

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

For EID-1484-2018 / SBVD-1483-2018, ARCH-1486-2018, SPEC-1482-2018

1. Project Title:

"Northwest Corner" (NWC) Broad & Tank Farm Mixed-Use Commercial / Assisted-Living Center including Vesting Tentative Map #3115

2. Lead Agency Name and Address:

City of San Luis Obispo 919 Palm Street San Luis Obispo, CA 93401

3. Contact Person and Phone Number:

Brandi Cummings, Contract Planner brandi.cummings@swca.com (805) 786-2550 Tyler Corey tcorey@slocity.org (805) 781-7169

4. **Project Location:**

3985 Broad Street and 660 Tank Farm Road

5. **Project Sponsor's Name and Address:**

NKT Development, LLC and Westmont Development, LP c/o C. M. Florence, AICP Oasis Associates, Inc. 3427 Miguelito Court San Luis Obispo, CA 93401

6. General Plan Designations:

Community Commercial with Special Focus Overlay, Business Park, and Conservation Open Space.

7. Zoning:

Community Commercial with Special Focus Overlay and Specific Plan Overlay (C-C-SF-SP) and Airport Area Specific Plan Designations: Business Park with Airport Area Specific Plan Overlay (BP-SP) and Conservation Open Space with Airport Area Specific Plan Overlay (C/OS-SP).

8. Description of the Project:

The applicant is proposing a five (5)-lot subdivision on two parcels with a combined area of approximately 10.07 acres. A General Plan amendment, Airport Area Specific Plan amendment, and rezone would change the designations of the project site to Community Commercial with Special Focus Overlay (C-C-SF-SP). Lot 1 of Vesting Tentative Tract Map (VTTM) 3115 would be developed with an assisted living and memory care facility on 4.79 acres. No application has been submitted for development on Lots 2 through 5, but the applicant has indicated that they would be developed with a commercial center on 5.28 acres subject to future review and entitlement actions. The project site is located within the Airport Area Specific Plan (AASP) located at 3985

Broad Street and 660 Tank Farm Road, San Luis Obispo, California 93401 (Assessor's Parcel Numbers [APNs]: 053-421-003 and -004). The 10.07-acre property is currently developed with a single-family residence at 660 Tank Farm Road, while 3985 Broad Street is currently vacant (Attachment 2, project plans).

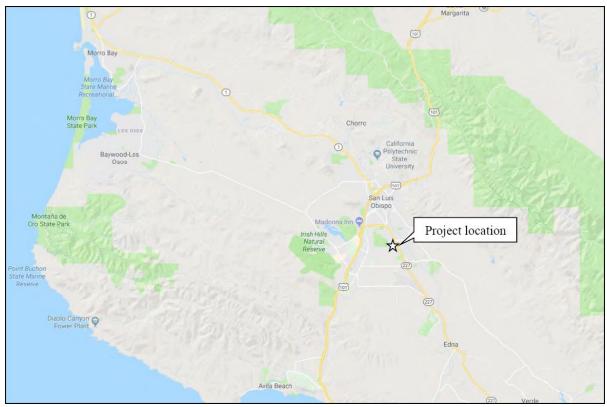


Figure 1: Regional Location



Figure 2: Project Vicinity, Site and Zoning Designations

The applicant is requesting a General Plan amendment to change the land use designation of parcel 053-421-004 from Business Park (BP) to Community Commercial (C-C), an Airport Area Specific Plan amendment to change the specific plan designation of both parcels from Business Park (BP) to Community Commercial (C-C), and a rezone to change the zoning designation of parcel 053-421-004 from Business Park (BP) to Community Commercial (C-C), and a serve community designation of parcel 053-421-004 from Business Park (BP) to Community Commercial (C-C-SF-SP). These changes would allow for a wide range of retail sales and personal services that serve communitywide needs within the context of distinctive, pedestrian-oriented shopping centers which may accommodate larger scale uses not appropriate in the Downtown Core. The existing Conservation/Open Space (C/OS) designations along the creek corridor along the western property line would remain.

The amendments would allow for the development of an assisted living facility and memory care facility (Westmont Living) that would occupy the westerly portion of the project site and would include 139 living units and support/administrative space in a 133,656 square-foot, two-story independent building, serving residents of 60 years in age and older. Westmont Living would be a retirement community that provides a spectrum of living options. State licensing is required to operate an assisted living and memory care facility. However, the level of assisted service is tailored to the individual needs of each resident. This allows each resident to "age in place" rather than relocate as their service needs change. Based on Westmont Living's proposed operations, approximately 50% of residents would be considered independent living. This would include residents of the community that do not require Assistance with Daily Living ("ADL") Services. The other 50% of residents would require some form of assistance, such as medication reminders, dressing or bathing assistance, transportation or mobility utilizing the assistance services or are memory care residents.

No entitlements are being sought at this time for development of the eastern portion of the project site. However, the applicant has indicated that a future development project would likely include a commercial center consisting of a medical office and retail/restaurant space. Conceptual site plans show that the proposed medical office would likely be a 45,000 square-foot independent detached building located near the SESLOC property to the north. The medical office would likely house the Dignity Health Comprehensive Cancer Center, an outpatient cancer treatment and education center. The proposed retail/restaurant development may consist of three buildings for retail or restaurant use totaling 15,000 square feet in three (3) independent detached buildings (5,000 square feet each). To facilitate potential future California Environmental Quality Act (CEQA) streamlining when a development project application is submitted for the eastern portion of the project site, this environmental document analyzes the potential environmental effects of possible future development projects that could be allowed by the General Plan amendment, Airport Area Specific Plan Amendment, and rezone, including the conceptual plan for the commercial center, as discussed above. However, this analysis is not conducted on a project-specific level since development plans and details may change.

The conceptual site plan for the commercial center is configured with retail/restaurant buildings along the southeastern corner of the site, adjacent to the Tank Farm-Broad Street intersection. The proposed medical office would be located at the northeast corner of the site, across from SESLOC and fronting Broad Street. Parking would primarily be located at the interior of the site, between the commercial center uses and the Westmont Living facility. Additional parking for the Westmont Living facility would be located west of the building, parallel to Orcutt Creek.

Project construction would begin with mass grading of the entire project site followed by development of the Westmont Living development. The Westmont Living facility would be phased, with 72 assisted living suites and 28 memory care studio units in the first phase and 39 assisted living suites in the second phase. Any development proposed on the eastern portion of the project would require review and approval for the appropriate entitlements based on the proposed uses of the commercial center and the project's consistency with the General Plan, Airport Area Specific Plan, zoning regulations, and this environmental document, or subsequent environmental analysis.

Additional proposed project components include:

- 1. A five-lot subdivision, including four commercial lots ranging in size from 0.69 acre to 2.68 acres, and one assisted living and memory care site of 4.79 acres;
- 2. The Westmont Living facility would include 111 assisted living units. Of these, approximately 50 60% would be independent living, with the balance being assisted living. The facility would also include 28 memory care beds. The facility would be constructed in two phases as follows:

- a. Phase 1 72 assisted living units and 28 memory care beds comprising 98,473 square feet (49,610 sf 1st floor, 48,863 sf 2nd floor) in a single building. Phase 1 parking and site improvements would consist of 70 parking spaces;
- Phase 2 39 assisted units comprising 35,183 square feet (17,764 sf 1st floor, 17,418 sf 2nd floor) in an expanded building attached to the main Phase 1 development;
- 3. Assisted living amenities at the site would include full meal services, entertainment and exercise rooms, movie theater, and beauty-barber services;
- 4. As a 24-hour operation, the Westmont Living facility is expected to employ approximately 80 full- and part-time staff. At any given time, as many as 18 employees would be on site for a given shift;
- 5. The Westmont Living facility would include various delivery receiving and service needs throughout each day, and would accommodate family and guest visitors throughout each day;
- 6. Assisted living parking is proposed at 70 parking spaces dedicated to residents and staff;
- 7. Proposed uses, building and lot sizes, and associated parking on each lot are shown in Table 1, below.

Lot	Use	Lot Size (acres)	Building floor area (sf)	Building footprint (sf)	Vehicle spaces provided	Bicycle parking provided
Lot 1	Assisted living and memory care	4.79	133,655	77,750	70	6 short- term 5 long- term
Lot 2	Retail/ Restaurant ¹	0.69	5,000 ¹	5,000 ¹		
Lot 3	Retail/ Restaurant ¹	0.98	5,000 ¹	5,000 ¹		
Lot 4	Retail/ Restaurant ¹	0.93	5,000 ¹	5,000 ¹		
Lot 5	Medical Office ¹	2.68	45,000 ¹	17,992 ¹		

Table 1: Project Statistics

 No application for development has been submitted for lots 2-5. Future development would require additional review and entitlement actions. This statistic represents one possible development scenario for the lot based on conceptual information from the applicant.

- 8. Demolition of the existing single-family residence at 660 Tank Farm Road;
- 9. Amendment to the Airport Area Specific Plan to modify the land use designation from Business Park with Specific Plan Overlay (BP-SP) to Community Commercial with Special Focus Area and Specific Plan Overlay (C-C-SF-SP) and associated text amendments to update the Specific Plan consistent with the proposed project and Special Focus Area policies (Attachment 1);
- 10. General Plan Amendment and rezone for the 1.37-acre parcel at 660 Tank Farm Road modifying the land use designation from Business Park to Community Commercial and the Zoning Designation from Business Park (BP-SP) to Community Commercial with Special Focus Overlay (C-C-SF-SP);
- 11. Creek setback exception to encroach into approximately 4,963 square-feet of the setback area for road improvements;
- 12. Design Exception for Tank Farm Road frontage improvements to allow 11-foot vs. 12-foot-wide travel lanes; and
- 13. Frontage and on-site improvements (Attachment 2, Project Plans).

Two points of access from Tank Farm Road are proposed via a north-south driveway that would be shared between the office/retail/restaurant portion and the assisted living portion of the site, and a signalized intersection at the Mindbody intersection that would connect to the Industrial Way/Broad Street signalized intersection. Access from Broad Street would be provided by a driveway located along the northerly property line. This driveway would also provide access to the SESLOC Federal Credit Union building to the north. The existing right-in/right-out driveway access to SESLOC from Broad Street would be eliminated. Also requested is a design exception for the travel lanes on Tank Farm Road, which seeks 11-foot vehicle lanes versus the 12-foot lanes required by the Airport Area Specific Plan (AASP). The proposed street frontage improvements for both Tank Farm Road and Broad

Street consist of curb, gutters, sidewalks, and parkways along the project frontages as depicted in the AASP. The Broad Street frontage improvements have been designed to accommodate a future transit stop.

The proposed two-story, 32-foot-high Westmont Living facility building's design would incorporate an architectural style and materials consistent with the surrounding neighborhood. The color palette would be neutral, and materials would consist of a mix of Alumawood, Hardie siding, stucco, board and batten, and stone. The Westmont Living facility design would incorporate use of simple shed roof forms, and board & batten and lap siding, with the intent to provide complementary forms and materials. (Project plans, Attachment 2)

The proposed project has been designed to collect stormwater runoff from the proposed buildings, landscaping, parking and drive aisles, and direct the water into underground storage facilities as a strategy to address current post-construction stormwater regulations. The impervious areas on site have been designed with gradients to direct stormwater through a storm drain system that would route the stormwater to the two proposed underground storage facilities.

The project is seeking a creek setback exception to encroach into approximately 4,963 square-feet of the setback area for road improvements. To minimize potential impacts to 0.19 acre of seasonal wetland and ephemeral drainage area through project design, the project includes the enhancement of approximately 0.06 acres of wetland along the Orcutt Creek corridor, which would constitute a 3:1 replacement ratio. The enhancement plan provides for the removal of invasive non-native species and planting of native plants in the northwest corner of the site and creek setback areas along Orcutt Creek (see Attachment 3, Biological Wetland Resource Assessment).

9. Project History:

The proposed project was originally submitted in March 2018 and included a seven-lot subdivision, an assisted living and memory care facility, a retail grocery store use, and six retail/restaurant spaces. That project was reviewed by the Airport Land Use Commission on July 25, 2018 and September 19, 2018 and received an Airport Land Use Plan consistency determination. On October 15, 2018, the Architectural Review Commission reviewed the project and sent its recommendations to the Planning Commission, which reviewed the project on April 10, 2019. The Planning Commission's recommendation was introduced initially to the City Council on May 7, 2019. A second hearing did not occur and neither the project nor the environmental document was approved.

The applicant has since revised the project and is only moving forward with the Westmont Living facility at this time. The assisted living and memory care facility remains as originally proposed, with no changes. The applicant has indicated that future development of the eastern portion of the project site would include replacing the proposed grocery store use with a medical office and reducing the amount of proposed retail/restaurant space. A conceptual site plan of a potential future development shows that the configuration of structures on the commercial portion of the property would be altered.

The applicant is seeking to proceed with the Westmont Living facility and commercial center as two separate projects, though both are analyzed herein. As no changes are proposed to Westmont Living facility, that project can proceed with a final City Council hearing, as this part of the project is still consistent with the previous review of the Architectural Review Commission and Planning Commission. As part of approving this environmental document, the City Council would also be approving the environmental analysis of the commercial center, and the vesting tentative tract map to subdivide the site. The commercial center is being processed as a separate entitlement and will require a separate Architectural Review Commission review and Planning Commission approval. When the commercial center project subsequently returns to Architectural Review Commission and Planning Commission, no further environmental review would be required and a consistency determination could be made (assuming the application is generally consistent with the conceptual plans for the commercial center included in this evaluation).

10. Project Entitlements:

- Vesting Tentative Tract Map 3115 to subdivide two existing parcels into five lots ranging in size from 0.69 acre to 4.79 acres, including a design exception for Tank Farm Road frontage improvements to allow 11-foot vs. 12-foot-wide travel lanes.
- Development Plan approval of the Westmont Living Facility, including a creek setback exception to encroach into approximately 4,963 square-feet of the setback area for road improvements. Separate

approval will be required in a future application for any development on the eastern portion of the site (which may or may not include medical office and retail/restaurant development).

- Airport Area Specific Plan Amendments including associated development standards and amendment of the Specific Plan zone designation from BP-SP to C-C-SF-SP to be consistent with the rezone of the property which occurred when the General Plan Land Use and Circulation Element (LUCE) was adopted in 2014.
- General Plan Amendment and rezone for the 1.37-acre parcel at 660 Tank Farm Road modifying the land use designation from Business Park to Community Commercial and the Zoning Designation from Business Park (BP-SP) to Community Commercial with Special Focus Overlay (C-C-SF-SP).

11. Surrounding Land Uses and Settings:

The project site's topography is relatively level and currently supports non-native annual grassland and ruderal habitats and an ephemeral drainage with mostly herbaceous vegetation along with several willow trees, a patch of bulrush, and a non-native blackberry thicket. There is an existing soil stockpile on the southern portion of the project site, which would be used for the proposed grading activities. The project site's northern and western boundaries are defined by drainage swales that flow west to the confluence with Orcutt Creek.

The project site is located at the northwest corner of Broad Street and Tank Farm Road within the Airport Area Specific Plan (AASP). Surrounding uses include SESLOC Federal Credit Union to the north, a mobile home park to the west, Marigold Shopping Center to the east, and Mindbody offices and the Edna Valley Market and Gas Station to the south. Orcutt Creek is located along the western boundary of the project site. The majority of the site (8.5 acres) is zoned Community-Commercial with Special Focus Area Overlay (C-C-SF-SP). The Business Park (BP-SP) zoned portion of the site is approximately 1.5 acres.

Surrounding adjacent land uses and zoning are provided in the table below:

	LAND USE	EXISTING USES / TENANTS
NORTH	Business Park (BP-SP)	SESLOC Federal Credit Union (SESLOC)*
SOUTH	Business Park (BP-SP)	Mindbody, Edna Valley Market & Gas Station
EAST	Community Commercial (C-C)	Marigold Shopping Center / Vons
WEST	Service Commercial (C-S-SP)	Hidden Hills Mobile Home Park**

Table 2: Adjacent Land Uses

* A development application has been received by the City for this site and is currently under review. The application is seeking entitlements for the construction of a new 12,000 square-foot three-story commercial structure to expand the existing SESLOC Credit Union campus.

**A development application has been received by the City for this site and is currently under review. The application is seeking entitlements to construct a mixed-use development including 249 apartment units and approximately 18,500 square-feet of commercial space.

12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

A Cultural Resources Survey of the project site (Terry L. Joslin, Ph.D., RPA, Central Coast Archaeological Research Consultants) has been prepared. Native American Tribes have been notified about the project consistent with City and State regulations. No requests for consultation were received.

13. Other public agencies whose approval is required:

- SLO County Airport Land Use Commission Airport Land Use Plan Consistency Determination
- U.S. Army Corps of Engineers Nationwide Permit 39 *Commercial and Institutional Developments* pursuant to Section 404 of the Clean Water Act (CWA)
- Regional Water Quality Control Board CWA Section 401 Water Quality Certification
- California Department of Fish and Wildlife Streambed Alteration Section 1600 Permit
- San Luis Obispo County Air Pollution Control District

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics	\boxtimes	Greenhouse Gas Emissions		Public Services
	Agriculture and Forestry Resources		Hazards and Hazardous Materials		Recreation
\boxtimes	Air Quality		Hydrology and Water Quality	\boxtimes	Transportation
\boxtimes	Biological Resources		Land Use and Planning	\boxtimes	Tribal Cultural Resources
\boxtimes	Cultural Resources		Mineral Resources		Utilities and Service Systems
	Energy	\boxtimes	Noise		Wildfire
	Geology and Soils		Population and Housing	\boxtimes	Mandatory Findings of Significance

FISH AND WILDLIFE FEES

	The Department of Fish and Wildlife has reviewed the CEQA document and written no effect determination request and has determined that the project will not have a potential effect on fish, wildlife, or habitat (see attached determination).
\boxtimes	The project has potential to impact fish and wildlife resources and shall be subject to the payment of Fish and Game fees pursuant to Section 711.4 of the California Fish and Game Code. This initial study has been circulated to the California Department of Fish and Wildlife for review and comment.

STATE CLEARINGHOUSE

This environmental document must be submitted to the State Clearinghouse for review by one or more State agencies (e.g. Cal Trans, California Department of Fish and Wildlife, Department of Housing and Community Development). The public review period shall not be less than 30 days (CEQA Guidelines 15073(a)).

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made, by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.	\boxtimes
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a "potentially significant" impact(s) or "potentially significant unless mitigated" impact(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

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August 6, 2020 Date

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Printed Name Tyler Corey, Principal Planner

For: Michael Codron, Community Development Director

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact' is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 19, "Earlier Analysis," as described in (5) below, may be cross-referenced).
- 5. Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063 (c) (3) (D)). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they addressed site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance

Less Than Issues, Discussion and Supporting Information Sources Significant Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-Potentially Less Than with 1486-2018, SPEC-1482-2018, EID-1484-2018 Significant Significant Mitigation Sources Impact Incorporated Impact No Impact

1. AESTHETICS

Ex	Except as provided in Public Resources Code Section 21099, would the project:					
a)	Have a substantial adverse effect on a scenic vista?	1, 5			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, open space, and historic buildings within a local or state scenic highway?	1, 5, 9, 35				\boxtimes
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	1, 5, 35			\boxtimes	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	1, 5, 18, 35			\boxtimes	

Evaluation

The AASP area is characterized as semi-rural, with grazing land intermixed with occasional one- and two-story industrial and business park development. Views in the planning area include the Santa Lucia Range and Islay Hill to the east. In addition, a small range of low hills separates the planning area from the city core to the north. The project site is located in the southeastern portion of the city and is generally surrounded by commercial service and retail uses; residential uses are located immediately west of the site. The project site is primarily undeveloped and contains a vacant single-family residence and is characterized by non-native annual grassland and several non-native trees, primarily eucalyptus.

