time (g_c+I1), s	2.9	7.7	0.0	7.3		6.0	2.8	7.0
Green Ext Time (p_c), s	0.1	6.6	0.0	3.4		5.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	159	411	54	217	322	24
Future Volume (veh/h)	159	411	54	217	322	24
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	167	433	57	228	339	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	1111	495	102	1681	696	319
Arrive On Green	0.33	0.33	0.06	0.49	0.21	0.21
Sat Flow, veh/h	3503	1522	1711	3503	3319	1522
Grp Volume(v), veh/h	167	433	57	228	339	25
Grp Sat Flow(s),veh/h/ln	1706	1522	1711	1706	1659	1522
Q Serve(g_s), s	1.3	10.0	1.2	1.4	3.4	0.5
Cycle Q Clear(g_c), s	1.3	10.0	1.2	1.4	3.4	0.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1111	495	102	1681	696	319
V/C Ratio(X)	0.15	0.87	0.56	0.14	0.49	0.08
Avail Cap(c_a), veh/h	2289	1021	688	2289	1781	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	11.9	17.0	5.1	13.0	11.8
Incr Delay (d2), s/veh	0.0	1.9	1.8	0.0	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.3	0.4	0.2	1.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.9	13.8	18.8	5.2	13.2	11.9
LnGrp LOS	A	B	B	A	B	B
Approach Vol, veh/h	600			285	364	
Approach Delay, s/veh	12.4			7.9	13.1	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.2	18.3			24.6	12.7
Change Period (Y+Rc), s	4.0	* 6.2			6.2	4.9
Max Green Setting (Gmax), s	15.0	* 25			25.0	20.0
Max Q Clear Time (g_c+I1), s	3.3	12.0			3.4	5.4
Green Ext Time (p_c), s	0.0	0.1			0.2	0.2

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		11.6
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

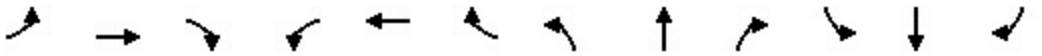
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	367	9	0	436	0	4
Future Vol, veh/h	367	9	0	436	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	399	10	0	474	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	205
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.36
Pot Cap-1 Maneuver	-	-	0	-	0	789
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	789
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	789	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	313	52	224	314	0	0	0	0	329	8	57
Future Volume (veh/h)	0	313	52	224	314	0	0	0	0	329	8	57
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1811	1811	1811	1811	0				1811	1811	1811
Adj Flow Rate, veh/h	0	329	55	236	331	0				346	8	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	6	6	6	6	0				6	6	6
Cap, veh/h	0	838	136	287	797	0				500	12	87
Arrive On Green	0.00	0.20	0.20	0.17	0.44	0.00				0.35	0.35	0.35
Sat Flow, veh/h	0	4449	696	1725	1811	0				1417	33	246
Grp Volume(v), veh/h	0	251	133	236	331	0				414	0	0
Grp Sat Flow(s),veh/h/ln	0	1648	1686	1725	1811	0				1696	0	0
Q Serve(g_s), s	0.0	3.4	3.5	6.8	6.4	0.0				10.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.4	3.5	6.8	6.4	0.0				10.7	0.0	0.0
Prop In Lane	0.00		0.41	1.00		0.00				0.84		0.14
Lane Grp Cap(c), veh/h	0	644	330	287	797	0				598	0	0
V/C Ratio(X)	0.00	0.39	0.40	0.82	0.42	0.00				0.69	0.00	0.00
Avail Cap(c_a), veh/h	0	2255	1153	674	1239	0				1658	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.9	18.0	20.6	9.8	0.0				14.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.7	2.2	0.3	0.0				3.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	1.3	2.4	1.8	0.0				3.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	18.3	18.7	22.8	10.1	0.0				17.2	0.0	0.0
LnGrp LOS		B	B	C	B					B		
Approach Vol, veh/h		384			567						414	
Approach Delay, s/veh		18.4			15.4						17.2	
Approach LOS		B			B						B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	12.5	14.6		24.0		27.1
Change Period (Y+Rc), s	4.0	4.6		6.0		4.6
Max Green Setting (Gmax), s	20.0	35.0		50.0		35.0
Max Q Clear Time (g_c+I1), s	8.8	5.5		12.7		8.4
Green Ext Time (p_c), s	0.1	2.4		5.4		1.6

