

INDEPENDENCE IN DIXON

CEQA ADDENDUM

PREPARED FOR

CITY OF DIXON



AUGUST 2023

PREPARED BY



1501 SPORTS DRIVE, SUITE A, SACRAMENTO, CA 95834

Independence in Dixon CEQA Addendum

Lead Agency:

City of Dixon Community Development Department
600 East A Street
Dixon, CA 95620

Contact:

Raffi Boloyan, Community Development Director
(707) 678-7000

Prepared By:

Raney Planning and Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834
(916) 372-6100

Contact:

Nick Pappani
Vice President

August 2023

TABLE OF CONTENTS

A. INTRODUCTION AND BACKGROUND1
B. SUBSEQUENT ENVIRONMENTAL REVIEW.....2
C. PROJECT DESCRIPTION2
D. CEQA ANALYSIS APPROACH.....14
E. ENVIRONMENTAL IMPACT COMPARISON16
F. SOURCES36

Appendices:

- Appendix A: Air Quality and Greenhouse Gas Modeling Results
- Appendix B: Updated Tree Impact Assessment

INDEPENDENCE IN DIXON ADDENDUM

A. INTRODUCTION AND BACKGROUND

The Dixon City Council adopted the Lincoln Square Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse No. 2022010090) on March 15, 2022 (Resolution No. 22-054) along with approving the project entitlements through adoption of an Ordinance for Rezoning the site (Ordinance No 22-003) and adoption of a Resolution conditionally approving a Design Review Permit and Tentative Map (Resolution No 22-055).¹ The Lincoln Square Project location is a 13.26-acre site immediately southwest of the North Lincoln Street/State Route (SR) 113 intersection, in Dixon, California. The approved project consists of a Planned Development (PD), comprised of a 10.99-acre subdivided residential community, as well as a new fueling station, car wash, and convenience store on a 2.27-acre commercial lot. The Lincoln Square Project included a Tentative Map to subdivide the residential portion of the site into 100 detached, single-family lots, the majority of which ranged in lot size from 2,814 square feet (sf) to 3,715 sf, with additional common area (Lots B-F). The proposed residential units were two-story structures designed according to three different house plans. All units were designed not to exceed 30 feet in height, with each layout including four bedrooms, three bathrooms, a two-car garage, and private green space in the form of a backyard. Access to the residential units was provided by a public street access roadway. Additionally, the approved Lincoln Square Project includes a fueling station with a 4,500-sf Rotten Robbie-branded convenience store, a 5,789-sf fueling canopy with eight fuel dispensers, and a 2,613-sf car wash on the separate commercial lot.

The Dixon General Plan designates the Lincoln Square Project site as Corridor Mixed Use (CMU).² As part of the City's approval of the Lincoln Square Project, the site's zoning designation was amended from Light Industrial, Professional and Administrative Office, and PD (ML-PAO-PD) to Planned Multiple Residential-PD (PMR-PD) and Service Commercial-PD (CS-PD) to be consistent with the new General Plan land use designation for the site. The Rezone of the residential portion of the site to PMR-PD allowed for the construction of residential dwellings, in accordance with the regulations set forth in Dixon Municipal Code Chapter 18.30. In addition, the Rezone of the site's commercial portion to CS-PD allowed for construction of a gasoline station and convenience market of more than 500 sf; automobile washing, including the use of mechanical conveyors, blowers, and steam cleaning; service stations; and parking lots. The CS-PD required conformance with the standards set forth in Dixon Municipal Code Chapter 18.27. In addition to a PD and Rezone, the Lincoln Square Project required City approval of a Tentative Subdivision Map and Design Review.

The City of Dixon adopted the General Plan 2040 and certified the General Plan 2040 Environmental Impact Report (General Plan EIR) on May 18, 2021. The General Plan EIR was prepared as a program-level EIR, pursuant to Section 15168 of the CEQA Guidelines. In accordance with Section 15152 of the CEQA Guidelines, the Lincoln Square IS/MND tiered off of the analysis in the General Plan EIR. The Lincoln Square IS/MND concluded that although potentially significant impacts could occur through development of the project, with incorporation of the mitigation measures set forth therein, all potential impacts would be reduced to a less-than-significant level. The project applicant has initiated construction of the commercial component of the City-approved Lincoln Square Project; however, the applicant is proposing to modify the

¹ City of Dixon. *Lincoln Square Initial Study/Mitigated Negative Declaration*. January 2022.

² City of Dixon. *General Plan 2040*. Adopted May 18, 2021.

project's residential component to include 93 two-story duplex buildings, totaling 186 units, rather than the previously approved 100 single-family residences; access to the residential portion of the site would be provided by a private roadway. The modified residential project is known as the Independence in Dixon Project (proposed project). A detailed description of proposed project is provided in the following sections.

B. SUBSEQUENT ENVIRONMENTAL REVIEW

This Addendum to the Lincoln Square IS/MND has been prepared in accordance with the California Environmental Quality Act of 1970, Public Resources Code (PRC) Section 21000 et seq., as amended (CEQA) and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations (CCR) Title 14, Section 15000 et seq. (CEQA Guidelines). Pursuant to CEQA Guidelines Section 15164(a), a lead agency or responsible agency shall prepare an Addendum to a previously certified EIR or adopted Negative Declaration if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a Subsequent EIR or Negative Declaration have occurred. Pursuant to CEQA Guidelines Section 15164(b), an Addendum to a certified EIR or adopted Negative Declaration may be prepared if only minor technical changes or additions are necessary.

The analysis within this document demonstrates that the proposed modifications to the approved Lincoln Square Project do not trigger the criteria set forth in CEQA Guidelines Section 15162. Thus, an Addendum is the appropriate CEQA document. See Section F below for further discussion on this topic.

Scope of the Addendum

This Addendum includes the following sections that will address various aspects about the proposed project:

- Introduction and Background;
- Subsequent Environmental Review;
- Project Description, including a discussion of the project location, existing setting, surrounding land uses, and project components;
- CEQA Analysis Approach; and
- Environmental Impact Comparison to the Lincoln Square IS/MND, using the criteria established by the current CEQA Guidelines.

C. PROJECT DESCRIPTION

The following provides a description of the project site's current location and setting, as well as the proposed project components and the discretionary action required for the project.

Project Location, Existing Setting, and Surrounding Land Uses

The 10.99-acre project site is located southwest of the North Lincoln Street/SR 113 intersection, in the City of Dixon and identified by Assessor's Parcel Number 0108-110-460 (see Figure 1 and Figure 2). The site, which has historically been used for irrigated agricultural production, is currently undeveloped and contiguous with the commercial component of the City-approved Lincoln Square Project. North Lincoln Street bounds the site to the north and SR 113 bounds the site to the east. A total of 31 trees are located along the western property line of the project site. The site is designated CMU by the Dixon General Plan and zoned PMR-PD.

Figure 1
Regional Vicinity Map

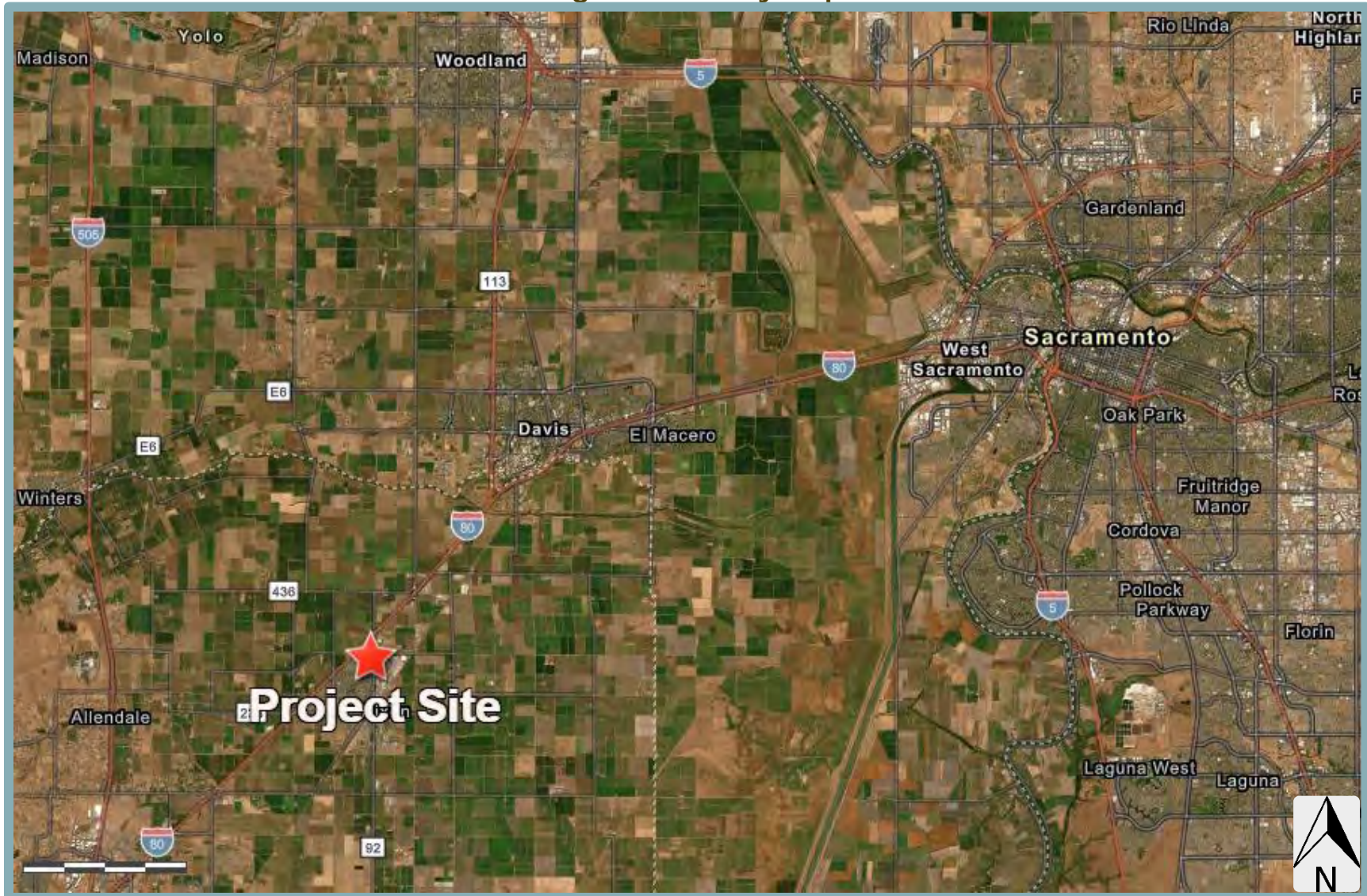


Figure 2
Project Site Boundaries



Surrounding existing land uses include an orthodontics office (Sunrise Orthodontics) and undeveloped land immediately to the north, across North Lincoln Street; a Country Inn & Suites hotel and commercial uses (Chevron fueling station and Dutch Bros Coffee) further to the north; a grocery store (Grocery Outlet) to the northeast, across the North Lincoln Street/SR 113 intersection; commercial uses (Tractor Supply Co., Les Schwab Tire Center, and Shell fueling station) to the east, across SR 113; light industrial businesses (Dependable Heating & Air Conditioning, Freedom Motors, and Moller International) to the south; and single-family residential communities to the southwest, west, and northwest. I-80 is located approximately 1,397 feet to the northwest of the project site.

Project Components

In general, the proposed project would consist of a multi-family residential rental community, comprised of 93 duplex buildings with a total of 186 dwelling units; common area buildings and various amenities; and associated private circulation, utility, and landscaping improvements. The project would require City approval of a PD Amendment to allow for an increase in density within the PMR-PD zoning district, as well as Design Review and a Tentative Map for one lot, with 186 airspace condominium units. The following section provides further details regarding the overall project.

Duplexes and Community Amenities

The proposed project would consist of a private multi-family residential rental community, primarily comprised of 93 two-story duplexes, totaling 186 units (see Figure 3 and Figure 4). The majority of units would be designed in accordance with six plan types (Plans 1, 2, 3, 3X, 4, and 5), which are summarized in Table 1 and would range in size from 1,175 sf to 1,829 sf.

Table 1 Unit Summary					
Plan	Unit Total	Square Feet per Unit	Bedrooms	Bathrooms	Garage Parking Spaces
1	71	1,175	2	2	1
2	16	1,484	3	2.5	2
3	72	1,611	3	2.5	2
3X	6	1,627	3	2.5	2
4	12	1,733	3	2.5	2
5	9	1,829	3	3	2
TOTAL	186	348,343	--	--	301

In addition to living/dining areas, kitchens, and laundry areas, each unit would also include a private backyard and either a single-car or two-car garage. Similar to the Lincoln Square Project, which proposed a maximum building height of 30 feet for the residences, the maximum building height for all currently proposed structures would be 28 feet and one inch (Plan 5). Additionally, each duplex would feature Spanish-themed architecture, with the use of five separate color schemes to provide variation between units, as well as juxtaposed roof lines and elevations to differentiate the massing of each structure.

With respect to on-site amenities, the proposed project would include a 1,362-sf leasing building and 2,062-sf resident fitness center in the southern portion of the project site. The leasing building would include a reception area, office, and restroom. The fitness center would feature a fitness room, specialty fitness room, and restrooms.

Figure 3
Tentative Map for Condominium Purposes

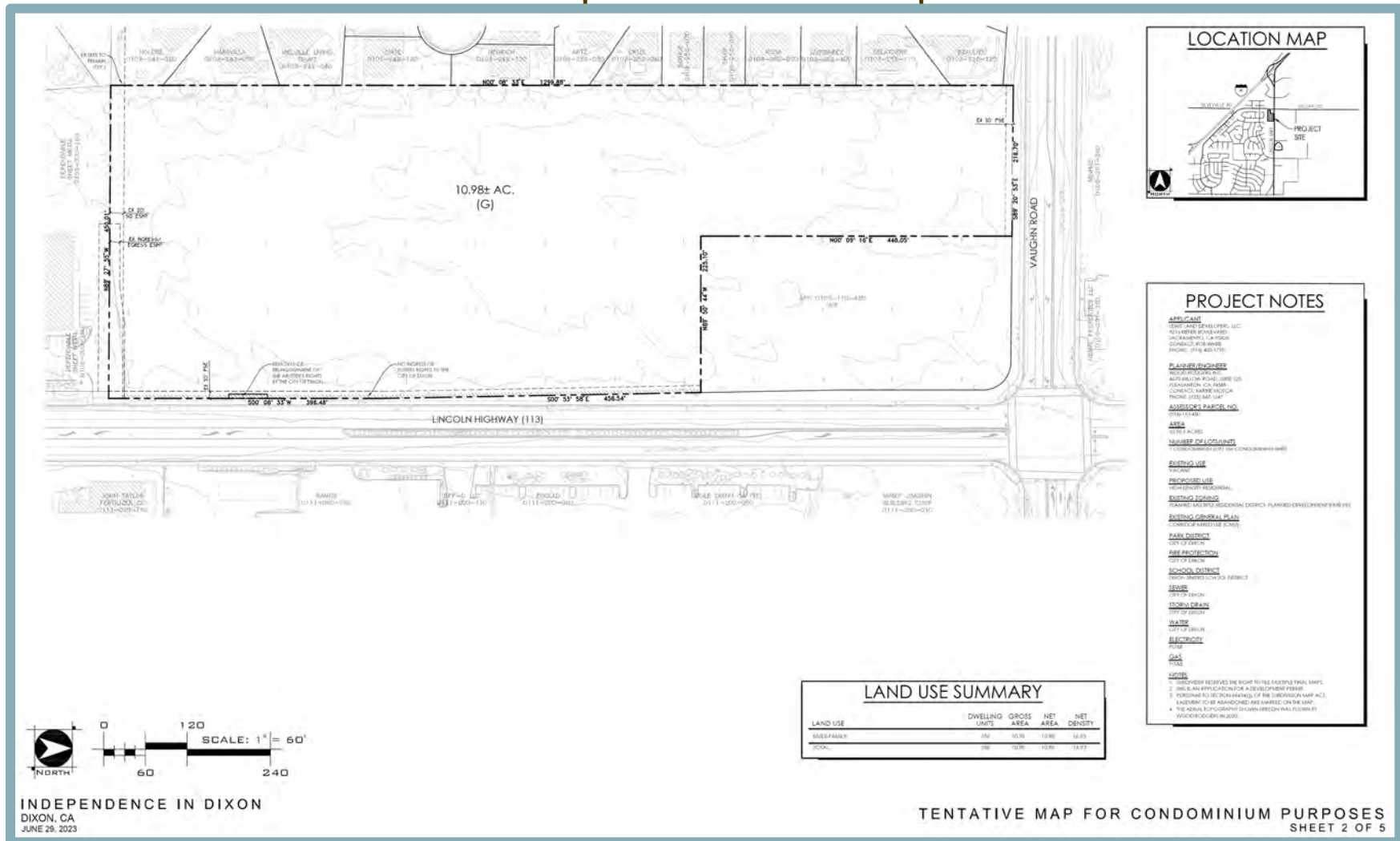


Figure 4
Site Plan



APARTMENTS

71	38.2%	PLAN 1 - 1,175 SF, 2 BED, 2 BA
16	8.6%	PLAN 2 - 1,484 SF, 3 BED, 2.5 BA
72	38.7%	PLAN 3 - 1,611 SF, 3 BED, 2.5 BA
6	3.2%	PLAN 3X - 1,627 SF, 3 BED, 2.5 BA
12	6.5%	PLAN 4 - 1,733 SF, 3 BED, 2.5 BA
9	4.8%	PLAN 5 - 1,829 SF, 3 BED, 3 BA, LOFT
186 TOTAL		

OPEN SPACE SUMMARY

Type	Required per Unit	Required Total	Provided	Total
Common Private	100	18,600	99,420	149,875

REQUIRED PARKING

Category	No. of Units	Ratio	Per Category	Total
Resident	71	2.0	142	372
Guest	115	2.0	230	
	186	0	0	0
Total				372
Parking Ratio				2.0

PROVIDED PARKING

Type	Stall Size	Per Type	Total
Resident			
Surface Standard Partially Covered Stalls Plan 1	9' x 20'	81	378
Driveway	9' x 20'	16	
Garage Stalls	18' x 20'	301	
Surface Standard	9' x 20'	36	
Surface Oversized	9' x 25' Min.	7	
Surface Standard HC	9' x 20' + 5'	2	79
Surface Standard HC Van	9' x 20' + 8'	2	
Surface Parallel	8' x 24'	26	
Surface Compact	8' x 16'	6	
Total			457
Parking Ratio			2.46

BUILDING SUMMARIES

Bldg Type	No. of Bldgs	Area Per Building (sq-ft)	Code Analysis			Building Code
			Occupancy Classification	Type of Construction	Fire Sprinklers	
B1	32	2,350				CRC 2022
B1X	7	2,786				
B2	12	3,095				
B22	2	2,968				
B3	19	3,222				
B3X	6	3,238				
B4	6	3,486				
B5	9	3,440				
Total	93	24,953				
Leasing Building	1	1,325	B	V-B	FL13	
Fitness Building	1	2,095	B	V-B	FL13	
Trash Enclosure/Compactor	1	700	B	V-B	150	
Maintenance Building	1	600	B	V-B		
Mail Building	1	277	B	V-B		
Total	5	4,997				
No. of Residential Buildings			93			
No. of Common Area Buildings			5			

FLOOR AREA RATIO

Type	Floor Area	Lot Area (SF)	FAR (%)	Combined FAR (%)
Residential	348,343	478,544	72.8%	81.6%
Commercial	7,373	99,378	7.4%	
Total	355,716	577,922	61.6%	

PROJECT SUMMARY

ADDRESS: SWC OF VAUGHN ROAD AND HIGHWAY 113, DIXON, 95620

SITE AREA: GROSS: 10.98 ACRES (+/- 478,544 SF)
NET: 10.50 ACRES (+/- 457,380 SF)

ZONE: EXISTING- RM-PD

ALLOWABLE DENSITY: 12-28 DU/AC PER GENERAL PLAN 2040 CORRIDOR MIXED USE (CMU)

PROPOSED DENSITY: GROSS: 186 UNITS/10.98 AC = 16.94 DU/AC
NET: 186 UNITS/10.50 AC = 17.71 DU/AC

TOTAL UNITS: 186

TOTAL BUILDINGS: 93 DUPLEXES + 5 COMMON BUILDINGS

PROPOSED HEIGHT: 29'-0"

NO OF STORY: 2-STORY @ DUPLEXES
1-STORY @ COMMON BUILDINGS



Sited in immediate proximity to the leasing building and resident fitness center would be a pool area and entertainment area, the latter of which would include vanity seating and barbecue facilities, corn hole, and enhanced paving. The project would also include an enclosed dog park in the southwest corner of the project site.

With respect to fencing, the project site’s shared boundaries with the commercial component of the Lincoln Square Project would include an eight-foot-tall soundwall, which is currently under construction as part of the fueling station, convenience store, and car wash (see Figure 5). In addition, along the western boundary of the project site is an existing wall. Along the northern and southern boundaries of the site, as well as the eastern site boundary contiguous with SR 113, the project would include a six-foot-tall precision concrete block wall.

The project would also install six-foot-tall gates at the main and secondary entrances near the leasing building and from North Lincoln Street, respectively, to provide additional security.