The City's Conservation and Open Space Element (COSE) identifies specific goals and policies intended to protect and enhance the city's visual quality and character. Policies in the COSE include, but are not limited to, promoting the creation of "streetscapes" and linear scenic parkways during construction or modification of major roadways, designing new development to be consistent with the surrounding architectural context, and preservation of natural and agricultural landscapes. The COSE and Circulation Element assign scenic value ratings of 'moderate' and 'high' to several roadways in the city, based on the availability of views of scenic resources from these public viewpoints. According to the Circulation Element of the General Plan, the segment of U.S. Highway 101 (U.S. 101) through the city of San Luis Obispo is identified as having moderate and high scenic value east of the intersection with Santa Fe Road. The portion of Broad Street along the project site is also identified as having high scenic value. The COSE does not identify any "cones of view" or other important scenic vistas in the project site vicinity.

The project site is located along a portion of Broad Street that is part of State Route 227 (S.R. 227), a state highway that begins at U.S. Route 101 (U.S. 101) and continues through San Luis Obispo to Arroyo Grande. This portion of S.R. 227 is not a designated or eligible state scenic highway. U.S.101 is located approximately 1.5 miles west of the project site. The section of U.S. 101 that extends through the city of San Luis Obispo is classified as an eligible state scenic highway but is not officially designated (Caltrans 2015).

In addition to regulation through local General Plan policies, the City's Architectural Review Commission (ARC) reviews for conformance with Community Design Guidelines. Architectural review is a process whereby the City's ARC examines a proposed project's layout, building design, its relationship to the neighborhood in which it would be located, landscaping, parking, signage, lighting, and other features affecting the project's appearance. The ARC is charged with administering architectural review to help achieve attractive and environmentally sensitive development. The ARC's by-laws include design review process goals of maintaining property values, preserving the city's natural beauty and distinct visual character, attracting

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

growth in the local economy and maintaining the community's quality of life for residents. The ARC uses the City's Community Design Guidelines as a basis for evaluating the suitability and appropriateness of individual project design.

a) A scenic vista is generally defined as a high-quality view displaying good aesthetic and compositional values that can be seen from public viewpoints. Some scenic vistas are officially or informally designated by public agencies or other organizations. A substantial adverse effect on a scenic vista would occur if the proposed project would significantly degrade the scenic landscape as viewed from public roads or other public areas. The proposed project would be located on the north side of Tank Farm Road with frontage along the segment of the road designated as having moderate scenic value, east of Santa Fe Road, and is briefly visible from the portion of Tank Farm Road that is designated as having high scenic value, west of Santa Fe Road. The project would also front the west side of Broad Street along the high scenic value segment of road. Existing views of the site consist of security fencing, non-native grasses and trees. Views through the site facing north-northeast from Tank Farm Road consist of commercial development on parcels to the north (SESLOC) and east (Marigold). Distant hillside views can be seen through the site and to the east, as viewed from Tank Farm Road.

The project would modify foreground views to the north and northeast through the site by constructing new buildings for the Westmont Living facility and for future commercial center development. The 2003 AASP EIR, which established the current 45-foot height limit and buildout potential for the project site, determined that urbanization of the AASP would irreversibly change the visual character of the south end of the city from that of a low density semi-rural area to a more intensely developed, suburban area. This change was determined to be significant and unavoidable and a statement of overriding considerations was adopted by the City Council. The Westmont Living facility building would be predominantly 26 feet with its high point at the top of the parapet (32 feet). Development plans has not been submitted for development on the eastern portion of the property. However, the proposed Community Commercial designation would allow for a maximum building height of 35 feet from the average existing grade elevation of the site. Architectural projections such as parapets, antennas, vents, etc. would be allowed to encroach up to 10 feet beyond the 35-foot limit. The proposed Community Commercial designation would also allow for up to 75% lot coverage and up to a 2.0 floor area ratio (FAR). In comparison, the existing Business Park (BP) designation allows for heights up to 45 feet, lot coverage up to 75%, and a FAR of 0.6 - 1.0 depending on use. Architectural projections in the Business Park (BP) designation are allowed to encroach up to 7 feet beyond the 45-foot limit.

The project would modify the foreground and middle ground views as experienced from Tank Farm Road by constructing a new two-story structure and a new single-story structure with frontage on Tank Farm Road. New development would be visible in the foreground and would block views of other structures looking to the north and northeast but would not block views of hillsides or other natural resources experienced from the cone of vision while driving east along Tank Farm Road. A conceptual site plan for the eastern portion identifies potential placement of a single-story structure adjacent to the Tank Farm Road/Broad Street intersection, which would help ensure views of the hills are not lost while approaching the intersection or turning north onto Broad Street. These hillsides are not within designated scenic vistas and there are no identified scenic "cones of view" through the site.

Future development on the eastern portion of the project site has the potential to modify the foreground views from Broad Street. A conceptual site plan shows that future development may include a new multi-story structure and two single-story structures with frontage on Broad Street. Travelling north on Broad Street, public views consist of street-frontage landscaping, commercial development, and shopping centers, with intermittent views of the South Hills, which are predominately blocked by existing eucalyptus trees on the project site. Travelling south on Broad Street, views of the site are generally blocked by the existing SESLOC building, ornamental landscaping, and street trees. Public views consist of a commercial shopping center and transportation-related infrastructure. Initial views of the site from Broad Street are predominately of the grove of eucalyptus trees clustered at the northern corner of the project site. These trees would be removed as part of the project. If the conceptual future project is realized, public views would consist of the multi-story medical office structure and intermittent views of the Mindbody campus. Single-story retail structures would block views of the existing Mindbody campus and the gas station on the southwest corner of the Tank Farm Road/Broad Street intersection. Future development on the eastern portion of the project site would require future entitlements which would require review and consistency with the City's

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

General Plan policies and implementing measures in the Zoning Code, Community Design Guidelines, and ARC policies and guidelines.

The visual character of the site would be modified, as the existing vacant residence and non-native grasses and trees would be replaced with the proposed new development. Removal of existing trees would not degrade or block any designated high scenic views or otherwise degrade the existing quality of the site or surroundings, and the project would incorporate on-site landscaping and new plantings as part of the riparian enhancement of Orcutt Creek. Additionally, the Westmont Living facility has been reviewed by the Architectural Review Commission (ARC), which recommended that the Planning Commission find the project consistent with the Community Design Guidelines and design guidance in the Airport Area Specific Plan (AASP). The Planning Commission reviewed the project and found the project consistent with the Community Design Guidelines and design guidance in the AASP and recommended approval the City Council. Impacts would be less than significant.

- b) The project site is located along Tank Farm Road and Broad Street. This portion of Broad Street is part of S.R. 227, a state highway that begins at U.S. 101 and continues through San Luis Obispo to Arroyo Grande. This portion of S.R. 227 is not a designated or eligible state scenic highway. U.S.101 is located approximately 1.5 miles west of the project site. The section of U.S. 101 that extends through the city of San Luis Obispo is classified as an eligible state scenic highway but is not officially designated (Caltrans 2015). The City has identified U.S. 101 from the southern city limit to Marsh Street as a highway with high scenic value, and between Marsh Street and Broad Street, and north of California Street, as a highway with moderate scenic value. Due to the distance between U.S. 101 and the project site, intervening topography, and the existing urban development, there are no available views of the project site from U.S. 101. Therefore, there would be no impact.
- c) See impact discussion a). Impacts would be less than significant.
- d) Existing sources of nighttime lighting in the vicinity of the project site include streetlights along Tank Farm Road and Broad Street, spillover lighting from surrounding development to the south and east, light from the headlights of vehicles traveling along Tank Farm Road and Broad Street, and from the single-family residential development to the southeast. Development of the project site would result in an increase in ambient nightime lighting through the addition of parking lot and security/safety lighting and exterior fixtures associated with the Westmont Living facility use and future development on the eastern portion of the project site. The project would also result in an increase of headlights and vehicle glare from vehicles accessing the site. In addition, exterior building materials, windows, and surface paving materials may cause glare that could affect the nearby residence to the southwest. The project would be required to conform to the City's Night Sky Preservation Ordinance (Zoning Regulations Chapter 17.23), which sets operation standards and requirements for lighting installations. These include limits on outdoor lighting that is misdirected, excessive, or unnecessary, and requires lighting to meet the minimum requirements of the California Code of Regulations for Outdoor Lighting and Signs (CCR Title 24, Chapter 6). The project would also be required to comply with the City's General Plan policies pertaining to lighting and glare (Policy 9.2.3 Outdoor Lighting), as well as the City's Community Design Guidelines. Prior to development of the proposed project, the applicant would also be required to provide an overall lighting plan that demonstrates that the project complies with the requirements of City Ordinance No. 17.18.030, which prohibits lighting or illuminated devices that would create glare which results in a hazard or nuisance on other properties. Compliance with applicable City policies and regulations would ensure that impacts associated with the creation of new sources of exterior lighting and glare would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		Potentially	Less Than Significant with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

2. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	1, 9, 19		\boxtimes
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	12		\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	19		X
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	19		\boxtimes
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	19		\boxtimes

Evaluation

The California Department of Conservation (DOC) classifies and maps agricultural lands in the state in the Farmland Mapping and Monitoring Program (FMMP). The FMMP identifies five farmland categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Farmland of Local Potential. The project site is designated as Urban and Built-Up Land by the DOC FMMP.

The project site is an urban in-fill site surrounded by existing development. There are no agricultural resources on the site; the nearest active agricultural operations are located in the unincorporated county, both to the south along S.R. 227 in Edna Valley and to the west along Buckley Road. Based on Figure 6 in the City's COSE, the project site is not located within or immediately adjacent to land under an active Williamson Act contract. The project site currently supports non-native annual grassland and ruderal habitats as well as an ephemeral drainage with mostly herbaceous vegetation along with several willow trees, a patch of bulrush, and a non-native blackberry thicket. Soils on the site include Cropley clay (0 to 2 percent slopes) and Concepcion loam (2 to 5 percent slopes).

According to Public Resources Code Section 12220(g), forest land is defined as land that can support 10percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Timberland is defined as land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. The project site does not support any forest land or timberland.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018	6	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

- a) According to the FMMP, the project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland). The project site is not in active agricultural use, is not located on land considered Important Farmland, and is in an area long designated for urban infill development in the AASP. Therefore, there would be no impact.
- b) There is no agricultural zoning or Williamson Act contract in effect on the project site or surrounding vicinity. Therefore, there would be no impact.
- c) The project site is not zoned for forest land or timberland zoned Timberland Production. Therefore, there would be no impact.
- d) The project site does not support any forest land or timberland. Therefore, there would be no impact.
- e) The project site has not been used for grazing or active agriculture in the recent past. Therefore, this project will not result in any direct loss of productive farmland. Other lands in the vicinity of the project site are either already developed or are slated by the AASP for eventual non-agricultural use whether this project proceeds or not. Therefore, this project has no direct correlation to any planned conversions of farmland to non-agricultural uses. The impacts of conversion of these lands to non-agricultural uses were evaluated both in the environmental documents for the City's Land Use and Circulation Element and the AASP and found to be insignificant. This project complies with said policies through consistency with approved land use designations. Therefore, there would be no impact.

Mitigation Measures

None necessary.

Conclusion

No impact.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

a)	Conflict with or obstruct implementation of the applicable air quality plan?	20, 21, 35		\boxtimes	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	20, 21, 33, 35, 45	\mathbb{X}		
c)	Expose sensitive receptors to substantial pollutant concentrations?	20, 21, 32, 33, 45	\boxtimes		
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	4, 32, 46	\boxtimes		

Evaluation

The city of San Luis Obispo is in the San Luis Obispo County portion of the South Central Coast Air Basin (SCCAB), which is under the jurisdiction of the San Luis Obispo Air Pollution Control District (SLOAPCD). SLOAPCD monitors air pollutant levels to assure that air quality standards are met, and if they are not met, develops strategies to meet the standards. Depending

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

on whether the standards are met or exceeded, the air basin is classified as being in "attainment" or as "non-attainment." San Luis Obispo County is in non-attainment for the state 24-hour standard for particulate matter (PM_{10}), partial non-attainment for federal ambient standards for ground-level ozone (O_3), and the state eight-hour standard for ozone). The COSE identifies goals and policies to achieve and maintain air quality that support health and enjoyment for those who live, work, and visit the city. These goals and policies include meeting state and federal air quality standards, reducing dependency on gasoline- or dieselpowered motor vehicles and to encourage walking, biking, and public transit use.

The major sources of PM₁₀ in the SCCAB are agricultural operations, vehicle dust, grading, and dust produced by high winds. Additional sources of particulate pollution include diesel exhaust; mineral extraction and production; combustion products from industry and motor vehicles; smoke from open burning; paved and unpaved roads; condensation of gaseous pollutants into liquid or solid particles; and wind-blown dust from soils disturbed by demolition and construction, agricultural operations, off-road vehicle recreation, and other activities. Ozone is a secondary pollutant that is formed by a reaction between nitrogen oxides (NOx) and reactive organic gases (ROGs) in the presence of sunlight. Therefore, ozone levels are dependent on the amount of these precursors. In the SCCAB, the major sources of ROGs are motor vehicles, organic solvents, petroleum production, and pesticides. The major sources of NOx are motor vehicles, public utility power generation, and fuel combustion by various industrial sources.

The SLOAPCD has developed a CEQA Air Quality Handbook (most recently updated with a November 2017 Clarification Memorandum) to evaluate project-specific impacts and determine if potentially significant impacts could result from a project. To evaluate long-term emissions, cumulative effects, and establish countywide programs to reach acceptable air quality levels, a Clean Air Plan (2001) has been adopted by the SLOAPCD.

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The California Air Resources Board (CARB) has identified the following groups as most likely to be affected by air pollution (i.e., sensitive receptors): children under 14, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. The project site is located within 1,000 feet of multiple sensitive receptors, including residential dwelling units to the west (mobile home park/planned residential development) and east and the Damon-Garcia Sports Complex to the north.

Naturally Occurring Asbestos (NOA) has been identified as a toxic air contaminant by the CARB. Any ground disturbance proposed in an area identified as having the potential to contain NOA must comply with the CARB's Airborne Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations. The SLOAPCD's Naturally Occurring Asbestos Map indicates that the project site is located within an area identified as having a potential for NOA to occur.

To facilitate potential future CEQA streamlining when a development project application is submitted for the eastern portion of the project site, this section analyzes the potential environmental effects of the conceptual plan for the commercial center, as discussed in the project description.

a) The SLOAPCD adopted the 2001 Clean Air Plan (CAP) in 2002. The 2001 CAP is a comprehensive planning document intended to provide guidance to the SLOAPCD and other local agencies, including the City, on how to attain and maintain the state standards for ozone and PM₁₀. The CAP presents a detailed description of the sources and pollutants which impact the jurisdiction, future air quality impacts to be expected under current growth trends, and an appropriate control strategy for reducing ozone precursor emissions, thereby improving air quality. In order to be considered consistent with the 2001 CAP, a project must be consistent with the land use planning and transportation control measures and strategies outlined in the CAP. The proposed project is consistent with the general level of development anticipated and projected in the CAP. The proposed development's location, uses, and intensity is generally consistent with planning envisioned in the City's 2014 Land Use and Circulation Element update and with the CAP's land use planning strategies, including locating the proposed development within an urban area proximate to an existing roadway, near transit services, and near existing shopping areas.

Transportation Control Measures (TCMs) are controls implemented at the local or regional level to reduce emissions resulting from the use of motor vehicles. TCMs are primarily intended to reduce vehicle use by promoting and facilitating the use of alternative transportation options. Many of the TCMs identified within the CAP are not applicable to the project, such as campus trip reduction programs, local and regional public transportation improvements, motor vehicle inspection programs, and maintenance and development of park-and-ride lots

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

throughout the county. The project would be generally consistent with the CAP TCM to promote bicycle use through provision of secure bicycle storage to encourage project employees to bike to and from work. The project site is not located in or adjacent to an area with proposed/needed bicycle infrastructure or improvements as identified in the CAP or City of San Luis Obispo Bicycle Transportation Plan. As described above, the project location would contribute to the Westmont Living facility occupants' overall reduction of dependence on automobiles and daily vehicle miles travelled. The project would be consistent with all applicable land use and TCMs identified in the CAP. Therefore, impacts related to a conflict with an air quality plan would be less than significant.

b) <u>Construction Emissions</u>

Temporary construction activities associated with the proposed project would generate criteria pollutant emissions (i.e., fugitive dust and ozone precursor emissions) as well as toxic air contaminant (TAC) emissions (i.e. diesel particulate matter (DPM) emissions), which would contribute to the existing San Luis Obispo County non-attainment status for ozone and PM₁₀. Table 3 summarizes the estimated short-term emissions from construction and shows maximum daily and quarterly emissions during construction compared to the applicable SLOAPCD construction emissions thresholds. Based on the project construction schedule and proposed structures, it is anticipated that a maximum of four large pieces of construction equipment would be active at the same time under maximum load. For modeling purposes, two bulldozers, a front-end loader, and a scraper were used to represent the equipment that would be active simultaneously.

	Daily (lbs/day)	Quarterly (tons/quarter)					
	ROG +NO _x (combined)			DPM ^{2,3}			
Maximum Construction Emissions	50.63	1.62	0.11	0.07			
SLOAPCD Significance Threshold	137	2.5 (Tier 1)	2.5 (Tier 1)	0.13 (Tier 1)			
Threshold Exceeded?	No	No	No	No			

Table 3. Maximum Construction Emissions

See Appendix A for CalEEMod results.

¹ The combined ROG and NO_x emissions were derived from the rolling maximum quarterly emissions for "ROG + NO_x " from CalEEMod.

²Quarterly emissions for Fugitive PM10 and DPM were calculated by dividing maximum annual construction emissions from CalEEMod by 4, since construction activities would extend for a duration exceeding 90 days, as recommended by SLOAPCD.

³ The DPM estimations were derived from the "PM10 Exhaust" and "PM2.5 Exhaust" output from CalEEMod as recommended

by SLOAPCD. This estimation represents a worst-case scenario because it includes other PM10 exhaust other than DPM.

As shown in Table 2, maximum construction emissions would not exceed the quarterly SLOAPCD thresholds for PM_{10} , DPM, the daily SLOAPCD threshold for ROG and NO_X or the quarterly SLOAPCD threshold for ROG and NO_X . Even though temporary construction impacts related to emissions of ROG and NO_X would be less than significant, Measures AQ-1 and AQ-2 are recommended to further reduce impacts. Measures AQ-1 and AQ-2 incorporate the standard construction equipment mitigation measures and BACT measures required by SLOAPCD for construction projects that exceed the 2.5-tons-per-quarter threshold for ROG and NO_X emissions (Attachment 4a, Rincon Consultants Air Quality Technical Memorandum and 4b, SWCA Updated CalEEMod Emissions Modeling). Impacts would be less than significant impact with mitigation incorporated.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

Operational Emissions

Operation of the proposed project would result in an increase in vehicle trips that would generate new criteria pollutant emissions in the SCCAB. In addition, operation of new land uses on the project site would result in long-term emissions associated with natural gas use and area sources, such as landscaping, consumption of consumer products, and off-gassing from architectural coatings. Table 4 shows the daily and annual operational emissions associated with the proposed project compared to the applicable SLOAPCD operational emissions thresholds.

Table 4. Maximum Operational Emissions

	ROG +NO _x (combined)	Fugitive PM ₁₀ (dust)	DPM ¹	СО
Proposed Project Daily Emissions	34.11bs/day ²	13.0 Olbs/day	$0.70 \ lb/day^2$	64.06lbs/day
SLOAPCD Daily Threshold	25 lbs/day	25 lbs/day	1.25 lbs/day	550 lbs/day
Threshold Exceeded?	Yes	No	No	No
Proposed Project Annual Emissions	4.36 tons/year	1.66 tons/year	0.0902 ton/year	8.20tons/year
SLOAPCD Annual Threshold	25 tons/year	25 tons/year	n/a	n/a
Threshold Exceeded?	No	No	n/a	n/a

See Attachment 4b for CalEEMod results.