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	16.8
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	598	0	0	477	332	61	7	390	0	0	0
Future Volume (veh/h)	44	598	0	0	477	332	61	7	390	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1811	1811	0	0	1811	1811	1811	1811	1811			
Adj Flow Rate, veh/h	46	629	0	0	502	349	64	7	411			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	6	6	0	0	6	6	6	6	6			
Cap, veh/h	75	1507	0	0	646	449	83	9	531			
Arrive On Green	0.04	0.44	0.00	0.00	0.33	0.33	0.40	0.40	0.40			
Sat Flow, veh/h	1725	3532	0	0	2032	1347	207	23	1331			
Grp Volume(v), veh/h	46	629	0	0	445	406	482	0	0			
Grp Sat Flow(s),veh/h/ln	1725	1721	0	0	1721	1569	1561	0	0			
Q Serve(g_s), s	1.7	8.2	0.0	0.0	15.1	15.2	17.5	0.0	0.0			
Cycle Q Clear(g_c), s	1.7	8.2	0.0	0.0	15.1	15.2	17.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.86	0.13		0.85			
Lane Grp Cap(c), veh/h	75	1507	0	0	573	522	623	0	0			
V/C Ratio(X)	0.61	0.42	0.00	0.00	0.78	0.78	0.77	0.00	0.00			
Avail Cap(c_a), veh/h	530	1852	0	0	926	844	1200	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	30.6	12.6	0.0	0.0	19.5	19.5	17.0	0.0	0.0			
Incr Delay (d2), s/veh	3.0	0.2	0.0	0.0	2.1	2.3	4.4	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	2.6	0.0	0.0	5.4	5.0	5.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.6	12.7	0.0	0.0	21.6	21.8	21.4	0.0	0.0			
LnGrp LOS	C	B			C	C	C					
Approach Vol, veh/h		675			851			482				
Approach Delay, s/veh		14.2			21.7			21.4				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		33.1			6.8	26.3		32.0				
Change Period (Y+Rc), s		4.6			4.0	4.6		6.0				
Max Green Setting (Gmax), s		35.0			20.0	35.0		50.0				
Max Q Clear Time (g_c+I1), s		10.2			3.7	17.2		19.5				
Green Ext Time (p_c), s		3.7			0.0	4.5		6.5				
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			19.1									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	704	1	4	488	0	10	0	11	0	0	0
Future Vol, veh/h	0	704	1	4	488	0	10	0	11	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	250	-	-	-	-	-	-	-	-
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	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	0	765	1	4	530	0	11	0	12	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	530	0	0	766	0	0	1039	1304	383	921	1304	265
Stage 1	-	-	-	-	-	-	766	766	-	538	538	-
Stage 2	-	-	-	-	-	-	273	538	-	383	766	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	986	-	-	799	-	-	176	150	596	215	150	713
Stage 1	-	-	-	-	-	-	346	394	-	477	503	-
Stage 2	-	-	-	-	-	-	690	503	-	593	394	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	986	-	-	799	-	-	175	149	596	210	149	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	175	149	-	210	149	-
Stage 1	-	-	-	-	-	-	346	394	-	477	500	-
Stage 2	-	-	-	-	-	-	687	500	-	581	394	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.1	19.1	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	278	986	-	-	799	-	-	-
HCM Lane V/C Ratio	0.082	-	-	-	0.005	-	-	-
HCM Ctrl Dly (s/v)	19.1	0	-	-	9.5	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q (veh)	0.3	0	-	-	0	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	713	105	83	504	40	125	0	365	84	311	292
Future Volume (veh/h)	0	713	105	83	504	40	125	0	365	84	311	292
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	0	743	109	86	525	42	130	0	380	88	324	304
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	0	1375	474	212	1559	695	0	675	530	114	585	522
Arrive On Green	0.00	0.31	0.31	0.06	0.45	0.45	0.00	0.00	0.20	0.07	0.34	0.34
Sat Flow, veh/h	0	4781	1535	3346	3441	1535	0	3441	2701	1725	1721	1535
Grp Volume(v), veh/h	0	743	109	86	525	42	0	0	380	88	324	304
Grp Sat Flow(s),veh/h/ln	0	1485	1535	1673	1721	1535	0	1721	1351	1725	1721	1535
Q Serve(g_s), s	0.0	8.4	3.2	1.5	5.9	0.9	0.0	0.0	7.9	3.0	9.2	9.8
Cycle Q Clear(g_c), s	0.0	8.4	3.2	1.5	5.9	0.9	0.0	0.0	7.9	3.0	9.2	9.8
Prop In Lane	0.00		1.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1375	474	212	1559	695	0	675	530	114	585	522
V/C Ratio(X)	0.00	0.54	0.23	0.41	0.34	0.06	0.00	0.00	0.72	0.77	0.55	0.58
Avail Cap(c_a), veh/h	0	3689	1271	831	2849	1271	0	1709	1342	428	855	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.3	15.5	27.2	10.7	9.3	0.0	0.0	22.7	27.8	16.2	16.4
Incr Delay (d2), s/veh	0.0	0.5	0.3	1.4	0.2	0.0	0.0	0.0	2.4	11.8	1.2	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	1.0	0.6	2.0	0.3	0.0	0.0	2.4	1.5	3.2	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	17.8	15.9	28.6	10.8	9.3	0.0	0.0	25.1	39.5	17.4	17.9
LnGrp LOS		B	B	C	B	A			C	D	B	B
Approach Vol, veh/h		852			653			380			716	
Approach Delay, s/veh		17.5			13.1			25.1			20.3	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	8.7	24.6	0.0	27.0		33.4	8.7	18.3				
Change Period (Y+Rc), s	4.9	* 6	4.7	6.5		6.0	4.7	* 6.5				
Max Green Setting (Gmax), s	15.0	* 50	15.0	30.0		50.0	15.0	* 30				
Max Q Clear Time (g_c+I1), s	3.5	10.4	0.0	11.8		7.9	5.0	9.9				
Green Ext Time (p_c), s	0.2	8.3	0.0	5.0		5.9	0.1	1.9				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		18.3
HCM 6th LOS		B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	324	453	56	250	377	43
Future Volume (veh/h)	324	453	56	250	377	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	341	477	59	263	397	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	1205	537	103	1759	671	308
Arrive On Green	0.35	0.35	0.06	0.52	0.20	0.20
Sat Flow, veh/h	3503	1522	1711	3503	3319	1522
Grp Volume(v), veh/h	341	477	59	263	397	45
Grp Sat Flow(s),veh/h/ln	1706	1522	1711	1706	1659	1522
Q Serve(g_s), s	2.8	11.6	1.3	1.6	4.3	1.0
Cycle Q Clear(g_c), s	2.8	11.6	1.3	1.6	4.3	1.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1205	537	103	1759	671	308
V/C Ratio(X)	0.28	0.89	0.57	0.15	0.59	0.15
Avail Cap(c_a), veh/h	2172	969	653	2172	1690	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.1	12.0	18.0	5.0	14.2	12.9
Incr Delay (d2), s/veh	0.0	2.0	1.8	0.0	0.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.7	0.5	0.3	1.3	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.2	14.0	19.8	5.0	14.5	13.0
LnGrp LOS	A	B	B	A	B	B
Approach Vol, veh/h	818			322	442	
Approach Delay, s/veh	12.0			7.7	14.4	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.4	20.1			26.4	12.8
Change Period (Y+Rc), s	4.0	* 6.2			6.2	4.9
Max Green Setting (Gmax), s	15.0	* 25			25.0	20.0
Max Q Clear Time (g_c+I1), s	3.3	13.6			3.6	6.3
Green Ext Time (p_c), s	0.0	0.3			0.3	0.3

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		11.8
HCM 6th LOS		B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