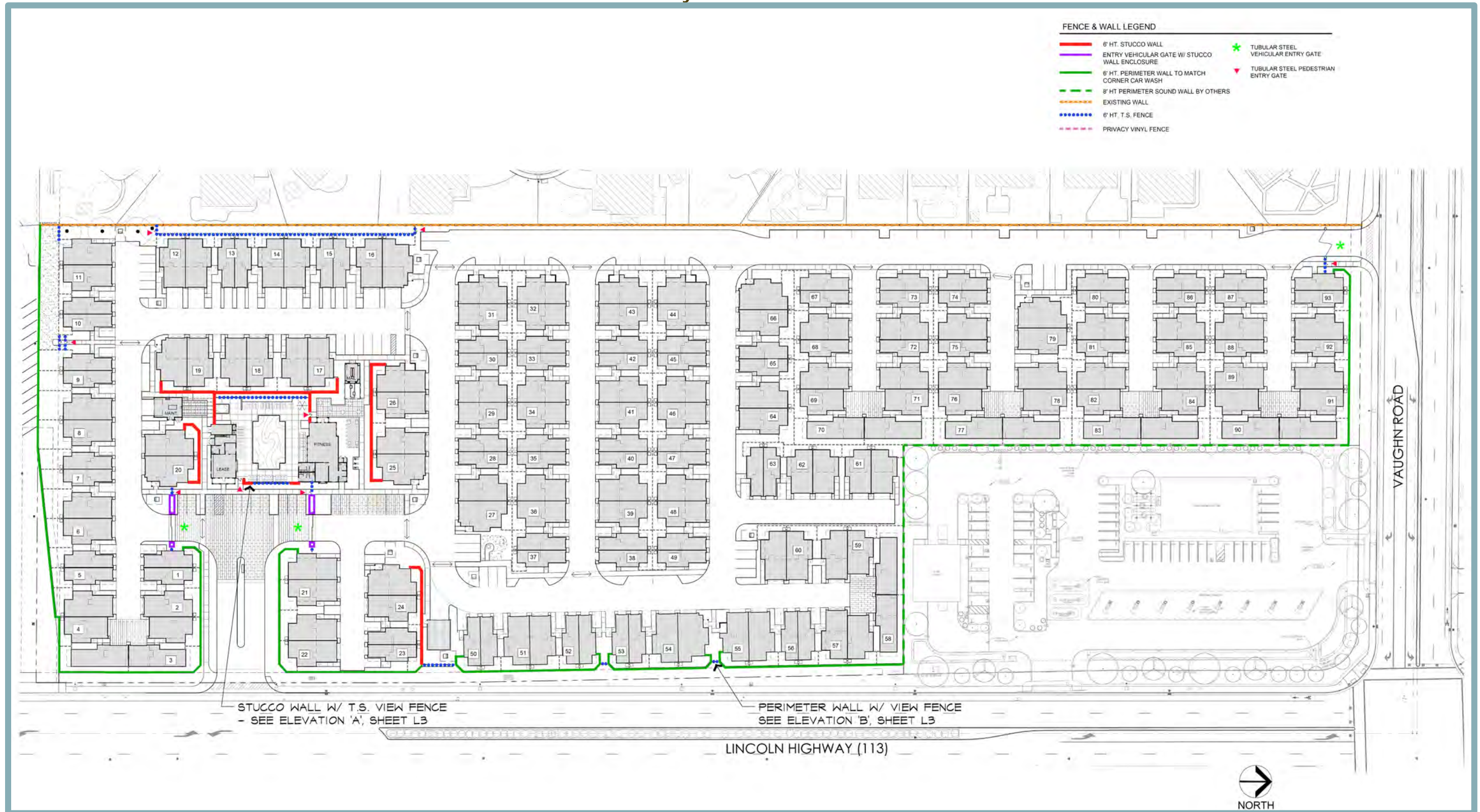
Access, Circulation, and Parking

The primary vehicle access to the project site would be provided from SR 113, with secondary access provided from North Lincoln Street (see Figure 3). From SR 113, a private internal roadway would extend westward into the site towards the main entry gate and would be comprised of two 20-foot-wide vehicle lanes and a seven-foot-wide median. From North Lincoln Street, a 26-foot-wide private internal roadway would extend southward into the site towards the secondary entry gate. Within the site, the project would include a private network of roadways that would range in width from 24 feet to 26 feet and provide access to all of the duplex units.

With respect to parking, as previously discussed, each unit would include either a single-car or two-car garage. Overall, the project would total 301 garage parking spaces. In addition, 61 of the 71 Plan 1 units would feature a partially covered surface parking stall adjacent to the unit. Sixteen units would have a driveway parking space. Additionally, a total of 79 guest parking spaces would be provided on-site, including spaces that would be designed in compliance with the Americans with Disabilities Act (ADA). Table 2 summarizes the proposed parking, which would total 457 stalls.

Table 2 Summary of Proposed Parking			
Type	Stall Size	Number of Stalls	
		Per Type	Total
Resident			
Plan 1 Surface Stalls	9' x 20'	61	380
Driveway	9' x 20'	16	
Garage Stalls	10' x 20'	301	
Guest			
Surface Standard	9' x 20'	36	79
Surface Oversized	9' x 20' Minimum	7	
Surface ACA	9' x 20' + 5'	2	
Surface ACA Van	9' x 20' + 8'	2	
Surface Parallel	8' x 24'	26	
Surface Compact	8' x 16'	6	
Total Parking			457
Parking Ratio			2.46

Figure 5
Preliminary Fence and Wall Plan



In regard to pedestrian access, an internal sidewalk would be located along the north-to-south internal roadway located parallel to the western site boundary. In addition, the pool and entertainment areas adjacent to the leasing building and fitness center would include sidewalks. With respect to bicycle parking, a bike rack would be provided adjacent to the north of the fitness center.

Utilities

Similar to the Lincoln Square Project, which proposed establishing water, sewer, and storm drain service for the new residences through installation of new utility lines that connect to the existing water, sewer, and storm drain lines within North Lincoln Street and SR 113, the proposed project would also be provided water and sewer service by the City through connections to the existing utility lines in the roads adjacent to the project site.

The proposed project would be provided water service through connections to the existing 12-inch water mains in North Lincoln Street and SR 113 (see Figure 6). From the existing mains, new eight-inch water lines would be extended into the site and installed within the internal roadways. Each unit would connect to the new water lines through newly installed laterals. The City would also provide sewer service to the project site through connections to the existing eight-inch main in North Lincoln Street and the existing 12-inch main in SR 113. From the existing sewer mains, new eight-inch sewer lines would be extended into the site within the internal roadways and connect to each unit through new laterals. The project's new water and sewer lines would be designed consistent with the requirements set forth in the City's Engineering Design Standards.

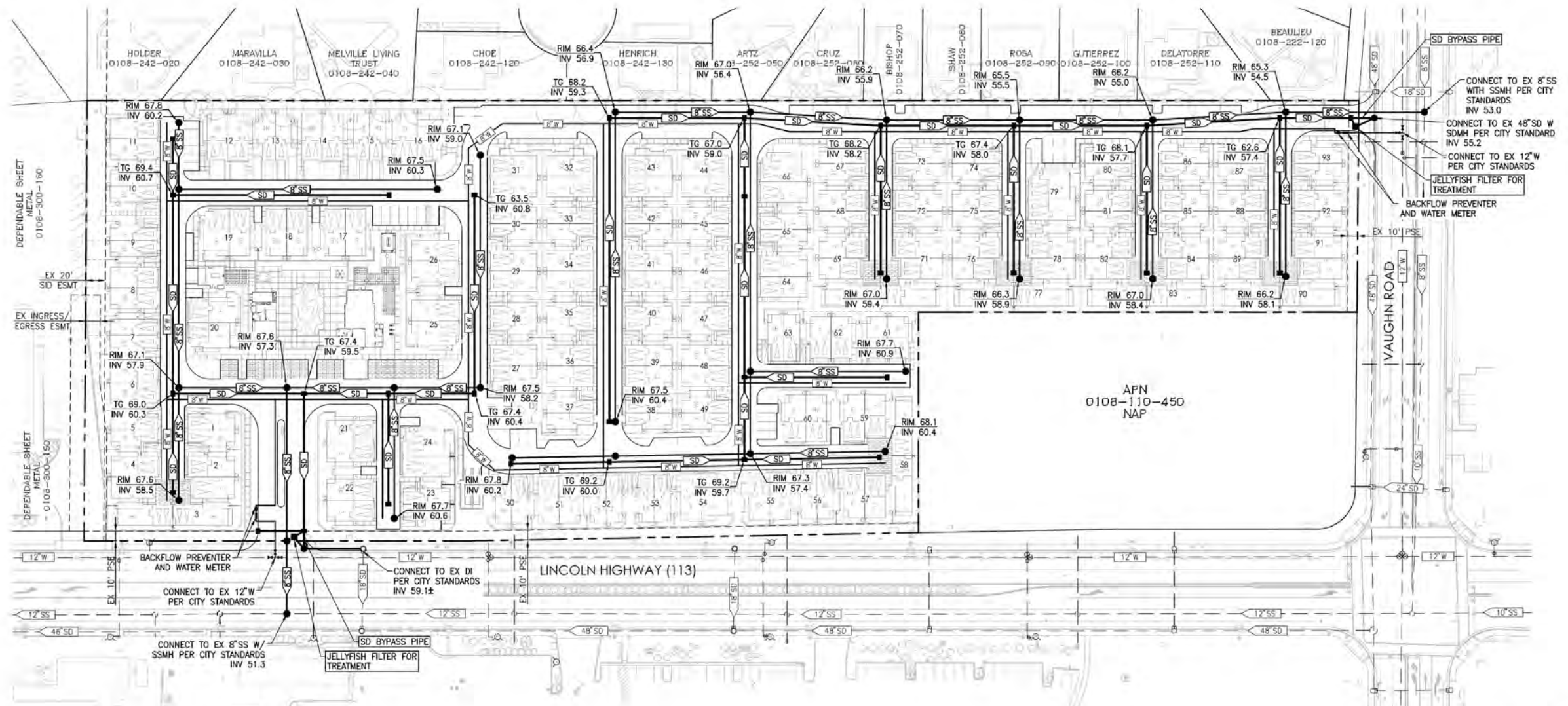
The project site would include on-site stormwater facilities to provide water quality treatment and drainage management before discharging runoff to the existing 48-inch storm drain mains in North Lincoln Street and SR 113 (see Figure 7). All stormwater facilities would be designed consistent with the requirements set forth in the City's Engineering Design Standards. In general, runoff from new impervious surfaces within each drainage management area (DMA) would be directed toward inlets, which would convey flows to Contech Jellyfish Filters, which would be installed at the project site entrances along SR 113 and North Lincoln Street and provide pretreatment and filtration of flows prior to release to the public storm drain system.

Electricity and natural gas would be provided by Pacific Gas & Electric (PG&E) Co. The proposed project would connect to existing infrastructure in the project vicinity. Consistent with Section 17.12.120 of the Municipal Code, new electricity and natural gas would be installed underground.

Landscaping

New landscaping would be provided consistent with the provisions set forth by Dixon Municipal Code Section 18.33.070, which requires landscaped areas to be installed and maintained in accordance with various provisions established by Dixon Municipal Code Section 18.33.090. More specifically, the project would be required to include a minimum seven-foot-wide landscaped area along public street frontages and at least two street trees for each 50 feet of public street frontage or fraction thereof. As shown in Figure 8, new tree vegetation would consist of 24-inch box trees, including golden rain tree, Chinese pistache, Portugal laurel, African sumac, Idaho locust, little leaf linden, and Brisbane box, and 15-gallon tree Chilean lily-of-the-valley. In addition, the project would include new groundcover and shrub species.

Figure 6
Preliminary Utility Plan



- STORM DRAIN
 - MINIMUM SLOPE: 0.005
 - MINIMUM MAINLINE PIPE SIZE: 12"
 - LATERAL PIPE SIZE: 8"
 - STORM DRAIN FACILITIES MAY BE RCP OR N-12 PIPE
- SANITARY SEWER
 - MINIMUM SLOPE: 0.0035
 - SANITARY SEWER PIPE TO BE SDR-26 PVC
- WATER PIPES TO BE CLASS 200 AWWA C900
- UTILITIES SHOWN ON THIS PLAN ARE PRELIMINARY AND SUBJECT TO CHANGES PENDING FINAL DESIGN.
- ALL ON-SITE SEWER, DOMESTIC & FIRE WATER, AND STORM DRAIN TO BE PRIVATE AND OWNED AND MAINTAINED BY THE OWNER.
- ADDITIONAL DRAIN INLETS MAY BE REQUIRED AT PROJECT ENTRY LOCATIONS TO PREVENT PUBLIC DRAINAGE FROM ENTERING THE PRIVATE SITE. FURTHER EVALUATION WILL BE MADE AT THE TIME OF FINAL DESIGN UPON REVIEW OF PRECISE EXISTING ROADWAY GRADES AND DRAINAGE.

ABBREVIATIONS	
DI	DRAIN INLET
EX	EXISTING
FUT	FUTURE
INV	INVERT ELEVATION
PL	PROPERTY LINE
R/W	RIGHT-OF-WAY
SD	STORM DRAIN
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
TC	TOP OF CURB ELEVATION
TG	TOP OF GRATE
W	WATER

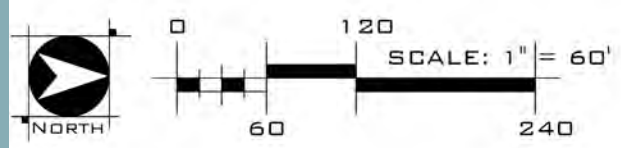
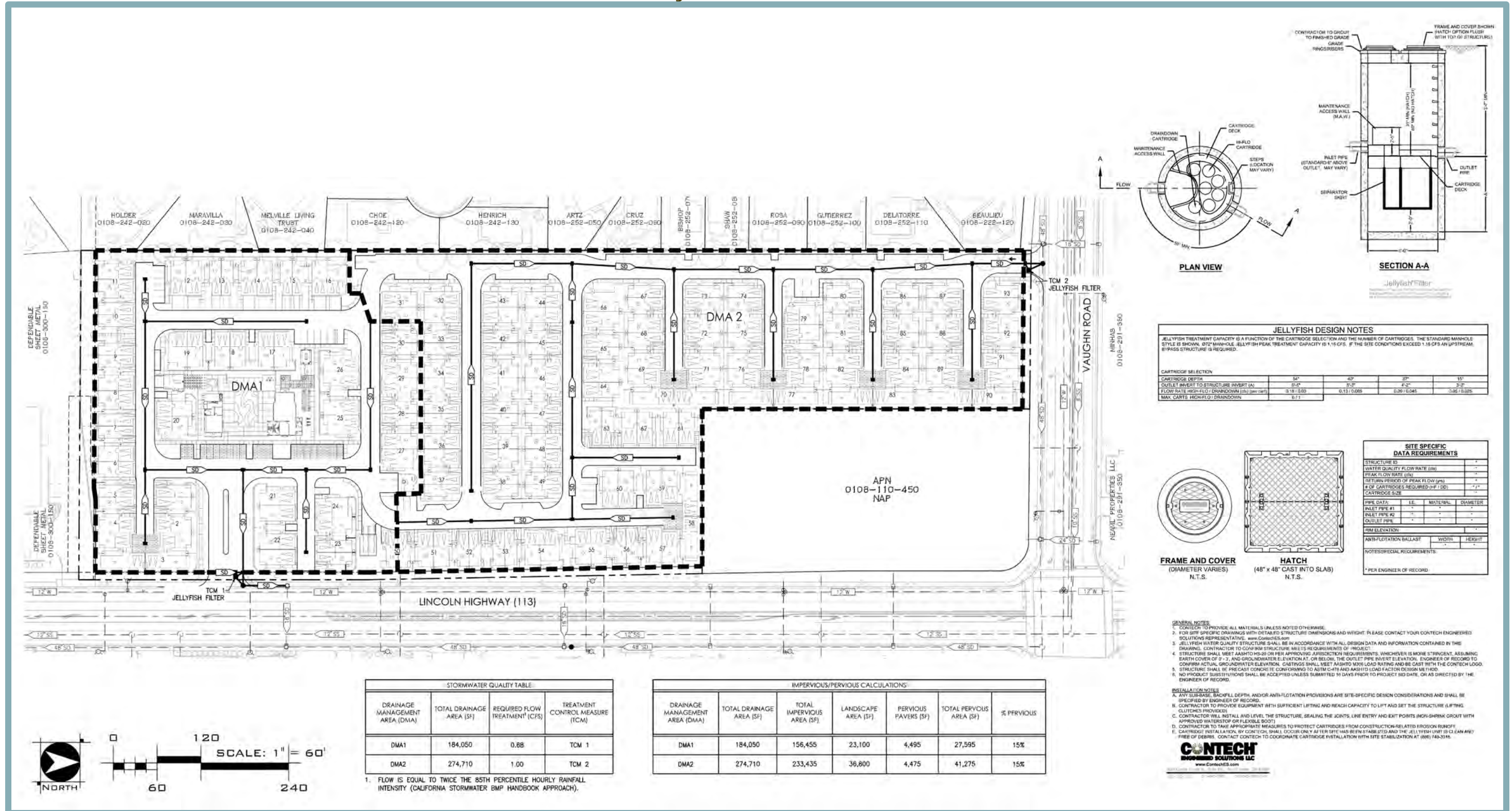


Figure 7
Preliminary Stormwater Control Plan



STORMWATER QUALITY TABLE			
DRAINAGE MANAGEMENT AREA (DMA)	TOTAL DRAINAGE AREA (SF)	REQUIRED FLOW TREATMENT ¹ (CFS)	TREATMENT CONTROL MEASURE (TCM)
DMA1	184,050	0.88	TCM 1
DMA2	274,710	1.00	TCM 2

IMPERVIOUS/PERVIOUS CALCULATIONS						
DRAINAGE MANAGEMENT AREA (DMA)	TOTAL DRAINAGE AREA (SF)	TOTAL IMPERVIOUS AREA (SF)	LANDSCAPE AREA (SF)	PERVIOUS PAVERS (SF)	TOTAL PERVIOUS AREA (SF)	% PERVIOUS
DMA1	184,050	156,455	23,100	4,495	27,595	15%
DMA2	274,710	233,435	36,800	4,475	41,275	15%

1. FLOW IS EQUAL TO TWICE THE 85TH PERCENTILE HOURLY RAINFALL INTENSITY (CALIFORNIA STORMWATER BMP HANDBOOK APPROACH).

JELLYFISH DESIGN NOTES				
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN. 8" MANHOLE JELLYFISH PEAK TREATMENT CAPACITY IS 1.16 CFS. IF THE SITE CONDITIONS EXCEED 1.16 OF 48" MANHOLE, BYPASS STRUCTURE IS REQUIRED.				
CARTRIDGE DEPTH	54"	42"	30"	18"
OUTLET INVERT TO STRUCTURE INVERT (ft)	0.4"	0.3"	0.2"	0.2"
FLOW RATE HIGH FLOW / DRAINDOWN (cfs) (per 100 SF)	0.18 / 0.09	0.13 / 0.05	0.09 / 0.04	0.06 / 0.025
MAX. CARTS HIGH FLOW / DRAINDOWN	0.1			

SITE SPECIFIC DATA REQUIREMENTS		
STRUCTURE ID		*
WATER QUALITY FLOW RATE (cfs)		*
PEAK FLOW RATE (cfs)		*
RETURN PERIOD OF PEAK FLOW (yr)		*
# OF CARTRIDGES REQUIRED (H/F/D)		**
CARTRIDGE SIZE		
PIPE DATA	I.E.	MATERIAL
INLET PIPE #1	12"	3"
INLET PIPE #2	12"	3"
OUTLET PIPE	12"	3"
INLET ELEVATION		
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
NOTES/SPECIAL REQUIREMENTS:		
* PER ENGINEER OF RECORD		

- GENERAL NOTES
- CONTRACTOR TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERING SOLUTIONS REPRESENTATIVE. www.conteches.com
 - JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THE DRAWING. CONTRACTOR TO COORDINATE STRUCTURE AREA'S REQUIREMENTS OF PROJECT.
 - STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ASSEMBLING BATH COVER OF 3", 3" AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE RIVER ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M305 LOAD RATING AND BE CAST WITH THE CONTECH LOAD.
 - STRUCTURE SHALL BE PRE-CAST CONCRETE CONFORMING TO ASTM C-795 AND AASHTO LOAD FACTOR DESIGN METHOD.
 - NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 90 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

- INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
 - CARTRIDGE INSTALLATION, BY CONTECH SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 748-3145.



Figure 8
Preliminary Landscape Plan



Discretionary Approvals

The City of Dixon has discretionary authority and is the lead agency for the proposed project. The project would require City approval of the following entitlements, which are discussed further below:

1. PD Amendment; and
2. Design Review.
3. Tentative Parcel Map for Condominium purposes

Planned Development Amendment

The proposed project includes development of a duplex residential community; thus, the proposed project includes a request to amend the project site's PMR-PD zoning to add two-family dwellings or duplexes as part of a multi-family development on a single parcel tract map for condominium purposes among the permitted uses. Additional modifications would include, but not be limited to, amended language related to accessory mechanical equipment, screening and landscaping, signs and support systems, yard area, and site area per dwelling unit.

Design Review

The proposed project would be subject to Design Review pursuant to Dixon Municipal Code Section 18.23.100, which requires the City's Planning Commission to review the design of new multi-family residential development for consistency with the City's applicable design standards. Design Review encompasses review of the siting of structures; landscaping, fencing, and other screening; circulation, parking, and loading facilities; exterior lighting; and open space areas.

Tentative Parcel Map

The application includes a Tentative Map for condominium purposes that identifies that the 10.98-acre site would be one lot, with 186 airspace condominium units.

D. CEQA ANALYSIS APPROACH

In the case of a project proposal requiring discretionary approval by the City for which the City has certified an EIR or adopted a Negative Declaration for the overall project, the City must determine whether a Subsequent EIR or Negative Declaration is required. The CEQA Guidelines provide guidance in this process by requiring an examination of whether, since the certification of the EIR or adoption of the Negative Declaration and approval of the previously proposed project, changes in the project or conditions have been made to such an extent that the proposal may result in new significant impacts not previously identified or a substantial increase in severity of previously identified significant impacts. If so, the City would be required to prepare a Subsequent EIR or Negative Declaration. The examination of impacts is the first step taken by the City in reviewing the CEQA treatment of the project in accordance with CEQA Guidelines Section 15162. Section 15162 is discussed in detail below.

Pursuant to Section 15164(a) of the CEQA Guidelines, an Addendum to an adopted Negative Declaration or Mitigated Negative Declaration may be prepared if only minor technical changes or additions are required, and none of the following conditions identified in CEQA Guidelines Section 15162 are present. The following identifies the standards set forth in Section 15162(a):

- (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 [or Negative Declaration];
 - (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.

CEQA Guidelines Section 15162 provides that the lead agency's role in project approval is completed upon certification of the EIR or adoption of the Negative Declaration and approval of the project, unless further discretionary action is required. The approvals requested as part of the project are considered discretionary actions. Therefore, CEQA review is required.