¹ DPM estimates were derived from the "PM10 Exhaust" and "PM2.5 Exhaust" output from CalEEMod as recommended by SLOAPCD. Based on CARB statewide inventories, DPM is roughly 8 percent of statewide PM2.5. This estimate represents a worst-case scenario because it includes all PM10 exhaust.

² SLOAPCD specifies that CalEEMod winter emission outputs be compared to operational thresholds for these pollutants. Note: All numbers may not sum exactly due to rounding.

The analysis of operational emissions does not consider TACs because the project does not propose a stationary source of toxic air emissions that would impact adjacent sensitive receptors. Additionally, the project site is not located close to a freeway or urban road with daily traffic volumes greater than 100,000 vehicles, which is the screening criteria identified by CARB to determine if TAC emissions would exposure the public to excessive cancer risk. Based on guidance from CARB and the California Air Pollution Control Officers Association (CAPCOA), the project would not expose people to undue excess cancer risk from exposure to TACs, which is defined as a risk of greater than 10 in a million.

The proposed Westmont Living facility and conceptual commercial center would not generate a substantial number of diesel truck trips and would not substantially increase the number of trucks on local or regional roadways. Therefore, long-term operational emissions would be less than significant.

As shown in Table 3, daily operational emissions associated with development under the proposed project would not exceed SLOAPCD operational daily and annual thresholds for PM₁₀, DPM, or CO, or annual threshold for ROG and NOx. The project would exceed the SLOAPCD operational daily threshold for ROG and NOx. According to the SLOAPCD CEQA Air Quality Handbook, projects that generate between 30 and 35 lbs/day of combined ROG and NOx shall select and implement at least 8 mitigation measures from Table 3-5 of the SLOAPCD CEQA Air Quality Handbook. This requirement has been included as Mitigation Measure AQ-3, and upon implementation would reduce ROG and NOx daily emissions to less than significant with mitigation.

c) The project does not include stationary sources of toxic air emissions that would impact adjacent sensitive receptors and the project site is not located close to a freeway urban road with daily traffic volumes of greater than 100,000

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

vehicles. The nearest potential sensitive receptors would be the existing mobile home park/planned residential units located on the parcel immediately adjacent to the project site's western boundary (650 Tank Farm Road). Because the project would be located within 1,000 feet of sensitive receptors, additional fugitive dust mitigation is required. Mitigation Measure AQ-2and AQ-4 would reduce construction related air quality impacts to sensitive receptors to less than significant. Therefore, impacts would be less than significant with mitigation.

d) The project would amend the AASP land use designation consistent with the City's General Plan and zoning designations to allow the proposed uses that are consistent with the Community Commercial Zone with Special Focus Overlay (C-C-SF-SP). None of the uses are identified by SLOAPCD as uses that typically create objectionable odors. In addition, the project site is surrounded by service commercial/business park land uses, an existing residence to the southeast, and open space and agricultural operations further to the southwest. None of these land uses include operations listed in the *CEQA Air Quality Handbook* as potential odor-contributing sources. Therefore, development under the proposed General Plan Amendment and rezone would not result in objectionable odors that would affect a substantial number of people.

The project site is located in an area identified by the SLOAPCD as having a potential for NOA to occur. Pursuant to SLOAPCD requirements and ARB Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105), the applicant is required to provide geologic evaluation prior to any construction activities and comply with existing regulations regarding NOA, if present. Mitigation Measures AQ-4 and AQ-5 have been identified to require the applicant to complete a geologic evaluation and follow all applicable protocols and procedures if NOA is determined to be present onsite.

The existing structure located onsite was constructed in 1940 and may have the potential to include asbestos containing materials (ACM) and/or lead-based paint. Demolition of this structure may have the potential to result in harmful asbestos or lead emissions. The project is proposing to demolish an existing single-family residence and would be subject to the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP). Mitigation Measure AQ-6 has been identified to require full compliance with applicable regulatory requirements for removal and disposal of these toxic contaminants if present on-site, including notification of the SLOAPCD prior to demolition of the existing structure. Therefore, this impact would be less than significant with mitigation.

Mitigation Measures

The following mitigation measures are required to reduce impacts to a less-than-significant level. These measures are required in addition to compliance with all required state and local laws that relate to air quality, as enforced by the San Luis Obispo Air Pollution Control District (APCD).

AQ-1 Standard Control Measures for Construction Equipment

The following standard air quality mitigation measures shall be implemented during the site preparation and grading phases of construction at the project site:

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with CARB-certified motor vehicle diesel fuel nontaxed version suitable for use off-road);
- Comply with the State Off-Road Regulation;
- Use on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOX exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
- Diesel idling within 500 feet of sensitive receptors shall not be not permitted;7
- Staging and queuing areas shall not be located within 500 feet of sensitive receptors;6

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

- Equipment shall be electrified when feasible;
- Gasoline-powered equipment shall be substituted in place of diesel-powered equipment, where feasible; and
- Alternatively-fueled construction equipment shall be used on-site where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel.
- AQ-2 Best Available Control Technology. Diesel construction equipment used during the site preparation and grading phases shall be equipped with CARB Tier 3 or Tier 4 certified off-road engines and 2010 on-road compliant engines.
- AQ-3 The project would result in ROG and NOx operational emissions that exceed the SLOAPCD threshold of 25 lbs/day. Prior to issuance of construction permits, the applicant shall identify at least 8 mitigation measures from Table 3-5 of the SLOAPCD CEQA Air Quality Handbook to incorporate into the project. Prior to occupancy, final inspection, or establishment of the use, whichever occurs first, the project shall demonstrate that it has implements such measures. If the project obtains a GreenPoint rating or is LEED certified, the applicant shall only need to implement 6 mitigation measures from Table 3-5 of the SLOAPCD CEQA Air Quality Handbook.
- AQ-4 This project is greater than 4 acres and within 1,000 feet of sensitive receptors (residential units). Construction activities can generate fugitive dust, which could be a nuisance to residents and businesses in close proximity to the proposed construction site. Projects with grading areas that are greater than 4-acres or are within 1,000 feet of any sensitive receptor shall implement the following measures to manage fugitive dust emissions such that they do not exceed the APCD's 20% opacity limit (APCD Rule 401) or prompt nuisance violations (APCD Rule 402):
 - a. Reduce the amount of the disturbed area where possible;
 - b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. When drought conditions exist and water use is a concern, the contractor or builder should consider the use of an APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control. Please refer to the following link from the San Joaquin Valley Air District for a list of potential dust suppressants: Products Available for Controlling Dust;
 - c. All dirt stock pile areas should be sprayed daily and covered with tarps or other dust barriers as needed;
 - d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil disturbing activities;
 - e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
 - f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
 - g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
 - h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
 - i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code (CVC) Section 23114;
 - j. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in CVC Section 23113 and California Water Code 13304. To prevent 'track out', designate access points and require all employees, subcontractors, and others to use them. Install and operate a 'track-out prevention device' where vehicles enter and exit unpaved roads onto paved streets. The 'trackout prevention device' can be any device or combination of devices that are effective at preventing track out, located at the point of intersection of an unpaved area and a paved road. Rumble strips or steel plate devices need periodic cleaning to be effective. If paved roadways accumulate tracked out soils, the trackout prevention device may need to be modified;

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

- k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible;
- 1. All PM10 mitigation measures required should be shown on grading and building plans; and
- m. The contractor or builder shall designate a person or persons whose responsibility is to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures as necessary to minimize dust complaints and reduce visible emissions below the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress (for example, wind-blown dust could be generated on an open dirt lot). The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition (Contact Tim Fuhs at 805- 781-5912).
- AQ-5 The applicant shall retain a registered geologist to conduct a geologic evaluation of the property including sampling and testing for naturally occurring asbestos in full compliance with California Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105) and SLOAPCD requirements. This geologic evaluation shall be submitted to the City Community Development Department upon completion. If the geologic evaluation determines that the project would not have the potential to disturb asbestos containing materials (ACM), the applicant must file an Asbestos ATCM exemption request with the SLOAPCD.
- AQ-6 If asbestos containing materials (ACM) are determined to be present onsite, proposed earthwork, demolition, and construction activities shall be conducted in full compliance with the various regulatory jurisdictions regarding ACM, including the ARB Asbestos Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105) and requirements stipulated in the National Emission Standards for Hazardous Air Pollutants (40 CFR 61, Subpart M Asbestos; NESHAP). These requirements include, but are not limited to, the following:
 - 1. Written notification, within at least 10 business days of activities commencing, to the SLOAPCD;
 - 2. Preparation of an asbestos survey conducted by a Certified Asbestos Consultant; and,
 - 3. Implementation of applicable removal and disposal protocol and requirements for identified ACM.
- AQ-7 The applicant shall implement the following measures to reduce the risk associated with disturbance of ACM and lead-coated materials that may be present within the existing structure onsite:
 - a. Demolition of the on-site structure shall comply with the procedures required by the National Emission Standards for Hazardous Air Pollutants (40 CFR 61, Subpart M Asbestos) for the control of asbestos emissions during demolition activities. SLOAPCD is the delegated authority by the U.S. EPA to implement the Federal Asbestos NESHAP. Prior to demolition of on-site structures, SLOAPCD shall be notified, per NESHAP requirements. The project applicant shall submit proof that SLOAPCD has been notified prior to demolition activities to the City Community Development Department.
 - b. If during the demolition of the existing structure, paint is separated from the construction materials (e.g., chemically or physically), the paint waste shall be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed of in accordance with local, state, and federal regulations. According to the Department of Toxic Substances Control (DTSC), if the paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as non-hazardous construction debris. The landfill operator shall be contacted prior to disposal of lead-based paint materials. If required, all lead work plans shall be submitted to SLOAPCD at least 10 days prior to the start of demolition. The applicant shall submit proof that paint waste has been evaluated by a qualified hazardous waste materials inspector and handled according to their recommendation to the City Community Development Department.

Conclusion

Less than significant with mitigation incorporated.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

4. **BIOLOGICAL RESOURCES**

Wo	ould the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	5, 15, 28, 29, 35, 38, 39	\boxtimes		
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	5, 15, 28, 29, 35, 38, 39	\boxtimes		
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	5, 15, 28, 29, 35, 38, 39	\boxtimes		
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	5, 15, 28, 29, 35, 38, 39		\boxtimes	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	5, 10, 29		\boxtimes	
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	5, 10, 29			\boxtimes

Evaluation

The urbanized area of the city of San Luis Obispo lies at the convergence of two main geologic features: Los Osos Valley, which drains westerly into Morro Bay via Los Osos Creek, and San Luis Valley, which drains to the south- southwest into the Pacific Ocean at Avila Beach via San Luis Obispo Creek. San Luis Obispo, Stenner, Prefumo, and Brizzolara creeks, and numerous tributary channels pass through the city, providing important riparian habitat and migration corridors connecting urbanized areas to less-developed habitats in the larger area surrounding the city.

Much of the area outside the city limits consists of open rangeland grazed year-round, along with agricultural lands dominated by annual crop rotations and vineyards. A variety of natural habitats and associated plant communities are present within the city and support a diverse array of native plants and resident, migratory, and locally nomadic wildlife species, some of which, are considered rare, threatened, or endangered species. However, the largest concentrations of natural and native habitats are located in the larger and less developed areas outside the city limits.

The project site currently supports disturbed non-native annual grassland and ruderal habitats (i.e., previously disturbed) as well as an ephemeral drainage with mostly herbaceous vegetation along with several willow trees, a patch of bulrush, and a non-native blackberry thicket. The majority of the project site has been developed with site improvements and buildings, etc., as recent as 2003, and dating back to approximately 1937 with buildings and active equipment/materials storage. The site has been vacant since 2004 when buildings were removed and the surface was cleared leaving only the non-native trees, the remaining vacant residence, and a temporary soil stockpile.

Issues, Discussion and Supporting Information Sources			Less Than Significant		
Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		Potentially	with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

An approved soil stockpile is present on the southwest corner of the property. An ephemeral drainage with a low-flow channel and a small adjacent wetland floodplain at the eastern reach enters the site through a 24-inch culvert in the northeast corner of the property (across from the Marigold Center entry on Broad Street) and flows west to the confluence with Orcutt Creek, located in the northwest corner of the project site. Orcutt Creek flows southwesterly along the west edge of the property to a culvert under Tank Farm Road. The property is bordered by urban development on the north, east, and south sides, with residential development to the west.

The City COSE identifies various goals and policies to maintain, enhance, and protect natural communities within the City planning area. These policies include, but are not limited to, protection of listed species and species of special concern, preservation of existing wildlife corridors, protection of significant trees, and maintaining development setbacks from creeks.

The City's Tree Ordinance (Municipal Code Chapter 12.24) was adopted in 2010 and recently updated in 2019 with the purpose of establishing a comprehensive program for installing, maintaining, and preserving trees within the city. This ordinance includes policies that encourage preservation of trees whenever possible and feasible, detail the procedure and requirements for acquisition of a permit for tree removal within the city, and identify application requirements for tree removals associated with development permits. The City has also established a Heritage Tree Program which protects Heritage trees throughout the city designated by the Tree Committee and City Council. Based on the City's GIS Division Heritage Trees map, no heritage trees are located within the project site.

Methods of Survey and Assessment

Sage Institute biologists conducted a review of available background information including the project information, aerial photographs dating back to 1937, NRCS Soils Survey information, and a search and review of the current California Natural Diversity Database (CNDDB) within an approximate 5-mile search radius of the project site. The 5-mile radius was used as the typical 10-mile search radius would have included rural areas well outside of the city limits that would not be relevant to this study in the urbanized city of San Luis Obispo. The CNDDB provided a list with mapped locations of special-status plant and wildlife species, as well as natural communities of special concern, that have been recorded within the region of the project site.

Sage Institute conducted field reconnaissance surveys of the project site on May 20, July 10, and July 31, 2014; July 3, 2017; and February 22, 2018. The purpose of the field surveys was to document existing conditions within the project site in terms of habitat for plants and wildlife species, and the potential to support jurisdictional wetlands, riparian habitats, and/or waters of the U.S./State. Plant and wildlife species observed in the field were recorded. The field surveys included a thorough and complete springtime floristic inventory and rare plant survey in 2014 of observable and identifiable plants. The 2017 and 2018 field surveys affirmed conditions were unchanged from the initial field surveys conducted in 2014. A wetland delineation and preliminary jurisdictional determination was completed, identifying U.S. Army Corps of Engineers (Corps) jurisdiction authority under the Nationwide Permitting Program.

The study area habitat types were described by the aggregation of plants and wildlife based on the composition and structure of the dominant vegetation observed at the time the field reconnaissance was conducted. The determination of jurisdictional wetlands and/or waters of the U.S./State was made using the currently accepted Corps wetland delineation methodology and Clean Water Act Section 404 implementing regulations and guidance.

PLANT COMMUNITIES - The project site supports the following distinct plant communities: 1) disturbed non-native annual grassland with non-native trees; and 2) an ephemeral drainage with mostly herbaceous vegetation along with several willow trees, a patch of bulrush, and a non-native blackberry thicket. Orcutt Creek, located along the western edge of the project site, is choked with non-native forbs and shrubs. Figure 4 of the Sage report provides a habitat map. Figure 6 provides a set of representative photographs of the existing conditions of the project site. All plant species observed during the field surveys, including rare plant surveys, are included in the Sage Report (Attachment 3) The botanical surveys resulted in no observations of any rare, threatened, endangered, or special status plant species within the project site. Further, the observable and identifiable plants and disturbed soil surface from over 70 years of human use on the site is further evidence the site does not support any special-status plants. A field survey by Sage Institute in 2018 confirmed that site conditions are unchanged since the 2014 floristic inventory and rare plant survey.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1400-2016, SI EC-1462-2016, EID-1464-2016	Sources	8	Incorporated	Impact	No Impact

DISTURBED NON-NATIVE ANNUAL GRASSLAND – The disturbed annual grassland habitat, is dominated by nonnative annual grasses and herbaceous broadleaf plant species, along with very few native species. Disturbed non-native annual grassland habitat occurs as the dominant habitat type over the entire project site, with the exception of the ephemeral drainage that runs along the northern property border. The approximately 9.3 acres of non-native annual grassland within the project site was observed to be very low in species diversity and dominated by a near pure stand of wild oats (*Avena barbata*). Other plant species observed in the non-native grassland habitat include, ripgut brome (*Bromus diandrus*), filaree (*Erodium cicutarium*), cheeseweed (*Sidalcea* sp.), fennel (*Foeniculum vulgare*), wild radish (*Raphanus sativus*), poison hemlock (*Conium maculatum*), harding grass (*Phalaris aquatica*), teasel (*Dipsacus sativus*), shortpod mustard (*Hirschfeldia incana*), bur-clover (*Medicago polymorpha*), milk thistle (*Silybum marianum*), narrow-leaf milkweed (*Asclepias fascicularis*), and bristly ox-tongue (*Helminthotheca echioides*). A few coyote brush shrubs (*Baccharis pilularis*) are scattered on the site, along with non-native pine, cypress, acacia, and eucalyptus trees.

WILDLIFE - The mosaic of remnant patches of ruderal and vacant lands within the urbanized landscape on and around the project site can provide habitat for a variety of wildlife species that have become adapted to the urban environment, such as raccoons, opossums, ground squirrels and other rodents and reptiles. Even in urbanized areas, drainage corridors and trees can provide high quality habitat for a variety of wildlife species that have become adapted to the urban environment, but in particular, to resident and migratory birds. Common birds observed during field surveys include the northern mockingbird, house finch, American goldfinch, and red-tailed hawk. Given that the site is surrounded by urban development, other wildlife use is likely limited with generally low habitat value for wildlife attributed to the disturbed site. Given the urban setting with a limited diversity of non-native grassland species, and the ephemeral nature of drainage along the north property line, the project site does not support suitable habitat for any special status wildlife species.

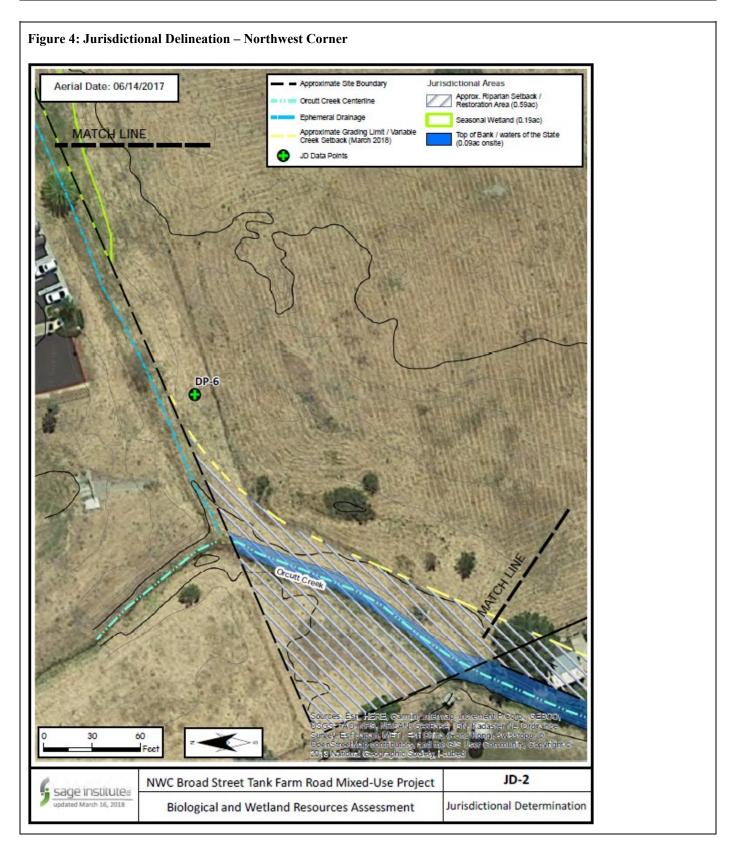
EPHEMERAL DRAINAGE & SEASONAL WETLAND – An unnamed ephemeral drainage swale and low-flow channel run just offsite along the northern property boundary from a 24-inch culvert under Broad Street at the northeast property corner to the confluence with Orcutt Creek, which then cuts across the northwest corner of the project site. For the most part, the drainage channel runs outside the property adjacent to the northern border. It appears to sheet flow over some of the property along an upper terrace above the drainage but below the general elevation of the rest of the property. A small stand of arroyo willow (*Salix lasiolepis*) occurs at the northwest corner with one small isolated tree in the center of the drainage. A patch of bulrush (*Schoenoplectus* sp.), a Himalayan blackberry (*Rubus armeniacus*) thicket, and one Canary Island date palm (*Phoenix canariensis*) occur along the drainage. The upper terrace was dominated by Harding grass, teasel, soft chess, rabbitsfoot grass (*Polypogon* sp.), and bristly ox-tongue. A patch of yerba mansa (*Anemopsis californica*) is mostly offsite in the swale with a small amount encroaching onto the site along the property line. Orcutt Creek, with an established bed, bank, and channel, runs along the western property line and is choked with non-native Italian rye grass (Festuca perennis), harding grass, bristly oxtongue, and castor bean (*Ricinus communis*) for most of its length.