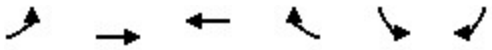
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	699	1	0	498	0	6
Future Vol, veh/h	699	1	0	498	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	760	1	0	541	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	381
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.36
Pot Cap-1 Maneuver	-	-	0	-	0	606
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	606
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	606	-	-	-
HCM Lane V/C Ratio	0.011	-	-	-
HCM Ctrl Dly (s/v)	11	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q (veh)	0	-	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3575	2620	350	264	970
Future Volume (vph)	0	3575	2620	350	264	970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6	4.6	6.0	6.0
Lane Util. Factor		0.91	0.86	0.86	0.97	0.88
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		4893	4615	1310	3303	2682
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		4893	4615	1310	3303	2682
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	3763	2758	368	278	1021
RTOR Reduction (vph)	0	0	1	84	0	1
Lane Group Flow (vph)	0	3763	2794	247	278	1020
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Turn Type		NA	NA	Perm	Prot	custom
Protected Phases		2	6		7	5 7
Permitted Phases				6		
Actuated Green, G (s)		122.9	84.4	84.4	16.5	55.0
Effective Green, g (s)		122.9	84.4	84.4	16.5	55.0
Actuated g/C Ratio		0.82	0.56	0.56	0.11	0.37
Clearance Time (s)		4.6	4.6	4.6	6.0	
Vehicle Extension (s)		2.8	2.8	2.8	5.0	
Lane Grp Cap (vph)		4008	2596	737	363	983
v/s Ratio Prot		0.77	c0.61		0.08	c0.38
v/s Ratio Perm				0.19		
v/c Ratio		0.94	1.08	0.34	0.77	1.04
Uniform Delay, d1		10.6	32.8	17.7	64.9	47.5
Progression Factor		1.00	0.67	0.69	1.00	1.00
Incremental Delay, d2		5.7	35.2	0.1	10.9	38.8
Delay (s)		16.3	57.1	12.3	75.8	86.3
Level of Service		B	E	B	E	F
Approach Delay (s/veh)		16.3	52.3		84.1	
Approach LOS		B	D		F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	96.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	2069	0	0	1850	490	1120	5	193	0	0	0
Future Volume (veh/h)	320	2069	0	0	1850	490	1120	5	193	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1811	1811	0	0	1811	1811	1811	1811	1811			
Adj Flow Rate, veh/h	337	2178	0	0	1947	259	1183	0	171			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	6	6	0	0	6	6	6	6	6			
Cap, veh/h	709	2588	0	0	1845	782	1113	0	990			
Arrive On Green	0.42	1.00	0.00	0.00	0.51	0.51	0.32	0.00	0.32			
Sat Flow, veh/h	3346	3532	0	0	3622	1535	3450	0	3070			
Grp Volume(v), veh/h	337	2178	0	0	1947	259	1183	0	171			
Grp Sat Flow(s),veh/h/ln	1673	1721	0	0	1811	1535	1725	0	1535			
Q Serve(g_s), s	10.9	0.0	0.0	0.0	76.4	14.9	48.4	0.0	6.0			
Cycle Q Clear(g_c), s	10.9	0.0	0.0	0.0	76.4	14.9	48.4	0.0	6.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	709	2588	0	0	1845	782	1113	0	990			
V/C Ratio(X)	0.48	0.84	0.00	0.00	1.06	0.33	1.06	0.00	0.17			
Avail Cap(c_a), veh/h	709	2588	0	0	1845	782	1113	0	990			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	37.2	0.0	0.0	0.0	36.8	21.7	50.8	0.0	36.4			
Incr Delay (d2), s/veh	0.2	3.5	0.0	0.0	37.3	1.1	45.3	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.9	1.3	0.0	0.0	41.3	5.5	27.3	0.0	2.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.4	3.5	0.0	0.0	74.1	22.9	96.1	0.0	36.5			
LnGrp LOS	D	A			F	C	F		D			
Approach Vol, veh/h		2515			2206			1354				
Approach Delay, s/veh		8.1			68.1			88.6				
Approach LOS		A			E			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		118.0			37.0	81.0		53.0				
Change Period (Y+Rc), s		4.6			4.6	* 4.6		4.6				
Max Green Setting (Gmax), s		92.4			12.0	* 76		48.4				
Max Q Clear Time (g_c+I1), s		2.0			12.9	78.4		50.4				
Green Ext Time (p_c), s		36.1			0.0	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	47.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1334	5	25	1560	20	7	0	10	5	0	5
Future Vol, veh/h	17	1334	5	25	1560	20	7	0	10	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	250	-	-	-	-	-	-	-	-
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	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	18	1450	5	27	1696	22	8	0	11	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1718	0	0	1455	0	0	2391	3261	728	2522	3252	859
Stage 1	-	-	-	-	-	-	1489	1489	-	1761	1761	-
Stage 2	-	-	-	-	-	-	902	1772	-	761	1491	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	335	-	-	427	-	-	16	8	351	13	8	286
Stage 1	-	-	-	-	-	-	121	174	-	81	127	-
Stage 2	-	-	-	-	-	-	285	125	-	349	174	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	335	-	-	427	-	-	14	7	351	12	7	286
Mov Cap-2 Maneuver	-	-	-	-	-	-	14	7	-	12	7	-
Stage 1	-	-	-	-	-	-	114	165	-	77	119	-
Stage 2	-	-	-	-	-	-	262	117	-	320	165	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.2	0.2	218.1	260.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	32	335	-	-	427	-	-	23
HCM Lane V/C Ratio	0.577	0.055	-	-	0.064	-	-	0.473
HCM Ctrl Dly (s/v)	218.1	16.4	-	-	14	-	-	260.5
HCM Lane LOS	F	C	-	-	B	-	-	F
HCM 95th %tile Q (veh)	1.9	0.2	-	-	0.2	-	-	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1018	180	130	1030	50	90	0	330	40	410	350
Future Volume (veh/h)	0	1018	180	130	1030	50	90	0	330	40	410	350
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	0	1060	69	135	1073	23	94	0	142	42	427	340
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	0	2345	808	186	2132	951	0	224	176	306	519	411
Arrive On Green	0.00	0.53	0.53	0.06	0.62	0.62	0.00	0.00	0.07	0.18	0.28	0.28
Sat Flow, veh/h	0	4781	1535	3346	3441	1535	0	3441	2701	1725	1826	1445
Grp Volume(v), veh/h	0	1060	69	135	1073	23	0	0	142	42	402	365
Grp Sat Flow(s),veh/h/ln	0	1485	1535	1673	1721	1535	0	1721	1351	1725	1721	1551
Q Serve(g_s), s	0.0	19.2	2.9	5.2	22.4	0.8	0.0	0.0	5.8	2.7	28.4	28.6
Cycle Q Clear(g_c), s	0.0	19.2	2.9	5.2	22.4	0.8	0.0	0.0	5.8	2.7	28.4	28.6
Prop In Lane	0.00		1.00	1.00		1.00	0.00		1.00	1.00		0.93
Lane Grp Cap(c), veh/h	0	2345	808	186	2132	951	0	224	176	306	489	441
V/C Ratio(X)	0.00	0.45	0.09	0.73	0.50	0.02	0.00	0.00	0.81	0.14	0.82	0.83
Avail Cap(c_a), veh/h	0	2345	808	260	2132	951	0	1236	970	306	655	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.1	15.3	60.4	13.7	9.5	0.0	0.0	43.9	45.1	43.5	43.5
Incr Delay (d2), s/veh	0.0	0.6	0.2	6.7	0.9	0.0	0.0	0.0	10.7	0.2	7.4	8.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	1.0	2.4	8.7	0.2	0.0	0.0	2.5	1.1	12.7	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	19.8	15.5	67.1	14.5	9.6	0.0	0.0	54.6	45.3	50.9	52.0
LnGrp LOS		B	B	E	B	A			D	D	D	D
Approach Vol, veh/h		1129			1231			142			809	
Approach Delay, s/veh		19.5			20.2			54.6			51.1	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	12.1	74.4	0.0	43.4		86.6	29.6	13.9				
Change Period (Y+Rc), s	4.9	* 6	4.7	6.5		6.0	6.5	* 5.4				
Max Green Setting (Gmax), s	10.1	* 44	5.0	49.5		58.3	8.9	* 47				
Max Q Clear Time (g_c+I1), s	7.2	21.2	0.0	30.6		24.4	4.7	7.8				
Green Ext Time (p_c), s	0.1	9.9	0.0	6.3		13.4	0.0	0.7				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		29.0	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	220	641	60	279	931	40
Future Volume (veh/h)	220	641	60	279	931	40
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	232	234	63	294	980	13
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	621	277	405	1733	1067	489
Arrive On Green	0.18	0.18	0.24	0.51	0.32	0.32
Sat Flow, veh/h	3503	1522	1711	3503	3319	1522
Grp Volume(v), veh/h	232	234	63	294	980	13
Grp Sat Flow(s),veh/h/ln	1706	1522	1711	1706	1659	1522
Q Serve(g_s), s	3.9	9.7	1.9	3.0	18.5	0.4
Cycle Q Clear(g_c), s	3.9	9.7	1.9	3.0	18.5	0.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	621	277	405	1733	1067	489
V/C Ratio(X)	0.37	0.84	0.16	0.17	0.92	0.03
Avail Cap(c_a), veh/h	1134	506	405	1733	1185	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	25.7	19.7	8.6	21.2	15.1
Incr Delay (d2), s/veh	1.7	25.8	0.1	0.2	10.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.1	0.7	0.9	8.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.0	51.5	19.7	8.8	31.4	15.1
LnGrp LOS	C	D	B	A	C	B
Approach Vol, veh/h	466			357	993	
Approach Delay, s/veh	38.3			10.8	31.2	
Approach LOS	D			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	31.6	17.6			39.2	25.8
Change Period (Y+Rc), s	6.2	* 5.8			6.2	4.9
Max Green Setting (Gmax), s	25.5	* 22			30.7	23.2
Max Q Clear Time (g_c+I1), s	13.9	11.7			5.0	20.5
Green Ext Time (p_c), s	0.0	0.2			0.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	29.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