Use of a Prior Environmental Document

In *Friends of College of San Mateo Gardens v. San Mateo County Community College District* (2016) 1 Cal.5th 937, 951, the California Supreme Court held that a lead agency, in considering a proposed change to a previously approved project, has the responsibility for deciding whether the environmental document for the original project retains "some relevance" to the decision-making process for the proposed change. "[W]hether an initial environmental document remains relevant despite changed plans or circumstances—like the question whether an initial environmental document requires major revisions due to changed plans or circumstances—is a predominantly factual question. It is thus a question for the agency to answer in the first instance, drawing on its particular expertise." (*Id.* at p. 952). On this factual issue, lead agencies are entitled to considerable deference from reviewing courts: "a court should tread with extraordinary care' before reversing an agency's determination, whether implicit or explicit, that its initial environmental document retains some relevance to the decision-making process." (*Id.* at p. 953).

Here, considering the recent date that the City of Dixon adopted the Lincoln Square IS/MND and the comprehensiveness of the previous CEQA document, which analyzed all CEQA environmental issue areas, the City of Dixon has determined that the previous CEQA document remains relevant to the current proposal. Based on the analyses below, moreover, the City has also concluded that the proposed project changes do not result in any of the circumstances listed in CEQA Guidelines Section 15162 (i.e., no new or substantially greater significant impacts) and would not trigger the need for either a Subsequent Negative Declaration or a supplement to the previously adopted CEQA document. For the aforementioned reasons, the City has prepared this Addendum to the Lincoln Square IS/MND in order to evaluate the proposed project. The proposed modifications would result in impacts similar to those identified in the Lincoln Square IS/MND.

E. ENVIRONMENTAL IMPACT COMPARISON

The purpose of the comparison is to evaluate the categories in terms of any “changes” or “new information” that may result in a changed environmental impact evaluation. A “no” answer does not necessarily mean that potential impacts do not exist relative to the environmental category, but that a relevant change would not occur in the condition or status of the impact due to its insignificance or its treatment in a previous environmental document.

The following sections provide discussions of potential impacts associated with the proposed project in comparison to those previously identified in the Lincoln Square IS/MND. According to CEQA Guidelines Section 15164(b), an Addendum may be prepared if only minor technical changes or additions to the previously adopted Negative Declaration are necessary or if none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a Subsequent Negative Declaration have occurred. Given the limited scope of changes to the project, this Addendum provides a detailed evaluation of those select CEQA topics most affected by the changes, whereas the remaining CEQA topics are appropriately discussed at a lesser level of detail.

In cases where an approved project has already undergone environmental review, and the environmental document has been adopted by the lead agency, the lead agency can restrict the current review to the incremental effects of the modified project, rather than reconsidering the overall impacts of the project. In such cases, as the project under review constitutes only a modification of a previously approved project, the “baseline” for the purposes of CEQA is the originally approved project.³ Thus, the environmental baseline for this Addendum is appropriately considered to be the approved Lincoln Square Project, which proposed 100 single-family residences within the current project site, as well as new internal roadways, associated utility improvements, and landscaping.

Air Quality

The proposed project’s potential to result in new significant impacts or substantially more severe significant impacts related to emissions of criteria pollutants, as well as health effects related to criteria pollutant emissions and other air quality-related thresholds required for analysis under CEQA, is discussed below.

Emissions of Criteria Pollutants

The City of Dixon is located within the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter (PM_{2.5}) and the State particulate matter 10 microns in diameter (PM₁₀) standards, as well as for both the federal and State ozone standards.

The CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIPs are modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. Due to the nonattainment designations, YSAQMD, along with the other air

³ See Michael H. Remy et al. *Guide to CEQA, 11th Edition*. Point Arena: Solano Press Books (2007), pg. 207; Stephen L. Kostka and Michael H. Zischke. *Practice Under the Environmental Quality Act, Second Edition* (Vol. 1). Oakland: Continuing Education of the Bar (2018), pgs. 12-32; *Benton v. Board of Supervisors* (1st Dist. 1991) 226 Cal. App. 3d 1467.

districts in the SVAB region, periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the federal AAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies. General conformity requirements of the SIP include whether a project would cause or contribute to new violations of any federal AAQS, increase the frequency or severity of an existing violation of any federal AAQS, or delay timely attainment of any federal AAQS. In addition, a project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Emission inventories are developed based on projected increases in population, employment, regional vehicle miles traveled (VMT), and associated area sources within the region, which are based on regional projections that are, in turn, based on General Plan and zoning designations for the region.

Due to the nonattainment designations of the area, YSAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The plans include the 2013 Ozone Attainment Plan, the PM_{2.5} Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. Adopted YSAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. Thus, by exceeding the YSAQMD’s mass emission thresholds for operational or construction emissions of reactive organic gas (ROG), nitrogen oxide (NO_x), or PM₁₀, a project would be considered to conflict with or obstruct implementation of the YSAQMD’s air quality planning efforts. The YSAQMD mass emission thresholds for operational and construction emissions are shown in Table 3 below in tons per year (tons/yr) and pounds per day (lbs/day).

Table 3		
YSAQMD Thresholds of Significance		
Pollutant	Construction Thresholds	Operational Thresholds
ROG	10 tons/yr	10 tons/yr
NO _x	10 tons/yr	10 tons/yr
PM ₁₀	80 lbs/day	80 lbs/day
Source: YSAQMD. Handbook for Assessing and Mitigating Air Quality Impacts. July 11, 2007.		

In order to determine whether the proposed project would result in new or more severe significant impacts relative to what was anticipated for the site in the Lincoln Square IS/MND, emissions have been estimated for the currently proposed project, using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.16 software – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including greenhouse gas (GHG) emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, trip generation rates, vehicle mix, trip length, average speed, compliance with the California Building Standards Code (CBSC), etc. Where project-specific data was available, such data was input into the model (e.g., construction phases and timing, inherent site or project design features, compliance with applicable regulations, etc.).

While the proposed project does not include the commercial component approved as part of the Lincoln Square Project, to provide a comparative analysis the modeling for the currently proposed project includes emissions estimations for buildout of the commercial component of the Lincoln Square Project and incorporates the assumptions from the Lincoln Square IS/MND for only the

commercial component. For the currently proposed project, project-specific data was input into the model based on information provided by the project applicant. The modeling for the Proposed Project Scenario assumed the following:

- Construction would begin in November 2023 and occur over approximately two years;
- Approximately 500 cubic yards (CY) of soil would be imported to the project site during site preparation of the commercial component;
- Approximately 500 CY of soil would be imported and 500 CY of soil would be off-hauled from the site during site grading of the commercial component;
- Approximately 1,000 CY of soil would be off-hauled from the project site during site preparation of the currently proposed project;
- Approximately 5,000 CY of soil would be off-hauled from the site during grading of the currently proposed project;
- The proposed project would comply with all relevant provisions of the 2019 CBSC, 2019 CALGreen Code, and MWEL0; and
- Trip generation rates for the proposed project were updated based on the project-specific traffic analysis prepared by Wood Rodgers, Inc.⁴

The CalEEMod results for the proposed project are included in Appendix A of this Addendum. The results of the emissions analysis for construction and operational emissions are discussed separately below. Table 4 presents the estimated unmitigated construction-related emissions under the Approved Conditions Scenario and the Proposed Project Scenario. It should be noted that due to the recency of the City’s approval of the Lincoln Square IS/MND, the CalEEMod results presented in the previous CEQA document for the Lincoln Square Project are incorporated into this Addendum as the Approved Conditions Scenario.

Table 4			
Maximum Unmitigated Construction Emissions			
	ROG (tons/yr)	NO_x (tons/yr)	PM₁₀ (lbs/day)
Approved Conditions Scenario	1.42	3.64	32.58
Proposed Project Scenario	0.88	2.61	43.5
<i>Net Change</i>	<i>-0.54</i>	<i>-1.03</i>	<i>+10.92</i>
YSAQMD Significance Threshold	10	10	80.0
Exceeds Threshold?	NO	NO	NO
Source: CalEEMod, August 2023 (see Appendix A).			

As shown in Table 4, development of the Proposed Project Scenario would result in a net decrease in construction-related emissions of ROG and NO_x and a minor net increase of construction-related emissions of PM₁₀, as compared to the Approved Conditions Scenario. However, the net increase associated with the Proposed Project Scenario would be below the applicable YSAQMD thresholds of significance for all criteria pollutants. Therefore, construction of the proposed project would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and the project would not result in new significant impacts or substantially more severe significant impacts beyond what were identified in the Lincoln Square IS/MND.

⁴ Wood Rodgers. *Memorandum: Independence at Dixon Vehicle Miles Traveled Screening Analysis*. April 21, 2023.

Table 5 presents the estimated unmitigated operational emissions under the Approved Conditions Scenario and the Proposed Project Scenario.

Table 5			
Maximum Unmitigated Operational Emissions			
	ROG (tons/yr)	NO_x (tons/yr)	PM₁₀ (lbs/day)
Approved Conditions Scenario	1.73	1.39	8.77
Proposed Project Scenario	2.92	1.87	12.1
<i>Net Change</i>	<i>+1.19</i>	<i>+0.48</i>	<i>+3.33</i>
YSAQMD Significance Threshold	10	10	80
Exceeds Threshold?	NO	NO	NO
<i>Source: CalEEMod, April 2023 (see Appendix A).</i>			

As shown in the table, the Proposed Project Scenario would result in a net increase in emissions of ROG, NO_x, and PM₁₀, as compared to the Approved Conditions Scenario. However, operational emissions of all applicable criteria pollutants associated with the Proposed Project Scenario would be below the YSAQMD's thresholds of significance. Accordingly, project operation would not violate any AAQS or contribute substantially to an existing or projected air quality violation, and the project would not result in new significant impacts or substantially more severe significant impacts beyond what were identified in the Lincoln Square IS/MND.

Health Effects Related to Criteria Pollutant Emissions

The California Supreme Court (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502) has underscored the need for analysis of potential health impacts resulting from emission of criteria pollutants during implementation of a project. Although analysis of project-level health risks related to the emission of toxic air contaminants (TACs) and other localized pollutants has long been practiced under CEQA, the analysis of health impacts due to individual projects resulting from emissions of criteria pollutants is a relatively new field. Whereas health impacts related to emissions of TACs are geographically limited and can fairly easily be traced back to a single project, health risks related to criteria pollutants occur as a result of cumulative regional-scale emissions. For instance, health impacts related to ozone and PM emissions within the City of Dixon are predominantly determined through the transport of emissions from large metropolitan areas such as Sacramento. In turn, ozone and PM levels within Sacramento may be subject to effects from emissions originating in the San Francisco Bay Area. Because health risks from ozone and PM originate from regional-scale emissions, attribution of potential health risks due to any individual project is difficult and highly speculative.

Given the highly speculative nature of attributing health effects to individual projects, a useful benchmark for assessing potential health effects are the thresholds of significance established by local air districts for criteria pollutant emissions. The YSAQMD's thresholds of significance were established with consideration given to the health-based air quality standards established by the federal and State AAQS, and are designed to aid the district in achieving attainment of the federal and State AAQS. Considering the health-based nature of the federal and State AAQS and the goal of the YSAQMD's thresholds to achieve attainment of the federal and State AAQS, projects resulting in emissions below the YSAQMD's thresholds of significance can be considered not to result in a substantial contribution to net health effects related to criteria pollutants.

As discussed above, emissions associated with the proposed project during both construction and operations would be below the YSAQMD's thresholds of significance. Considering the low

level of emissions estimated to occur from construction and operational activities related to the project, implementation of the proposed project would not be anticipated to result in measurable health effects or a substantial contribution to net health effects in the project region.

Other Thresholds Required for Analysis under CEQA

As detailed under question 'c' in Section III, Air Quality, of the Lincoln Square IS/MND, emissions of carbon monoxide (CO) are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO for multiple years.⁵ Additionally, the Placer County Air Pollution Control District (PCAPCD), which has authority over a portion of the SVAB and is located within proximity to the YSAQMD, has a screening level for localized CO impacts. According to the PCAPCD screening levels, a project could result in a significant impact if the project would result in CO emissions from vehicle operations in excess of 550 lbs/day.⁶ Because the CalEEMod estimates calculated for the Lincoln Square IS/MND found that operations of the previously proposed project would result in maximum CO emissions of 54.67 lbs/day, which is significantly under the PCAPCD screening level, the Lincoln Square IS/MND concluded that the Lincoln Square Project would not expose sensitive receptors to substantial concentrations of localized CO and impacts related to localized CO emissions would be less than significant.

With respect to the currently proposed project, the CalEEMod found that operations of the project would result in maximum CO emissions of 79.3 lbs/day, which is also significantly under the PCAPCD screening level. Thus, the proposed project would not expose sensitive receptors to substantial concentrations of localized CO.

Finally, as discussed under question 'd' in Section III, Air Quality, of the Lincoln Square IS/MND, construction equipment and operation thereof for development projects is regulated in accordance with the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation. Construction activities within Dixon are also required to comply with all applicable YSAQMD rules and regulations, particularly associated with permitting of air pollutant sources. The aforementioned regulations help to minimize air pollutant emissions as well as any associated odors related to operation of construction equipment. Based on compliance with the foregoing requirements, the Lincoln Square IS/MND concluded a less-than-significant impact related to odors would occur. Given that the currently proposed project would similarly be required to comply with the above regulations, the project would similarly not result in odors that adversely affect a substantial amount of people. Similarly, as projects within the YSAQMD are required to implement construction mitigation measures, such as a dust control program, as well as comply with YSAQMD Rule 2.11, Particulate Matter Concentration, and Rule 2.19, Particulate Matter Process Emission Rate, the Lincoln Square IS/MND concluded a less-than-significant impact related to dust emissions would occur. As the currently proposed project would similarly be required to comply with the above regulations, the project would not result in dust emissions that adversely affect a substantial amount of people.

Conclusion

Overall, based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to air quality beyond what were identified in

⁵ Sacramento Metropolitan Air Quality Management District. *CEQA Guide: Chapter 4, Operational Criteria Air Pollutant Emissions*. October 2020.

⁶ Placer County Air Pollution Control District. *2017 CEQA Handbook: Chapter 4, Analyzing Operations Criteria Pollutant Emissions*. 2017.

the Lincoln Square IS/MND. Thus, the proposed project is consistent with the conclusions of the Lincoln Square IS/MND.

Lincoln Square IS/MND Mitigation Measures:

None required.

Modified Mitigation Measures:

None required.

Biological Resources

The currently proposed project would be developed within the footprint of the Lincoln Square Project's residential component. As such, potential impacts identified in the Lincoln Square IS/MND related to biological resources would be reasonably expected to occur at a similar level as part of development of the proposed project, given that the site footprint remains identical and on-site habitats would reasonably be assumed to be currently similar as those evaluated in the Lincoln Square IS/MND. Accordingly, as the Lincoln Square IS/MND concluded that the previously proposed project would result in a less-than-significant impact with respect to protected and special-status plant species; riparian habitat or other designated Sensitive Natural Communities; State- or federally protected wetlands; wildlife movement corridors or nursery sites; and potential conflicts with the provisions of an adopted Habitat Conservation Plan (HCP) or Natural Conservation Community Plan (NCCP); such would be expected of the proposed project.

In addition, although the Lincoln Square IS/MND concluded that the previously proposed project could result in potential impacts to Swainson's hawk, burrowing owl, and other nesting migratory birds and raptors, the previous CEQA document included mitigation measures to address impacts to the aforementioned species. With incorporation of the mitigation measures set forth therein, the Lincoln Square IS/MND concluded a less-than-significant impact would occur. Accordingly, the currently proposed project would be subject to the foregoing mitigation measures, which would reduce potential impacts to Swainson's hawk, burrowing owl, and other nesting migratory birds and raptors to a less-than-significant level.

With respect to potential impacts to on-site trees, the proposed project could require removal of additional trees beyond the number identified in the Lincoln Square IS/MND. Thus, the proposed project's potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, requires further analysis.

As detailed in Section IV, Biological Resources, of the Lincoln Square IS/MND, Dixon Municipal Code Chapter 13.05 sets forth the requirements of the City's Street Tree Ordinance, with projects that require the removal of street trees subject to the provisions of Section 13.05.070 of the City's Municipal Code, which necessitates the obtaining of an encroachment permit and adherence to the conditions established therein. The proposed project would not include the removal of street trees; however, several ornamental trees are located within the project site, along the site's western boundary. General Plan Policy NE-1.15 requires the enhancement of tree health and the appearance of streets and other public spaces through regular maintenance as well as tree and landscape planting and care of the existing canopy. In addition, General Plan Policy NE-1.16 requires that the removal of, and damage to, trees due to construction-related activities be minimized and requires the replacement of trees lost to new development. Furthermore, Dixon Municipal Code Section 17.10.320 requires the configuration of subdivision lots and design of improvements to preserve indigenous natural resources, such as trees and shrubs, to the extent deemed reasonable by the approving authority.

An Arborist Report was prepared for the Lincoln Square Project by Tree Associates to ascertain the extent to which existing on-site trees would be impacted by the project. The Arborist Report identified 31 trees within the project site with trunk diameters of six inches or greater, all of which occur along the western site property line. Of the total, 13 of the on-site trees were anticipated to be preserved as part of the Lincoln Square Project, with the Arborist Report determining that all of the trees to be preserved have, at a minimum, a fair tree structure, and none were judged to be in poor health. To ensure that the 13 trees with fair tree structure would be preserved in accordance with General Plan Policy NE-1.16, the Lincoln Square IS/MND required Mitigation Measure IV-10, which necessitated that the project applicant incorporate the Tree Preservation Guidelines established in the Arborist Report into the project's improvement plans and building permit plans. With implementation of Mitigation Measure IV-10, the Lincoln Square IS/MND concluded a less-than-significant impact would occur.

To address potential impacts that could occur to on-site trees as part of the currently proposed project, an Updated Tree Impact Assessment was prepared for the project by California Tree and Landscape Consulting, Inc. (see Appendix B of this Addendum).⁷ The Updated Tree Impact Assessment identified 31 trees with trunk diameters of six inches or greater along the western site boundary. The trees consist of 22 London plane trees (*Platanus x acerifolia*), four coast redwoods (*Sequoia sempivirens*), three almond trees (*Prunus dulcis*), a single pistache (*Pistachia chinensis*) and a single coast live oak (*Quercus agrifolia*). Although most of the trees (22) were determined to be in fair health, the Updated Tree Impact Assessment found that seven trees are in poor health and two dead. In addition, of the 29 living trees, 24 have poor structures, with only five trees having fair structural condition.

As shown in Figure 3, the proposed internal roadways that would be constructed as part of the proposed project include a road that would impact 29 of the on-site trees. Two London plane trees (identified as #501 and #502 in the Updated Tree Impact Assessment) are located at the southwest corner of the project site and would be impacted by mass grading, but would be able to tolerate any root pruning that may be required. The trees would require a standard tree protection plan involving root pruning and canopy restructuring to minimize the impact of the mass grading and construction of the adjacent homes.

Overall, the Updated Tree Impact Assessment determined that 29 trees would require removal prior to mass grading activities associated with the proposed project. According to the Updated Tree Impact Assessment, a replacement ratio of 2.5 trees planted for every tree removed would be required, which would necessitate that approximately 73 replacement trees be planted as part of the proposed project. Without such replacement plantings, as well as compliance with the City of Dixon's list of recommended replacement tree species, a potential impact could occur. To address the potential impact, the proposed project would be subject to Mitigation Measure IV-10 of the Lincoln Square IS/MND, as modified below. Compliance with the provisions set forth therein would ensure that potential impacts are reduced to a less-than-significant level.

Overall, based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to biological resources beyond what were identified in the Lincoln Square IS/MND. Thus, the proposed project is consistent with the conclusions of the Lincoln Square IS/MND.

⁷ California Tree and Landscape Consulting, Inc. *Updated Tree Impact Assessment*. July 10, 2023.

Lincoln Square IS/MND Mitigation Measures:

Implementation of the following Lincoln Square IS/MND mitigation measures are applicable to the currently proposed project and would reduce potential impacts to a *less-than-significant* level. Certain mitigation measures identified in this section would only be required if the draft Solano HCP is adopted prior to issuance of grading permits for the proposed project. These measures are identified in the below section.

Swainson's Hawk Foraging Habitat

IV-1 Pursuant to California Department of Fish and Wildlife (CDFW) guidelines, the applicant shall preserve an equal acreage of Swainson's hawk foraging habitat as is proposed for development (approximately 13.05 acres) (i.e., a 1:1 ratio). The preserved habitat shall be at a location approved by the CDFW. Preservation may occur through either:

- Payment of a mitigation fee to an established mitigation bank, or similar habitat development and management company, or the City of Dixon through a negotiated agreement (subject to approval by CDFW) between the City and the applicant. The monies shall be held in a trust fund, and used to purchase mitigation credits to offset the loss of suitable foraging habitat for Swainson's hawk. The credits would become incorporated into the mitigation bank, owned and operated by the habitat development and management company, and protected in perpetuity (consistent with CDFW guidelines); or
- Purchase of conservation easements or fee title of lands with suitable Swainson's hawk foraging habitat (consistent with CDFW guidelines).

If mitigation lands or a conservation easement have not been acquired prior to issuance of the building permit or grading permits, whichever occurs first, the City shall hold the applicant's contribution in a separate, interest-bearing account until the appropriate lands are identified (through consultation with CDFW and the City) and acquired by the City or preserved through other methods acceptable to the CDFW. The foregoing funds shall be used to compensate for the loss of Swainson's hawk foraging habitat.

Swainson's Hawk Nesting Habitat

IV-2 To avoid take of Swainson's hawk, project-related activities shall occur, when possible, between September 16 and February 28, outside of the Swainson's hawk nesting season.

Prior to the start of any project construction activities, a qualified biologist shall conduct protocol-level Swainson's hawk nesting surveys for active Swainson's hawk nests within 0.25-mile of the project site, in accordance with guidelines set by the Swainson's Hawk Technical Advisory Committee (SHTAC 2000), within all publicly accessible areas. For areas not publicly accessible, the biologist shall attempt to visually survey such areas from publicly accessible viewpoints. The SHTAC guidelines define five survey periods for Swainson's hawk: Period I: January 1-March 20; Period II: March 20-April 5; Period III: April 5-April 20; Period IV: April 21-June 10; and Period V: June 10-July 30. The guidelines prescribe a minimum of three surveys per survey period and recommend at least the two survey periods immediately prior to a project's initiation. The SHTAC guidelines

specifically recommend that surveys be completed in Periods II, III, and V. Per the SHTAC guidelines, Swainson's hawks in the Solano County region typically incubate during June, and active nests can be difficult to find. Therefore, the draft Solano HCP states that June surveys shall not be acceptable for determining the absence of Swainson's hawk nests. The purpose of these surveys shall be to establish a base understanding of the location and activity of nesting Swainson's hawks within the vicinity of the project site. A written summary of the survey results shall be submitted to the City of Dixon Community Development Department.