WATERS OF THE U.S., WATERS OF THE STATE, & WETLANDS - The ephemeral drainage swale with low-flow channel is located just offsite adjacent to the northern property line. The limits were shown on the SESLOC grading plans as jurisdictional waters of the U.S., subject to Corps and California Department of Fish and Wildlife (CDFW) jurisdiction. Currently, it appears that the source of hydrology for the ephemeral drainage is from a culvert outfall just offsite at the northeast corner of the property from runoff from surrounding commercial and residential development. The drainage appears to have become a prominent drainage feature between 1994 and 2002 with the development of the Marigold Shopping Center.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact



Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact



Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
100 2010, 5120 1102 2010, 212 1101 2010	Sources	Impact	Incorporated	Impact	No Impact

There is evidence of overflow flooding wetland hydrology (drift lines of debris and sediment deposits) from the ephemeral drainage onto the property on a terrace that runs along the drainage on the property. The evaluation of soils identified field indicators of hydric soils, suggesting a regular flooding regime over time during the wet season. The upper reach of the terrace was dominated by Harding grass (*Phalaris aquatica*), teasel (*Dipsacus sativus*), soft chess (*Bromus hordaceous*), rabbitsfoot grass (*Polypogon* sp.), and bristly ox-tongue (*Helminthotheca echioides*), which that does not represent a wetland vegetation community. Appendix B of the Sage Institute report provides the details of a wetland delineation and preliminary jurisdictional determination evaluation performed on the terrace adjacent to the ephemeral drainage that runs just offsite along the northern property boundary.

While some level of overland flow appears to occur, with the exception of the bulrush patch, the ephemeral nature of the drainage overflow does not manifest a definitive wetland plant community. However, given several years of below normal rainfall at the time of the delineation in 2014, this area was treated as a problem area wetland. As such, based on the presence of hydric soils and wetland hydrology, approximately 0.19 acre (8,166 square feet) of jurisdictional seasonal wetland occurs on the bench above the ephemeral drainage along the northern property boundary. Figures 3 and 4 above, (Figures JD-1 and JD-2 in Appendix A of the Sage Institute report) show the location and extent of wetlands delineated adjacent to the ephemeral drainage, as described above.

The ephemeral drainage meets Orcutt Creek at the northwest corner of the property, becoming Orcutt Creek that exhibits a distinct bed, bank and channel. As described above, this reach of Orcutt Creek is choked with non-native grasses, forbs, and shrubs. Orcutt Creek has been in its current alignment as a tributary drainage since as far back as 1937. Given it flows through a sequence of creeks to San Luis Obispo Creek and the Pacific Ocean, Orcutt Creek is considered a tributary jurisdictional water of the U.S./State. The Ordinary High Water Mark (OHWM) and top of bank are essentially the same along this reach, representing the federal and state jurisdictional limits, respectively. Approximately 0.23 acre of jurisdictional waters of the U.S./State are associated with Orcutt Creek within the project area.

- a) Implementation of the proposed project would result in impacts to vegetation and wildlife utilizing disturbed nonnative annual grassland habitat from the development of the site. Due to the level of surrounding development, frequent human activity, regular vehicle noise, lighting, and developed nature of the area, the project site does not contain suitable habitat for special status plant or wildlife species. The project is not located within an area designated as a wildlife corridor within the COSE. Tree removal and ground disturbance, even to the ruderal annual grassland habitat, could impact nesting birds if conducted during the nesting season. This would be considered a potentially significant impact. Mitigation Measure BIO-1 is required to reduce potential impacts to a less-thansignificant level. Therefore, impacts would be less than significant with mitigation.
- Orcutt Creek runs parallel to the western property boundary. The existing riparian habitat associated with Orcutt b) Creek is of low quality and is choked with non-native Italian rye grass (*Festuca perennis*), harding grass, bristly oxtongue, and castor bean (Ricinus communis) for most of its length. The project would generally be setback 35 feet from the creek, as required by City regulation. The applicant is seeking an exception to the setback requirement to allow grading and development activities that would encroach into approximately 4,963 square feet of the setback area. The project would be required to comply with the Central Coast Regional Water Quality Control Board (RWQCB) requirements set forth in their Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region. Physical improvement of the project site will be required to comply with the drainage requirements of the City's Waterways Management Plan. This plan was adopted for the purpose of ensuring water quality and proper drainage within the City's watershed. Completion of this project would ensure that construction-related discharges would be limited or adequately accommodated by properly engineered infrastructure design. The project proposes an enhancement plan that would remove invasive non-native species and would plant native plants in the northwest corner of the site and the creek setback area along Orcutt Creek. To affirm acceptable regulatory compliance to reduce potential impacts to waters of the U.S./State to a less-than-significant level, and to ensure successful implementation of replacement wetland area and riparian enhancement plantings, Mitigation Measures BIO-2 through BIO-5 are required. Therefore, impacts would be less than significant with mitigation.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	8	Incorporated	8	No Impact

c) Part of the project is to enhance the riparian corridor of Orcutt Creek and replace a small wetland at the northeast corner of the property, which would be removed to enable the entry off Broad Street. Based upon circulation between the proposed project and the existing SESLOC facility, located north of the subject properties, the Broad Street access will impact 0.19 acres of seasonal wetland. Included in the impact area is a new crossing of the ephemeral drainage required to provide access from the subject properties to the existing SESLOC facility.

The enhancement plan would also include removal of noxious, invasive, and non-native herbaceous and woody species, while a new native plant planting program is proposed in the northwest corner and creek setback areas along Orcutt Creek. Table CMMP-1 from the Sage Biological Assessment (Attachment 3) is a list of creek enhancement plantings proposed as part of the project.

Development of an access driveway from Broad Street along the northern project boundary would impact approximately 0.19 acre of herbaceous seasonal wetland habitat associated with the ephemeral drainage that would require regulatory compliance from the federal and state agencies. This would be considered a potentially significant impact without mitigation. Mitigation of impacts to 0.19 acre of seasonal wetland and ephemeral drainage area is incorporated into the project design and would offset potential impacts to wetland areas at a 3:1 replacement ratio with the enhancement of approximately 0.60 acre within the Orcutt Creek riparian corridor. However, to affirm acceptable regulatory compliance to reduce potential impacts to waters of the U.S./State to a less-than-significant level, and to ensure successful implementation of replacement wetland area and riparian enhancement plantings, Mitigation Measures BIO-2 through BIO-5 are required. Therefore, impacts would be less than significant with mitigation.

d) The project is not located within an area designated as a wildlife corridor within the COSE. According to the Biological and Wetland Resources Assessment (Sage Institute 2018), neither the wetland area or Orcutt Creek serve as a location habitat or migration corridor. Suitable habitat is not present in the small remaining reach of the ephemeral drainage or Orcutt Creek for aquatic species with nearby recorded occurrences (Sage Institute 2018).

The proposed project includes creek restoration consistent with policies in the AASP for creeks which are in degraded condition. The project also would not remove protected trees and includes substantial riparian enhancement plantings within the development plan and as a part of the restoration component of the project. The project does not conflict with local policies or ordinances regarding tree preservation or protection of biological resources. This would be a less-than-significant impact.

- e) The project application was submitted and initially reviewed prior to adoption of the current Tree Removal ordinance requirements and therefore is not subject to the requirement for review by the City's Tree Committee. The City Arborist has reviewed the proposed tree removals and riparian enhancement plan and made a recommendation of support to the ARC and PC. The project site does not contain any heritage trees or significant native vegetation. The project includes the removal of multiple non-native trees, primary eucalyptus species. The project would not adversely affect sensitive habitats or resources identified in the COSE or impact any heritage trees designated by the Heritage Tree Program. The project would not conflict with any policies or plans. Therefore, impacts would be less than significant.
- f) The project site is not part of a local, regional, or state habitat conservation plan; therefore, no impact would occur as a result of the proposed project.

Mitigation Measures

BIO-1. Vegetation Removal Timing. Vegetation removal and initial site disturbance for any project elements shall be conducted between September 1st and January 31st outside of the nesting season for birds. If vegetation removal is planned for the nesting bird season (February 1st to August 31st), then preconstruction nesting bird surveys shall be required within one week prior to construction activities to determine if any active nests would be impacted by project

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

construction. If no active nests are found and vegetation removal is conducted within 5 days of the survey and is done continuously, then no further survey work shall be required. Additional surveys during the nesting season shall be conducted as needed if there is any break in vegetation removal, grading and/or construction lasting more than 5 days. If any active nests are found that would be impacted by vegetation removal, grading and/or construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by a qualified biologist. Nest sites shall be avoided and protected within the non-disturbance buffer zone until the young are no longer reliant on the nest site for survival (have fledged) as determined by a qualified biologist. All workers shall receive training on good housekeeping practices during construction that will discourage nests from being established within the work area (e.g., cover stored pipe ends, cover all equipment being used daily, etc.) A qualified biologist shall regularly walk the construction area to look for nest starts and review site for good housekeeping practices. As such, avoiding disturbance or take of an active nest would reduce potential impacts on nesting birds to a less-than-significant level.

- **BIO-2.** Clean Water Act Permitting. The applicant shall obtain Clean Water Act (CWA) regulatory compliance in the form of a permit from the U.S. Army Corps of Engineers (Corps) or written documentation from the Corps that no permit would be required for the proposed road crossing. Should a permit be required, the applicant shall implement all the terms and conditions of the permit to the satisfaction of the Corps. Corps permits and authorizations require applicants to demonstrate that the proposed project has been designed and will be implemented in a manner that avoids and minimizes impacts on aquatic resources to the extent practicable. Compliance with Corps permitting would also include obtaining and CWA 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB). In addition, the Corps and RWQCB may require compensatory mitigation for unavoidable permanent impacts on waters of the U.S./State to achieve the goal of a no net loss of wetland values and functions. As such, with implementation of the 3:1 ratio of creek enhancement mitigation plantings and regulatory compliance would reduce potential impacts on waters of the U.S. to a less-than-significant level.
- **BIO-3.** Streambed Alteration Agreement. The applicant shall obtain compliance with Section 1602 of the California Fish and Game Code (Streambed Alteration Agreements) in the form of a completed Streambed Alteration Agreement or written documentation from the CDFW that no agreement would be required for the proposed road crossing. Should an agreement be required, the property owners shall implement all the terms and conditions of the agreement to the satisfaction of the CDFW. The CDFW Streambed Alteration Agreement process encourages applicants to demonstrate that the proposed project has been designed and will be implemented in a manner that avoids and minimizes impacts in the stream zone. In addition, CDFW may require compensatory mitigation for unavoidable permanent impacts on waters of the State. As such, with implementation of the 3:1 ratio of creek enhancement mitigation plantings and regulatory compliance would reduce potential impacts on waters of the U.S. to a less-than-significant level.
- **BIO-4.** Wetland Replacement and Riparian Enhancement Plan. The applicant shall retain a qualified biologist to prepare a wetland replacement and riparian enhancement plan. The plan shall provide for a minimum of 3:1 mitigation area for the wetland area to be impacted and shall be designed to the satisfaction of the Corps, RWQCB, and CDFW. The plantings for the riparian enhancement area shall include native species and shall be placed in a manner to ensure their success. The plan shall include a cost estimate for the implementation of the plantings. The applicant shall implement the wetland replacement and riparian enhancement plan within 60 days of completion of grading and site disturbance activities.
- **BIO-5.** Wetland Replacement and Riparian Enhancement Plan Monitoring. The applicant shall retain a qualified biologist or landscape architect for the purpose of monitoring the success of the mitigation planting area. The monitoring contract shall include a requirement that the monitor conduct, at a minimum, an annual site visit and assessment of the planting success for 10 years and an annual submittal of a monitoring report to the City Community Development Department and Sustainability & Natural Resources Official. The applicant shall also post a bond for the cost of implementing the mitigation planting. If the monitoring demonstrates that the plan has been successfully implemented, the bond shall be returned. If the monitoring demonstrates that the plan has not been successfully implemented after two years, the City

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

Community Development Department and Sustainability & Natural Resources Official shall use the bond to hire a licensed landscape architect to implement and maintain the revised plan.

Conclusion

Less than significant with mitigation incorporated.

5. CULTURAL RESOURCES

Would the project:

	1 5				
a)	Cause a substantial adverse change in the significance of a historic resource pursuant to §15064.5?	12, 23, 24, 25		\boxtimes	
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	12, 24, 25, 36	\boxtimes		
c)	Disturb any human remains, including those interred outside of formal cemeteries?	26, 36	\boxtimes		

Evaluation

<u>Pre-Historic Setting</u>: As outlined in the City's LUCE Update EIR, archaeological evidence demonstrates that Native American groups (including the Chumash) have occupied the Central Coast for at least 10,000 years, and that Native American use of the central coast region may have begun during the late Pleistocene, as early as 9000 B.C., demonstrating that historical resources began their accumulation on the central coast during the prehistoric era. The city of San Luis Obispo is located within the area historically occupied by the Obispeño Chumash, the northernmost of the Chumash people of California. The Obispeño Chumash occupied much of San Luis Obispo County, including the Arroyo Grande area, and from the Santa Maria River north to approximately Point Estero. The earliest evidence of human occupation in the region comes from archaeological sites along the coast.

<u>Historic Resource Setting</u>: The area of San Luis Obispo became colonialized by the Spanish Incursion initially in 1542, with the first official settlement on Chumash Territory occurring in 1772, when the Mission San Luis Obispo de Tolosa was established. By the 1870s (after the earliest arrivals of Chinese immigrants in 1869), a Chinatown district had been established in the downtown area near Palm and Morro Street. By 1875, 2,500 residents were documented in a 4-square mile area around what is now the City of San Luis Obispo. By 1901, the City was served by the Pacific Coast Railway and mainline Southern Pacific, and in 1903 the California Polytechnic State University was established. The last era of growth generally lasted from 1945 to the present. Many of the residential subdivisions in the Foothill and Laguna Lake area were developed between 1945 and 1970 and the city's population increased by 53% during this time.

The City's COSE establishes various goals and policies to balance cultural and historical resource preservation with other community goals. These policies include, but are not limited to the following:

- a) Identification, preservation, and rehabilitation of significant historic and architectural resources;
- b) Prevention of demolition of historically or architecturally significant buildings unless doing so is necessary to remove a threat to health and safety;
- c) Consistency in the design of new buildings in historical districts to reflect the form, spacing and materials of nearby historic structures; and
- d) Identification and protection of neighborhoods or districts having historical character due to the collective effect of Contributing or Master List historic properties

<u>Central Coast Archaeological Research Consultants (CCARC), April 2018 Analysis</u>: The purpose of this study was to determine if there are cultural resources within the study area, pursuant to the California Environmental Quality Act (CEQA) of 1970, as amended, (Sections 21083.2 and 21084.1) and Sections 5020 through 5024 of the Public Resources Code which mandates public

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1400-2010, 51 EC-1402-2010, EID-1404-2010	Sources	Impact	Incorporated	Impact	No Impact

agencies to consider the effects of projects on historic properties. These regulations require public agencies to identify the environmental impacts of proposed undertakings, determine if the impacts will be significant and identify alternatives and mitigation measures that will substantially reduce or eliminate significant impacts to the environment. The CCARC study also adheres to the standards established by the San Luis Obispo County Department of Planning and Building, "A Guide to Archaeology and Historic Resources".

Archival research focused on primary and secondary sources to develop a general historic context and lot-specific information for the immediate project area. To identify previously recorded archaeological and historical sites, archaeological site records, site location base maps, GIS layers, and cultural resources survey and excavation reports on file at the Central Coast Information Center (CCIC), University of California, Santa Barbara were reviewed. The records search included information on all surveys within a 0.25-mile radius of the current project area and sites within a 0.5-mile radius. In addition to this research effort, CCRAC consulted the National Register of Historic Places (NRHP) via the National Register Information Service (NRIS), the official online database of the NRHP; the California Inventory of Historic Resources (California 1976); and the California Historical Landmarks (California 1995). The comprehensive records search revealed the current study area has not been surveyed and no known cultural resources are within, or in the immediate vicinity of, the current study area. Over 29 cultural resources studies have been conducted within a 0.25-mile radius of the project site, the majority of which, are for small lot surveys, land use planning, and infrastructure development. Of the five documented surveys adjacent to the current study area (Bertrando 2013; Conway 1999, 2004, 2005; Mikkelsen et al. 2001), no cultural resources were discovered within, or in the vicinity of, the 365 Prado Road survey area. Three studies (i.e., Conway 1999, 2004; Mikkelsen et al. 2001) overlap with the current study area and the documents reveal no resources were identified on a highly modified landform. Gibson's (1993, 2001) intensive surveys in the Tank Farm road region also failed to identify cultural resources. Additionally, knowledge on the current survey area suggests a low likelihood of archaeological deposits within the project area. Three prehistoric archaeological sites (CA-SLO-785, -1427, and -2044) are recorded within 0.5-mile of the project area on a landform that has been subject to severe alteration during construction of residential buildings, roads, landscaping, and utilities. The closest site is CA-SLO-1427, situated approximately 0.28 mile north (Dills 1990). Approximately 0.33 mile southeast of the project site (along Route 227) is CA-SLO-2044, a highly disturbed, redeposited marine shell scatter (Mikkelsen et al. 2001). CA-SLO-785 (a spare marine shell scatter) is situated approximately 0.36 mile southeast of the project site (Dills 1994). Also, in the same vicinity of the project area is the expansive Union Oil Company Tank Farm (P-40-041195), which consists of an extensive oil tank farm and associated infrastructure (Conway 2008). Reports on file at the CCIC revealed that no archaeological materials associated with these sites have been found on the surface or during construction adjacent to the project site.

In an effort to ensure the Northern Chumash community is apprised of the project, CCARC called individuals that had expressed an interest to CCARC regarding the current undertaking. The proposed project was reviewed and CCARC provided the results of the records search and field survey of the project area. Prior to the field study Fred Collins, a representative of the Northern Chumash Tribal Council, was contacted (March 20, 2018). Mr. Collins was the only Tribal representative to return CCARC calls (on March 21-22, 2018), and a collaborative conversation resulted in no cultural resources concerns within the project area.

Although located within an area of moderate archaeological sensitivity, archival research, previous surveys, initial consultation with the Northern Chumash Tribal Council, and an intensive archaeological field survey of the project area located at the Northwest Corner of Broad Street and Tank Farm Road San Luis Obispo, California identified no cultural resources. No further archaeological work was required or recommended for the project site.