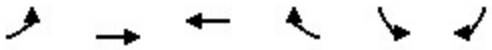
Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1347	18	0	1572	0	9
Future Vol, veh/h	1347	18	0	1572	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	1464	20	0	1709	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	742
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.36
Pot Cap-1 Maneuver	-	-	0	-	0	349
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	349
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	349	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-
HCM Ctrl Dly (s/v)	15.6	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q (veh)	0.1	-	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	4210	2773	224	302	740
Future Volume (vph)	0	4210	2773	224	302	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6	4.6	4.6	6.0	6.0
Lane Util. Factor		0.91	0.86	0.86	0.97	0.88
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		4893	4619	1310	3303	2682
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		4893	4619	1310	3303	2682
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	4432	2919	236	318	779
RTOR Reduction (vph)	0	0	0	50	0	2
Lane Group Flow (vph)	0	4432	2943	162	318	777
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%
Turn Type		NA	NA	Perm	Prot	custom
Protected Phases		2	6		7	5 7
Permitted Phases				6		
Actuated Green, G (s)		123.4	95.4	95.4	16.0	44.0
Effective Green, g (s)		123.4	95.4	95.4	16.0	44.0
Actuated g/C Ratio		0.82	0.64	0.64	0.11	0.29
Clearance Time (s)		4.6	4.6	4.6	6.0	
Vehicle Extension (s)		2.8	2.8	2.8	5.0	
Lane Grp Cap (vph)		4025	2937	833	352	786
v/s Ratio Prot		c0.91	0.64		0.10	c0.29
v/s Ratio Perm				0.12		
v/c Ratio		1.10	1.00	0.19	0.90	0.99
Uniform Delay, d1		13.3	27.3	11.3	66.2	52.7
Progression Factor		1.00	0.58	0.57	1.00	1.00
Incremental Delay, d2		49.9	5.4	0.0	26.7	29.1
Delay (s)		63.2	21.4	6.5	92.9	81.8
Level of Service		E	C	A	F	F
Approach Delay (s/veh)		63.2	20.4		85.0	
Approach LOS		E	C		F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	2332	0	0	1727	553	1270	10	390	0	0	0
Future Volume (veh/h)	370	2332	0	0	1727	553	1270	10	390	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1811	1811	0	0	1811	1811	1811	1811	1811			
Adj Flow Rate, veh/h	389	2455	0	0	1818	325	1345	0	379			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	6	6	0	0	6	6	6	6	6			
Cap, veh/h	732	2473	0	0	1700	720	1228	0	1093			
Arrive On Green	0.44	1.00	0.00	0.00	0.47	0.47	0.36	0.00	0.36			
Sat Flow, veh/h	3346	3532	0	0	3622	1535	3450	0	3070			
Grp Volume(v), veh/h	389	2455	0	0	1818	325	1345	0	379			
Grp Sat Flow(s),veh/h/ln	1673	1721	0	0	1811	1535	1725	0	1535			
Q Serve(g_s), s	12.8	0.0	0.0	0.0	70.4	21.4	53.4	0.0	13.6			
Cycle Q Clear(g_c), s	12.8	0.0	0.0	0.0	70.4	21.4	53.4	0.0	13.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	732	2473	0	0	1700	720	1228	0	1093			
V/C Ratio(X)	0.53	0.99	0.00	0.00	1.07	0.45	1.10	0.00	0.35			
Avail Cap(c_a), veh/h	732	2473	0	0	1700	720	1228	0	1093			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	36.6	0.0	0.0	0.0	39.8	26.8	48.3	0.0	35.5			
Incr Delay (d2), s/veh	0.4	16.5	0.0	0.0	43.1	2.0	55.8	0.0	0.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.5	5.7	0.0	0.0	39.9	8.0	31.7	0.0	5.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.0	16.5	0.0	0.0	82.9	28.8	104.1	0.0	35.6			
LnGrp LOS	D	B			F	C	F		D			
Approach Vol, veh/h		2844			2143			1724				
Approach Delay, s/veh		19.3			74.7			89.0				
Approach LOS		B			E			F				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		113.0			38.0	75.0		58.0				
Change Period (Y+Rc), s		4.6			4.6	* 4.6		4.6				
Max Green Setting (Gmax), s		87.4			13.0	* 70		53.4				
Max Q Clear Time (g_c+I1), s		2.0			14.8	72.4		55.4				
Green Ext Time (p_c), s		47.1			0.0	0.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	54.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	15.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1785	5	12	1565	5	18	0	12	5	0	5
Future Vol, veh/h	5	1785	5	12	1565	5	18	0	12	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	250	-	-	-	-	-	-	-	-
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	9	9	9	9	9	9	9	9	9	9	9
Mvmt Flow	5	1940	5	13	1701	5	20	0	13	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1706	0	0	1945	0	0	2830	3685	973	2710	3685	853
Stage 1	-	-	-	-	-	-	1953	1953	-	1730	1730	-
Stage 2	-	-	-	-	-	-	877	1732	-	980	1955	-
Critical Hdwy	4.28	-	-	4.28	-	-	7.68	6.68	7.08	7.68	6.68	7.08
Critical Hdwy Stg 1	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.68	5.68	-	6.68	5.68	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	339	-	-	271	-	-	~ 7	4	239	9	4	289
Stage 1	-	-	-	-	-	-	61	101	-	85	131	-
Stage 2	-	-	-	-	-	-	296	131	-	255	100	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	339	-	-	271	-	-	~ 7	4	239	8	4	289
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 7	4	-	8	4	-
Stage 1	-	-	-	-	-	-	60	99	-	84	125	-
Stage 2	-	-	-	-	-	-	277	125	-	238	99	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.1	$ 1569.2	$ 429.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	11	339	-	-	271	-	-	16
HCM Lane V/C Ratio	2.964	0.016	-	-	0.048	-	-	0.679
HCM Ctrl Dly (s/v)	$ 1569.2	15.8	-	-	19	-	-	$ 429.9
HCM Lane LOS	F	C	-	-	C	-	-	F
HCM 95th %tile Q (veh)	5.1	0	-	-	0.2	-	-	1.7