If active nests are not found during preconstruction surveys, further mitigation is not necessary. Should any active Swainson's hawk nests be discovered within 0.25-mile of the project site, construction work (including grading, earthmoving, and any operation of construction equipment) shall not occur within a 0.25-mile buffer zone around an active Swainson's hawk nest, except as provided below. Construction-free buffers shall be identified on the ground with flagging, fencing, or by other easily visible means, and shall be maintained until the biologist has determined that the young have fledged.

The size of nest site buffer zones may be reduced only under the following conditions:

- A site-specific analysis prepared by an approved biologist indicates that the nesting pair under consideration are not likely to be adversely affected by construction activities (e.g., the nest is located in an area where the hawks are habituated to human activity and noise levels comparable to anticipated construction work). CDFW must approve this analysis before construction may begin within 0.25-mile of a nest, or if the draft Solano HCP is adopted prior to the issuance of a grading permit for the proposed project, then Solano County Water Agency (SCWA), in consultation with the HCP Technical Review Committee, may approve the analysis.
- Monitoring by an approved biologist is conducted for a sufficient time (during all construction activities for a minimum of 10 consecutive days following the initiation of construction), and the nesting pair does not exhibit adverse reactions to construction activities (e.g., changes in behavioral patterns, reactions to construction noise).
- Monitoring is continued at least once a week through the nesting cycle at that nest. This longer-term monitoring may be reduced to a minimum of two hours in the morning and two hours in the afternoon during construction activities. However, additional and more frequent monitoring may be required if any adverse reactions are noted.
- Monitoring reports are submitted to CDFW, or if the draft Solano HCP has been adopted prior to the issuance of a grading permit, monitoring reports are submitted to SCWA.

IV-3

If the draft Solano HCP is adopted prior to issuance of grading permits for the project, then the following mitigation shall be implemented if indirect Swainson's hawk nest impacts occur as a result of the project. According to the draft Solano HCP, an indirect effect can occur if project construction affects the nest such that active, Swainson's hawks are disturbed to a degree that causes, or is likely to cause: (a) injury to the nesting birds; (b) a decrease in productivity by substantially

interfering with normal breeding, feeding, or sheltering behavior; or (c) nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. Covered Activities within 250 feet of an active nest are presumed to have a long-term indirect effect on the nest.

Mitigation for indirect impacts to Swainson's hawk breeding habitat, including known or active nests, shall consist of the following:

- The project applicant shall preserve an active nest site through purchase of occupied nest credits from an HCP-certified mitigation bank or approved project-specific reserve. If preserved active nest sites are unavailable, project proponents will provide funding to the HCP's Interim Nest Protection Program; or
- Pay current nest-protection impact fee (the fee schedule for the draft Solano HCP has yet to be determined) and monitor the nest tree for a minimum of two nesting seasons following completion and occupancy of the project upon approval from SCWA and Resource Agencies. If the nest remains active or is affected by a subsequent project, the fee, with applicable interest, will be returned to the applicant; or
- Demonstrate to and receive concurrence from SCWA and the Resource Agencies that the covered activity will not substantially increase disturbance to the nest site.

If take of Swainson's hawk cannot be avoided, the project applicant shall obtain a California Endangered Species Act (CESA) Incidental Take Permit (ITP) from the CDFW.

Burrowing Owl Habitat Assessment, Surveys, and Avoidance

IV-4

Prior to project construction activities, a qualified biologist shall conduct a habitat assessment following Appendix C: Habitat Assessment and Reporting Details of the 2012 CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012 Staff Report). The habitat assessment shall extend at least 492 feet (150 meters) from the project site boundary, or more, where direct or indirect effects could potentially extend off-site (up to 500 meters or 1,640 feet) and include burrows and burrow surrogates. If the habitat assessment identifies potentially suitable burrowing owl habitat, then a qualified biologist shall conduct a take avoidance survey following the CDFW 2012 Staff Report survey methodology. The survey shall encompass the project site and a sufficient buffer zone to detect owls nearby that may be impacted, commensurate with the type of disturbance anticipated, as outlined in the CDFW 2012 Staff Report, and include burrow surrogates such as culverts, piles of concrete or rubble, and other non-natural features, in addition to burrows and mounds. Time lapses between the survey or project construction activities shall trigger subsequent surveys, as determined by a qualified biologist, including, but not limited to, a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections. Detected nesting burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report and any passive relocation plan for non-nesting owls shall be subject to CDFW review.

Burrowing Owl Habitat Mitigation

IV-5 *If project construction activities would impact an unoccupied nesting burrowing owl burrow or burrow surrogate (i.e., a burrow known to have been used in the past three years for nesting), or an occupied burrow (where a non-nesting owl would be evicted as described above), the following habitat mitigation shall be implemented prior to project construction:*

Impacts to each nesting site shall be mitigated by permanent preservation of two occupied nesting sites with appropriate foraging habitat within Solano County, unless otherwise approved by CDFW, through a conservation easement and implementing and funding a long-term management plan in perpetuity. The same requirements shall apply for impacts to non-nesting evicted owl sites.

The project applicant may implement alternative methods for preserving habitat, with written acceptance from CDFW.

Migratory Birds and Raptors

IV-8 *To the maximum extent practicable, vegetation planned for removal as part of the proposed project shall be removed during the non-breeding season (September 1 through January 31). If it is not possible to avoid vegetation removal during the breeding season (February 1 through August 31), preconstruction surveys shall be conducted by a qualified biologist no more than 14 days prior to the start of any such activities occurring during the breeding season.*

The preconstruction survey shall include all trees, shrubs, or other areas of potential nesting habitat within the project footprint and within 250 feet for raptors and 50 feet for other birds where practicable and legal access allows. If the target species are deemed absent from the area, then no further mitigation shall be required, and construction shall commence within 14 days following the survey. A written summary of the survey results shall be submitted to the City of Dixon Community Development Department.

IV-9 *If nesting raptors or migratory birds are detected during the survey, a suitable disturbance-free buffer shall be established around all active nests. The precise dimension of the buffer shall be determined by a qualified biologist at that time and may vary depending on factors such as location, species, topography, and line of sight to the construction area, and may be up to 250 feet. The buffer area(s) shall be enclosed with temporary fencing, and equipment and workers shall not enter the enclosed buffer areas. Buffers shall remain in place until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents.*

Modified Mitigation Measures:

The following mitigation measure from the Lincoln Square IS/MND, which has been modified, shall be implemented by the proposed project:

IV-10 *Prior to the approval of the final project improvement plans, the project applicant shall ensure that all ~~Tree Preservation Guidelines~~ recommendations established in the ~~Arborist Report~~ Updated Tree Impact Assessment prepared for the proposed project are included in the project's improvement plans and building permit plans.*

The project plans shall include, but not be limited to, replacement plantings as recommended in the Updated Tree Impact Assessment, and guidelines related to tree preservation measures, trunk locations, tree protection zones (TPZs), modified TPZs (MTPZs), and tree protection fences, as well as restrictions related to grading, compaction, trenching, rototilling, vehicle traffic, material storage, spoil, waste or washout, or any other disturbance within TPZs and/or MTPZs. Proof of compliance with all guidelines set forth in the Arborist Plan Updated Tree Impact Assessment shall be subject to review and approval by the City of Dixon Community Development Department.

Greenhouse Gas Emissions

GHG emissions contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, cumulative global GHG emissions contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts. Development of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the proposed project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr).

A number of regulations currently exist related to GHG emissions, predominantly Assembly Bill (AB) 32, Executive Order S-3-05, and Senate Bill (SB) 32. AB 32 sets forth a statewide GHG emissions reduction target of 1990 levels by 2020. Executive Order S-3-05 sets forth a transitional reduction target of 2000 levels by 2010, the same target as AB 32 of 1990 levels by 2020, and further builds upon the AB 32 target by requiring a reduction to 80 percent below 1990 levels by 2050. SB 32 also builds upon AB 32 and sets forth a transitional reduction target of 40 percent below 1990 levels by 2030. In order to implement the statewide GHG emissions reduction targets, local jurisdictions are encouraged to prepare and adopt area-specific GHG reduction plans and/or thresholds of significance for GHG emissions. As noted in the City's General Plan EIR, the City of Dixon intends to adopt and begin to implement a Climate Action Plan (CAP) within 18 to 36 months of the adoption of the Dixon General Plan⁸. However, the City does not currently have a CAP.

The YSAQMD, in their *Handbook for Assessing and Mitigating Air Quality Impacts*, acknowledges that new emissions generated by development projects could potentially conflict with existing GHG emissions reductions targets, and thus, a need for development of GHG emissions thresholds exists. However, the YSAQMD has not yet established or adopted any such thresholds. The YSAQMD is currently recommending GHG analysis consistent with the SMAQMD adopted thresholds of significance. As discussed in Section VIII, Greenhouse Gas Emissions, of the Lincoln Square IS/MND, while SMAQMD recognizes that emissions from a single project cannot

⁸ City of Dixon. *General Plan 2040 Final Environmental Impact Report*. Certified May 18, 2021.

be determined to substantially impact overall GHG emissions levels in the atmosphere, an emissions threshold is useful to trigger further project review and assess mitigation. As such, SMAQMD designed emissions thresholds to ensure that 90 percent of new GHG emissions related to land use projects would be reviewed and assessed for mitigation. Thus, projects exceeding SMAQMD’s thresholds would constitute the vast majority of GHG emissions, and exceedance of the thresholds would allow for further project review contributing to the emissions reduction goals of AB 32, SB 32, the CARB 2022 Climate Change Scoping Plan, and relevant Executive Orders. The SMAQMD threshold used for the purposes of analyzing both construction and operational GHG emissions in the Lincoln Square IS/MND was 1,100 MTCO₂e/yr. It should be noted that the nearby PCAPCD has independently adopted an operational threshold of 1,100 MTCO₂e/yr, for use in project GHG analysis, while the El Dorado County Air Pollution Control District similarly recommends use of SMAQMD’s 1,100 MTCO₂e/yr threshold. To compare the proposed project against the baseline conditions, this Addendum evaluated potential impacts related to GHG emissions using the threshold of 1,100 MTCO₂e/yr.

Construction-related GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change, as global climate change is inherently a cumulative effect that occurs over a long period of time and is quantified on a yearly basis. Nonetheless, Table 6 presents the estimated unmitigated maximum construction-related GHG emissions under the Approved Conditions Scenario and the Proposed Project Scenario. As previously discussed, due to the recency of the City’s approval of the Lincoln Square IS/MND, the CalEEMod results presented in the previous CEQA document for the Lincoln Square Project are incorporated into this Addendum as the Approved Conditions Scenario. GHG emissions associated with the Proposed Project Scenario were modeled using CalEEMod under the assumptions described in the Air Quality section of this Addendum.

Table 6	
Maximum Unmitigated Construction-Related GHG Emissions	
	Project Emissions (MTCO₂e)
Approved Conditions Scenario	623.45
Proposed Project Scenario	755
<i>Net Change</i>	<i>+131.55</i>
Applicable Threshold of Significance	1,100.00
Exceeds Threshold?	NO
<i>Source: CalEEMod, August 2023 (see Appendix A).</i>	

As shown in the table, construction of the Proposed Project Scenario would result in a net increase in GHG emissions as compared to construction of the Approved Conditions Scenario. However, the total maximum annual emissions related to construction of the Proposed Project Scenario would be well below the threshold of 1,100 MTCO₂e/yr used in the Lincoln Square IS/MND. Therefore, project construction would not be considered to result in a cumulatively considerable contribution to global climate change.

With respect to operational GHG emissions, as detailed in Table 7, the Lincoln Square IS/MND determined that the previously approved project would exceed the 1,100 MTCO₂e/yr threshold at full buildout, as the Lincoln Square Project would generate an estimated 1,791.56 MTCO₂e/yr during operation. As such, the Lincoln Square IS/MND concluded that the previously approved project could be considered to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. To address the potential

impact, Mitigation Measure VIII-1 of the Lincoln Square IS/MND requires the project applicant to demonstrate a project-wide reduction in GHG emissions and includes various examples of measures that could be used to achieve the required GHG reduction, including, but not limited to, passive solar heating building orientation, achievement of third-party green building certifications, limiting natural gas infrastructure within developments on-site, and providing outdoor electrical outlets to allow for use of electrically powered landscaping equipment at all residences.

Table 7						
Maximum Unmitigated Operational GHG Emissions (MTCO₂e/yr)						
Scenario	Area	Energy	Mobile	Solid Waste	Water	Total
Approved Conditions	1.26	223.63	1,496.45	56.68	13.54	1,791.56
Proposed Project	2.38	323	2,391	44	10.7	2,771.08
Net Change	+979.52					
Source: CalEEMod, August 2023 (see Appendix A).						

As shown in Table 7, the currently proposed project, in combination with the commercial component of the Lincoln Square Project, would similarly exceed the 1,100 MTCO₂e/yr threshold, as the project would generate an estimated 2,771.08 MTCO₂e/yr during operation. While the Proposed Project Scenario would result in a net increase of 979.52 MTCO₂e/yr maximum annual emissions relative to the maximum operational GHG emissions of the Lincoln Square Project, such an increase would not be considered substantial when compared to the 1,100 MTCO₂e/yr threshold.⁹ In addition, the currently proposed project would be subject to Mitigation Measure VIII-1 of the Lincoln Square IS/MND, which would continue to ensure combined GHG emissions associated with operation of the proposed project and Lincoln Square commercial component are reduced to the same level required of the Lincoln Square Project through implementation of the GHG-reducing measures set forth therein.

Based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to GHG emissions beyond what were identified in the Lincoln Square IS/MND. Thus, the proposed project is consistent with the conclusions of the Lincoln Square IS/MND.

Lincoln Square IS/MND Mitigation Measures:

The following mitigation measure from the Lincoln Square IS/MND shall be implemented:

Modified Mitigation Measures:

The following mitigation measure from the Lincoln Square IS/MND, which has been modified, shall be implemented by the proposed project:

⁹ The basis for using 1,100 MTCO₂e/yr to determine whether the project's increase in operational GHG emissions is substantial when compared to the significant operational GHG impact and associated emissions identified in the Lincoln Square IS/MND is tied to the substantial evidence provided in PCAPCD's Thresholds of Significance Justification Report (2016). As part of the district's effort to establish GHG emission thresholds, the district reviewed 688 projects that underwent CEQA review by the PCAPCD between 2003 and 2015. When applying a threshold of 1,100 MTCO₂e/yr, the PCAPCD found that 47 percent of the 688 projects exceeded the threshold and accounted for 97 percent of the total GHG emissions generated by the 688 projects. Thus, the foregoing determination served to help establish the PCAPCD's operational GHG emissions threshold of 1,100 MTCO₂e/yr. As mentioned above, SMAQMD has also used the 1,100 MTCO₂e/yr threshold, which has been recommended for use by YSAQMD. Based on the aforementioned information, the proposed project's net increase of 979.52 MTCO₂e/yr would not be considered a substantial increase. Further, with implementation of MM VIII-1 below, the GHG impact from the currently proposed project would be reduced to a level below the applicable standard of significance.

VIII-1

Prior to issuance of the building permits, the project applicant shall demonstrate a project-wide ~~694.56~~ 1671.08 MTCO₂e/yr reduction in GHG emissions (~~390.88~~ 1,370.4 MTCO₂e/yr for the residential component, and 300.68 MTCO₂e/yr for the commercial component). Examples of measures that may be used to achieve the required GHG reduction may include, but are not limited to, the following:

- Orient buildings to maximize passive solar heating;
- Design all on-site development to achieve Zero Net Energy;
- Achieve third-party green building certifications, such as the GreenPoint Rated program, LEED rating system, the Living Building Challenge, or equivalent programs;
- Limit installation of natural gas infrastructure within developments of the project site, or design structures with the infrastructure necessary to allow for the conversion of all natural gas appliances to all-electric equivalents;
- Install electric vehicle charging infrastructure in excess of existing CBSC requirements;
- Install solar water heating;
- Install on-site renewable energy systems in excess of State or local standards for the commercial portion of the project;
- Provide outdoor electrical outlets to allow for use of electrically powered landscaping equipment at all residences and commercial development within the project site;
- Construct on-site or fund off-site carbon sequestration projects (such as tree plantings or reforestation projects). If off-site mitigation measures are proposed, the applicant must be able to show that the emission reductions from identified projects are real, permanent through the duration of the project, enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site measures shall be subject to review and approval by the City of Dixon Community Development Department. If YSAQMD has established an off-site mitigation program at the time a development application is submitted, as an off-site mitigation measure, the applicant may choose to enter into an agreement with YSAQMD and pay into the established off-site mitigation program fund, where YSAQMD would commit to reducing the type and amount of emissions identified in the agreement; and
- Purchase carbon credits to offset project annual emissions. Should carbon credit be purchased, the credit purchases shall adhere to the following:
 1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title

17 of the California Code of Regulations. Such credits must be purchased through one of the following:

- (i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;
 - (ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or
 - (iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the YSAQMD;
 - (iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.
2. The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Dixon Community Development Department.

Transportation

The currently proposed project would be developed within the footprint of the Lincoln Square Project's residential component. Similar to the Lincoln Square Project's residential component, as part of the currently proposed project, primary vehicle site access would be provided from SR 113 and secondary access from North Lincoln Street (see Figure 3), with an internal road system that provides access to all of the proposed residential units. In addition, as was the case for the Lincoln Square Project's residential component, the proposed project's improvements would be limited to on-site areas and would not impact the existing bicycle lanes and/or sidewalks in the project vicinity. Finally, the proposed project would be required to be consistent with all applicable provisions of the Dixon Municipal Code and the City's Engineering Design Standards. As such, potential impacts identified in the Lincoln Square IS/MND related to transit, bicycle, and pedestrian facilities, as well as increases in hazards due to design features or incompatible uses and emergency access, would be similar to those that would result through development of the proposed project. Accordingly, the proposed project would be subject to Mitigation Measure XVII-1 of the Lincoln Square IS/MND to reduce potential impacts related to disruptions of the transportation network in the project vicinity during project construction to a less-than-significant level.

With respect to VMT, as discussed in Section XVII, Transportation, of the Lincoln Square IS/MND, Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Pursuant to Section 15064.3, analysis of VMT attributable to a

project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. At the time the Lincoln Square IS/MND was prepared, the City of Dixon had not yet established standards or thresholds regarding VMT. As a result, the City elected to use the thresholds recommended in the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), published by the Governor's Office of Planning and Research (OPR) in December 2018.¹⁰ Consistent with the Technical Advisory, projects that meet certain screening thresholds based on their location and project type may be presumed to result in a less-than-significant transportation impact.

To evaluate potential VMT impacts associated with the proposed project, a VMT Analysis was prepared by Urban Crossroads for the Lincoln Square IS/MND. The VMT Analysis used the Dixon Travel Demand Model (City Model) to evaluate the residential component of the Lincoln Square Project. As noted in the Technical Advisory, residential projects exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Therefore, the VMT Analysis determined the City of Dixon VMT per capita through inputs into the City Model, in combination with population by Transportation Analysis Zone (TAZ), as developed for the City's General Plan. The daily VMT per capita for the City was determined to be 21.78. As detailed further in the Lincoln Square IS/MND, the Lincoln Square Project's residential component was determined to result in 17.26 VMT per capita. Because the residential component's VMT per capita was found to be approximately 20.75 percent below the City's existing VMT per capita, in accordance with the Technical Advisory, the Lincoln Square IS/MND concluded the project's residential component would result in a less-than-significant impact.

Using the same approach to calculate VMT as was used for the approved Lincoln Square Project, DKS Associates calculated VMT per capita for the proposed project, and concluded the proposed project would result in 16 VMT per capita.¹¹ Thus, both the approved Lincoln Square Project and the currently proposed project would result in VMT per capita below the City of Dixon residential project threshold of 18.5 VMT per capita. Under the proposed project, the VMT has decreased with the increase in residential density, consistent with VMT as a State-required measurement to increase density in and around commercial areas.

Overall, based on the above, the proposed project would not result in new significant impacts or substantially more severe significant impacts related to transportation beyond what were identified in the Lincoln Square IS/MND. Thus, the proposed project is consistent with the conclusions of the Lincoln Square IS/MND.

Lincoln Square IS/MND Mitigation Measures:

Implementation of the following Lincoln Square IS/MND mitigation measure would reduce the potential impact to a *less-than-significant* level.

XVII-1 Prior to any construction activities at the project site, the project applicant shall prepare a detailed Construction Traffic Control Plan and submit it for review and approval to the City Department of Engineering/Utilities. The applicant and the City shall consult with Caltrans, Redit-Ride, and local emergency service providers for their input prior to approving the Plan. The plan shall ensure that acceptable

¹⁰ Governor's Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.

¹¹ Vaca, Erin, Senior Transportation Planner, DKS Associates. Personal Communication [email] with Brandon Rodriguez, Senior Civil Engineer, City of Dixon, May 30, 2023.

operating conditions on local and State roadways and freeway facilities are maintained during construction. At a minimum, the plan shall include:

- The number of truck trips, time, and day of street closures;
- Time of day of arrival and departure of trucks;
- Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting;
- Provision of a truck circulation pattern;
- Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas);
- Safe and efficient access routes for emergency vehicles;
- Manual traffic control, when necessary;
- Proper advance warning and posted signage concerning street closures; and
- Provisions for pedestrian safety.

A copy of the Construction Traffic Control Plan shall be submitted to local emergency response agencies, and the agencies shall be notified at least 14 days prior to the commencement of construction that would partially or fully obstruct roadways.

Modified Mitigation Measures:

None required.

Remaining Environmental Resource Areas

In addition to the CEQA topics discussed in the previous sections of this Addendum, the Lincoln Square IS/MND included analysis of the following issue areas:

- Aesthetics;
- Agriculture and Forestry Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Mineral Resources;
- Noise;
- Population and Housing;
- Public Services;
- Recreation;
- Tribal Cultural Resources;
- Utilities and Service Systems; and
- Wildfire.