- a) The project site is not designated or listed as a historic resource and not located within a historic district. There are no historic structures on the site. Impacts would be less than significant.
- b) Although no known archaeological resources were found on the site through survey work, and the potential for finding such resources is low, there is always the potential that unknown buried resources may be discovered through site grading and construction activities. No further archaeological work is recommended per the CCARC cultural resources survey. In the event cultural resources or human resources are discovered during construction activities, Mitigation Measures CR-1 and CR-2 are required. Impacts would be less than significant with prescribed mitigation.
- c) The project site is not located within a designated burial sensitivity area and the project is not considered an archaeologically sensitive site as described in the CCARC study or the City's Archaeological Resource Preservation Program Guidelines. No further archaeological work is recommended per the CCARC cultural resources survey. In the event of an accidental discovery or recognition of any human remains, California State Health and Safety Code Section 7050.5 and LUO Section 22.10.040 (Archaeological Resources) require that no further disturbances shall

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Issue of
	Sources	Impact	Incorporated	Impact	No Impact

occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California PRC Section 5097.98. With adherence to State Health and Safety Code Section 7050.5 and LUO Section 22.10.040, impacts related to the unanticipated disturbance of archaeological resources and human remains would be reduced to less than significant Mitigation measures CR-1 and CR-2 would ensure that any previously unknown human remains that could be uncovered would be properly mitigated to a less than significant level. Therefore, impacts would be less than significant with mitigation.

Mitigation Measures

- **CR-1** Halt Work Order for Discovery of Previously Unidentified Cultural Resources. In the event that historical or archaeological remains are discovered during earth disturbing activities associated with the project, construction activities shall cease, and the City Community Development Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified specialist (paleontologist, historian, archaeologist) and disposition of artifacts may be accomplished in accordance with state and federal law. After the find has been appropriately mitigated, work in the area may resume. A Native American tribal representative shall monitor any mitigation excavation associated with Native American materials.
- **CR-2. Halt Work Order for Discovery of Human Remains.** In the event that human remains are unearthed, the applicant shall notify the City Community Development Department and shall comply with State Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County of San Luis Obispo Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission within 24 hours, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Conclusion

Less than significant with mitigation incorporated.

6. ENERGY

Wo	ould the project:			
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?		\boxtimes	
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?		\boxtimes	

Evaluation

Pacific Gas & Electric Company (PG&E) has historically been the primary electricity provider for the City. In October of 2018, the City Council committed to joining Monterey Bay Community Power (MBCP). MBCP is an existing community choice energy program that serves the counties of Santa Cruz, San Benito, and Monterey and provides 100 percent carbon free electricity with a rate savings relative to PG&E. Additionally, the City recently adopted the Clean Energy Choice Program for New Buildings, which encourages clean, efficient, and cost effective all-electric new buildings through incentives and local amendments to the California Energy Code. When paired with cost comparable modern electric appliances and carbon-free electricity from MBCP, all-electric new buildings are operationally greenhouse gas emissions-free, cost effective, and help achieve the community's climate action goals.

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486 2018, SBEC, 1482, 2018, EUD, 1484, 2018		Potentially	Less Than Significant with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

property. The CBC includes mandatory green building standards for residential and nonresidential structures, the most recent version of which are referred to as the 2019 Building Energy Efficiency Standards. These standards focus on four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and non-residential lighting requirements.

The City is currently developing local amendments to the 2019 California Building Code (CBC) to encourage all-electric new buildings. When paired with Monterey Bay Community Power's carbon free electricity supply, all electric new buildings are carbon free and avoid health and safety issues associated with fossil fuels and GHGs. At its meeting on Tuesday, June 16, 2020, the City Council adopted the Clean Energy Choice Program. Unlike other cities that are banning natural gas entirely, the proposed Clean Energy Choice Program will provide options to people who want to develop new buildings with natural gas. New projects wishing to use natural gas will be required to build more efficient and higher performing buildings and offset natural gas use by performing retrofits on existing buildings or by paying an in-lieu fee that will be used for the same purpose.

Leadership in Energy and Environmental Design (LEED) is an internationally recognized green building certification system that provides third-party verification that a building or community was designed and built using strategies aimed at improving performance metrics in energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. LEED provides a point system to score green building design and construction. The system is categorized in nine basic areas: Integrative Process, Location and Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation in Design, and Regional Priority. Buildings are awarded points based on the extent various sustainable strategies are achieved. The more points awarded the higher the level of certification achieved from Certified, Silver, Gold, to Platinum (source reference 22).

The City's COSE establishes goals and policies to achieve energy conservation and increase use of cleaner, renewable, and locally controlled energy sources. These goals include increasing the use of sustainable energy sources and reducing reliance on non-sustainable energy sources to the extent possible and encouraging the provision for and protection of solar access. Policies identified to achieve these goals include, but are not limited to, use of best available practices in energy conservation, procurement, use and production, energy-efficiency improvements, pedestrian- and bicycle-friendly facility design, fostering alternative transportation modes, compact, high-density housing, and solar access standards.

The City's Climate Action Plan (CAP), adopted in 2012 and currently in the process of being updated, also identifies strategies and policies to increase use of cleaner and renewable energy resources in order to achieve the City's greenhouse gas emissions reduction target. These strategies include promoting a wide range of renewable energy financing options, incentivizing renewable energy generation in new and existing developments, and increasing community awareness of renewable energy programs (source reference 24).

a) During construction, fossil fuels, electricity, and natural gas would be used by construction vehicles and equipment. The energy consumed during construction would be temporary in nature and would be typical of other similar construction activities in the city. State and federal regulations in place require fuel-efficient equipment and vehicles and prohibit wasteful activities, such as diesel idling; therefore, potential impacts associated with construction energy use would be less than significant.

The project would rely on the local electricity service provider, MBCP, to supply project electricity needs. MBCP provides 100 percent carbon-free electricity.

Operation of the project would result in an overall increase in consumption of energy resources associated with vehicle trips and electricity and natural gas usage by project occupants. The project would be designed in full compliance with the California Building Code including applicable green building standards, which include thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and non-residential lighting requirements. The project has been designed in a manner that would provide access to public transit (existing and future bus stops), provision of bicycle facilities, and would locate development within an infill site. Compliance with existing building codes and use of 100% greenhouse gas-free energy resources would ensure the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, impacts would be less than significant.

b) The project would be designed in full compliance with the California Building Code, including applicable green building standards. The project would be consistent with energy goals and policies in the City's COSE associated

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

with use of best available practices in energy conservation, encouraging energy-efficient "green-buildings", and pedestrian- and bicycle-friendly design. The project would also be consistent with the goals and policies set forth in the City's Climate Action Plan associated with renewable energy and energy efficiency. Therefore, the project would not result in a conflict with, or obstruction of, a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

7. GEOLOGY AND SOILS

Would the project:						
a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:					
i.	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	4, 17, 29, 48			\boxtimes	
ii.	Strong seismic ground shaking?	4, 17, 48			\boxtimes	
iii.	Seismic-related ground failure, including liquefaction?	4, 17			\boxtimes	
iv.	Landslides?	4, 17				\boxtimes
b)	Result in substantial soil erosion or the loss of topsoil?	7, 29			\boxtimes	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	4, 7, 50, 51			\boxtimes	
d)	Be located on expansive soil, as defined in Table 1802.3.2 of the California Building Code (2013), creating substantial direct or indirect risks to life or property?	4, 14, 49			\boxtimes	
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	4, 14, 17				\boxtimes
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	50, 52			\boxtimes	
Evaluation						

The City's Safety Element identifies active, potentially active, and inactive mapped and inferred faults with the potential to affect the city in the event of rupture. The Los Osos Fault, adjacent to the city of San Luis Obispo, is identified under the State of California Alquist-Priolo Fault Hazards Act and is classified as active. The West Huasna, Oceanic, and Edna faults are considered

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

potentially active and present a moderate fault rupture hazard to developments near them. The San Andreas Fault and the offshore Hosgri Fault, which present the most likely source of ground shaking for San Luis Obispo, have a high probability of producing a major earthquake within an average lifespan. The highest risk from ground shaking is found on deep soils that were deposited by water, are geologically recent, and have many pore spaces among the soil grains. These are typically found in valleys (source reference 27).

Faults capable of producing strong ground shaking motion in San Luis Obispo include the Los Osos, Point San Luis, Black Mountain, Riconada, Wilmar, Pecho, Hosgri, La Panza, and San Andreas faults. Engineering standards and building codes set minimum design and construction methods for structures to withstand seismic shaking. Based on the Department of Conservation Fault Activity Map and the City's Safety Element Earthquake Faults – Local Area Map, the project site is not located within, or n the immediate vicinity of, an active fault zone.

As discussed in the City's 2014 LUCE Update EIR, San Luis Obispo lies within the southern Coast Range Geomorphic Province. This province lies between the Central Valley of California and the Pacific Ocean and extends from Oregon to northern Santa Barbara County. The Coast Range province is structurally complex and is comprised of sub-parallel northwest-southeast trending faults, folds, and mountain ranges.

Rock types in the San Luis Obispo area are mainly comprised of volcanic, metavolcanics, and a mixture of serpentinite and greywacke sandstone. These rocks are highly fractured and are part of the Mesozoic aged Franciscan Formation. Intrusive and extrusive volcanic deposits of Tertiary age and marine sedimentary deposits of the Miocene aged Monterey Formation are also found in the area. The most distinctive geomorphological feature of the San Luis Obispo area is the series of Tertiary aged volcanic plugs (remnants of volcanoes) which extend from the City of San Luis Obispo northwesterly to Morro Bay. Hollister Peak, Bishop Peak, Cerro San Luis Obispo, Islay Hill, and Morro Rock are all comprised of these volcanic plugs.

<u>Faulting and Seismic Activity</u>: The predominant northwest-southeast trending structures of the Coast Range Province are related to the San Andreas Fault Transform Boundary. Other faults in the San Luis Obispo area that are considered active or potentially active include the San Juan Fault, the East and West Huasna Faults, the Nacimiento Fault Zone, the Oceano Fault, the Oceanic Fault, Cambria Fault, the Edna Fault, the Hosgri Fault, and the Los Osos Fault. The East and West Huasna Faults, the Nacimiento Fault Zone, the Cambria Fault, the Edna Fault have not yet been officially classified by the California Division of Mines and Geology.

The Alquist-Priolo Earthquake Fault Zone (formerly known as a Special Studies Zone) is an area within 500 feet from a known active fault trace that has been designated by the State Geologist. Per the Alquist-Priolo legislation, no structure for human occupancy is permitted on the trace of an active fault. The portion of the Alquist-Priolo fault zone closest to the city is located near the southern flank of the Los Osos Valley, northwest of Laguna Lake, but lies just outside of the city limits.

<u>Seismically-Induced Ground Acceleration</u>: Seismically-induced ground acceleration is the shaking motion that is produced by an earthquake. Probabilistic modeling is done to predict future ground accelerations, taking into consideration design basis earthquake ground motion, applicable to residential or commercial, or upper-bound earthquake ground motion, applied to public use facilities like schools or hospitals.

Landslides: Landslides occur when the underlying support can no longer maintain the load of material above it, causing a slope failure. Ground shaking and landslide hazards are mapped by the City and are shown in the General Plan. Much of the development in San Luis Obispo is in valleys, where there is low potential for slope instability. However, the city contains extensive hillsides. Several are underlain by the rocks of the Franciscan group, which is a source of significant slope instability. The actual risk of slope instability is identified by investigation of specific sites, including subsurface sampling, by qualified professionals. The California Building Code requires site-specific investigations and design proposals by qualified professionals in areas that are susceptible to slope instability and landslides.

<u>Liquefaction</u>: Liquefaction is defined as the transformation of a granular material from a solid state to a liquefied state as a consequence of increased pore water pressure. As a result, structures built on this material can sink into the alluvium, buried structures may rise to the surface or materials on sloped surfaces may run downhill. Other effects of liquefaction include lateral

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

spread, flow failures, ground oscillations, and loss of bearing strength. Liquefaction is intrinsically linked with the depth of groundwater below the site and the types of sediments underlying an area.

The soils in the San Luis Obispo area that are most susceptible to ground shaking, and which contain shallow ground water, are the ones most likely to have a potential for settlement and for liquefaction. The actual risk of settlement or liquefaction is identified by investigation of specific sites, including subsurface sampling, by qualified professionals. Previous investigations have found that the risk of settlement for new construction can be reduced to an acceptable level through careful site preparation and proper foundation design, and that the actual risk of liquefaction is low.

<u>Differential Settlement:</u> Differential settlement is the downward movement of the land surface resulting from the compression of void space in underlying soils. This compression can occur naturally with the accumulation of sediments over porous alluvial soils within river valleys. Settlement can also result from human activities including improperly placed artificial fill, and structures built on soils or bedrock materials with differential settlement rates. This phenomenon can alter local drainage patterns and result in structural damage. Portions of the City have been identified as possibly being underlain by soft organic soils, resulting in a high potential for settlement (General Plan Safety Element).

<u>Subsidence:</u> Ground subsidence occurs where underlying geologic materials (typically loosely consolidated surficial silt, sand, and gravel) undergo a change from looser to tighter compaction. As a result, the ground surface subsides (lowers). Where compaction increases (either naturally, or due to human activity), the geologic materials become denser. As a result, the ground surface overlying the compacting subsurface materials subsides as the underlying geologic materials settle. Ground subsidence can occur under several different conditions, including:

- Ground-water withdrawal (water is removed from pore space as the water table drops, causing the ground surface to settle)
- Tectonic subsidence (ground surface is warped or dropped lower due to geologic factors such as faulting or folding); and
- Earthquake-induced shaking causes sediment liquefaction, which in turn can lead to ground-surface subsidence.

<u>Expansive Soils</u>: Expansive soils are soils that are generally clayey, swell when wetted and shrink when dried. Wetting can occur in a number of ways (i.e., absorption from the air, rainfall, groundwater fluctuations, lawn watering, broken water or sewer lines, etc.). Soil expansion can cause subtle damage that can reduce structural integrity. Portions of the city are known to exhibit the soil types (refer to General Plan Safety Element) identified as having a moderate to high potential for expansion.

The project site is underlain by two soil units, as described below based on the San Luis Obispo County Soil Survey:

127. Cropley clay, 0-2% slopes. This very deep, moderately well-drained, nearly level soil has slow permeability and slow surface runoff. The hazard of water erosion is slight and the shrink-swell potential of this soil is high. This soil is well suited to vegetable crops, dryland farming, and pasture. If used for urban development, foundations and footings should be designed to compensate for the high shrink swell potential and low strength. Septic tank absorption fields do not function properly because of slow permeability.

120. Conception loam, 2-5% slopes. This very deep, moderately well-drained, gently sloping soil has very slow permeability and surface runoff is slow. The hazard of water erosion is slight. Building sites and most other engineering practices often require special design considerations due to the high shrink-swell potential, low strength, and hardness to pack of the subsoil. Foundations and footings need to be designed to compensate for these soil characteristics. Septic tank absorption fields do not function properly due to very slow permeability.

<u>Site Specific Analysis:</u> The project site topography includes nearly level conditions with scattered trees and a stockpile of soil from earlier earth moving activity. Subsurface investigations revealed a silty, clayey sand material, noted by the study authors as "Site Classification D", containing a medium range expansion classification, conforming to San Luis Obispo Building Codes.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486 2018, SBEC, 1482 2018, EUD 1484 2018		Potentially	Less Than Significant with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

Perched groundwater was encountered in a thin gravel layer at approximately 9-12 feet in depth. Infiltration testing was also completed as part of the geotechnical analysis. The analysis indicates that the site does not lie within identified Earthquake Fault Zones, but closest faults in the vicinity include Los Osos Fault (approximately 2.8 miles southwest) and San Luis Range Fault (approximately 7.4 miles east). The Rinconada, Hosgri, and San Andreas faults are approximately 10, 23, and 58 miles distance from the project site, respectively. The analysis concludes that liquefaction and landslide hazards at the site are minimal.

- a.i) Based on Figure 3 (Earthquake Faults Local Area) of the Safety Element of the City's General Plan and the Department of Conservation Fault Activity Map of California, no known fault lines are mapped on or within 1 mile of the project site. Therefore, the project would not have the potential to result in substantial adverse effects involving rupture of a known earthquake fault and impacts would be less than significant.
- a.ii) Although there are no fault lines on the project site or within close proximity, the site is located in an area of "High Seismic Hazards," specifically Seismic Zone D, which means that future buildings constructed on the site could be subjected to excessive ground shaking in the event of an earthquake. Structures are required to be designed in compliance with seismic design criteria established in the California Building Code for Seismic Zone D and City Codes require new structures be built to resist such shaking or to remain standing in an earthquake. All project structures would be designed and constructed in compliance with the California Building Code and all applicable City Building Codes; therefore, impacts would be less than significant.
- a.iii) Based on the Ground Shaking and Landslide Hazards Map in the City's Safety Element, the project site is located within an area with high liquefaction potential. The soils engineering report prepared for the project found that the potential for seismic liquefaction of soils at the site is minimal. A soils report prepared by a qualified engineer is required upon review of the building permit to address the nature of the subsurface soils in response to liquefaction potential, in accordance with the California Building Code Chapter 18, any issues identified in the report would be addressed through standard site construction techniques, as required by the Code. In addition, the proposed development would be required to be designed in compliance with standard seismic design criteria established in the California Building Code to reduce risk associated with seismic-related ground failure, including liquefaction. Therefore, based on compliance with existing regulations, impacts related to causing substantial adverse effects due to seismic-related ground failure would be less than significant.
- a.iv) Based on the Ground Shaking and Landslide Hazards Map in the City's Safety Element, the project site is located within an area with low landslide potential. Therefore, the project would not result in significant adverse effects associated with landslides and no impacts would occur.
- b) The project would result in approximately 46,595 cubic yards of cut and 45,466 cubic yards of fill. No substantial permanent changes in existing topography would occur. Projects that disturb one acre of soil or more are required to obtain National Pollutant Discharge Elimination System (NPDES) coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit), Order No. 2009-0009-DWQ. The General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP), which includes Best Management Practices (BMPs) to protect stormwater runoff, including measures to prevent soil erosion. Because more than one acre of land would be disturbed during the construction phase, the applicant would be required to prepare a SWPPP and obtain a storm water permit from the RWQCB. Compliance with permit conditions would require implementation of erosion control BMPs. Because construction activities would require implementation of erosion control measures, as required by the SWPPP and existing City standards, impacts associated with erosion during construction would be minimal. Following project completion, the project site would be developed with buildings, hardscapes, or otherwise landscaped, precluding the potential for substantial erosion or loss of topsoil. Therefore, impacts related to soil erosion and loss of topsoil would be less than significant.
- c) Landslides typically occur in areas with steep slopes or in areas containing escarpments. Based on the Ground Shaking and Landslide Hazards Map in the City's Safety Element, the project site is located within an area with low landslide potential. Based on the City's Safety Element and USGS data, the project is not located in an area of historical or current land subsidence. Based on the geotechnical analysis prepared for the project, liquefaction and landslide hazards at the site are minimal. Therefore, impacts would be less than significant.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

- d) Based on the Soil Survey of San Luis Obispo County, the project site is located in an area underlain by soils with moderateto-high shrink-swell potential. The volume changes that soils undergo in this cyclical pattern can stress and damage slabs and foundations. All proposed structures would be designed and constructed to comply with CBC requirements to minimize safety hazards associated with expansive soils, including incorporation of the geotechnical report recommendations for foundation type and design criteria and provisions to mitigate the effects of expansive soils, as necessary therefore, impacts would be less than significant.
- e) The project site will be connected to the City's wastewater collection and disposal system and will, therefore, not require the use of septic tanks or alternative wastewater disposal systems on the project site. No impact would occur as a result of the proposed project.
- f) The project site is underlain by Holocene-age alluvial gravel and sand of stream channels (source reference 29). Holocene age units, particularly those younger than 5,000 years old, are generally too young to contain fossilized material; therefore, paleontological resources are not expected to be present at the project site. Potential impacts to paleontological resources would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

8. GREENHOUSE GAS EMISSIONS

Would the project:								
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	13, 20, 21		\boxtimes				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	13, 20, 21, 33		\boxtimes				

Evaluation

Greenhouse gases (GHGs) are any gases that absorb infrared radiation in the atmosphere and are different from the criteria pollutants discussed in Section 3, Air Quality, above. The primary GHGs that are emitted into the atmosphere as a result of human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. In 2012, the City of San Luis Obispo established a Climate Action Plan that identified measures and implementation strategies in order to achieve the City's GHG reduction target of 1990 emission levels by 2020. In addition, the City is currently developing a plan for achieving carbon neutrality by 2035. The City's 2005 community-wide GHG emissions inventory showed that 50% of the city's GHG emissions came from transportation, 22% came from commercial and industrial uses, 21% came from residential uses, and 7% came from waste.