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1158	141	80	1147	45	200	0	420	90	320	361
Future Volume (veh/h)	0	1158	141	80	1147	45	200	0	420	90	320	361
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	0	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	0	1206	28	83	1195	18	208	0	236	94	333	351
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	0	2467	850	128	2167	967	0	344	270	229	471	420
Arrive On Green	0.00	0.55	0.55	0.04	0.63	0.63	0.00	0.00	0.10	0.13	0.27	0.27
Sat Flow, veh/h	0	4781	1535	3346	3441	1535	0	3441	2701	1725	1721	1535
Grp Volume(v), veh/h	0	1206	28	83	1195	18	0	0	236	94	333	351
Grp Sat Flow(s),veh/h/ln	0	1485	1535	1673	1721	1535	0	1721	1351	1725	1721	1535
Q Serve(g_s), s	0.0	21.5	1.1	3.2	25.6	0.6	0.0	0.0	9.7	6.5	22.7	28.0
Cycle Q Clear(g_c), s	0.0	21.5	1.1	3.2	25.6	0.6	0.0	0.0	9.7	6.5	22.7	28.0
Prop In Lane	0.00		1.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2467	850	128	2167	967	0	344	270	229	471	420
V/C Ratio(X)	0.00	0.49	0.03	0.65	0.55	0.02	0.00	0.00	0.87	0.41	0.71	0.83
Avail Cap(c_a), veh/h	0	2467	850	234	2167	967	0	1154	906	229	651	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.7	13.2	61.6	13.6	9.0	0.0	0.0	43.6	51.7	42.5	44.4
Incr Delay (d2), s/veh	0.0	0.7	0.1	6.0	1.0	0.0	0.0	0.0	10.9	1.3	3.0	8.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.1	0.4	1.5	9.9	0.2	0.0	0.0	3.6	2.8	9.7	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	18.4	13.3	67.7	14.7	9.0	0.0	0.0	54.5	53.1	45.5	53.3
LnGrp LOS		B	B	E	B	A			D	D	D	D
Approach Vol, veh/h		1234			1296			236			778	
Approach Delay, s/veh		18.3			18.0			54.5			49.9	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s	9.9	78.0	0.0	42.1		87.9	23.7	18.4				
Change Period (Y+Rc), s	4.9	* 6	4.7	6.5		6.0	6.5	* 5.4				
Max Green Setting (Gmax), s	9.1	* 42	7.6	49.2		56.0	14.3	* 44				
Max Q Clear Time (g_c+I1), s	5.2	23.5	0.0	30.0		27.6	8.5	11.7				
Green Ext Time (p_c), s	0.1	10.0	0.0	5.6		14.1	0.1	1.2				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	27.5
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	363	763	60	340	932	50
Future Volume (veh/h)	363	763	60	340	932	50
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	382	362	63	358	981	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	901	402	264	1732	1068	490
Arrive On Green	0.26	0.26	0.15	0.51	0.32	0.32
Sat Flow, veh/h	3503	1522	1711	3503	3319	1522
Grp Volume(v), veh/h	382	362	63	358	981	24
Grp Sat Flow(s),veh/h/ln	1706	1522	1711	1706	1659	1522
Q Serve(g_s), s	6.0	14.9	2.1	3.8	18.5	0.7
Cycle Q Clear(g_c), s	6.0	14.9	2.1	3.8	18.5	0.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	901	402	264	1732	1068	490
V/C Ratio(X)	0.42	0.90	0.24	0.21	0.92	0.05
Avail Cap(c_a), veh/h	1134	506	264	1732	1185	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	23.1	24.1	8.8	21.2	15.2
Incr Delay (d2), s/veh	1.5	25.7	0.2	0.3	10.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.5	0.8	1.1	8.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.3	48.8	24.3	9.1	31.4	15.2
LnGrp LOS	C	D	C	A	C	B
Approach Vol, veh/h	744			421	1005	
Approach Delay, s/veh	34.7			11.4	31.0	
Approach LOS	C			B	C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	16.2	23.0			39.2	25.8
Change Period (Y+Rc), s	6.2	* 5.8			6.2	4.9
Max Green Setting (Gmax), s	5.5	* 22			30.7	23.2
Max Q Clear Time (g_c+I1), s	14.1	16.9			5.8	20.5
Green Ext Time (p_c), s	0.0	0.2			0.4	0.4