As discussed previously, construction and operation activities associated with the currently proposed project would be confined to the residential component footprint previously analyzed as part of the Lincoln Square IS/MND. Thus, although the proposed project would consist of 93

duplex buildings, rather than the 100 single-family residences anticipated for the site as part of the Lincoln Square Project, the proposed project would not increase the area of disturbance previously anticipated for the site in the Lincoln Square IS/MND.

Given that site conditions, as well as conditions in the project vicinity, have remained the same, the currently proposed project would not result in new significant impacts or substantially more significant impacts related to the following environmental issue areas: aesthetics, agriculture and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, tribal cultural resources, and wildfire. For example, new scenic vistas would not have occurred within the project vicinity subsequent to the adoption of the Lincoln Square IS/MND, and the project would not result in increased building heights relative to what was previously proposed as part of the Lincoln Square Project. Similarly, the project site would not have undergone changes related to farmland, subsurface conditions, and hydrology since adoption of the Lincoln Square IS/MND. The vast majority of existing uses within the project vicinity are the same or similar to those that existed during preparation of the Lincoln Square IS/MND. While the Lincoln Square Project was designed such that the backyards of the proposed single-family residences would abut the backyards of the existing residences west of the project site, the proposed project would place an internal drive aisle along the site's border. Nevertheless, an existing block wall along the western site boundary would ensure that noise generated by vehicle circulation would be sufficiently attenuated, and that a new significant impact would not occur. In addition, the proposed project would result in a net increase of 413 daily trips, as the project is estimated to generate 1,367 daily trips, whereas the Lincoln Square Project's residential component was estimated to generate 954 daily trips.¹² As such, traffic noise generated by the proposed project would not be anticipated to result in a substantially greater increase to the predicted traffic noise levels in the Lincoln Square IS/MND.¹³

It is also important to note that the Lincoln Square IS/MND includes other mitigation measures that are applicable to the currently proposed project, and thus, will be required during implementation of the proposed project. In general, these mitigation measures pertain to cultural resources (MM VI-1 and VI-2), geology and soils [(MM VII-1 (expansive soils) and VII-1 (paleontological resources)], noise (MM XIII-1), and tribal cultural resources (MM XVIII-1 through XVIII-3).

Thus, with respect to the foregoing issue areas, the currently proposed project would result in similar impacts as those determined for the Lincoln Square Project and the mitigation measures set forth in the Lincoln Square IS/MND, as well as compliance with applicable federal, State, and local policies, regulations, and standards, would ensure impacts related to the aforementioned issue areas would be reduced to a less-than-significant level.

With respect to energy, the proposed project would be subject to the currently adopted 2022 California Green Building Standards Code (CALGreen Code) and the Building Energy Efficiency Standards (Title 24, Part 6 of the California Code of Regulations), which include more stringent requirements related to energy efficiency than previous iterations of the aforementioned regulations. Energy reductions relative to previous Building Energy Efficiency Standards are achieved through various regulations, including requirements for the use of high-efficacy lighting,

¹² Wood Rodgers. *Independence at Dixon, Dixon, CA, Traffic Impact Analysis*. July 2023.

¹³ The IS/MND determined that the Lincoln Square project (residential and commercial components) would increase traffic noise levels by 0.4 and 0.8 dB DNL at SR 113 and North Lincoln Street, respectively. The increase in trips attributable to the current project would not be anticipated to cause traffic noise levels to exceed the applicable traffic noise level increase thresholds of 1.5 dB DNL and 3 dB DNL for SR 113 and North Lincoln Street, respectively.

improved water heating system efficiency, and high-performance attics and walls. The 2022 Building Energy Efficiency Standards are designed to move the State closer to its net-zero energy goals for new residential development by requiring all new residences to install enough renewable energy to offset all the electricity needs of each residential unit, as well as battery storage to maximize on-site use of solar energy and avoid electricity demand during peak consumption periods on the grid. The proposed project would exceed Title 24 energy efficiency requirements by 10 percent, including 15 percent of total project electricity generated coming from renewable sources.

Additionally, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction. Thus, the proposed project would not result in new significant impacts or substantially more significant impacts related to energy beyond what were identified in the Lincoln Square IS/MND.

Finally, with respect to land use and planning and population and housing, the currently proposed project would not physically divide an established community, and through approval of the proposed PD Amendment, the proposed project would be consistent with the site's PMR-PD zoning and the proposed project would actually be more in line with the type of housing and density allowed and envisioned under the Corridor Mixed Use General Plan land use designation. New utility lines installed as part of the proposed project would be located in the right-of-way of project roadways and would be sized to accommodate only the proposed project, thereby ensuring the project does not induce substantial unplanned population growth. Regarding public services and utilities, the proposed project would be subject to applicable development impact fees, ensuring the project pays a fair-share contribution for the increase in demand for various public services and utilities. Thus, the proposed project would not result in new significant impacts or substantially more significant impacts related to the aforementioned environmental issue areas beyond what were identified in the Lincoln Square IS/MND.

Environmental Findings

As presented in the discussions above, the proposed project would not result in any new information of substantial importance, new significant impacts, or a substantial increase in the severity of previously identified significant impacts that would require major revisions to the Lincoln Square IS/MND. The feasibility of mitigation measures previously identified would not be altered as part of implementation of the proposed project. The proposed project would be required to implement all applicable mitigation measures set forth in the Lincoln Square IS/MND. As a result, new information of substantial importance, which was not known and could not have been known at the time the previous CEQA document was prepared, has not come to light from what has been previously analyzed.

Conclusion

The proposed project would not result in any new information of substantial importance, new significant impacts, or a substantial increase in the severity of previously identified significant

impacts that would require major revisions to the Lincoln Square IS/MND. As such, the proposed project would not result in any conditions identified in CEQA Guidelines Sections 15162 and 15163, and a subsequent Negative Declaration to the Lincoln Square IS/MND is not required. The appropriate supplemental review document is this Addendum, prepared pursuant to CEQA Guidelines section 15164.

F. SOURCES

The following documents are referenced information sources used for the purposes of this Addendum:

1. CalEEMod Air Quality Modeling Results. August 2023.
2. California Tree and Landscape Consulting, Inc. *Updated Tree Impact Assessment*. July 10, 2023.
3. City of Dixon. *General Plan 2040*. Adopted May 18, 2021.
4. City of Dixon. *General Plan 2040 Final Environmental Impact Report*. Certified May 18, 2021.
5. City of Dixon. *Lincoln Square Initial Study/Mitigated Negative Declaration*. January 2022.
6. Governor's Office of Planning and Research. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December 2018.
7. Vaca, Erin, Senior Transportation Planner, DKS Associates. Personal Communication [email] with Brandon Rodriguez, Senior Civil Engineer, City of Dixon, May 30, 2023.
8. Wood Rodgers. *Independence at Dixon, Dixon, CA, Traffic Impact Analysis*. July 2023.

APPENDIX A

AIR QUALITY AND GHG MODELING RESULTS

Independence at Dixon Custom Report

Table of Contents

1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.3. Construction Emissions by Year, Mitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
 - 2.6. Operations Emissions by Sector, Mitigated
3. Construction Emissions Details
 - 3.1. Site Preparation: Residential (2023) - Unmitigated
 - 3.2. Site Preparation: Residential (2023) - Mitigated

- 3.3. Site Preparation: Commercial (2023) - Unmitigated
- 3.4. Site Preparation: Commercial (2023) - Mitigated
- 3.5. Grading: Residential (2023) - Unmitigated
- 3.6. Grading: Residential (2023) - Mitigated
- 3.7. Grading: Residential (2024) - Unmitigated
- 3.8. Grading: Residential (2024) - Mitigated
- 3.9. Grading: Commercial (2023) - Unmitigated
- 3.10. Grading: Commercial (2023) - Mitigated
- 3.11. Building Construction: Residential (2024) - Unmitigated
- 3.12. Building Construction: Residential (2024) - Mitigated
- 3.13. Building Construction: Residential (2025) - Unmitigated
- 3.14. Building Construction: Residential (2025) - Mitigated
- 3.15. Building Construction: Commercial (2024) - Unmitigated
- 3.16. Building Construction: Commercial (2024) - Mitigated
- 3.17. Paving (2024) - Unmitigated
- 3.18. Paving (2024) - Mitigated
- 3.19. Architectural Coating: Residential (2024) - Unmitigated

3.20. Architectural Coating: Residential (2024) - Mitigated

3.21. Architectural Coating: Residential (2025) - Unmitigated

3.22. Architectural Coating: Residential (2025) - Mitigated

3.23. Architectural Coating: Commercial (2024) - Unmitigated

3.24. Architectural Coating: Commercial (2024) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

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

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Independence at Dixon
Construction Start Date	11/1/2023
Operational Year	2025
Lead Agency	City of Dixon
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	33.8
Location	38.465810112872674, -121.8233613270892
County	Solano-Sacramento
City	Dixon
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	831
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.17

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
------------------	------	------	-------------	-----------------------	------------------------	--------------------------------	------------	-------------

Condo/Townhouse	186	Dwelling Unit	10.4	197,160	68,915	—	525	—
Parking Lot	487	Space	2.45	0.00	0.00	—	—	—
Convenience Market with Gas Pumps	8.00	Pump	0.03	4,500	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-10-A	Establish Onsite Renewable Energy Systems: Generic
Water	W-7	Adopt a Water Conservation Strategy

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.	4.71	10.7	26.6	44.1	0.06	1.07	2.98	4.05	0.99	0.71	1.70	—	9,202	9,202	0.28	0.31	15.2	9,316
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.58	8.05	80.8	72.6	0.12	3.63	39.8	43.5	3.34	20.3	23.7	—	13,552	13,552	0.50	0.32	0.34	13,661
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.35	4.84	14.3	20.9	0.03	0.58	2.52	2.82	0.54	1.18	1.46	—	4,512	4,512	0.15	0.15	3.02	4,563

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	0.88	2.61	3.82	0.01	0.11	0.46	0.51	0.10	0.22	0.27	—	747	747	0.02	0.02	0.50	755

2.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.71	10.7	26.6	44.1	0.06	1.07	2.98	4.05	0.99	0.71	1.70	—	9,202	9,202	0.28	0.31	15.2	9,316
2025	2.29	5.35	12.5	22.5	0.03	0.47	1.71	2.18	0.43	0.41	0.84	—	4,805	4,805	0.14	0.16	7.99	4,863
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	9.58	8.05	80.8	72.6	0.12	3.63	39.8	43.5	3.34	20.3	23.7	—	13,552	13,552	0.50	0.32	0.11	13,661
2024	4.31	5.42	35.8	37.3	0.07	1.47	9.67	11.1	1.35	3.77	5.13	—	8,199	8,199	0.28	0.29	0.34	8,292
2025	2.24	5.29	12.7	21.2	0.03	0.47	1.71	2.18	0.43	0.41	0.84	—	4,642	4,642	0.15	0.16	0.21	4,694
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.81	0.68	6.88	5.97	0.01	0.30	2.52	2.82	0.27	1.18	1.46	—	1,204	1,204	0.04	0.03	0.17	1,214
2024	2.35	4.84	14.3	20.9	0.03	0.58	1.76	2.34	0.54	0.48	1.02	—	4,512	4,512	0.15	0.15	3.02	4,563
2025	1.00	2.44	5.59	9.41	0.01	0.21	0.75	0.96	0.19	0.18	0.37	—	2,082	2,082	0.07	0.07	1.55	2,107
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.15	0.12	1.25	1.09	< 0.005	0.05	0.46	0.51	0.05	0.22	0.27	—	199	199	0.01	0.01	0.03	201
2024	0.43	0.88	2.61	3.82	0.01	0.11	0.32	0.43	0.10	0.09	0.19	—	747	747	0.02	0.02	0.50	755
2025	0.18	0.45	1.02	1.72	< 0.005	0.04	0.14	0.18	0.03	0.03	0.07	—	345	345	0.01	0.01	0.26	349

2.3. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.71	10.7	26.6	44.1	0.06	1.07	2.98	4.05	0.99	0.71	1.70	—	9,202	9,202	0.28	0.31	15.2	9,316
2025	2.29	5.35	12.5	22.5	0.03	0.47	1.71	2.18	0.43	0.41	0.84	—	4,805	4,805	0.14	0.16	7.99	4,863
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	9.58	8.05	80.8	72.6	0.12	3.63	39.8	43.5	3.34	20.3	23.7	—	13,552	13,552	0.50	0.32	0.11	13,661
2024	4.31	5.42	35.8	37.3	0.07	1.47	9.67	11.1	1.35	3.77	5.13	—	8,199	8,199	0.28	0.29	0.34	8,292
2025	2.24	5.29	12.7	21.2	0.03	0.47	1.71	2.18	0.43	0.41	0.84	—	4,642	4,642	0.15	0.16	0.21	4,694
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.81	0.68	6.88	5.97	0.01	0.30	2.52	2.82	0.27	1.18	1.46	—	1,204	1,204	0.04	0.03	0.17	1,214
2024	2.35	4.84	14.3	20.9	0.03	0.58	1.76	2.34	0.54	0.48	1.02	—	4,512	4,512	0.15	0.15	3.02	4,563
2025	1.00	2.44	5.59	9.41	0.01	0.21	0.75	0.96	0.19	0.18	0.37	—	2,082	2,082	0.07	0.07	1.55	2,107
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.15	0.12	1.25	1.09	< 0.005	0.05	0.46	0.51	0.05	0.22	0.27	—	199	199	0.01	0.01	0.03	201
2024	0.43	0.88	2.61	3.82	0.01	0.11	0.32	0.43	0.10	0.09	0.19	—	747	747	0.02	0.02	0.50	755
2025	0.18	0.45	1.02	1.72	< 0.005	0.04	0.14	0.18	0.03	0.03	0.07	—	345	345	0.01	0.01	0.26	349

2.4. 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.	13.7	17.7	9.57	79.3	0.15	0.23	11.9	12.1	0.22	3.01	3.24	88.8	17,202	17,291	9.88	0.79	990	18,763

Mit.	13.7	17.7	9.47	79.3	0.15	0.22	11.9	12.1	0.22	3.01	3.23	88.2	16,996	17,084	9.79	0.78	990	18,553
% Reduced	< 0.5%	< 0.5%	1%	< 0.5%	—	3%	—	< 0.5%	3%	—	< 0.5%	1%	1%	1%	1%	< 0.5%	—	1%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.6	15.5	11.0	67.7	0.14	0.23	11.9	12.1	0.22	3.01	3.23	88.8	16,138	16,227	10.0	0.86	936	17,671
Mit.	11.6	15.5	10.9	67.6	0.14	0.22	11.9	12.1	0.21	3.01	3.23	88.2	15,932	16,020	9.94	0.86	936	17,461
% Reduced	< 0.5%	< 0.5%	1%	< 0.5%	—	3%	—	< 0.5%	4%	—	< 0.5%	1%	1%	1%	1%	< 0.5%	—	1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.1	16.0	10.4	68.5	0.15	0.23	11.6	11.9	0.22	2.95	3.17	88.8	16,341	16,429	9.94	0.83	958	17,883
Mit.	12.1	16.0	10.3	68.4	0.15	0.22	11.6	11.9	0.21	2.95	3.16	88.2	16,135	16,223	9.86	0.82	958	17,673
% Reduced	< 0.5%	< 0.5%	1%	< 0.5%	—	3%	—	< 0.5%	4%	—	< 0.5%	1%	1%	1%	1%	< 0.5%	—	1%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.20	2.93	1.89	12.5	0.03	0.04	2.12	2.16	0.04	0.54	0.58	14.7	2,705	2,720	1.65	0.14	159	2,961
Mit.	2.20	2.92	1.87	12.5	0.03	0.04	2.12	2.16	0.04	0.54	0.58	14.6	2,671	2,686	1.63	0.14	159	2,926
% Reduced	< 0.5%	< 0.5%	1%	< 0.5%	< 0.5%	3%	—	< 0.5%	4%	—	< 0.5%	1%	1%	1%	1%	< 0.5%	—	1%

2.5. 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	12.6	11.9	8.34	68.1	0.15	0.14	11.9	12.0	0.13	3.01	3.14	—	15,015	15,015	0.72	0.74	55.7	15,309

Area	1.04	5.74	0.10	10.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	29.0	29.0	< 0.005	< 0.005	—	29.1
Energy	0.13	0.07	1.13	0.49	0.01	0.09	—	0.09	0.09	—	0.09	—	2,145	2,145	0.24	0.02	—	2,156
Water	—	—	—	—	—	—	—	—	—	—	—	12.8	12.7	25.5	1.32	0.03	—	67.8
Waste	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Total	13.7	17.7	9.57	79.3	0.15	0.23	11.9	12.1	0.22	3.01	3.24	88.8	17,202	17,291	9.88	0.79	990	18,763
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.5	10.7	9.85	67.2	0.14	0.14	11.9	12.0	0.13	3.01	3.14	—	13,980	13,980	0.87	0.82	1.44	14,246
Area	0.00	4.76	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.13	0.07	1.13	0.49	0.01	0.09	—	0.09	0.09	—	0.09	—	2,145	2,145	0.24	0.02	—	2,156
Water	—	—	—	—	—	—	—	—	—	—	—	12.8	12.7	25.5	1.32	0.03	—	67.8
Waste	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Total	11.6	15.5	11.0	67.7	0.14	0.23	11.9	12.1	0.22	3.01	3.23	88.8	16,138	16,227	10.0	0.86	936	17,671
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.4	10.7	9.17	62.7	0.14	0.14	11.6	11.8	0.13	2.95	3.08	—	14,168	14,168	0.79	0.78	24.0	14,444
Area	0.51	5.25	0.05	5.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	14.3	14.3	< 0.005	< 0.005	—	14.4
Energy	0.13	0.07	1.13	0.49	0.01	0.09	—	0.09	0.09	—	0.09	—	2,145	2,145	0.24	0.02	—	2,156
Water	—	—	—	—	—	—	—	—	—	—	—	12.8	12.7	25.5	1.32	0.03	—	67.8
Waste	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Total	12.1	16.0	10.4	68.5	0.15	0.23	11.6	11.9	0.22	2.95	3.17	88.8	16,341	16,429	9.94	0.83	958	17,883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.08	1.96	1.67	11.4	0.03	0.02	2.12	2.15	0.02	0.54	0.56	—	2,346	2,346	0.13	0.13	3.98	2,391
Area	0.09	0.96	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.37	2.37	< 0.005	< 0.005	—	2.38
Energy	0.02	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	355	355	0.04	< 0.005	—	357

Water	—	—	—	—	—	—	—	—	—	—	—	2.12	2.10	4.22	0.22	0.01	—	11.2
Waste	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155	155
Total	2.20	2.93	1.89	12.5	0.03	0.04	2.12	2.16	0.04	0.54	0.58	14.7	2,705	2,720	1.65	0.14	159	2,961

2.6. 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	12.6	11.9	8.34	68.1	0.15	0.14	11.9	12.0	0.13	3.01	3.14	—	15,015	15,015	0.72	0.74	55.7	15,309
Area	1.04	5.74	0.10	10.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	29.0	29.0	< 0.005	< 0.005	—	29.1
Energy	0.12	0.06	1.03	0.45	0.01	0.08	—	0.08	0.08	—	0.08	—	1,940	1,940	0.22	0.01	—	1,950
Water	—	—	—	—	—	—	—	—	—	—	—	12.2	12.1	24.3	1.25	0.03	—	64.5
Waste	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Total	13.7	17.7	9.47	79.3	0.15	0.22	11.9	12.1	0.22	3.01	3.23	88.2	16,996	17,084	9.79	0.78	990	18,553
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.5	10.7	9.85	67.2	0.14	0.14	11.9	12.0	0.13	3.01	3.14	—	13,980	13,980	0.87	0.82	1.44	14,246
Area	0.00	4.76	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.12	0.06	1.03	0.45	0.01	0.08	—	0.08	0.08	—	0.08	—	1,940	1,940	0.22	0.01	—	1,950
Water	—	—	—	—	—	—	—	—	—	—	—	12.2	12.1	24.3	1.25	0.03	—	64.5
Waste	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Total	11.6	15.5	10.9	67.6	0.14	0.22	11.9	12.1	0.21	3.01	3.23	88.2	15,932	16,020	9.94	0.86	936	17,461

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.4	10.7	9.17	62.7	0.14	0.14	11.6	11.8	0.13	2.95	3.08	—	14,168	14,168	0.79	0.78	24.0	14,444
Area	0.51	5.25	0.05	5.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	14.3	14.3	< 0.005	< 0.005	—	14.4
Energy	0.12	0.06	1.03	0.45	0.01	0.08	—	0.08	0.08	—	0.08	—	1,940	1,940	0.22	0.01	—	1,950
Water	—	—	—	—	—	—	—	—	—	—	—	12.2	12.1	24.3	1.25	0.03	—	64.5
Waste	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Total	12.1	16.0	10.3	68.4	0.15	0.22	11.6	11.9	0.21	2.95	3.16	88.2	16,135	16,223	9.86	0.82	958	17,673
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.08	1.96	1.67	11.4	0.03	0.02	2.12	2.15	0.02	0.54	0.56	—	2,346	2,346	0.13	0.13	3.98	2,391
Area	0.09	0.96	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.37	2.37	< 0.005	< 0.005	—	2.38
Energy	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	321	321	0.04	< 0.005	—	323
Water	—	—	—	—	—	—	—	—	—	—	—	2.02	2.00	4.02	0.21	< 0.005	—	10.7
Waste	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155	155
Total	2.20	2.92	1.87	12.5	0.03	0.04	2.12	2.16	0.04	0.54	0.58	14.6	2,671	2,686	1.63	0.14	159	2,926

3. Construction Emissions Details

3.1. Site Preparation: Residential (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.18	1.94	< 0.005	0.10	—	0.10	0.09	—	0.09	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement:	—	—	—	—	—	—	1.08	1.08	—	0.55	0.55	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.40	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movement:	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.72	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	148	148	< 0.005	0.01	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.01	0.01	0.58	0.13	< 0.005	0.01	0.12	0.12	0.01	0.03	0.04	—	447	447	< 0.005	0.07	0.02	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.28	8.28	< 0.005	< 0.005	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.5	24.5	< 0.005	< 0.005	0.02	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	< 0.005	< 0.005	< 0.005	—