In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented legislation to reduce statewide emissions. Assembly Bill 32 (AB 32) codifies the Statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. Senate Bill 32 (SB 32) extends AB 32, requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030. Other statewide policies adopted to reduce GHG emissions include AB 32, SB 375, SB 97, Clean Car Standards, Low Carbon Fuel Standard, Renewable Portfolio Standard, California Building codes, and the California Solar Initiative.

Issues, Discussion and Supporting Information Sources			Less Than Significant		
Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		Potentially	with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

On December 14, 2017, the California Air Resources Board (ARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 statewide target set by SB 32. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of 6 metric tons (MT) CO₂e by 2030 and 2 MT CO₂e by 2050 (ARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

Plans, policies, and guidelines have been established at the regional and local levels to address GHG emissions and climate change effects within the city. In March 2012, the SLOAPCD approved thresholds for GHG emission impacts and these thresholds have been incorporated into the CEQA Air Quality Handbook and updated in 2017 with a clarification memorandum. According to the adopted SLOAPCD guidance, the following three quantitative thresholds may be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects:

- 1) Qualified GHG Reduction Plan. A project would have a significant impact if it is not consistent with a qualified GHG reduction strategy that meets the requirements of the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,
- 2) Bright-Line Threshold. A project would have a significant impact if it would generate GHG emissions in excess of the "bright-line threshold" of 1,150 MT of CO₂e per year; OR,
- 3) Efficiency Threshold. A project would have a significant impact if it would generate GHG emissions in excess of the efficiency threshold of 4.9 MT of CO₂e per service population per year. The service population is defined as the number of residents plus employees for a given project.

The efficiency threshold is specifically intended to avoid penalizing large-scale plans or projects that incorporate emissionsreducing features and/or that are located in a manner that results in relatively low vehicle miles traveled. The SLOAPCD GHG quantitative thresholds were developed to help reach the AB 32 emission reduction targets for the year 2020. The SLOAPCD has not yet updated these thresholds to reflect SB 32 emission reduction goals.

The City of San Luis Obispo Climate Action Plan (CAP), adopted in 2012, serves as the City's qualified GHG reduction strategy. The GHG-reducing policy provisions contained in the CAP were prepared with the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan, which have a horizon year of 2020. Therefore, the City's CAP is not considered a qualified GHG reduction strategy for assessing the significance of GHG emissions generated by projects with a horizon year post-2020.

The City is in the process of updating its CAP. A public review draft has been released and is expected to be adopted later this year. The plan establishes a community-wide goal of carbon neutrality by 2035, adopts sector specific goals, and provides foundational actions to establish a trajectory towards achieving those goals. Appendix C of the CAP Update includes thresholds and guidance for the preparation of GHG emissions analysis under CEQA for project within the City. To support progress toward the City's long-term aspirational carbon neutrality goal, plans and projects within the City that undergo CEQA review will need to demonstrate consistency with targets in the CAP, which will be a Qualified GHG Emissions Reduction Plan, consistent with CEQA Guidelines Section 15183.5, upon adoption of its CEQA review document, specifically the CAP Initial Study-Negative Declaration (IS-ND), and approval of the CAP by City Council (City of SLO 2020).

In October of 2018, the City Council committed to joining Monterey Bay Community Power (MBCP). MBCP is an existing community choice energy program that serves the counties of Santa Cruz, San Benito, and Monterey and provides 100 percent carbon free electricity with a rate savings relative to PG&E. Additionally, the City recently adopted the Clean Energy Choice Program for New Buildings, which encourages clean, efficient, and cost effective all-electric new buildings through incentives and local amendments to the California Energy Code. When paired with cost comparable modern electric appliances and carbon-free electricity from MBCP, all-electric new buildings are operationally greenhouse gas emissions-free, cost effective, and help achieve the community's climate action goals.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

a), b) The primary sources of direct and indirect GHG emissions have been calculated for year 2024. As shown below in Table 6, annual emissions associated with implementation of the proposed project would be 3.9 MT of CO_2e per service person, which would not exceed the current SLOAPCD efficiency threshold of 4.9MT of CO_2e per service person.

Table 6. Year 2024 Annual GHG Emissions

Emission Source	Year 2024 GHG Emissions (MT of CO2e)
Construction ¹	83.33
Area Sources	3.18
Energy Use	02
Mobile Sources	891.79
Solid Waste Disposal	236.39
Water Use	36.40
Total	1,251.09
Service Population	318.25
GHG Emissions per Service Population	3.9
See Attachment 4b for modeling results.	

¹Construction emissions were amortized over a 25 year period per SLOAPCD guidance.

²Based on the Clean Energy Choice Program for New Buildings and the Monterey Bay Community Power.

Additionally, the project would be consistent with the City's CAP Update, if adopted, as listed below:

- The Specific Plan amendment would result in an equivalent or less GHG-intensive project when compared to the existing designation.
- The project would comply with requirements related to bicycle parking, bikeway design, and EV charging stations.
- The project is located in an area of the City where residential VMT per capita is below the City's impact threshold of 14.25 per the City's Transportation Impact Study Guidelines screening map.
- The proposed commercial center is less than 50,000 square-feet and per the City's Transportation Impact Study Guidelines can be assumed to cause a less-than-significant impact to VMT.
- The project demonstrates compliance with the City's Bicycle Transportation Plan.
- The project complies with the Municipal Code requirements for trees.
- The proposed project would locate mixed-use development in close proximity to stops on the SLO Transit 1A (Johnson/Tank Farm) route, as well as commercial business park and industrial uses south of Tank Farm and east of Broad Street.

The project would not conflict with any of the goals, policies, and programs of the existing CAP or the CAP Update, and is therefore considered to be consistent with the CAP and CAP Update.

To ensure the project does not result in CO₂e emissions resulting from energy sources, Mitigation Measure GHG-1 would require an operational commitment to participate in Monterey Bay Community Power. Therefore, impacts would be less than significant with mitigation.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

Mitigation Measures

The following mitigation measure is required to ensure GHG emissions from energy sources are less than significant.

GHG-1 Monterey Bay Community Power

Prior to final inspection, occupancy, or establishment of the use, the applicant shall demonstrate that the subject use has made an operational commitment to participate in Monterey Bay Community Power. Any rental or lease agreement for individual tenant spaces shall include a requirement that the tenant continue participation in Monterey Bay Community Power. This participation shall continue until PG&E or another electric provider provides 100 percent carbon-free electricity, at which point the applicant or tenant may elect to switch services to such a provider.

Conclusion

Less than significant with mitigation incorporated.

9. HAZARDS AND HAZARDOUS MATERIALS

Wo	Would the project:							
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	4,9			\boxtimes			
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	2, 4, 9			\boxtimes			
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	9, 10			\boxtimes			
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	9, 31				\boxtimes		
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	1, 4, 27, 43			\boxtimes			
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	4, 27			\boxtimes			
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	4, 9, 27			\boxtimes			

Issues, Discussion and Supporting Information Sources			Less Than Significant		
Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		Potentially	with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

Evaluation

As described in the City's 2014 LUCE Update EIR, the analysis of hazards and hazardous material impacts relates to hazards regarding safety risks posed by airport flight patterns, conflicts with adopted emergency response/evacuation plans, and wildland fires where wildlands are adjacent to urbanized areas; and hazardous materials or substances regarding routine transport or disposal of substances, explosion or release of substances, and emissions or handling of substances within 0.25 mile of an existing or planned school. The following is a brief outline of the primary identified hazards.

Fire Hazards: Fires have the potential to cause significant losses to life, property, and the environment. Urban fire hazards result from the materials that make up the built environment, the size and organization of structures, and spacing of buildings. Additional factors that can accelerate fire hazards are availability of emergency access, available water volume and pressure for fire suppression, and response time for fire fighters. Fire hazard severity in rural areas, including areas on the edge between urban and rural land (commonly called the wildland interface), are highly influenced by the slope of the landscape and site vegetation and climate. This risk is somewhat amplified by the native, Mediterranean vegetation common to the rural setting in which the City is located that has evolved to rely on wildfires for its ecological sustainability. Where wildland fires may be a threat, plant fuels are often managed by replacement planting, grazing, plowing, or mechanical clearing.

Hazardous Materials: Hazardous materials are defined as substances with physical and chemical properties of ignitability, corrosivity, reactivity, or toxicity which may pose a threat to human health or the environment. This includes, for example, chemical materials such as petroleum products, solvents, pesticides, herbicides, paints, metals, asbestos, and other regulated chemical materials. Additionally, hazards include known historical spills, leaks, illegal dumping, or other methods of release of hazardous materials to soil, sediment, groundwater, or surface water. If a historical release exists, then there is a risk associated with disturbing the historical release area. The potential for risks associated with hazardous materials are varied regionally. The primary risk concerns identified by the City, as stipulated in the City's General Plan Safety Element, include radiation hazards and the transportation of hazardous materials in and around the city. Most of these incidents are related to the increasing frequency of transport of chemicals over roadways, railways or through industrial accidents. Highway 101 and a rail corridor are major transportation corridors through the San Luis Obispo area.

The Hazardous Waste and Substances Site (Cortese) List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements related to the disclosure of information about the location of hazardous materials release sites. Government Code section 65962.5 requires the California EPA (CalEPA) to develop at least annually an updated Cortese List. Various state and local government agencies are required to track and document hazardous material release information for the Cortese List. The California Department of Toxic Substance Control's (DTSC's) EnviroStor database tracks DTSC cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination, such as federal superfund sites, state response sites, voluntary cleanup sites, school cleanup sites, school investigation sites, and military evaluation sites. The State Water Resources Control Board's (SWRCB's) GeoTracker database contains records for sites that impact, or have the potential to impact, water in California, such as Leaking Underground Storage Tank (LUST) sites, Department of Defense sites, and Cleanup Program Sites. The remaining data regarding facilities or sites identified as meeting the "Cortese List" requirements can be located on the CalEPA website: https://calepa.ca.gov/sitecleanup/corteselist/.

Based on a review of the Cortese List, SWRCB's Geotracker database, and the DTSC's EnviroStor database, the project site is not an active hazardous waste cleanup site. The closest investigation site is located approximately 0.4 mile south. The project site is located within the San Luis Obispo Regional Airport Land Use Planning Area (ALUP).

Airport Hazards: The San Luis Obispo County Airport provides commuter, charter, and private aviation service to the area. The primary hazard associated with land uses near the airport is the risk of aircraft incidents on approach and take-off. Aircraft flight operations are determined largely by the physical layout of the airport and rules of the Federal Aviation Administration. The County manages activities on the airport property through the Airport Land Use Commission (ALUC). As the means of fulfilling these basic obligations, the ALUC must prepare and adopt Airport Land Use Plans (ALUPs) for each airport within their jurisdiction. The policies in the ALUP are intended to minimize the public's exposure to excessive noise and safety hazards while providing for the orderly expansion of airports (Public Utility Code Section 21670(a)(2). The ALUC has developed an ALUP for the San Luis Obispo County Regional Airport that was first adopted in 1973, was most recently updated in May 2005,

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

and is currently being updated. The ALUP has identified safety zones with associated land use density and intensity restrictions. The ALUP defines these as:

- Runway Protection Zones Areas immediately adjacent to the ends of each active runway, within which the level of aviation safety risk is very high and in which, consequently, structures are prohibited and human activities are restricted to those which require only very low levels of occupancy.
- Safety Areas S-1 a through c The area within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes less than 500 feet above ground level (AGL).
- Safety Area S-2 The area within the vicinity of which aircraft operate frequently or in conditions of reduced visibility at altitudes between 501 and 1,000 feet above ground level (AGL). Because aircraft in Area S-2 are at greater altitude and are less densely concentrated than in other portions of the Airport Planning Area, the overall level of aviation safety risk is considered to be lower than that in Area S-1 or the Runway Protection Zones.
- a) The proposed project would not create a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials. Construction of the proposed project would be required to comply with applicable building, health, fire, and safety codes. Commonly used hazardous materials would be used in varying amounts during construction and occupancy of the project. Construction and maintenance activities would use hazardous materials such as fuels (gasoline and diesel), oils, and lubricants, paints and paint thinners, glues; cleaners (which could include solvents and corrosives in addition to soaps and detergents);; and possibly pesticides and herbicides. The amount of materials used would be small, so the project would not create a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials, as such uses would have to comply with applicable federal, state, and local regulations including, but not limited to, Titles 8 and 22 of the CCR, the Uniform Fire Code, and Chapter 6.95 of the California Health and Safety Code.

With respect to operation of the project, it is not anticipated the Westmont Living facility or the allowed uses of the AASP (assisted living, bank and credit unit, general market, office, retail sales and personal service, or restaurant) would generate significant amounts of hazardous materials. Any future medical office use would have the potential to generate biological, pharmaceutical, radioactive, or chemotherapeutic waste. This medical waste would be subject to the disposal requirements of the Medical Waste Management Act and California Health and Safety Code 117690. This issue would be considered a less-than-significant impact.

- b) The proposed project would not result in the routine transport, use, disposal, handling, or emission of any hazardous materials that would create a significant hazard to the public or to the environment. Implementation of Title 49, Parts 171–180, of the Code of Federal Regulations and stipulations in the General Plan Safety Element would reduce any impacts associated with the potential for accidental release during construction or occupancy of the proposed project or by transporters picking up or delivering hazardous materials to the project site. These regulations establish standards by which hazardous materials would be transported within and to/from the project site. Where transport of these materials occurs on roads, the California Highway Patrol is the responsible agency for enforcement of regulations. Compliance with existing regulations would ensure impacts related to hazardous materials exposure would be less than significant.
- c) The proposed project is an assisted-living residential development with potential future commercial and office uses, parking, and associated amenities, and is not located within 0.5 mile of a school. The proposed project would not result in the routine transport, use, disposal, handling, or emission of any hazardous materials that would create a significant hazard to the public or to the environment; therefore, this is considered a less-than-significant impact.
- d) The project site is not on a parcel included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC 2012) and, as a result, the project would not create a significant hazard to the public or the environment; therefore, no impact would occur.

- e) The project site is located in the vicinity of the San Luis Obispo County Regional Airport and the County ALUP area. The project site is subject to the City's Airport Overlay Zone (AOZ), which allows development based on the development standards for the zone (Table 10, Zoning Regulations). Because the proposed project includes an amendment to the AASP, the project was referred to the ALUC for a determination of consistency. On August 15, 2018, and again on September 19, 2018, the San Luis Obispo County ALUC reviewed the proposed project for consistency with the ALUP. On September 19th the ALUC found the Westmont Living facility and a similar commercial center project consistent with the ALUP based on a series of findings and conditions that would render the project site would require a consistency finding with the Airport Land Use Plan and could result in additional conditions from the ALUC. With incorporation of all conditions from the ALUC, impacts would be less than significant in terms of safety hazards to those living and working on the project site.
- f) The Fire Marshal has reviewed the design of the project and determined that the project would not interfere with any emergency response plan or emergency evacuation plans; therefore, impacts would be less than significant.
- g) The project site is not located within or adjacent to a wildland area and the project would not expose people or structures to a significant risk of loss, injury, or death; therefore, impacts would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

10. HYDROLOGY AND WATER QUALITY

Wo	uld the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	5, 9, 15		\boxtimes	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	5, 9, 15, 17		\boxtimes	
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i.	Result in substantial erosion or siltation on or off site;	5, 9, 15, 17		\boxtimes	
ii.	Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	5, 9, 15, 17		\boxtimes	
iii.	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	5, 9, 15, 17		\boxtimes	
iv.	Impede or redirect flood flows?	5, 9, 17			\boxtimes

Issues, Discussion and Supporting Information Sources			Less Than Significant		
Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	with Witigation	Less Than Significant	
1400-2016, SFEC-1462-2016, EID-1464-2016	Sources	Impact	Incorporated	8	No Impact

d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	4, 9, 17			\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			\boxtimes	

Evaluation

As discussed in the City's 2014 LUCE Update EIR, the project site is located within the San Luis Obispo Creek Hydrologic Subarea of the Estero Bay Hydrologic Unit, an area that corresponds to the coastal draining watersheds west of the Coastal Range. The Estero Bay Hydrologic Unit stretches roughly 80 miles between the Santa Maria River and the Monterey County line and includes numerous individual stream systems. Within the Estero Bay Hydrologic Unit, the San Luis Obispo Creek watershed drains approximately 84 square miles.

The city of San Luis Obispo is generally located within a low-lying valley centered on San Luis Obispo Creek. San Luis Obispo Creek is one of four major drainage features that create flood hazards in the city, with the others being Stenner Creek, Prefumo Creek, and Old Garden Creek. In addition, many minor waterways drain into these creeks, and these can also present flood hazards. Because of the high surrounding hills and mountains in the area, the drainage sheds of these creeks are relatively small, but the steep slopes and high gradient can lead to intense, fast moving flood events in the city.

According to the Central Coast RWQCB, water quality in the San Luis Obispo Creek drainage system is generally considered to be good. However, the water quality fluctuates along with seasonal changes in flow rates. In summer months, when the flows decrease, and dilution is reduced, water quality decreases. According to the RWQCB Total Maximum Daily Load (TMDL) Project for San Luis Obispo Creek, the creek has been reported to exceed nutrient and pathogen levels.

Groundwater within the San Luis Obispo Valley Sub-basin flows toward the south-southwest, following the general gradient of surface topography. Groundwater within the San Luis Obispo area is considered suitable for agricultural water supply, municipal and domestic supply, and industrial use.

The City is enrolled in the State General Permit National Pollutant Discharge Elimination System (NPDES) permit program governing stormwater. As part of this enrollment, the City is required to implement the Central Coast RWQCB's adopted Post Construction Stormwater Management requirements through the development review process. The primary objective of these post-construction requirements is to ensure that the permittee is reducing pollutant discharges to the maximum extent practicable and preventing stormwater discharges from causing or contributing to a violation of receiving water quality standards in all applicable development projects that require approvals and/or permits issued.

The 100-year flood zone identifies areas that would be subject to inundation in a 100-year storm event, or a storm with a 1% chance of occurring in any given year. Based on the City's Flood Preparedness Map, the project site is not located within a 100-year flood zone.

a) The project would not violate any water quality standards or waste discharge requirements or substantially degrade water quality because the project is required to comply with the Central Coast RWQCB requirements set forth in their Post-Construction Stormwater Management Requirements for development projects in the Central Coast region. The project would be required to submit a Stormwater Control Plan (SWCP). Completion of this project would ensure that construction-related discharges would be limited or adequately accommodated by properly engineered infrastructure design.

Preparation and implementation of the SWPPP and associated BMPs would ensure potential impacts associated with the accidental release of hazardous materials would be less than significant.

b) The project would be serviced by the City's water system, which has four primary water sources, including the Whale Rock Reservoir, Salinas Reservoir, Nacimiento Reservoir, and recycled water (for irrigation), with

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018	Sources	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Immost
	Sources	Impact	Incorporated	Impact	No Impact

groundwater serving as a fifth supplemental source. The City no longer draws groundwater for potable purposes as of 2015. Therefore, the project would not deplete groundwater resources and impacts would be less than significant.