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		28.4
HCM 6th LOS		C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1785	12	0	1588	0	10
Future Vol, veh/h	1785	12	0	1588	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	1940	13	0	1726	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	977
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.02
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.36
Pot Cap-1 Maneuver	-	-	0	-	0	243
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	243
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	20.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	243	-	-	-
HCM Lane V/C Ratio	0.045	-	-	-
HCM Ctrl Dly (s/v)	20.5	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q (veh)	0.1	-	-	-

Fehr & Peers

Major Street	Lathrop Rd
Minor Street	D St

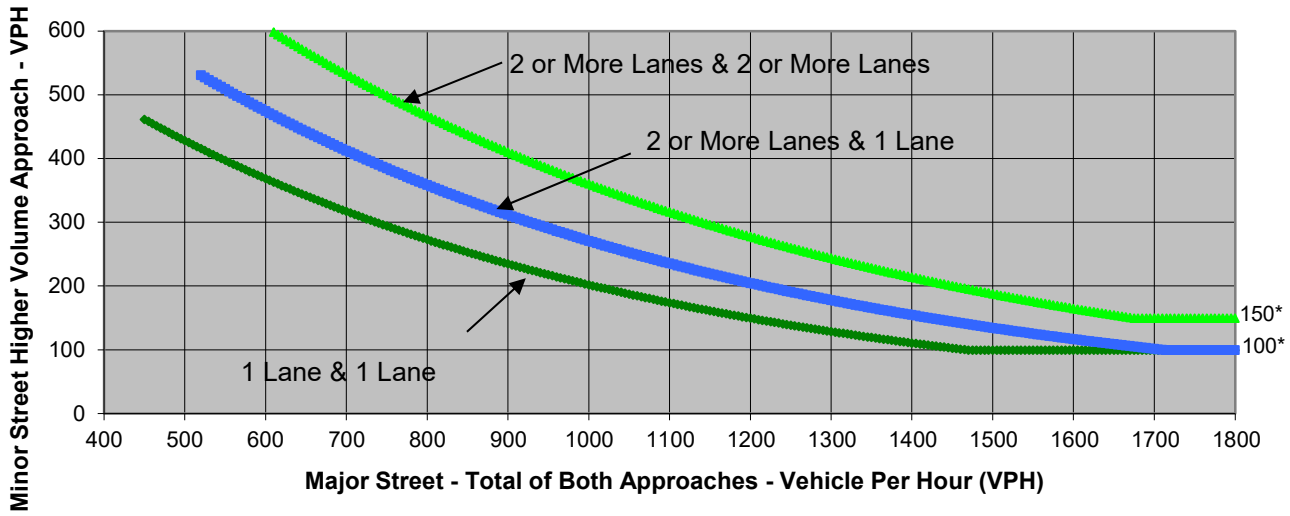
Project	Lathrop Scannell IS/MND, Jifco Inc.
Scenario	Cumulative Plus Project Conditions
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	6	5	17	25
Through	0	0	1334	1560
Right	10	5	5	20
Total	16	10	1,356	1,605

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Lathrop Rd	D St	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**2,961**	**16**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Project	Lathrop Scannell IS/MND, Jifco Inc.
Scenario	Cumulative Plus Project Conditions
Peak Hour	AM

Major Street	Lathrop Rd
Minor Street	D St

Turn Movement Volumes

	NB	SB	EB	WB
Left	6	5	17	25
Through	0	0	1,334	1,560
Right	10	5	5	20
Total	16	10	1,356	1,605

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	298.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	10

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	**Peak Hour Volume on Minor Approach (vph)**	**Peak Hour Entering Volume Serviced (vph)**
Cumulative Plus Project Conditions	**0.8**	**16**	**2,987**
Limiting Value	**4**	**100**	**800**
Condition Satisfied?	**Not Met**	**Not Met**	**Met**
Warrant Met	**NO**		

Fehr & Peers

Major Street	Lathrop Rd
Minor Street	D St

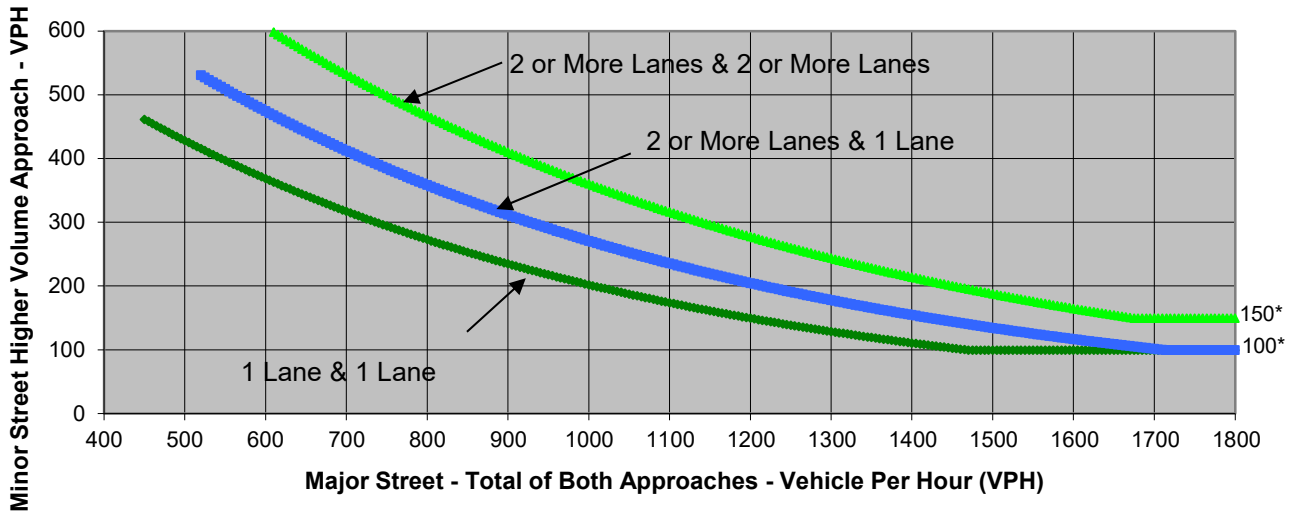
Project	Lathrop Scannell IS/MND, Jifco Inc.
Scenario	Cumulative Plus Project Conditions
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	18	5	5	12
Through	0	0	1785	1565
Right	12	5	5	5
Total	30	10	1,795	1,582