3.2. Site Preparation: Residential (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314

Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.26	0.22	2.18	1.94	< 0.005	0.10	—	0.10	0.09	—	0.09	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement:	—	—	—	—	—	—	1.08	1.08	—	0.55	0.55	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.05	0.04	0.40	0.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48.0	48.0	< 0.005	< 0.005	—	48.2
Dust From Material Movement:	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.08	0.07	0.07	0.72	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	148	148	< 0.005	0.01	0.02	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Hauling	0.01	0.01	0.58	0.13	< 0.005	0.01	0.12	0.12	0.01	0.03	0.04	—	447	447	< 0.005	0.07	0.02	

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.28	8.28	< 0.005	< 0.005	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.5	24.5	< 0.005	< 0.005	0.02	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.37	1.37	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	< 0.005	< 0.005	< 0.005	—

3.3. Site Preparation: Commercial (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.09	0.97	< 0.005	0.05	—	0.05	0.05	—	0.05	—	145	145	0.01	< 0.005	—	146

Dust From Material Movement:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.72	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	148	148	< 0.005	0.01	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.02	0.01	0.58	0.13	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	450	450	< 0.005	0.07	0.02	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.14	4.14	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.01	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	—
---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---	------	------	---------	---------	---------	---

3.4. Site Preparation: Commercial (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.70	3.95	39.7	35.5	0.05	1.81	—	1.81	1.66	—	1.66	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.09	0.97	< 0.005	0.05	—	0.05	0.05	—	0.05	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1

Dust From Material Movement:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.72	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	148	148	< 0.005	0.01	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.02	0.01	0.58	0.13	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	450	450	< 0.005	0.07	0.02	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.14	4.14	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.01	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	—

3.5. Grading: Residential (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.41	2.03	< 0.005	0.10	—	0.10	0.09	—	0.09	—	426	426	0.02	< 0.005	—	428
Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.44	0.37	< 0.005	0.02	—	0.02	0.02	—	0.02	—	70.5	70.5	< 0.005	< 0.005	—	70.8
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.82	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	0.01	0.01	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.04	0.02	1.44	0.32	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,117	1,117	0.01	0.18	0.06	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.1	72.1	< 0.005	0.01	0.06	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	—

3.6. Grading: Residential (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement:	—	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.29	0.24	2.41	2.03	< 0.005	0.10	—	0.10	0.09	—	0.09	—	426	426	0.02	< 0.005	—	428
Dust From Material Movement:	—	—	—	—	—	—	0.59	0.59	—	0.24	0.24	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.05	0.04	0.44	0.37	< 0.005	0.02	—	0.02	0.02	—	0.02	—	70.5	70.5	< 0.005	< 0.005	—	70.8
Dust From Material Movement:	—	—	—	—	—	—	0.11	0.11	—	0.04	0.04	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.09	0.08	0.08	0.82	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	0.01	0.01	0.02	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Hauling	0.04	0.02	1.44	0.32	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,117	1,117	0.01	0.18	0.06	

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.1	72.1	< 0.005	0.01	0.06	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	—

3.7. Grading: Residential (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.54	1.36	< 0.005	0.07	—	0.07	0.06	—	0.06	—	297	297	0.01	< 0.005	—	298

Dust From Material Movement:	—	—	—	—	—	—	0.41	0.41	—	0.16	0.16	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.28	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49.2	49.2	< 0.005	< 0.005	—	49.3
Dust From Material Movement:	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	166	166	0.01	0.01	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.04	0.02	1.40	0.31	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,098	1,098	0.01	0.17	0.06	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.63	7.63	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.04	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.26	1.26	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.18	8.18	< 0.005	< 0.005	0.01	—
---------	---------	---------	------	---------	---------	---------	---------	---------	---------	---------	---------	---	------	------	---------	---------	------	---

3.8. Grading: Residential (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement:	—	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.54	1.36	< 0.005	0.07	—	0.07	0.06	—	0.06	—	297	297	0.01	< 0.005	—	298
Dust From Material Movement:	—	—	—	—	—	—	0.41	0.41	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.28	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	49.2	49.2	< 0.005	< 0.005	—	49.3

Dust From Material Movement:	—	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.07	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	166	166	0.01	0.01	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.04	0.02	1.40	0.31	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,098	1,098	0.01	0.17	0.06	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.63	7.63	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.4	49.4	< 0.005	0.01	0.04	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.26	1.26	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.18	8.18	< 0.005	< 0.005	0.01	—

3.9. Grading: Commercial (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.02	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	181	181	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.9	29.9	< 0.005	< 0.005	—	30.0
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	0.82	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	0.01	0.01	0.02	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.03	0.02	1.15	0.26	0.01	0.02	0.23	0.25	0.02	0.06	0.08	—	894	894	0.01	0.14	0.05	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.73	4.73	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.5	24.5	< 0.005	< 0.005	0.02	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	< 0.005	< 0.005	< 0.005	—

3.10. Grading: Commercial (2023) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.43	3.72	37.3	31.4	0.06	1.59	—	1.59	1.47	—	1.47	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement:	—	—	—	—	—	—	9.21	9.21	—	3.65	3.65	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.12	0.10	1.02	0.86	< 0.005	0.04	—	0.04	0.04	—	0.04	—	181	181	0.01	< 0.005	—	181
Dust From Material Movement:	—	—	—	—	—	—	0.25	0.25	—	0.10	0.10	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.02	0.02	0.19	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.9	29.9	< 0.005	< 0.005	—	30.0
Dust From Material Movement:	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.09	0.08	0.08	0.82	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	169	169	0.01	0.01	0.02	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Hauling	0.03	0.02	1.15	0.26	0.01	0.02	0.23	0.25	0.02	0.06	0.08	—	894	894	0.01	0.14	0.05	

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.73	4.73	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.5	24.5	< 0.005	< 0.005	0.02	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	< 0.005	< 0.005	< 0.005	—

3.11. Building Construction: Residential (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.78	0.65	6.10	7.14	0.01	0.27	—	0.27	0.25	—	0.25	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.11	1.30	< 0.005	0.05	—	0.05	0.05	—	0.05	—	216	216	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.55	0.38	6.18	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,244	1,244	0.02	0.05	5.09	—
Vendor	0.04	0.03	0.72	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	577	577	0.01	0.08	1.49	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.51	5.15	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,124	1,124	0.04	0.05	0.13	—
Vendor	0.04	0.03	0.77	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	578	578	0.01	0.08	0.04	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.23	2.73	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	624	624	0.02	0.03	1.20	—
Vendor	0.02	0.01	0.41	0.21	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	314	314	< 0.005	0.04	0.35	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.50	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	0.20	—
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	52.0	52.0	< 0.005	0.01	0.06	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.12. Building Construction: Residential (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.65	6.10	7.14	0.01	0.27	—	0.27	0.25	—	0.25	—	1,304	1,304	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.11	1.30	< 0.005	0.05	—	0.05	0.05	—	0.05	—	216	216	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.55	0.38	6.18	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,244	1,244	0.02	0.05	5.09	—
Vendor	0.04	0.03	0.72	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	577	577	0.01	0.08	1.49	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.51	5.15	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,124	1,124	0.04	0.05	0.13	—
Vendor	0.04	0.03	0.77	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	578	578	0.01	0.08	0.04	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.23	2.73	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	624	624	0.02	0.03	1.20	—
Vendor	0.02	0.01	0.41	0.21	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	314	314	< 0.005	0.04	0.35	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.50	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	0.20	—
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	52.0	52.0	< 0.005	0.01	0.06	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.13. Building Construction: Residential (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.62	5.77	0.01	0.19	—	0.19	0.18	—	0.18	—	1,060	1,060	0.04	0.01	—	1,064
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.84	1.05	< 0.005	0.03	—	0.03	0.03	—	0.03	—	176	176	0.01	< 0.005	—	176
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.73	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,219	1,219	0.02	0.04	4.65	—
Vendor	0.04	0.03	0.68	0.34	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	567	567	0.01	0.07	1.48	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.48	0.47	4.79	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,102	1,102	0.03	0.05	0.12	—

Vendor	0.03	0.03	0.74	0.35	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	567	567	0.01	0.08	0.04	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.17	2.07	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	497	497	0.01	0.02	0.89	—
Vendor	0.01	0.01	0.32	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	251	251	< 0.005	0.03	0.28	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.3	82.3	< 0.005	< 0.005	0.15	—
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.5	41.5	< 0.005	0.01	0.05	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.14. Building Construction: Residential (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.62	5.77	0.01	0.19	—	0.19	0.18	—	0.18	—	1,060	1,060	0.04	0.01	—	1,064
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.84	1.05	< 0.005	0.03	—	0.03	0.03	—	0.03	—	176	176	0.01	< 0.005	—	176
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.73	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,219	1,219	0.02	0.04	4.65	—
Vendor	0.04	0.03	0.68	0.34	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	567	567	0.01	0.07	1.48	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.48	0.47	4.79	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,102	1,102	0.03	0.05	0.12	—
Vendor	0.03	0.03	0.74	0.35	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	567	567	0.01	0.08	0.04	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.17	2.07	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	497	497	0.01	0.02	0.89	—
Vendor	0.01	0.01	0.32	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	251	251	< 0.005	0.03	0.28	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.3	82.3	< 0.005	< 0.005	0.15	—

Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	41.5	41.5	< 0.005	0.01	0.05	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.15. Building Construction: Commercial (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.69	4.31	0.01	0.16	—	0.16	0.15	—	0.15	—	788	788	0.03	0.01	—	791
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.67	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	131	131	0.01	< 0.005	—	131
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.55	0.38	6.18	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,244	1,244	0.02	0.05	5.09	—
Vendor	0.04	0.03	0.72	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	577	577	0.01	0.08	1.49	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.51	5.15	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,124	1,124	0.04	0.05	0.13	—
Vendor	0.04	0.03	0.77	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	578	578	0.01	0.08	0.04	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.14	1.65	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	377	377	0.01	0.02	0.72	—
Vendor	0.01	0.01	0.25	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	< 0.005	0.03	0.21	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.4	62.4	< 0.005	< 0.005	0.12	—
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.4	31.4	< 0.005	< 0.005	0.03	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.16. Building Construction: Commercial (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.40	3.69	4.31	0.01	0.16	—	0.16	0.15	—	0.15	—	788	788	0.03	0.01	—	791
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.67	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	131	131	0.01	< 0.005	—	131
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.55	0.38	6.18	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,244	1,244	0.02	0.05	5.09	—
Vendor	0.04	0.03	0.72	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	577	577	0.01	0.08	1.49	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.51	0.51	5.15	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,124	1,124	0.04	0.05	0.13	—

Vendor	0.04	0.03	0.77	0.38	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	578	578	0.01	0.08	0.04	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.17	0.14	1.65	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	377	377	0.01	0.02	0.72	—
Vendor	0.01	0.01	0.25	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	< 0.005	0.03	0.21	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.4	62.4	< 0.005	< 0.005	0.12	—
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.4	31.4	< 0.005	< 0.005	0.03	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.17. Paving (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.11	1.01	1.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	195	195	0.01	< 0.005	—	195
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.2	32.2	< 0.005	< 0.005	—	32.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	0.01	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.4	16.4	< 0.005	< 0.005	0.03	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.71	2.71	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.18. Paving (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.01	1.29	< 0.005	0.05	—	0.05	0.05	—	0.05	—	195	195	0.01	< 0.005	—	195
Paving	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.2	32.2	< 0.005	< 0.005	—	32.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	125	125	< 0.005	0.01	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.4	16.4	< 0.005	< 0.005	0.03	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.71	2.71	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.19. Architectural Coating: Residential (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.47	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	69.0	69.0	< 0.005	< 0.005	—	69.2
Architectural Coatings	—	1.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.15	2.47	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	498	498	0.01	0.02	2.04	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.20	2.06	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	450	450	0.01	0.02	0.05	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.04	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	237	237	0.01	0.01	0.45	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	0.08	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.20. Architectural Coating: Residential (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.47	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	69.0	69.0	< 0.005	< 0.005	—	69.2
Architectural Coatings	—	1.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.4	11.4	< 0.005	< 0.005	—	11.5
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.15	2.47	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	498	498	0.01	0.02	2.04	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.20	2.06	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	450	450	0.01	0.02	0.05	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.09	1.04	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	237	237	0.01	0.01	0.45	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	0.08	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.21. Architectural Coating: Residential (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.41	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Architectural Coatings	—	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.4
Architectural Coatings	—	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.13	2.29	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	488	488	0.01	0.02	1.86	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.19	0.19	1.92	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	441	441	0.01	0.02	0.05	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	0.88	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	211	211	0.01	0.01	0.38	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.0	35.0	< 0.005	< 0.005	0.06	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.22. Architectural Coating: Residential (2025) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.41	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Architectural Coatings	—	1.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.4
Architectural Coatings	—	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.13	2.29	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	488	488	0.01	0.02	1.86	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.19	0.19	1.92	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	441	441	0.01	0.02	0.05	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.07	0.88	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	211	211	0.01	0.01	0.38	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.0	35.0	< 0.005	< 0.005	0.06	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.23. Architectural Coating: Commercial (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.0
Architectural Coatings	—	1.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.29
Architectural Coatings	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

3.24. Architectural Coating: Commercial (2024) - 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
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.30	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.0
Architect ural Coatings	—	1.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.29	
Architectural Coatings	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	6.66	6.27	4.75	39.1	0.09	0.08	7.06	7.14	0.08	1.79	1.87	—	8,879	8,879	0.40	0.42	33.1	9,048
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market with Gas Pumps	5.91	5.62	3.59	29.0	0.06	0.06	4.82	4.88	0.05	1.22	1.28	—	6,136	6,136	0.32	0.32	22.6	6,261
Total	12.6	11.9	8.34	68.1	0.15	0.14	11.9	12.0	0.13	3.01	3.14	—	15,015	15,015	0.72	0.74	55.7	15,309
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	6.09	5.67	5.62	37.9	0.08	0.08	7.06	7.14	0.08	1.79	1.87	—	8,262	8,262	0.47	0.47	0.86	8,414
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Convenience Market with Gas Pumps	5.37	5.04	4.23	29.3	0.06	0.06	4.82	4.88	0.05	1.22	1.28	—	5,718	5,718	0.40	0.35	0.59	5,832
Total	11.5	10.7	9.85	67.2	0.14	0.14	11.9	12.0	0.13	3.01	3.14	—	13,980	13,980	0.87	0.82	1.44	14,246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.11	1.03	0.96	6.50	0.01	0.01	1.26	1.28	0.01	0.32	0.33	—	1,387	1,387	0.07	0.07	2.37	1,413
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market with Gas Pumps	0.98	0.92	0.72	4.94	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	959	959	0.06	0.06	1.62	979
Total	2.08	1.96	1.67	11.4	0.03	0.02	2.12	2.15	0.02	0.54	0.56	—	2,346	2,346	0.13	0.13	3.98	2,391

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	6.66	6.27	4.75	39.1	0.09	0.08	7.06	7.14	0.08	1.79	1.87	—	8,879	8,879	0.40	0.42	33.1	9,048
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Convenience Market with Gas Pumps	5.91	5.62	3.59	29.0	0.06	0.06	4.82	4.88	0.05	1.22	1.28	—	6,136	6,136	0.32	0.32	22.6	6,261
Total	12.6	11.9	8.34	68.1	0.15	0.14	11.9	12.0	0.13	3.01	3.14	—	15,015	15,015	0.72	0.74	55.7	15,309
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	6.09	5.67	5.62	37.9	0.08	0.08	7.06	7.14	0.08	1.79	1.87	—	8,262	8,262	0.47	0.47	0.86	8,414
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market with Gas Pumps	5.37	5.04	4.23	29.3	0.06	0.06	4.82	4.88	0.05	1.22	1.28	—	5,718	5,718	0.40	0.35	0.59	5,832
Total	11.5	10.7	9.85	67.2	0.14	0.14	11.9	12.0	0.13	3.01	3.14	—	13,980	13,980	0.87	0.82	1.44	14,246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	1.11	1.03	0.96	6.50	0.01	0.01	1.26	1.28	0.01	0.32	0.33	—	1,387	1,387	0.07	0.07	2.37	1,413
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market with Gas Pumps	0.98	0.92	0.72	4.94	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	959	959	0.06	0.06	1.62	979
Total	2.08	1.96	1.67	11.4	0.03	0.02	2.12	2.15	0.02	0.54	0.56	—	2,346	2,346	0.13	0.13	3.98	2,391

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	536	536	0.09	0.01	—	542
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.2	52.2	0.01	< 0.005	—	52.8
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	129	129	0.02	< 0.005	—	130
Total	—	—	—	—	—	—	—	—	—	—	—	—	717	717	0.12	0.01	—	724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	536	536	0.09	0.01	—	542
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.2	52.2	0.01	< 0.005	—	52.8
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	129	129	0.02	< 0.005	—	130
Total	—	—	—	—	—	—	—	—	—	—	—	—	717	717	0.12	0.01	—	724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	88.8	88.8	0.01	< 0.005	—	89.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	8.65	8.65	< 0.005	< 0.005	—	8.74
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3	< 0.005	< 0.005	—	21.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.02	< 0.005	—	120

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	453	453	0.07	0.01	—	457
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.2	52.2	0.01	< 0.005	—	52.8
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	129	129	0.02	< 0.005	—	130
Total	—	—	—	—	—	—	—	—	—	—	—	—	634	634	0.10	0.01	—	640
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	453	453	0.07	0.01	—	457

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	52.2	52.2	0.01	< 0.005	—	52.8
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	129	129	0.02	< 0.005	—	130
Total	—	—	—	—	—	—	—	—	—	—	—	—	634	634	0.10	0.01	—	640
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	74.9	74.9	0.01	< 0.005	—	75.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	8.65	8.65	< 0.005	< 0.005	—	8.74
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3	< 0.005	< 0.005	—	21.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	105	105	0.02	< 0.005	—	106

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.13	0.06	1.09	0.46	0.01	0.09	—	0.09	0.09	—	0.09	—	1,384	1,384	0.12	< 0.005	—	1,388
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Convenience	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.6	43.6	< 0.005	< 0.005	—	43.7
Total	0.13	0.07	1.13	0.49	0.01	0.09	—	0.09	0.09	—	0.09	—	1,428	1,428	0.13	< 0.005	—	1,432
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.13	0.06	1.09	0.46	0.01	0.09	—	0.09	0.09	—	0.09	—	1,384	1,384	0.12	< 0.005	—	1,388
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.6	43.6	< 0.005	< 0.005	—	43.7
Total	0.13	0.07	1.13	0.49	0.01	0.09	—	0.09	0.09	—	0.09	—	1,428	1,428	0.13	< 0.005	—	1,432
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.20	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	229	229	0.02	< 0.005	—	230
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.22	7.22	< 0.005	< 0.005	—	7.24
Total	0.02	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	236	236	0.02	< 0.005	—	237

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.12	0.06	0.99	0.42	0.01	0.08	—	0.08	0.08	—	0.08	—	1,262	1,262	0.11	< 0.005	—	1,266
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.6	43.6	< 0.005	< 0.005	—	43.7
Total	0.12	0.06	1.03	0.45	0.01	0.08	—	0.08	0.08	—	0.08	—	1,306	1,306	0.12	< 0.005	—	1,310
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.12	0.06	0.99	0.42	0.01	0.08	—	0.08	0.08	—	0.08	—	1,262	1,262	0.11	< 0.005	—	1,266
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.6	43.6	< 0.005	< 0.005	—	43.7
Total	0.12	0.06	1.03	0.45	0.01	0.08	—	0.08	0.08	—	0.08	—	1,306	1,306	0.12	< 0.005	—	1,310
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.02	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	209	209	0.02	< 0.005	—	210
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Convenience Market with Gas Pumps	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.22	7.22	< 0.005	< 0.005	—	7.24
Total	0.02	0.01	0.19	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	216	216	0.02	< 0.005	—	217

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	4.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.04	0.98	0.10	10.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	29.0	29.0	< 0.005	< 0.005	—	29.1
Total	1.04	5.74	0.10	10.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	29.0	29.0	< 0.005	< 0.005	—	29.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	4.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	—	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	4.76	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.09	0.09	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.37	2.37	< 0.005	< 0.005	—	2.38
Total	0.09	0.96	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.37	2.37	< 0.005	< 0.005	—	2.38

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	4.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.04	0.98	0.10	10.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	29.0	29.0	< 0.005	< 0.005	—	29.1

Total	1.04	5.74	0.10	10.7	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	0.00	29.0	29.0	< 0.005	< 0.005	—	29.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	4.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.44	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	4.76	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	0.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.09	0.09	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.37	2.37	< 0.005	< 0.005	—	2.38
Total	0.09	0.96	0.01	0.97	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	2.37	2.37	< 0.005	< 0.005	—	2.38

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.7	12.5	25.2	1.30	0.03	—	67.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.16	0.15	0.31	0.02	< 0.005	—	0.84
Total	—	—	—	—	—	—	—	—	—	—	—	12.8	12.7	25.5	1.32	0.03	—	67.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.7	12.5	25.2	1.30	0.03	—	67.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.16	0.15	0.31	0.02	< 0.005	—	0.84
Total	—	—	—	—	—	—	—	—	—	—	—	12.8	12.7	25.5	1.32	0.03	—	67.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	2.10	2.08	4.17	0.22	0.01	—	11.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.03	0.02	0.05	< 0.005	< 0.005	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	2.12	2.10	4.22	0.22	0.01	—	11.2

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.0	11.9	23.9	1.23	0.03	—	63.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.16	0.15	0.31	0.02	< 0.005	—	0.84
Total	—	—	—	—	—	—	—	—	—	—	—	12.2	12.1	24.3	1.25	0.03	—	64.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.0	11.9	23.9	1.23	0.03	—	63.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.16	0.15	0.31	0.02	< 0.005	—	0.84
Total	—	—	—	—	—	—	—	—	—	—	—	12.2	12.1	24.3	1.25	0.03	—	64.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.99	1.97	3.96	0.20	< 0.005	—	10.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.03	0.02	0.05	< 0.005	< 0.005	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	2.02	2.00	4.02	0.21	< 0.005	—	10.7

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	74.2	0.00	74.2	7.42	0.00	—	260
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Convenience	—	—	—	—	—	—	—	—	—	—	—	1.83	0.00	1.83	0.18	0.00	—	6.39
Total	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	74.2	0.00	74.2	7.42	0.00	—	260
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	1.83	0.00	1.83	0.18	0.00	—	6.39
Total	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.3	0.00	12.3	1.23	0.00	—	43.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.30	0.00	0.30	0.03	0.00	—	1.06
Total	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.0