- c.i-iii) Construction of the proposed project would result in an increase of impervious surfaces that would cause the timing and amount of surface water runoff to increase. However, the project is subject to the revised City Storm Drain Master Plan/Waterway Management Plan that discusses the necessary improvements that would ensure adequate transmission and detention of storm water flow created by any new development. Physical improvement of the project site would be required to comply with the drainage requirements of the City's Waterways Management Plan. This plan was adopted for the purpose of ensuring water quality and proper drainage within the City's watershed. The Waterways Management Plan and Low Impact Development (LID) stormwater treatment requires that site development be designed so that post-development site drainage does not significantly exceed pre-development runoff. In addition, the project would be required to comply with the City's engineering standards, water pollution control plan requirements, Post-Construction Stormwater Requirements, and adopted building and grading codes for water quantity/quality analysis. Compliance with these requirements will ensure impacts are less than significant.
- c.iv) The project site is not within the boundaries of an area subject to inundation from flood waters in a 100-year storm per the Federal Flood Hazard Boundary or Flood Insurance Rate Map. The project would not impede or redirect the flow of any waters. Therefore, there would be no impact.
- d) The proposed development is outside the zone of impacts from seiche or tsunami and the existing upslope projects do not generate significant storm water runoff such to create a potential for inundation by mudflow; therefore, no impact would occur as a result of the proposed project.
- e) As discussed in the threshold analysis above, the project would not deplete groundwater supplies or interfere substantially with groundwater recharge. The project includes stormwater treatment and storage facilities and would not conflict with the Central Coastal Basin Plan or other water quality control plans. The project would not conflict with a sustainable groundwater management plan, or other local or regional plans or policies intended to manage water quality or groundwater supplies; therefore, impacts would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

11. LAND USE AND PLANNING

Would the project:				
a) Physically divide an established community?	1, 2, 9, 11		\boxtimes	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	1, 6, 9, 10, 11		\boxtimes	

Evaluation

a) The project site is primarily undeveloped and contains a single-family residence but does not contain an established community. The proposed project is an infill project and would not have the potential to divide an established community on adjacent parcels or in the vicinity of the project site. The site is designated for land uses consistent

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486 2018, SPEC, 1482, 2018, FUD, 1484, 2018		Potentially Significant	Less Than Significant with Mitigation	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

with the proposed AASP land use designation of Community Commercial, which would be consistent with the existing zoning and General Plan Land use designation of the site. The project is designed to be consistent with existing and developing/planned surrounding commercial infill development and would not physically divide an established community. Impacts would be less than significant.

b) The Land Use, Circulation, and Housing Elements of the City's General Plan and the Zoning Ordinance are the primary land use planning guidance documents for the development pattern of the city. The proposed specific plan amendment would be consistent with the general plan land use designation and zoning for the property, if amended as requested. The Westmont Living facility was reviewed on October 15, 2018 by the Architectural Review Commission and by the Planning Commission on April 10, 2019. The Planning Commission's recommendation was introduced to the City Council on May 7, 2019; a second hearing did not occur. Any future development beyond the Westmont Living facility would be subject to the review of the Architectural Review Commission and Planning Commission. The following describes the project's consistency with key General Plan policies, as well as those of the City's Airport Area Specific Plan and the Airport Land Use Plan, as adopted by San Luis Obispo County.

As discussed below, the project would be potentially consistent with applicable City goals, policies, and programs, although a final determination of consistency would be made by the City Council. Policy-related impacts are anticipated to be less than significant.

General Plan Policy Consistency

The 2014 General Plan establishes several community goals, policies and programs for development that relate to the project site. These include:

- Special Focus Area #12
- Neighborhood Connections
- Mixed-Use Developments and Convenience
- Neighborhood Compatibility

The project's consistency with each is discussed below:

1. Special Focus Area #12 – General Plan Policy 8.13 provides that the project site would be a mixed-use development, providing uses consistent with the "Community Commercial" and "Office" designations. This policy calls for a strong commercial presence at the corner of Tank Farm and Broad Street, and to emphasize creek protection and circulation connectivity as noted above in any land plan. The Westmont Living facility and a similar commercial development was brought to the Planning Commission on June 13, 2018 for a conceptual policy review to receive early, conceptual comments on the project's potential consistency with the Special Focus Area policies.

Since the Planning Commission recommendation on April 10, 2019, the applicant has revised the project and is only moving forward with the Westmont Living facility at this time. The assisted living and memory care facility remains as originally proposed, with no changes. The applicant has indicated that future development of the eastern portion of the project site would a revised commercial center, include replacing the proposed grocery store use with a medical office and reducing the amount of proposed retail/restaurant space. A conceptual site plan of a potential future development shows that the configuration of structures on the commercial portion of the property would be altered. Any future development on the eastern portion of the project site, including a revised commercial center, would require separate application and Architectural Review Commission and Planning Commission determinations. Future development applications are expected to incorporate the Planning Commission and Architectural Review Commission and Planning Commission and Planning Commission and Architectural Review Commission concerns and comments related to consistency with this General Plan policy.

- Articulated walkways within and along the perimeter of the uses, as well as enhanced connections between future commercial uses and Westmont Living facility.
- Improvements to future commercial service areas located along the central road access to screen loading and unloading functions for the uses. This includes landscaping to minimize visibility from off-site.
- Pedestrian meeting areas/plazas to connect pedestrian and bicycle routes into the site.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		Potentially	Less Than Significant with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

2. Neighborhood Connections – General Plan Policies 2.2.4 and 2.2.5 discuss planning for connectivity both internally to a given project, and as that project relates to the larger neighborhood context. The subject site is located at the northwest corner of Tank Farm Road and Broad Street and the project would provide pedestrian and bicycle connections to the nearby employment centers at Mindbody and along the Broad Street corridor, and to retail services at the Marigold Shopping Center. Additionally, vehicle circulation connecting to adjoining development would be enhanced, providing additional access options to motorists working or visiting the area. Future development would be reviewed for internal access patterns to promote accessibility from off-site and facilitate internal access the Westmont Living facility and future commercial uses. The adjacent Agera Grove mixed-use project would have access into the site via the bridge crossing Orcutt Creek (to be constructed by Agera Grove with that project). The project would construct an extension of the Mindbody street that would connect to the SESLOC property and beyond to Industrial Way. The project is consistent with these General Plan policies.

3. *Mixed-Use Developments and Convenience* – General Plan Policies 2.3.1 and 2.3.6 encourage mixed-use projects to integrate complementary uses close to one another, and to ultimately cut down on vehicle traffic by making these mixed-use projects accessible to other nearby neighborhoods. The design of the proposed project adheres to, and is consistent with, the General Plan policies encouraging retail shopping and food service options located onsite with residential uses and close to employment centers, transportation corridors, and resident needs.

4. Neighborhood Compatible Development – General Plan Policy 2.3.9 sets several goals for new development (specifically residential, but equally applicable to "infill" projects) within established neighborhoods. The vicinity of the proposed project includes a wide mix of commercial, office, professional, business park, manufacturing, industrial and residential uses. The proposed project includes the potential for a mix of these uses as allowable land use types. Architectural design of the Westmont Living facility is also consistent with architectural stylings found in the nearby area. The project also incorporates many of these established architectural styles into a well-designed center that is compatible with scale and design of these neighborhoods. The project is consistent with this General Plan policy. Future development on the eastern portion of the project site would be submitted under a separate application and reviewed for consistency with this policy and the Community Design Guidelines.

Airport Area Specific Plan (AASP) Consistency

First adopted by the City Council in 2005, the AASP included a series of goals, policies, and programs to comprehensively guide development of the Planning Area. Additional guidelines and development standards are included in the AASP, as well as infrastructure requirements and a plan for implementation of the Plan. In 2014 the AASP was updated to reflect current planning standards for the area.

Overall goals of the Specific Plan include:

- Provide a framework to move from County developments primarily focused on heavier industrial and manufacturing uses to a blend of these established uses, both inside and outside the City, with new uses focused on lighter industrial and manufacturing uses, professional and business park developments, employment centers, retailing services to support daytime customer demands and limited numbers of residential developments surrounding the Planning Area.
- Plan for proposed development, including annexations within the Planning Area, so that public facilities are developed concurrently with new development in a rational and cost- effective fashion.
- Expand the use of bicycles and pedestrians within the Plan Area as an alternative to increasing vehicular trips.
- Protect and enhance natural resources within the AASP, including emphasis on maintaining visual qualities of the surrounding hills and open space areas and protection of creek corridors, wetlands and habitat qualities.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018	C	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Incore et
	Sources	Impact	Incorporated	Impact	No Impact

The Westmont Living facility, as designed, addresses each of these goals through its design, and is therefore consistent with the AASP. Future development on the eastern portion of the project site would be submitted under a separate application and reviewed for consistency with the AASP.

San Luis Obispo County Airport Land Use Plan (ALUP) Consistency

On August 15, 2018, and again on September 19, 2018, the Airport Land Use Commission (ALUC) considered a referral of this project from the City. On September 19, 2018, the ALUC found the Westmont Living facility and a similar commercial center project, including amendments to the City's AASP, were consistent with the County's ALUP based on a series of findings and conditions. Future development on the eastern portion of the project site would require a consistency finding with the Airport Land Use Plan and could result in additional conditions from the ALUC.

Therefore, impacts would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

12. MINERAL RESOURCES

Wo	ould the project:			
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	5, 9, 17		\boxtimes
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	5, 9, 17		\boxtimes

Evaluation

Based on the City's Conservation and Open Space Element, mineral extraction is prohibited within city limits.

a-b) No known mineral resources are present at the project site. Implementation of the proposed project would not result in the loss of availability of a known mineral resource. The project site is not designated by the General Plan, specific plan, or other land use plans as a locally important mineral recovery site. Therefore, there would be no impact to mineral resources.

Mitigation Measures

None necessary.

Conclusion

No impact.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

13. NOISE

Wo	uld the project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	3, 9, 10, 11, 40	\boxtimes		
b)	Generation of excessive groundborne vibration or groundborne noise levels?	3, 9, 10, 11		\boxtimes	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	1, 3, 9, 10, 11, 40		\boxtimes	

Evaluation

Physical Setting

As analyzed in the City's LUCE Update EIR, a number of noise-sensitive land uses are present within the city, including various types of residential development, schools, hospitals and care facilities, parks and recreation areas, hotels and transient lodging, and places of worship and libraries. Based on ambient noise level measurements throughout the City, major sources of noise include traffic noise on major roadways, passing trains, and aircraft overflights.

The project site is located north of Tank Farm Road and west of Broad Street. These two arterial streets are the primary sources of ambient noise in the vicinity of the project site. The southwest corner of the project site is closest to the San Luis Obispo County Regional Airport, a separate potential source of nearby noise. Each of these potential sources of noise was observed and measured to evaluate their contribution to ambient on-site noise levels.

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with users of these land uses. The following land uses are typically considered noise-sensitive: single-family and multiple-family residences, long-term care facilities (including convalescent and retirement facilities), dormitories, motels, hotels, transient lodgings and other residential uses, houses of worship, hospitals, libraries, schools, auditoriums, concert halls, outdoor theaters, nature and wildlife preserves, and parks. The nearest existing noise-sensitive receivers to the project site include existing and approved future residential land uses southwest of the project site within a mobile home park (approved for redevelopment with a mixed-use residential development). The existing mobile home park is located approximately 110 feet from the project boundary and approximately 350 feet from the center of the construction activity on the project site.

Regulatory Setting

City of San Luis Obispo General Plan Noise Element and Noise Guidebook

The Noise Element and Noise Guidebook (1996) of the City of San Luis Obispo General Plan uses modified land use compatibility standards recommended by the California Department of Health Services. The following Noise Element policies are applicable to the project and the local noise environment:

Policy 1.4. New Transportation Noise Sources. Noise created by new transportation noise sources, including road, railroad, and airport expansion projects, shall be mitigated to not exceed the levels specified in Table 4.10-3 for outdoor activity areas and indoor spaces of noise-sensitive land uses which were established before the new transportation noise source.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1100 2010, 51 20 1102 2010, 212 1101 2010	Sources	Impact	Incorporated	U	No Impact

Policy 1.6. New Development and Stationary Noise Sources. New development of noise-sensitive land uses may be permitted only where location or design allow the development to meet the standards of Table 4.10-4, for existing stationary noise sources.

City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control)

Construction noise level limits set by the City are defined in section 9.12.050(6.a.), of the Municipal Code. Table 2 and Table 3 of the noise study included as Attachment 8 summarize the City's maximum allowable noise levels for short-term or long-term operation of mobile equipment and stationary equipment at residential properties. Section 9.12.050(6.b.) of the Municipal Code limits the operation of nonscheduled, intermittent, short-term operation of mobile equipment associated with construction to a maximum hourly noise level of 85 dBA and the operation of repetitively scheduled and relatively long-term operations of stationary equipment associated with construction to a maximum hourly noise level of 75 dBA.

Operational vibration level limits set by the City are defined in section 9.12.050(7) or the Municipal Code. Section 9.12.050(7) limits operation vibration levels to the "perception threshold of an individual at or beyond the property boundary of the source if on private property or at one hundred fifty feet (forty-six meters) from the source if on a public space or public right-of-way." The SLOMC defines the perception threshold as a "motion velocity of 0.01" inch per second.

Methods of Assessment

Noise sources examined include vehicular traffic along the two busy ground transportation corridors, as well as operations associated with the San Luis Obispo County Regional Airport. In addition, there are potential existing or future stationary noise sources from neighboring commercial activities along the south boundary of the site.

Ambient noise levels were measured at the project site. SoundPLAN, an acoustic software sound level modeling tool, was used to generate sound level contours which were based on physical characteristics of the topography, measured sound level values, and traffic volume data. Sound level measurements were taken on September 30, 2017 with two calibrated Type 1 Sound Level Meters. The two on-site sound level measurement locations are shown on Figure 7 of the 45dB Acoustics Report (Attachment 7). In addition, a second noise study to assess the project's potential operational impact on nearby sensitive resources was prepared by Rincon Consultants and is included as Attachment 8. Please refer to this study for a discussion of the technical nature of sound and vibration. The results of this study form the basis for the conclusions of this MND. Key aspects of this study are summarized below.

Significance Thresholds

Construction Noise

Based on the duration of proposed construction activities and the Municipal Code, section 9.12.050(6), construction noise would be significant if:

- Noise levels exceed a maximum hourly noise level of 65 dBA Leq when measured at the Hidden Hills Mobilodge (mobile home park); or
- Construction noise exceeds a maximum hourly noise level of 70 dBA Leq at a commercial property.

Construction Vibration

The City has adopted a vibration threshold of 0.01 in/sec peak particle velocity (PPV). However, the City has not adopted a significance threshold to assess vibration impacts during construction. Therefore, the Caltrans Transportation and Construction Vibration Guidance Manual (2013) and the FTA Transit Noise and Vibration Impact Assessment Manual (2018) are used to evaluate potential construction vibration impacts related to both potential building damage and human annoyance. Based on the Caltrans and FHWA criteria, construction vibration impacts would be significant if vibration levels exceeds 0.5 in/sec PPV for residential structures and 1.0 in/sec PPV for commercial and industrial structures, which are the limits where minor architectural damage may occur to each type of buildings. Human annoyance impacts would occur if vibration levels from long-term operations exceeded 68 VdB (equal to 0.01 in/sec PPV) at a residence or if a transient source, such as construction, exceeds 94 VdB at any occupied structure.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1480-2018, SPEC-1482-2018, EID-1484-2018	Sources	Impact	Incorporated	Impact	No Impact

Project Operational Noise

According to the SLOMC, Section 9.12.060, operational noise from an on-site noise level source would result in a significant impact if the project would exceed the City noise levels limits at the property line of affected land use as defined in Table 5 of the Noise Study, included as Attachment 8.

Traffic Noise

Off-site project-related noise (i.e., roadway noise) would result in a significant impact if the project would cause the traffic noise level measured at the property of affected uses to increase by 3 CNEL to or within the "normally unacceptable" or "clearly unacceptable" category, or by 5 CNEL or more if existing or future noise levels are below the normally acceptable category. The City's General Plan Noise Element establishes standards for maximum acceptable noise levels associated with stationary and transportation sources. Noise created by new transportation noise sources are required to be mitigated to not exceed the maximum acceptable noise levels identified in Table 6, below.

Table 6. Maximum Noise Exposure for Noise-Sensitive Uses due to Transportation Noise Sources

	Outdoor Activity Areas ¹	Indoor Spaces		s
Noise-Sensitive Use	L _{dn} or CNEL, in dB	L _{dn} or CNEL, in dB	L _{eg} in db ²	L_{max} in db ³
Residences, hotels, motels, hospitals, nursing homes	60	45		60
Theaters, auditoriums, music halls]		35	60
Churches, meeting halls, office building, mortuaries	60		45	
Schools, libraries, museums]		45	60
Neighborhood parks	65			
Playgrounds	70			

¹ If the location of outdoor activity areas is not shown, the outdoor noise standard shall apply at the property line of the receiving land use.

² As determined for a typical worst-case hour during periods of use.

³ L_{max} indoor standard applies only to railroad noise at locations south of Orcutt Road.

The City's Noise Element also identifies Policy 1.4 regarding noise created by new transportation sources, including road, railroad, and airport expansion projects, which states noise from these sources shall be mitigated to not exceed the levels specified in Table 6 (above) for outdoor activity areas and indoor spaces of noise-sensitive land uses.

To facilitate potential future CEQA streamlining when a development project application is submitted for the eastern portion of the project site, this section analyzes the potential noise impacts of conceptual commercial center development.

a) Construction Noise

Construction impacts would result in temporary increases in ambient noise levels in the project area on an intermittent basis and, as such, would expose surrounding sensitive receivers to increased noise levels. Any increase in noise levels at off-site receptors during construction of the proposed project would be temporary in nature and would not generate continuously high noise levels, although occasional single-event disturbances from construction would be possible. In addition, construction noise would typically be higher during the heavier periods of initial construction (i.e., demolition and grading work) and reduced in the later construction phases (i.e., interior building construction) because the physical structure of the proposed project would break line-of-sight noise transmission from the construction phase, equipment type and duration of use, distance between the noise source and receiver, and presence or absence of noise attenuation barriers.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1400 2010, SI LC 1402 2010, LID 1404 2010	Sources	Impact	Incorporated	Impact	No Impact

The nearest residential receivers from the proposed construction are residences associated with the Hidden Hills Mobilodge mobile home park, approximately 350 feet to the southwest of the center of proposed construction activities for the Westmont Living facility, which would be the closest long-term construction activity. Mobile home parks are considered multiple family residential land uses. The nearest commercial uses are located adjacent to the south of the project approximately 300 feet from the center of construction activity (Mindbody).

The FHWA Roadway Construction Noise Model (RCNM) was used to estimate noise levels from construction equipment at local residential and commercial receivers. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment. Each phase of construction has a specific equipment mix. The maximum hourly Leq of each phase is determined by combining the Leq contributions from each piece of equipment used in that phase (FTA 2018). Construction phases would include demolition, site preparation, grading, building construction, architectural coating, and paving of the project site.

In typical construction projects, grading activities generate the highest noise levels because grading involves the largest equipment and covers the greatest area. For assessment purposes, and to be conservative, the loudest hour has been used for assessment. The loudest hour of construction would typically occur during site preparation and foundation excavation. Based on the project construction schedule and proposed development plan, it is anticipated that a maximum of four large pieces of construction equipment would be active at the same time in the same hour under maximum load. For modeling purposes, two bulldozers, a frontend loader, and a scraper are used to represent the loudest pieces of equipment that would be active simultaneously. Based on the FHWA Highway Construction Noise Handbook (2008), the maximum hourly noise level from all four pieces of equipment would result in a maximum combined noise level of 108.2 Leq at 300 feet (refer to Appendix D for RCNM results). Table 8 shows typical construction noise levels associated with the use of heavy construction equipment during site preparation and foundation excavation at distances of 50, 300, and 350 feet from the center of construction activity.