Major Street Direction

	North/South
x	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Lathrop Rd	D St	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**3,377**	**30**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

Fehr & Peers

Project	Lathrop Scannell IS/MND, Jifco Inc.
Scenario	Cumulative Plus Project Conditions
Peak Hour	PM

Major Street	Lathrop Rd
Minor Street	D St

Turn Movement Volumes

	NB	SB	EB	WB
Left	18	5	5	12
Through	0	0	1,785	1,565
Right	12	5	5	5
Total	30	10	1,795	1,582

Major Street Direction

	North/South
x	East/West

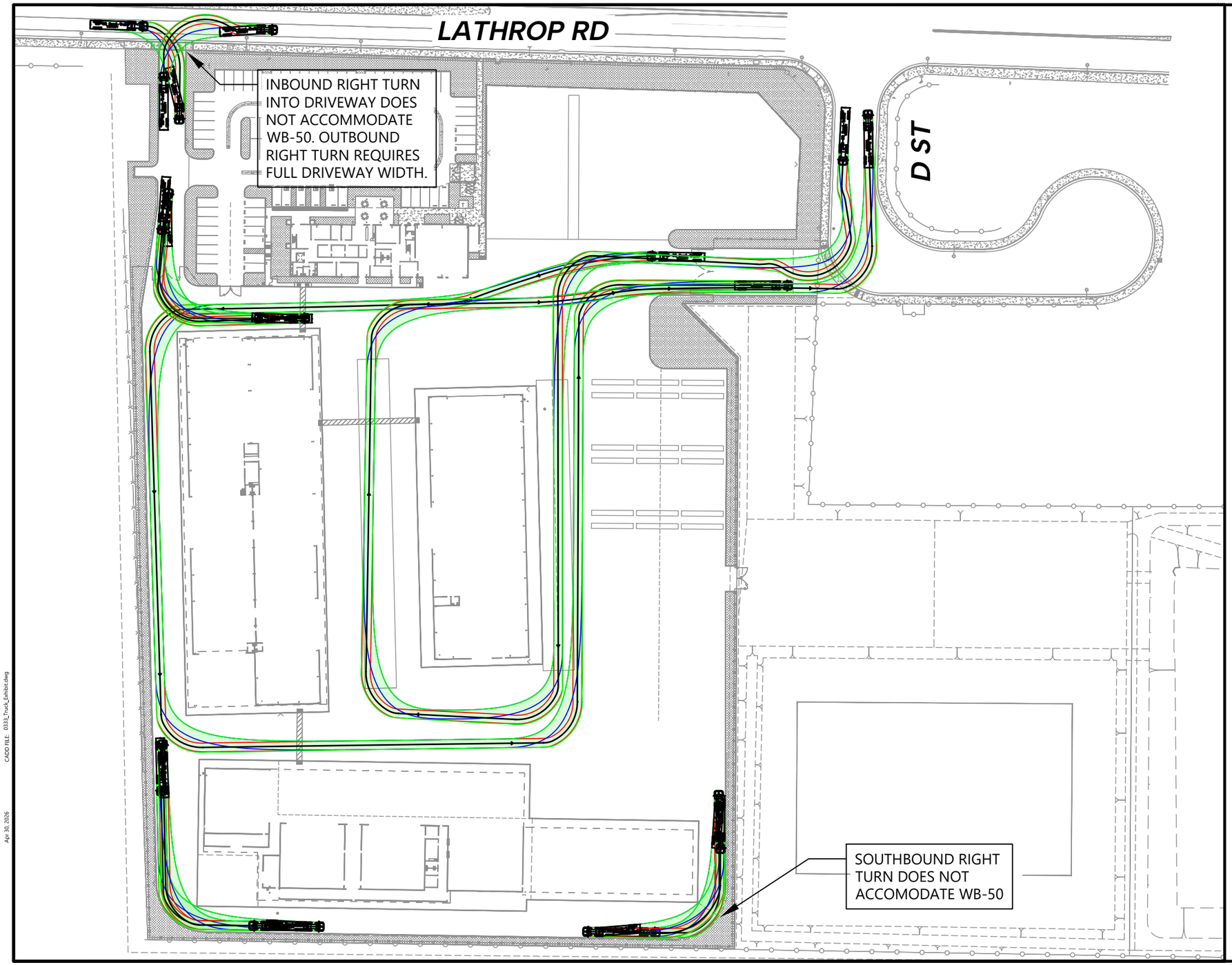
Intersection Geometry

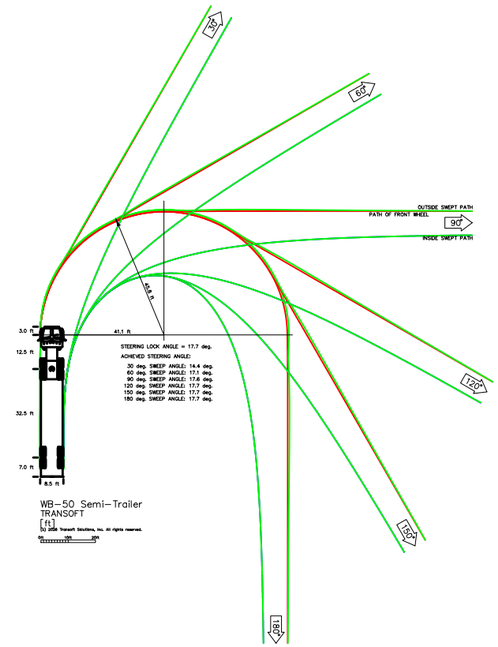
Number of Approach Lanes for Minor Street	1
Total Approaches	4