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	74.2	0.00	74.2	7.42	0.00	—	260
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	1.83	0.00	1.83	0.18	0.00	—	6.39
Total	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	74.2	0.00	74.2	7.42	0.00	—	260
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	1.83	0.00	1.83	0.18	0.00	—	6.39
Total	—	—	—	—	—	—	—	—	—	—	—	76.0	0.00	76.0	7.60	0.00	—	266
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	12.3	0.00	12.3	1.23	0.00	—	43.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	0.30	0.00	0.30	0.03	0.00	—	1.06
Total	—	—	—	—	—	—	—	—	—	—	—	12.6	0.00	12.6	1.26	0.00	—	44.0

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.41	1.41
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	933	933
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.41	1.41

Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	933	933
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	154	154
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155	155

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.41	1.41
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	933	933
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.41	1.41
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	933	933
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	934	934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
Convenience Market with Gas Pumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	154	154
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	155	155

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 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. 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)

Equipme 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)

Equipme nt 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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: Residential	Site Preparation	11/1/2023	11/28/2023	5.00	20.0	—
Site Preparation: Commercial	Site Preparation	11/1/2023	11/14/2023	5.00	10.0	—
Grading: Residential	Grading	11/29/2023	1/23/2024	5.00	40.0	—
Grading: Commercial	Grading	11/15/2023	11/28/2023	5.00	10.0	—
Building Construction: Residential	Building Construction	3/29/2024	8/14/2025	5.00	360	—
Building Construction: Commercial	Building Construction	3/29/2024	9/12/2024	5.00	120	—

Paving	Paving	1/24/2024	3/28/2024	5.00	47.0	—
Architectural Coating: Residential	Architectural Coating	4/12/2024	8/28/2025	5.00	360	—
Architectural Coating: Commercial	Architectural Coating	4/12/2024	9/26/2024	5.00	120	—

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: Residential	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation: Residential	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation: Commercial	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation: Commercial	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading: Residential	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading: Residential	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading: Residential	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading: Residential	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading: Residential	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading: Commercial	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading: Commercial	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading: Commercial	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading: Commercial	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading: Commercial	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Building Construction: Residential	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction: Residential	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction: Residential	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction: Residential	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction: Residential	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction: Commercial	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction: Commercial	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction: Commercial	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction: Commercial	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction: Commercial	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating: Residential	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating: Commercial	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation: Residential	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation: Residential	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation: Commercial	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation: Commercial	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading: Residential	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading: Residential	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading: Residential	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading: Residential	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading: Residential	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading: Commercial	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading: Commercial	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading: Commercial	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading: Commercial	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading: Commercial	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction: Residential	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction: Residential	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction: Residential	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction: Residential	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction: Residential	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction: Commercial	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction: Commercial	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction: Commercial	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction: Commercial	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction: Commercial	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating: Residential	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating: Commercial	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation: Residential	—	—	—	—
Site Preparation: Residential	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation: Residential	Vendor	—	8.40	HHDT,MHDT
Site Preparation: Residential	Hauling	6.25	20.0	HHDT
Site Preparation: Residential	Onsite truck	—	—	HHDT
Grading: Residential	—	—	—	—
Grading: Residential	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading: Residential	Vendor	—	8.40	HHDT,MHDT
Grading: Residential	Hauling	15.6	20.0	HHDT
Grading: Residential	Onsite truck	—	—	HHDT
Building Construction: Residential	—	—	—	—

Building Construction: Residential	Worker	135	11.7	LDA,LDT1,LDT2
Building Construction: Residential	Vendor	20.6	8.40	HHDT,MHDT
Building Construction: Residential	Hauling	0.00	20.0	HHDT
Building Construction: Residential	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating: Residential	—	—	—	—
Architectural Coating: Residential	Worker	54.1	11.7	LDA,LDT1,LDT2
Architectural Coating: Residential	Vendor	—	8.40	HHDT,MHDT
Architectural Coating: Residential	Hauling	0.00	20.0	HHDT
Architectural Coating: Residential	Onsite truck	—	—	HHDT
Site Preparation: Commercial	—	—	—	—
Site Preparation: Commercial	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation: Commercial	Vendor	—	8.40	HHDT,MHDT
Site Preparation: Commercial	Hauling	6.30	20.0	HHDT
Site Preparation: Commercial	Onsite truck	—	—	HHDT
Grading: Commercial	—	—	—	—
Grading: Commercial	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading: Commercial	Vendor	—	8.40	HHDT,MHDT
Grading: Commercial	Hauling	12.5	20.0	HHDT
Grading: Commercial	Onsite truck	—	—	HHDT
Building Construction: Commercial	—	—	—	—
Building Construction: Commercial	Worker	135	11.7	LDA,LDT1,LDT2
Building Construction: Commercial	Vendor	20.6	8.40	HHDT,MHDT

Building Construction: Commercial	Hauling	0.00	20.0	HHDT
Building Construction: Commercial	Onsite truck	—	—	HHDT
Architectural Coating: Commercial	—	—	—	—
Architectural Coating: Commercial	Worker	—	11.7	LDA,LDT1,LDT2
Architectural Coating: Commercial	Vendor	—	8.40	HHDT,MHDT
Architectural Coating: Commercial	Hauling	0.00	20.0	HHDT
Architectural Coating: Commercial	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation: Residential	—	—	—	—
Site Preparation: Residential	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation: Residential	Vendor	—	8.40	HHDT,MHDT
Site Preparation: Residential	Hauling	6.25	20.0	HHDT
Site Preparation: Residential	Onsite truck	—	—	HHDT
Grading: Residential	—	—	—	—
Grading: Residential	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading: Residential	Vendor	—	8.40	HHDT,MHDT
Grading: Residential	Hauling	15.6	20.0	HHDT
Grading: Residential	Onsite truck	—	—	HHDT
Building Construction: Residential	—	—	—	—
Building Construction: Residential	Worker	135	11.7	LDA,LDT1,LDT2
Building Construction: Residential	Vendor	20.6	8.40	HHDT,MHDT
Building Construction: Residential	Hauling	0.00	20.0	HHDT
Building Construction: Residential	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2

Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating: Residential	—	—	—	—
Architectural Coating: Residential	Worker	54.1	11.7	LDA,LDT1,LDT2
Architectural Coating: Residential	Vendor	—	8.40	HHDT,MHDT
Architectural Coating: Residential	Hauling	0.00	20.0	HHDT
Architectural Coating: Residential	Onsite truck	—	—	HHDT
Site Preparation: Commercial	—	—	—	—
Site Preparation: Commercial	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation: Commercial	Vendor	—	8.40	HHDT,MHDT
Site Preparation: Commercial	Hauling	6.30	20.0	HHDT
Site Preparation: Commercial	Onsite truck	—	—	HHDT
Grading: Commercial	—	—	—	—
Grading: Commercial	Worker	20.0	11.7	LDA,LDT1,LDT2
Grading: Commercial	Vendor	—	8.40	HHDT,MHDT
Grading: Commercial	Hauling	12.5	20.0	HHDT
Grading: Commercial	Onsite truck	—	—	HHDT
Building Construction: Commercial	—	—	—	—
Building Construction: Commercial	Worker	135	11.7	LDA,LDT1,LDT2
Building Construction: Commercial	Vendor	20.6	8.40	HHDT,MHDT
Building Construction: Commercial	Hauling	0.00	20.0	HHDT
Building Construction: Commercial	Onsite truck	—	—	HHDT
Architectural Coating: Commercial	—	—	—	—
Architectural Coating: Commercial	Worker	—	11.7	LDA,LDT1,LDT2
Architectural Coating: Commercial	Vendor	—	8.40	HHDT,MHDT
Architectural Coating: Commercial	Hauling	0.00	20.0	HHDT

Architectural Coating: Commercial	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: Residential	299,735	99,912	5,068	1,689	4,807
Architectural Coating: Commercial	99,514	33,171	1,682	561	1,596

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation: Residential	—	1,000	30.0	0.00	—
Site Preparation: Commercial	—	500	15.0	0.00	—
Grading: Residential	—	5,000	120	0.00	—
Grading: Commercial	500	500	30.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.45

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Parking Lot	2.45	100%
Convenience Market with Gas Pumps	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

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
Condo/Townhouse	1,367	1,367	1,367	498,992	9,987	9,987	9,987	3,645,161
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market with Gas Pumps	1,294	1,294	1,294	472,310	6,820	6,820	6,820	2,489,447

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse	1,367	1,367	1,367	498,992	9,987	9,987	9,987	3,645,161
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market with Gas Pumps	1,294	1,294	1,294	472,310	6,820	6,820	6,820	2,489,447

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	186
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	186
Conventional Wood Stoves	0
Catalytic Wood Stoves	0

Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
399249	133,083	6,750	2,250	6,403

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
Condo/Townhouse	959,604	204	0.0330	0.0040	4,318,910
Parking Lot	93,488	204	0.0330	0.0040	0.00
Convenience Market with Gas Pumps	230,475	204	0.0330	0.0040	136,069

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)
Condo/Townhouse	809,706	204	0.0330	0.0040	3,939,322
Parking Lot	93,488	204	0.0330	0.0040	0.00
Convenience Market with Gas Pumps	230,475	204	0.0330	0.0040	136,069

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	6,605,018	1,098,017
Parking Lot	0.00	0.00
Convenience Market with Gas Pumps	83,657	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	6,274,767	1,043,116
Parking Lot	0.00	0.00
Convenience Market with Gas Pumps	83,657	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	138	—

Parking Lot	0.00	—
Convenience Market with Gas Pumps	3.39	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	138	—
Parking Lot	0.00	—
Convenience Market with Gas Pumps	3.39	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Convenience Market with Gas Pumps	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market with Gas Pumps	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Convenience Market with Gas Pumps	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market with Gas Pumps	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
----------------	-----------	-------------	----------------	---------------	------------	-------------

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
----------------	-----------	----------------	---------------	----------------	------------	-------------

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
----------------	-----------	--------	--------------------------	------------------------------	------------------------------

5.17. User Defined

Equipment Type	Fuel Type
----------------	-----------

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)
-----------	--------	------------------------------	------------------------------

8. User Changes to Default Data

Screen	Justification
Land Use	Lot acreage adjusted to be consistent with total acreage of project site.
Construction: Construction Phases	Phase timing adjusted based on applicant-provided information. In addition, based on typical construction practices, architectural coating assumed to start two weeks after the start of building construction and last for the same number of days.
Operations: Vehicle Data	Res H-W, H-S, and H-O adjusted based on trip generation and VMT adjustments.
Construction: On-Road Fugitive Dust	All roads in project vicinity are paved.
Operations: Road Dust	All roads in project vicinity paved.

APPENDIX B

UPDATED TREE IMPACT ASSESSMENT



California Tree and Landscape Consulting, Inc.

359 Nevada Street, Ste 201, Auburn, CA 95603

530.745-4086

CLIENT: Lewis Management Corporation
Rob White, VP Planned Communities
9216 Kiefer Boulevard
Sacramento, CA 95826

PROJECT SITE: Independence in Dixon
Dixon, CA

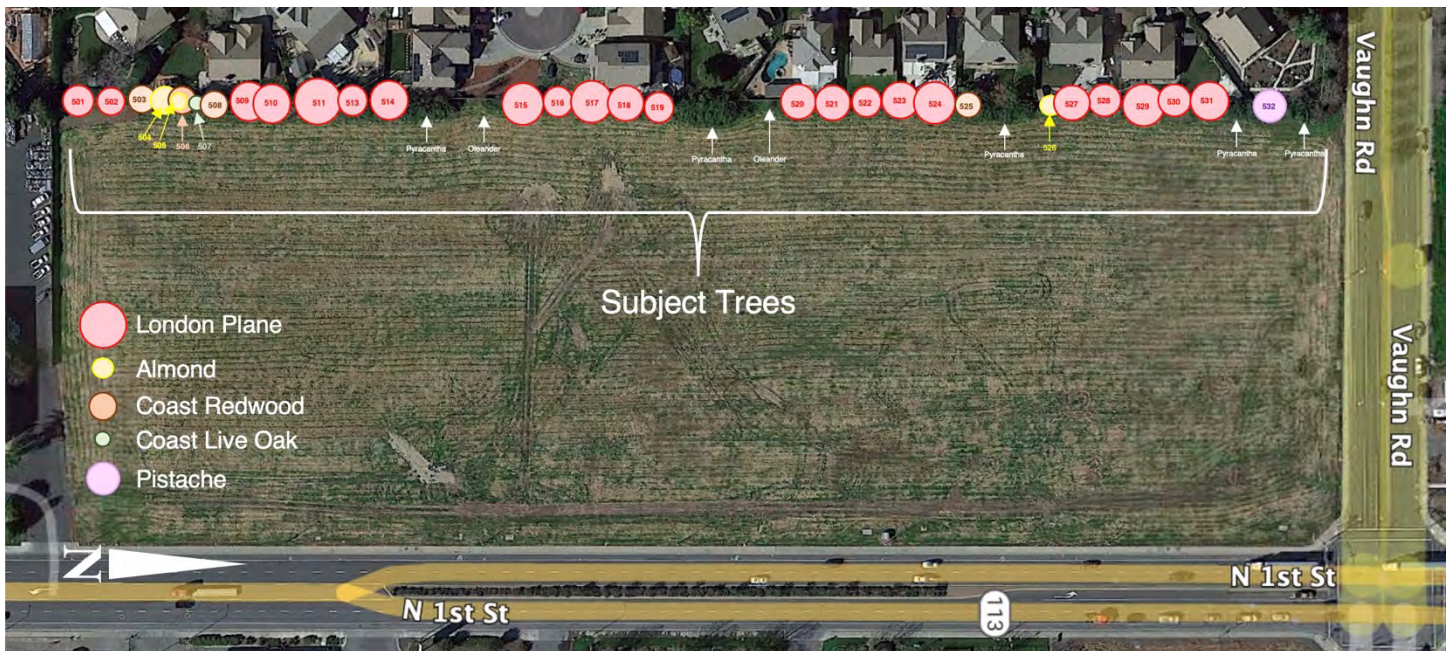
REPORT ASSIGNMENT: Provide analysis of existing trees, protection measures for construction and recommendations for replacement trees.

DATE OF SITE VISIT: June 23, 2023

REPORT DATE: July 10, 2023

BACKGROUND: The project site is a vacant lot bounded by Vaughn Road to the north and Highway 113 to the east. Residences and businesses border the property on the west and south sides of the site. There are 31 trees with trunk diameters of six inches or greater that are growing along the western edge of the property that will be impacted by the proposed development of the site.

SITE OVERVIEW:



OBSERVATIONS OF EXISTING TREES

Tree Tag #	Species	Trunk Dia.	Canopy Spread	Health	Struct. Cond.	Comments	Replace or Preserve
501	London plane (<i>Platanus x acerifolia</i>)	9"	30'	Fair	Fair	Branches stubbed off on N. side. Susceptible to anthracnose. Requires regular irrigation to thrive.	Preserve
502	London plane (<i>Platanus x acerifolia</i>)	10"	30'	Fair	Fair	Branches stubbed off on N. side. Susceptible to anthracnose. Requires regular irrigation to thrive.	Preserve
503	coast redwood (<i>Sequoia sempivirens</i>)	19"	30'	Poor	Poor	Tree is in decline. Recommend removal. Requires regular irrigation to thrive.	Remove & replace
504	almond (<i>Prunus dulcis</i>)	4", 4"	25'	Fair	Poor	Codominant stems. Poor structure Unsuitable for preservation. Requires regular irrigation to thrive.	Remove & replace
505	almond (<i>Prunus dulcis</i>)	5", 5", 4"	25'	Fair	Poor	Codominant stems with included bark. Poor structure. Unsuitable for preservation. Requires regular irrigation to thrive.	Remove & replace
506	coast redwood (<i>Sequoia sempivirens</i>)	18"	35'	Poor	Poor	Top is dead, branch dieback in crown. Tree is in decline and won't recover.	Remove & replace
507	coast live oak (<i>Quercus agrifolia</i>)	8"	15'	Fair	Poor	Lower branches removed by others. Being crowded by surrounding trees. Tree is too close to wall.	Remove & replace
508	coast redwood (<i>Sequoia sempivirens</i>)	20"	30'	Fair	Poor	Codominant leaders in crown. Symptoms of cankers. Requires regular irrigation to thrive.	Remove & replace
509	London plane (<i>Platanus x acerifolia</i>)	15"	25'	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
510	London plane (<i>Platanus x acerifolia</i>)	13"	25'	Fair	Poor	Poor structure. Needs extensive corrective pruning. Susceptible to anthracnose. Requires regular irrigation to thrive.	Remove & replace
511	London plane (<i>Platanus x acerifolia</i>)	13"	30'	Poor	Poor	Poor structure. Needs extensive corrective pruning. Shows symptoms of anthracnose. Requires regular irrigation to thrive.	Remove & replace
513	London plane (<i>Platanus x acerifolia</i>)	10"	25'	Fair	Poor	Tree is being crowded out by surrounding plant material. Requires regular irrigation to thrive.	Remove & replace
514	London plane (<i>Platanus x acerifolia</i>)	13"	25'	Poor	Poor	Low vigor. Poorly structured canopy. Tree is being crowded out by surrounding plant material. Requires regular irrigation to thrive.	Remove & replace
515	London plane (<i>Platanus x acerifolia</i>)	13"	25'	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
516	London plane (<i>Platanus x acerifolia</i>)	10"	20'	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
517	London plane (<i>Platanus x acerifolia</i>)	12"	25'	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
518	London plane (<i>Platanus x acerifolia</i>)	11"	20'	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace

Tree Tag #	Species	Trunk Dia.	Canopy Spread	Health	Struct. Cond.	Comments	Replace or Preserve
519	London plane (<i>Platanus x acerifolia</i>)	12"	20'	Fair	Poor	Tree is being crowded out by surrounding plant material. Poorly structured canopy. Requires regular irrigation to thrive.	Remove & replace
520	London plane (<i>Platanus x acerifolia</i>)	12"	20'	Fair	Fair	Susceptible to anthracnose. Requires regular irrigation to thrive.	Remove & replace
521	London plane (<i>Platanus x acerifolia</i>)	10"	25'	Fair	Poor	Codominant stems. Needs extensive corrective pruning. Shows symptoms of anthracnose. Being crowded by volunteer pear tree. Requires regular irrigation to thrive.	Remove & replace
522	London plane (<i>Platanus x acerifolia</i>)	11"	20'	Fair	Poor	Codominant stems. Needs extensive corrective pruning. Shows symptoms of anthracnose. Shows symptoms of insect infestation. Being crowded by volunteer pear tree. Requires regular irrigation to thrive.	Remove & replace
523	London plane (<i>Platanus x acerifolia</i>)	14"	25'	Fair	Poor	Codominant trunks. Shows symptoms of anthracnose. Needs extensive corrective pruning. Shows symptoms of insect infestation. Being crowded by pistache tree. Boston ivy growing into tree. Requires regular irrigation to thrive.	Remove & replace
524	London plane (<i>Platanus x acerifolia</i>)	14"	25'	Fair	Poor	Poorly structured crown needs extensive corrective pruning. Crown crowded by surrounding plants. Shows symptoms of anthracnose. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
525	coast redwood (<i>Sequoia sempivirens</i>)	14"	----	----	----	Tree is dead	Remove & replace
526	almond (<i>Prunus dulcis</i>)	6", 3", 1"	----	----	----	Tree is dead	Remove & replace
527	London plane (<i>Platanus x acerifolia</i>)	10	25	Fair	Fair	Codominant trunks. Needs extensive corrective pruning. Shows symptoms of anthracnose. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
528	London plane (<i>Platanus x acerifolia</i>)	10	25	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of anthracnose. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
529	London plane (<i>Platanus x acerifolia</i>)	13	25	Fair	Fair	Needs extensive corrective pruning. Shows symptoms of anthracnose. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
530	London plane (<i>Platanus x acerifolia</i>)	14	20	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of anthracnose. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
531	London plane (<i>Platanus x acerifolia</i>)	14	20	Fair	Poor	Needs extensive corrective pruning. Shows symptoms of anthracnose. Shows symptoms of insect infestation. Requires regular irrigation to thrive.	Remove & replace
532	Chinese pistache (<i>Pistacia chinensis</i>)	6" 3"	20	Poor	Poor	Volunteer tree. Poorly shaped trunk. Needs extensive corrective pruning. Requires regular irrigation to thrive.	Remove & replace

ANALYSIS & DISCUSSION

There are 31 trees with trunk diameters of six inches or greater along the western boundary of the site. The subject row consists of 22 London plane trees (*Platanus x acerifolia*), 4 coast redwoods (*Sequoia sempivirens*), 3 almond trees (*Prunus dulcis*), a single pistache (*Pistachia chinensis*) and a single coast live oak (*Quercus agrifolia*). Most of the trees (22) are in fair health with 7 in poor health and 2 dead trees. However, of the 29 living trees, 24 have poor structures with only 5 trees having fair structural condition.

The trees were irrigated at one time but do not appear to have been irrigated for quite some time. Earlier reports of the subject trees indicated that they had been suffering from the extended drought conditions prior to the winter season of 2022/2023. Their current health should only be attributed to the exceptional winter rains that took place during that period. Unless the trees continue to receive a consistent amount of moisture through the summer season and in subsequent years, the growth that was produced during the spring of 2023 will not be sustained by the trees and die back will most likely appear.

The branching structures of the trees indicate that they have never been pruned. As a result, the canopies now have multiple structural defects that would require extensive corrective pruning treatments over a period of several years to cultivate healthy canopies.

The project's internal circulation plan calls for a roadway along the western project boundary, which will have an impact on 29 of the existing trees that line the western boundary. There are 2 London plane trees (#501, #502) located at the southwest corner of the project site that will be impacted by the mass grading but will be able to tolerate any root pruning that may be required. These trees will require a standard tree protection plan that will involve root pruning and canopy restructuring to minimize the impact of the mass grading and construction of the adjacent homes.

Five trees (#503, #504, #505 #506 and #507) are adjacent to an open space area between the two buildings at the southwest corner of the site. Tree #503 is a coast redwood that is in an advanced state of decline with no chance of recovery. Trees #504 and #505 are almond trees that require regular irrigation to thrive with branching structures consisting of codominant stems and poorly structured crowns making them unsuitable for preservation. Tree #506 is a coast redwood in decline with no possibility of recovery. Tree #507 is a coast live oak approximately 2 feet away from a block wall on the property boundary. This tree most likely occurred naturally and has managed to grow through the surrounding canopy. As a result of the surrounding canopy and no proper cultivation of the branching structure this tree has a poorly structured crown. If left in place, the roots and trunk flare of this tree has the potential to cause damage to the wall within the next several years.

The remaining 24 trees (#508 - #532) are located near or at the edge of the grading that will be required for the new structures and road. Grading will result in the loss of too much of their root masses for them to remain stable or healthy. Trees #515 - #532 are either at the edge of or within the area where grading will need to take place for the roadway that begins at Vaughn Road and runs south along the western boundary of the project site until the street turns to the east.

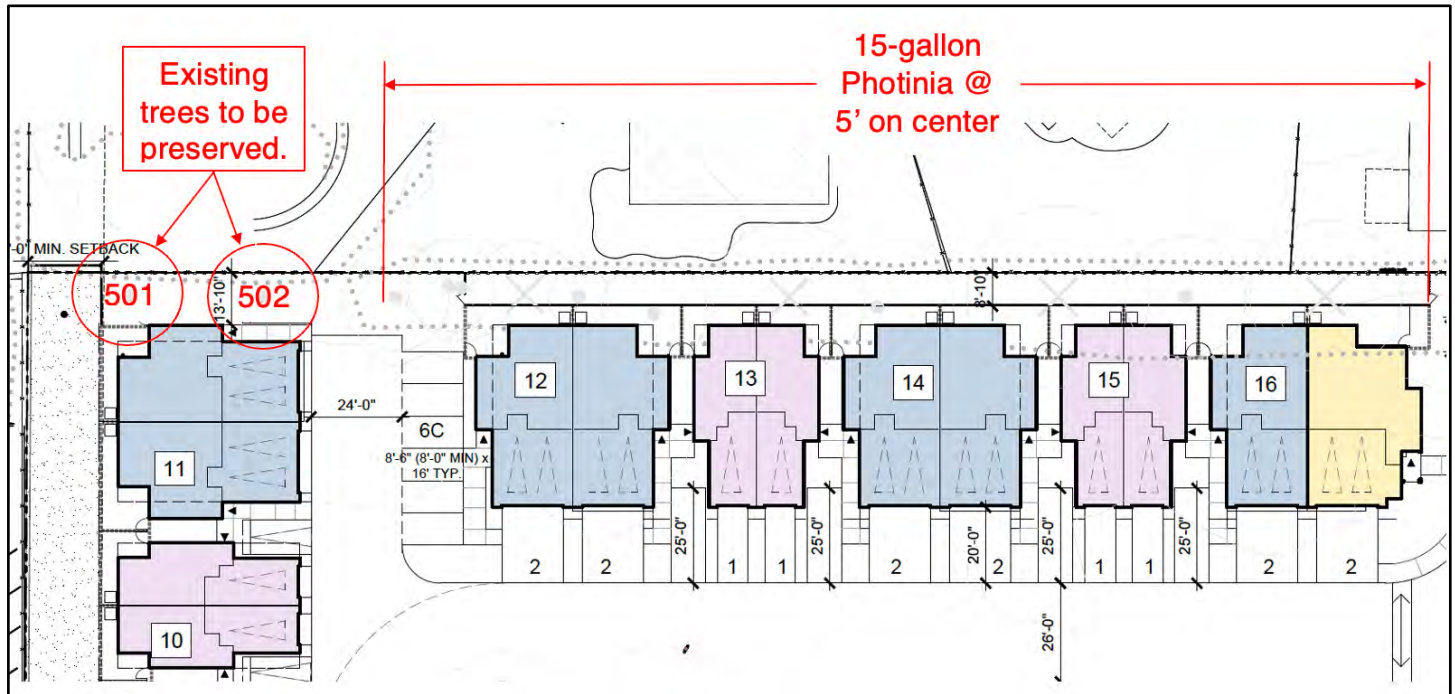
Overall, there are 29 trees that should be removed prior to the mass grading that will need to take place for the proposed project. A replacement ratio of 2.5 trees planted for every tree removed equals approximately 73 replacement trees required for the project.

The City of Dixon has a list of 45 recommended replacement trees for use in the City. However, only 5 of the trees on the list have very low water requirements and 15 trees have low water requirements. Of those 20 trees with very low or low water requirements 11 would mature at a size too large to be used as replacement trees for the subject area. Technically there are only 4 trees on the City of Dixon's recommended replacement list that would be appropriate as replacement trees for the 29 trees that need to be removed.

The goal of a tree replacement and planting plan should be to add to the diversity of Dixon's existing tree canopy and prevent the over saturation of a single species. Urban forests that consist of only a few species run the risk of becoming negatively affected by a species-specific insect or disease epidemic which could severely impact the City's urban forest. Therefore, when selecting new and/or replacement trees, it is particularly important that there are never too many trees of one species in a single area or throughout a specific area. Over 70% of the existing stand of trees consists of London plane trees. By introducing new species to the City's tree palette, this tree replacement plan helps reach the City's objective that no one species of tree is dominant and constitutes no more than 10% of the urban forest.

The area where the replacement trees will be planted is a narrow strip of land with neighboring properties on the west side and separated by an existing concrete block wall, and a proposed roadway on the east side. To limit the impact of canopy growth over the adjacent properties, consideration is given to the mature height and shape of the canopy. To prevent damage to the existing wall and the proposed road, consideration is given to the size of the trunk and extent of the root mass. In consideration of the potential for limited water resources and a harsher climate in the future, trees that have the capability to adapt to harsher climate conditions in the future are taken into consideration. Additional details such as structural strength, flower fragrances, fruit and leaf litter, pruning requirements, longevity, soil structure, drainage and other growth requirements are also considered.

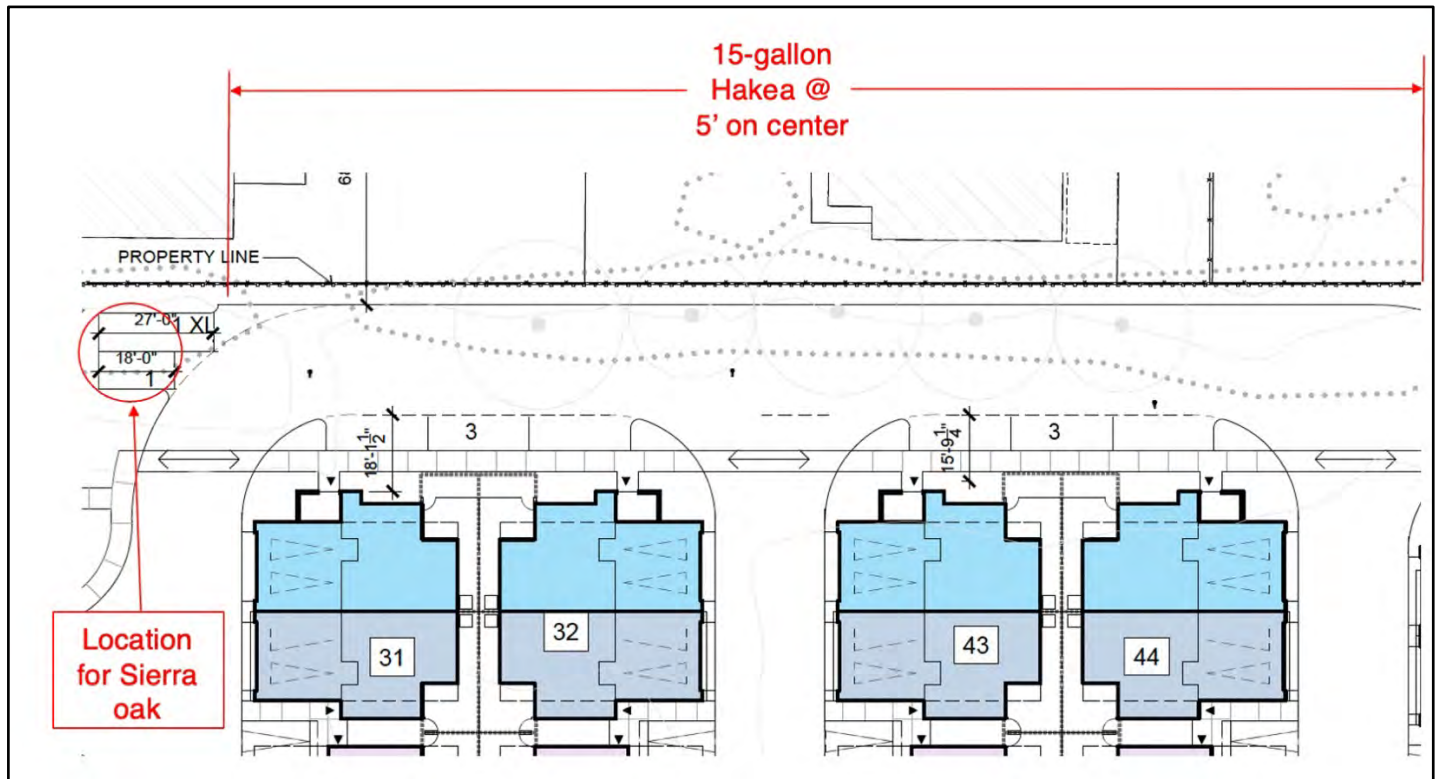
The diagram below shows a section of the site that extends from the southern boundary of the site to the edge of the lot for unit 16. Trees 501, 502 and 503 have been identified as trees that will tolerate the impact of construction and are suitable to retain and protect in place during the project.



Planting 15-gallon sized Photinia (*Photinia serrulata*) along the boundary wall in the back yards of units 12 – 16 would provide an effective visual barrier between the new homes on the site and the established homes to the west. There is approximately 300 linear feet of spacing that would allow for as many as 60 trees planted at approximately 5 feet on center.

The photinia is a small evergreen tree that typically reaches a mature height of 15 – 20 feet. They have also been known to grow larger, but only under exceptional growing conditions. This small statured tree produces new growth in the spring that is tinged pink at first then turns to a shiny, dark green color that lasts through the year. It can be pruned into a hedge that creates a dense screen that will provide color at different times of the year. They have a moderate growth rate that slows when moisture becomes limited. They have a small root mass that does not have the potential to damage any of its surroundings.

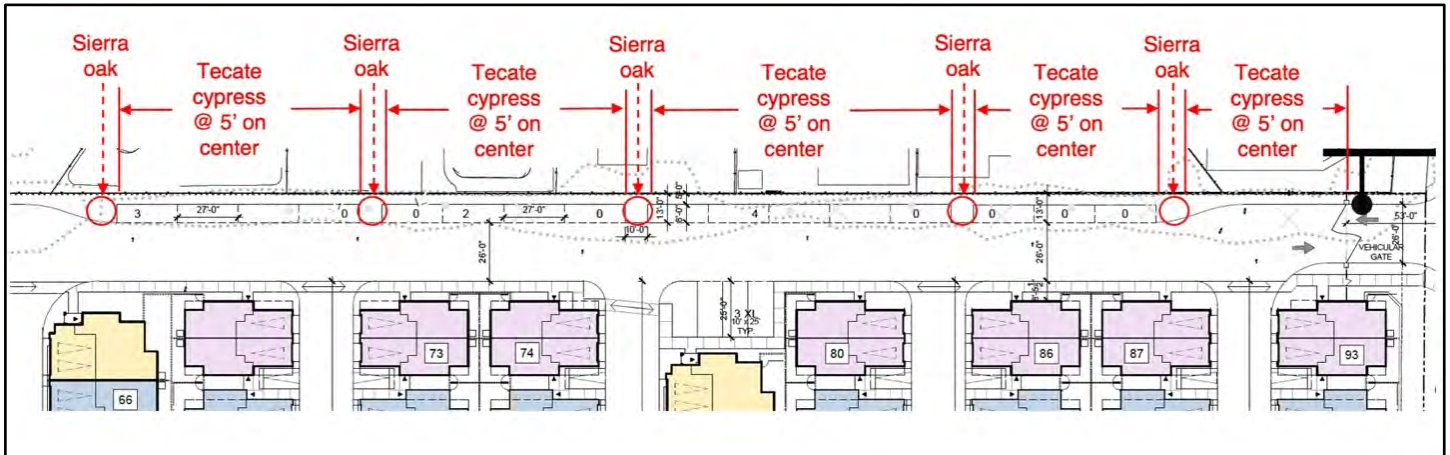
The diagram below shows the section of the site that extends from the northerly edge of the lot for unit 16 to the southerly edge of the lot for unit 66. There is room for a larger statured tree that could serve as a feature tree in the yard that is on the northerly side of unit 16. The strip of land that is adjacent to the road will require a tree that has a uniform shape, will not cause root damage to the existing block wall or the proposed roadway and will not have a canopy that creates a burden to the homes on the north side of the wall.



Sweet hakea (*Hakea drupacea*) is a small evergreen tree that can reach a mature height of 10 – 20 feet with a canopy spread of 10 – 15 feet. They have tiny bright green lobed leaves with sharp points. When planted as a hedge they can be pruned or sheared to form a thick barrier. They produce clusters of white flowers during the cooler time of year that have a sweet scent and some trees will have flowers throughout the year. Young trees may take several years to adapt to new growing conditions before they begin to produce flowers. Flower growth is followed by small woody fruits that are egg-shaped and shiny brown. They have a small root mass that does not have the potential to damage any of its surroundings. They grow best in full sun and tolerate drought but are mildly sensitive to frost.

Planting 15-gallon sized Hakea trees in the planter strip that is across from units 31 & 32 and 43 & 44 will provide an effective physical barrier between the project site and the established homes to the west. There is approximately 300 linear feet of spacing that would allow for as many as 60 trees to be planted at approximately 5 feet on center.

The diagram below shows the section of the site that extends from the southern side of unit 66 and extends to the second entry point to the site from Vaughn Avenue. The site has approximately 5 feet of planting space to allow for small columnar shaped trees along the block wall with 5 individual sites that will allow for larger accent trees with a broader canopy. These will provide additional screening for the adjacent properties add aesthetic value and increase canopy coverage for the site.



Tecate cypress (*Hesperocyparis forbesii*) is a California native, evergreen tree with a bushy growth form. They tend to have multiple trunks without a dominant leader and will reach a mature height of 20 – 30 feet with a canopy spread of 15 - 20 feet. Trees growing under dryer conditions however may only reach a mature height that is much shorter. They produce single cones that are about an inch long. They require full sun full and will grow in poor soil, coarse, rocky, clay or sand soils, dry slopes, exposed hillsides, and ridgetops. Like most cypress trees they have strong branch attachments and make a good windbreak or hedge in hot dry locations. This tree does well in a grouped setting or as an accent plant. They have fragrant foliage and provide wildlife habitat.

Sierra Oak (*Quercus canbyi*)

An evergreen to semi-deciduous tree that reaches a mature height of 25 – 50 feet with a broad canopy shape of equal proportion. Over time the bark develops a distinctively fissured appearance that adds aesthetic value to this species of oak. They will shed most of their leaves in the late winter before producing new foliage that starts out as a bright red eventually turning to a rich dark green and then returning to its reddish color in the fall. They develop long branches that tend to droop which adds to their graceful appearance. They are a relatively clean tree that produces small acorns and generates a little leaf litter. This species of oak will tolerate alkaline soil, takes very little water once it becomes established and has proven to be very drought tolerant.

TREE PROTECTION DURING CONSTRUCTION

A tree protection program will need to be established prior to construction for trees #501 and #502. Steps will need to be taken to provide pre-construction care and enhancement, protection throughout the construction phase and long-term maintenance after construction is finished. There are specific protocols for tree protection that includes preparing the trees so they can successfully withstand construction activities, protecting them while construction is underway, and recommendations for post-construction maintenance for long-term health. Establishing an individual tree protection zone (TPZ) for each tree minimizes the negative impacts of construction and allows the construction process to proceed in a timely and efficient manner.

PREPARING AND MANAGING A TREE PROTECTION ZONE (TPZ)

- a. Canopy pruning should take place as far in advance as possible prior to any root pruning. Selected branches should be removed to enhance structural stability and to control overall canopy size. Timing of the pruning should coincide with the trees spring flush of growth if possible. All existing plant material should also be removed from under the protected trees.
- b. Mark the precise locations of all improvements including but not limited to hardscape surfaces, buildings, utilities and any other improvements in close proximity to the protected trees. The layout of these proposed improvements will serve as the outline of the required TPZ.
- c. Create a grow zone for protected trees within the TPZ.

Most of the roots of the protected trees will be found in the upper 18 – 24” of soil and are likely to be impacted during grading or construction. To offset the stress of root loss all roots will need to be removed from the areas where grading and construction will take place and a grow zone established within the boundary of the TPZ prior to the commencement of any construction.

- i. Root pruning

Survey the area where construction will be taking place in proximity to the protected trees to determine the limits of the TPZ. Include all areas where over excavation will be required for construction purposes.

Once the areas for trenching have been determined mark them with marking paint and treat the soil area with a soil penetrant to loosen soil compaction and prepare the area for excavation.

Excavate a one foot (1') wide by eighteen inches (18") deep trench, using an Air-Spade, adjacent to the protected trees and their TPZ's. The approximate circumference of the entire TPZ boundary is where the exploratory trenching should be conducted to identify the root structure extending beyond the dripline.

ii. Mulching

Vertical mulch inside the boundary of the TPZ in a triangle pattern every ten feet (10') a 4 foot on center triangle (3 holes) to the depths of 12 to 18 inches. Then, backfill the 3 holes (at each triangle) with the following: ¼ part sand, ¼ part naturalized fir mulch (Redwood shavings), and ½ part parent soil, as recommended by the project arborist. Contractor shall then mulch the TPZ's, with nitrolized fir mulch to a depth of three inches (3").

iii. Irrigation

Provide irrigation for the protected trees through the life of the project or until the permanent irrigation system is installed. Regular irrigation should match the needs of the trees that are being preserved as well as what the future irrigation requirements will be once the project is complete.

d. Maintenance period during construction

Providing adequate maintenance is essential to mitigate stressful changes that occur to the tree's environment during construction. Protected trees should be inspected on a bi-weekly basis to monitor tree health and to specifically watch for any early symptoms of change in health or condition that may lead to the decline of the protected trees.

To prevent encroachment into the TPZ during construction, the protected trees must have the protection fences as specified, and in place at all times. Removal of a tree protection fence, even temporarily, to allow deliveries or equipment access is prohibited.

Any root buffer components put into place, i.e. barricades, mulch, gravel and plywood, must be maintained continually to assure its effectiveness against soil compaction.

Control dust around the tree as best as possible during construction. If necessary, wash the entire canopy with water to remove the excessive accumulation of construction dust on the leaf surfaces.

CONCLUSION

The row of trees along the western boundary of the site have been growing in place for over 20 years with little to no regular care. As a result, they have developed canopies with poor branching structures that are likely to pose a risk to the adjacent properties in the future. While they currently serve the purpose of screening homes to the west of the site, they also pose concerns.

- The existing trees require regular moisture to thrive and do not meet the requirements for drought tolerant and/or water efficient trees that should be used.
- London plane trees make up over 70% of the row of trees, making the row of trees susceptible to wide-spread loss of canopy from a species-specific insect, disease or extended drought conditions.
- The trunks and root masses of the subject trees will soon outgrow the site and damage the existing wall, if damage has not already occurred.
- The canopies of the trees will continually create maintenance issues for the homes to the west of the project site.
- The trunks and root masses of the trees are actually within the area where grading will take place for the roadway that is required to be constructed along the western project boundary.

RECOMMENDATIONS

It is recommended that trees #501 & #502 be protected in place during construction. A tree protection plan with a complete tree protection zone should be established prior to construction.

It is recommended that trees #503 - #532 be removed and replaced at a ratio of 2.5 trees to be planted for every tree that is removed for an estimated total of 73 replacement trees planted along the western boundary of the project site.

- It is recommended that 15-gallon sized photinia (*Photinia serrulata*) trees be planted at approximately 5 feet on center along side the boundary wall in the back yards of units 12 – 16.
- It is recommended that 15-gallon sized sweet hakea (*Hakea drupacea*) trees be planted at approximately 5 feet on center in the strip of land that is adjacent to the roadway along the western project boundary and across from units 31 & 32 and 43 & 44.
- It is recommended that a 36" box sized sierra oak (*Quercus canbyi*) tree be planted in the front yard of yard unit 16 (the northerly side).
- It is recommended that 15-gallon sized Tecate cypress (*Hesperocyparis forbesii*) trees be planted between the southern side of unit 66 and extend to the second entry point to the site from Vaughn Avenue. It is also recommended that at least five 36" box sized sierra oaks (*Quercus canbyi*) trees be planted in the pop out sections that will allow for larger accent trees with a broader canopy.

REPORT LIMITATIONS

- This report is restricted to the trees that are the subject of this report and did not consider any other trees on the subject property or any other properties.
- Arborists are specialists in tree management and care who use their education, knowledge, training and experience to inspect and assess tree health and condition to identify measures that reduce risk of personal injury or property damage from trees exhibiting defects.
- Arborists cannot detect every condition that could possibly lead to the structural failure or decline in the health of a tree. Trees are living organisms that fail in ways that are not fully understood and cannot always be predicted. Conditions are often hidden within trees and/or below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances.
- These recommendations are based upon information provided by the Client, and the education, knowledge, training, experience and field investigation of Walt Warriner, Consulting Arborist.
- There is no present or prospective interest in the trees that are the subject of this report and there is no personal bias with respect to any of the parties involved.
- Compensation for this report is not contingent upon this report or any predetermined outcome that favors the cause of any of the parties involved or any stipulated result.
- This report has been prepared in conformity with the standards of professional reporting on arboriculture and urban forestry.
- Client may choose to accept or disregard any or all of the recommendations of this report, or to seek additional advice.

Respectfully submitted,



Walt Warriner, Consulting Arborist
Certified Urban Forester #108 - SAF
Certified Arborist #WE-0407AM - ISA
Qualified Tree Risk Assessor - ISA
Qualified Tree & Plant Appraiser – ASCA
Licensed Pest Control Advisor – State of CA