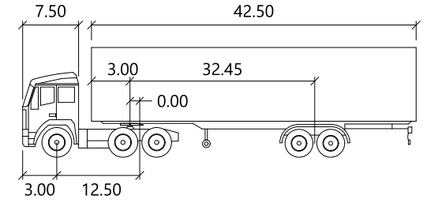
Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	1605
Approach with Worst Case Delay	NB
Total Vehicles on Approach	30

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	**Peak Hour Volume on Minor Approach (vph)**	**Peak Hour Entering Volume Serviced (vph)**
Cumulative Plus Project Conditions	**13.4**	**30**	**3,417**
Limiting Value	**4**	**100**	**800**
Condition Satisfied?	**Met**	**Not Met**	**Met**
Warrant Met	**NO**		

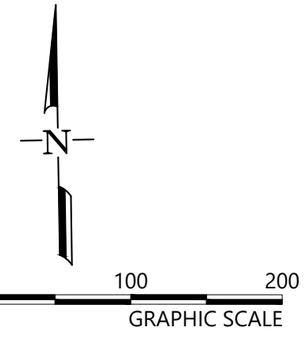






WB-50 Semi-Trailer

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 17.7
Tractor Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		



CADD FILE: 0333_Truck_Exhibit.dwg

Apr 30, 2026

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

TRUCK TURN ENVELOPES
WB-50 SEMI-TRUCK

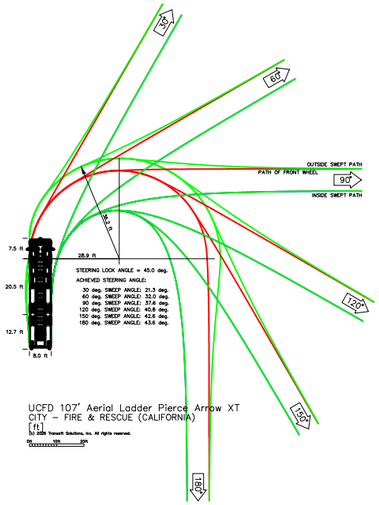
Exhibit A

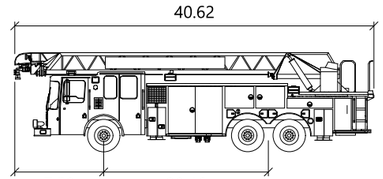
LATHROP RD

DST

NOTE:

FIRE LANES NOT HIGHLIGHTED IN THIS ANALYSIS.





UCFD 107' Aerial Ladder Pierce Arrow XT

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

N

100 0 100 200

1"=100' GRAPHIC SCALE

CADD FILE: 0333_Truck_Exhibit.dwg

Apr 30, 2026

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

TRUCK TURN ENVELOPES FIRE TRUCK

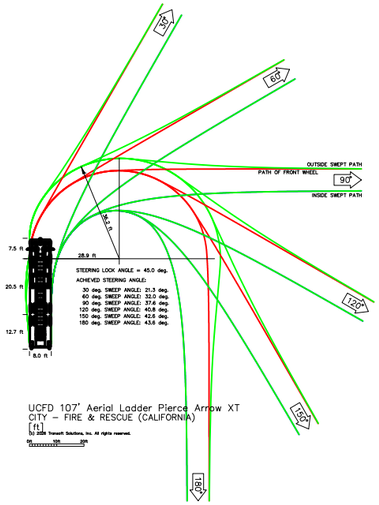
Exhibit B.1

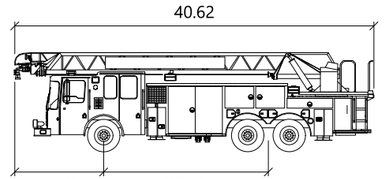
LATHROP RD

DST

NOTE:

FIRE LANES NOT HIGHLIGHTED IN THIS ANALYSIS.





UCFD 107' Aerial Ladder Pierce Arrow XT

feet

Width	:	8.00
Track	:	8.00
Lock to Lock Time	:	6.0
Steering Angle	:	45.0

N

100 0 100 200

1"=100'

GRAPHIC SCALE

CADD FILE: 0333_Truck_Exhibit.dwg

Apr 30, 2026

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

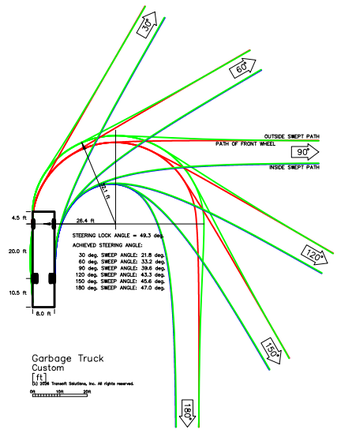
TRUCK TURN ENVELOPES
FIRE TRUCK

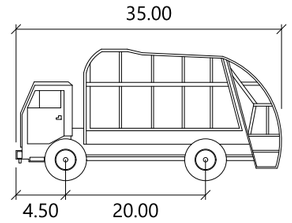
Exhibit B.2

LATHROP RD

DST

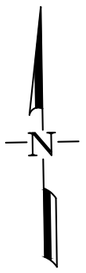
GARBAGE TRUCK IS ACCOMMODATED PER CITY OF LATHROP DESIGN & CONSTRUCTION STANDARDS 1.1.26 AND FIGURE 1-1.





Garbage Truck

	feet
Width	: 8.00
Track	: 8.38
Lock to Lock Time	: 6.0
Steering Angle	: 49.3



100 0 100 200

1"=100' GRAPHIC SCALE

CADD FILE: 0333_Truck_Exhibit.dwg

Apr 30, 2026

Fehr & Peers

CONCEPTUAL - NOT FOR CONSTRUCTION. ADDITIONAL DETAILED ANALYSIS AND ENGINEERING DESIGN REQUIRED.

TRUCK TURN ENVELOPES
GARBAGE TRUCK

Exhibit C