Construction Equipment	Noise Level 50 feet (dBA L _{max} / L _{eq})	Noise Level 300 feet (dBA L _{max} / L _{eq})	Noise Level 350 feet (dBA L _{max} / L _{eq})
Bulldozer	81.7 / 77.7	66.1 / 62.1	64.8 / 60.8
Bulldozer	81.7 / 77.7	66.1 / 62.1	64.8 / 60.8
Front End Loader	79.1 / 75.1	63.5 / 59.6	62.2 / 58.2
Scraper	83.6 / 79.6	68.0 / 64.0	66.7 / 62.7
Total	83.6 / 83.8	68.0 / 68.3	66.7 / 66.9

RCNM results are included in Appendix D of the Rincon Consultants Noise Study (Attachment 8)

Source: Roadway Construction Noise Model (RCNM); individual equipment noise levels based on FTA Transit Noise and Vibration Impact Assessment Manual (2018).

Based on the RCNM results, maximum hourly noise levels during project construction, which would occur during grading and foundation excavation, were calculated to be 67 dBA Leq at the mobile home park, which would exceed the City's construction noise standard of 65 dBA for multiple-family residential land uses. Construction activity maximum hourly noise levels would attenuate to 68 dBA Leq at the commercial uses located to the south of the project site, which would not exceed the City's maximum hourly noise level limit of 70 dBA Leq for commercial uses. Since the estimated noise levels during construction would exceed the applicable City noise standard for multiple-family residential land uses, the temporary noise impact would be potentially significant. Additionally,

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1100 2010, 51 De 1102 2010, EIB 1101 2010	Sources	Impact	Incorporated	Impact	No Impact

construction of future commercial uses on the eastern portion of the project site could result in noise impacts to the Westmont Living facility, if the facility is operational at the initiation of construction. While the majority of grading activities would have been completed with the mass grading proposed with this project, final grading, excavation, and compaction activities would still be necessary. Mitigation Measures N-1 and N-2 would be required to reduce construction noise levels at the nearby mobile home park and the on-site assisted living facility to comply with the City's standards.

Operational Noise

There are two primary sources of long-term operational noise associated with the project. The first would be from on-site activity related to residential uses and any future commercial uses. The second primary source would be increased traffic generated by the project. These issues are discussed below and fully analyzed in the Noise Study included as Attachment 8.

The proposed residential project would require periodic trash hauling services. However, the project site is located in a developed area and would be surrounded by multi-family residential and commercial uses that require similar trash hauling services. Therefore, as trash trucks are already a common occurrence in the project vicinity, trash services would not result in a noticeable increase in ambient noise levels above levels existing without the project.

The project would include outdoor patio space for the private use of residents, and it is assumed any future commercial uses would have exterior patio area for dining or employee break areas. Operational noise associated with outdoor use areas would generally be limited to conversations (normally about 70 dB),would be partially shielded by the proposed buildings and would attenuate to approximately 48 dB at 12 feet. These noise-generating activities would result in a negligible change to existing noise levels. Noise from conversation would also be an intermittent and temporary noise source. Therefore, noise impacts related to outdoor seating areas would be less than significant.

The project would include rooftop heating, ventilation, and air conditioning (HVAC) equipment. Typically, HVAC equipment is provided at a rate of 1-ton of nominal cooling/heating per 600 square feet. Various sizes of HVAC units would be required to meet the needs of the different proposed uses. Based on the type of development and density of development in the project area, it is anticipated the HVAC units would be roof mounted. The HVAC would be approximately 3 feet above the roof level.

As shown in Table 8 below (Table 9 of the Rincon Noise Study), project operations would not generate noise levels in excess of the City's noise level limits. The Noise Study evaluated a conceptual commercial center which included a grocery store and loading dock. Grocery stores are typically a more intensive noise use, requiring daily refrigerated semi-truck deliveries at off hours of the morning or night. Additionally, noise levels generated by on-site noise levels would not substantially increase ambient noise levels at the surrounding properties. Therefore, on-site noise sources would result in less-than-significant noise impacts.

Location	Noise Level at Receiver dBA L _{eq}	Noise Level Limit (dBA)	Does the Project Exceed Standard?
Hidden Hills Mobilodge	43	70*	No
SESLOC	47	55	No
Marigold Shopping Center	45	65	No
Mindbody**	46	60	No

Table 8. Noise Levels from Project Operation

*The Hidden Hills Mobilodge site has been re-zoned since the time of the Rincon Noise Study. The zoning designation has changed from R-2 to C-S, and therefore the noise level limit has changed from 50 dBA to 70 dBA.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1100 2010, SI LO 1102 2010, LIB 1101 2010	Sources	Impact	Incorporated	Impact	No Impact

**The use on the site has changed since the time of the Rincon Noise Study from medical offices to Mindbody. The noise level limit has not changed.

Traffic Noise Impacts

The proposed project would generate new vehicle trips and incrementally increase traffic on area roadways. A project would result in a significant off-site traffic noise impact if it would cause the ambient noise level measured at the property line of affected uses to increase by 3 CNEL to or within the "normally unacceptable" or "clearly unacceptable" category as identified in Table 4 of the Noise Study (Attachment 8), or by 5 CNEL or more if existing or future noise levels are below the normally actable category. Based on trip generation estimates, the project would result in a maximum increase of 1,416 average daily trips (ADT) on local roadways. Existing traffic on Tank Farm Road is approximately 20,709 ADT between Broad Street and Santa Fe Road. Existing traffic on Broad Street is 28,396 ADT between Tank Farm Road and Industrial Way and 22,944 between Tank Farm Road and Fuller Road. Adding 1, 416 ADT to Tank Farm Road or Broad Street would result in less than 1 CNEL increase in traffic noise levels along any affected roadway.

Based on the noise compatibility analysis, traffic volumes can be assumed to increase by 1 to 2 percent annually. Broad Street and Tank Farm Road were assumed to increase by 1.5 percent annually. This would result in a 2040 ADT of 38,820 and 27,735 ADT for Broad Street and Tank Farm Road, respectively. Adding the project's volumes to these volumes would result in less than 1 CNEL increases along all affected roadways and noise generation from the project would not be considered cumulatively considerable.

The project would increase existing traffic noise levels on Broad Street and Tank Farm Road by less than 1 CNEL. Therefore, off-site traffic noise would not exceed the City's thresholds and off-site traffic noise impacts would be less than significant. In addition, the project was the subject of a noise and land use compatibility analysis prepared by 45 dB (Attachment 7), which determined the project would be compatible with the existing and future noise environment.

Therefore, the project would generate a potentially significant increase in ambient noise related to construction activities that would require implementation of Mitigation Measures N-1 and N-2 to reduce potential impacts to be less than significant. The project would not result in a substantial permanent increase in ambient noise levels due to operation of the project; therefore, operational impacts would be less than significant.

Implementation of Mitigation Measures N-1 and N-2 would require use of construction equipment best management practices, including shielding stationary equipment, temporary sound barriers between the construction site and the mobile home park to the west and the on-site assisted-living facility, and limiting construction activity to daytime hours when people are typically awake. Mitigation Measure N-2 would require nearby residential receptors to be notified of future construction activities at the site. Acoustic shielding, sound blankets, and other construction noise best management practices can reduce noise levels from individual pieces of construction equipment by 5-10 dBA. Temporary sound barriers used to fully block line-of-sight noise transmission from the construction noticing and noise complaint procedures ensure that nearby sensitive land uses would have the opportunity to alert the City's Community Development Department of construction noise issues. Therefore, implementation of Mitigation Measures N-1 and N-2 would ensure that noise levels would not exceed the stationary equipment noise standards in the City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control).

b) Increases in groundborne vibration levels attributable to the proposed project would be primarily associated with short-term construction activities. A quantitative assessment of potential vibration impacts from construction activities, such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation, are conducted using the equations developed by Caltrans and the FTA (Caltrans 2013b, FTA 2018). Certain types of construction equipment can generate high levels of groundborne vibration. Table 9 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration (FTA 2018).

Equipment		in/sec PPV at 25 ft.	Approximate L _v Vdb at 25 ft.
Pile Driver	Upper	1.518	112
	Typical	0.644	104
Large bulldozer		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Table 10 shows estimated groundborne vibration levels from construction equipment that would result in the highest vibration levels. Vibration impacts are assessed based on the distance from the location of vibration-intensive construction activities, conservatively assumed to be at edge of the project site, to the edge of nearby structures. Therefore, equipment was anticipated to operate at a distance of 250 feet from existing residences within the Hidden Hills Mobilodge.

Table 10. Vibration Levels at Sensitive Receivers

		Existing Re (250 fe	
Equipment		in/sec PPV	Vdb
Pile Driver	Upper	0.121	90
	Typical	0.052	82
Large bulldozer		0.007	65
Loaded trucks		0.006	61
Jackhammer		0.003	57
Threshold		0.5	94
Threshold Exceeded	?	No	No
See Appendix D of the Rinc	on Consultants Noise Study (Attachment 8) for vibration analysis worksh	eet.

As shown, groundborne vibration from typical construction equipment is not estimated to exceed the threshold of 0.5 in/sec PPV at an existing residence. Similarly, typical construction equipment would not exceed the threshold of 94 vdB at any occupied structure. The project does not include any substantial long-term vibration sources. Therefore, the project would not expose local vibration sensitive receptors to excessive vibration levels and vibration impacts would be less than significant.

c) The project site is not located within the vicinity of a private airstrip. The project is located in the vicinity of the San Luis Obispo County Regional Airport and is subject to the County Airport Land Use Plan and the City Airport Area Specific Plan. As identified in the ALUP and in the City of San Luis Obispo General Plan Noise Element, the project site is outside the 60-dBA airport sound level contour, and within the 55-dBA airport sound level contour. Airport noise levels at the project site are lower than existing road traffic noise levels; therefore, the project would not expose people residing or working in the project area to excessive noise levels from aircraft noise. The 45db acoustics sound study (Attachment 7) did not locate the project site within existing or projected noise contours for the airport that would necessitate specific mitigation measures beyond standard Uniform Building Code and City Noise Ordinance standards for temporary and on-going noise impact thresholds. According to the 45dB Acoustics report, use of standard noise insulating building techniques for the Westmont Living facility south facing wall(s) would reduce interior noise levels. Impacts would be less than significant.

Mitigation Measures

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		Potentially	Less Than Significant with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018	Sources	Significant Impact	Mitigation Incorporated	Significant Impact	No Impact

The following measures would mitigate potential short-term construction noise impacts to a less-than-significant level.

- N-1 Construction Equipment Best Management Practices. For all construction activity at the project site that exceeds 60 dBA at the property line with the mobile home park to the west, and for future construction activity associated with development on the eastern portion of the project site that exceeds 60 dBA at the property line with the Westmont Living facility, construction equipment noise attenuation techniques shall be employed to ensure that noise levels are maintained within levels allowed by the City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control). Such techniques shall include:
 - Sound blankets on noise-generating equipment.
 - Stationary construction equipment that generates noise levels above 60 dBA at the project boundaries shall be shielded with barriers that meet a sound transmission class (a rating of how well noise barriers attenuate sound) of 25.
 - All diesel equipment shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.
 - For stationary equipment, the applicant shall designate equipment areas with appropriate acoustic shielding on building and grading plans. Equipment and shielding shall be installed prior to construction and remain in the designated location throughout construction activities.
 - Electrical power shall be used to power air compressors and similar power tools.
 - The movement of construction-related vehicles, with the exception of passenger vehicles, along roadways adjacent to sensitive receptors shall be limited to the hours between 7:00 AM and 7:00 PM, Monday through Saturday. No movement of heavy equipment shall occur on Sundays or official holidays (e.g., Thanksgiving, Labor Day).
 - As needed, temporary sound barriers shall be constructed between the construction site and the mobile home park to the west.

In the event the residential uses at the mobile home park site have been removed (i.e. the site is under construction), and/or if the Westmont Living facility is not occupied or operational during future construction of the eastern portion of the project site, then construction equipment noise attenuation techniques do not need to be implemented.

N-2 Neighboring Property Owner Notification and Construction Noise Complaints. The contractor shall inform the property owner and current tenants of the mobile home park to the west of the project site, prior to initiation of any construction activities, of the proposed construction timelines and noise complaint procedures to minimize potential annoyance related to construction noise. In the event the residential uses at the mobile home park site have been removed (i.e. the site is under construction), notification is not required. If the Westmont Living facility is occupied or operational prior to construction of future uses on the project site, the contractor shall inform the property owner and current tenants of the facility of the proposed construction timelines and noise complaint procedures to minimize potential annoyance related to construction noise. Proof of mailing the notices shall be provided to the Community Development Department prior to issuance of grading permits or initiation of site disturbance activities. Signs identifying the noise complaint procedures shall be in place before the beginning of and throughout grading and construction activities. Noise-related complaints shall be directed to the City's Community Development Department.

Conclusion

Less than significant impact with mitigation for short-term construction-related noise impacts.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

14. POPULATION AND HOUSING

Wo	Would the project:					
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	2, 6, 9, 35, 43			\boxtimes	
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	1, 6, 9				\boxtimes

Evaluation

The city of San Luis Obispo is the largest city in terms of population in San Luis Obispo County and has grown from 45,119 in 2010 to approximately 46,802 in 2019 according to the City General Plan 2019 Annual Report. The City's housing tenure is approximately 39% owner-occupied and 61% renter-occupied, which is strongly influenced by Cal Poly University and Cuesta College enrollment. Many segments of the city's population have difficulty finding affordable housing within the city due to their economic, physical or sociological circumstances. San Luis Obispo contains the largest concentration of jobs in the County, and during workdays, the City's population increases to an estimated 70,000 persons.

The City's Housing Element identifies various goals, policies, and programs based on an assessment of the City's housing needs, opportunities, and constraints. The City's overarching goals for housing include safety, affordability, conservation of existing housing, accommodation for mixed-income neighborhoods, providing housing variety and tenure, planning for new housing, maintaining neighborhood quality, providing special needs housing, encouraging sustainable housing and neighborhood design, maximization of affordable housing opportunities for those who live or work in the City, and developing housing on suitable sites.

- a) The project site is already designated for commercial and mixed uses. The project site was already planned for uses consistent with the Community Commercial Zoning and Special Focus Area designations adopted for the site with the 2014 Land Use and Circulation Element update. In addition, the site is surrounded by existing urban development within the City and would not require new roadways or other infrastructure that might otherwise be considered growth-inducing. Therefore, the impact of inducing substantial population growth to the planning area would be less than significant.
- b) The project site contains one vacant residence, which would be replaced as a result of the proposed project. The project would not displace any existing residents since the existing residence is vacant. There would be no impact with regard to population displacement, and a less-than-significant impact with respect to the displacement of existing housing.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

15. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	9, 12		\boxtimes	
Police protection?	9, 12		\boxtimes	
Schools?	9, 12		\boxtimes	
Parks?	12		\boxtimes	
Other public facilities?	12		\boxtimes	

Evaluation

The project site is located within the existing service area of the San Luis Obispo City Fire Department and would likely be served by City Fire Station 3, located 1.7 miles north of the project site. Built in 1960, this fire station is the only station on the east side of the Southern Pacific Railroad line and primarily provides response to the southern portion of the City. This station is staffed by a 3-person paramedic truck company.

The City of San Luis Obispo Police Department (SLOPD) provides public safety services for the city and consists of 85.5 employees, 59 of which are sworn police officers. The SLOPD operates out of one main police station, which is located at 1042 Walnut Street at the intersection of Santa Rosa (Highway 1) and U.S. Highway 101. The project site is located within the San Luis Coastal Unified School District, which includes 15 schools from elementary to high school. The nearest school to the proposed project is Sinsheimer Elementary School, which is located 1.3 miles north of the project site. Public parks and recreational trails within the city are managed and maintained by the City of San Luis Obispo Department of Parks and Recreation. The nearest park to the project site is the Damon-Garcia Sports Complex directly north of the project site, and E.A. French Park approximately a half mile east of the site.

All new residential and non-residential development within the City is subject to payment of Development Impact Fees, which are administered by and paid through the Community Development Department. Development Impact Fees provide funding for maintaining the City's emergency services, infrastructure, and facilities. For example, fire protection impact fees provide funding for projects such as the renovation of the City's fire stations and the replacement of fire service vehicles and equipment.

a) Fire protection: The project site is within the existing service area of the SLOFD. The closest fire station to the project site is City Fire Station 3, located at 1280 Laurel Lane, approximately two miles northeast of the project site. The City has a mutual aid agreement with CALFIRE which allows for additional fire or emergency assistance when needed, CALFIRE Fire Station 21 is located approximated 1 mile to the southeast. New development would be subject to the SLOFD standards and California Fire Code in all proposed buildings, including installation of fire hydrants, building sprinklers, provision of adequate water supply and pressure, placement of fire extinguishers, provision of adequate fire access to buildings, and other requirements. The City's Fire Master Plan (FMP) discusses current and future operations and concludes that the City does not have enough primary neighborhood fire stations to deliver suburban response times to all outer areas, including the AASP. Since the FMP's preparation in 2009, increasing population and new development have been further pressure on the department's ability to respond to requested services. The 2016 San Luis Obispo Fire Department Master Plan requires construction of a new fire station in the southern area of the City when the southern area of the City reaches 90 percent buildout. The project would be subject to development impact fees pursuant to City Council-adopted amendments and the Capital

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

Facilities Fee Program to pay for acquisition and construction of a new fire station in the southern area of the City. The impact would be less than significant.

Police protection: The AASP and LUCE EIRs determined that implementation and buildout of the AASP would not result in any significant impacts related to any of the above-listed services due to the ability to offset service needs through the City's Development Impact Fee program established via the City's General Plan and/or infrastructure requirements of project proponents as projects occur. Since the proposed development is consistent with anticipated development in the Land Use Element as a Special Focus Area, development would not result in any adverse impacts to these services. The project would not result in substantial adverse physical impacts associated with the provision of, or need for new or physically altered, government facilities, the construction of which, might have the potential to cause significant environmental impacts. The project would be subject to City-established Development Impact Fees that are charged in conjunction with approval of development projects to offset costs associated with increases in demand of public services. Thus, the impact would be less than significant.

Schools: The State has the authority to collect fees at the time of building permits to offset the costs to finance school site acquisition and school construction, and said fees, when collected by local school districts, are deemed by State law to provide adequate mitigation for school facility requirements. Section 65955 of the Government Code prohibits the City from denying a subdivision or collecting any fees beyond those required by the school district to mitigate effects associated with inadequate school facilities. Any increases in demand on school facilities caused by the project are considered to be mitigated by the District's collection of adopted fees at the time of building permit issuance for each residence and commercial building. This impact would be less than significant.

Parks: The AASP and LUCE EIRs determined that implementation and buildout of the AASP would not result in any significant impacts related to any of the above-listed services due to the ability to offset service needs through the City's Development Impact Fee program established via the City's General Plan and/or infrastructure requirements of project proponents as projects are developed. Since the proposed development is consistent with anticipated development in the Land Use Element as a Special Focus area, development would not result in any adverse impacts to these services. The project would not result in substantial adverse physical impacts associated with the provision of, or need for new or physically altered, government facilities, the construction of which, might have the potential to cause significant environmental impacts. The project would be subject to City-established Development Impact Fees that would be collected in conjunction with approval of development projects to offset costs associated with increases in demand of public services. Thus, the impact is less than significant.

Other public facilities: The project would result in a marginal increase in use of other City public facilities, such as roadways and public libraries. The project would be subject to transportation development impact fees, which would offset the project's contribution to increased use of City roadways. Through participation in this fee program, potential project impacts on schools would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

16. RECREATION

a) Would the project increase the use of existing neighborhor regional parks or other recreational facilities such substantial physical deterioration of the facility would on be accelerated?	that 35			\boxtimes		
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Issues, Discussion and Supporting Information Sources			Less Than Significant		
Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	with Mitigation	Less Than Significant	
1400-2010, 51 LC-1402-2010, LID-1404-2010	Sources	Impact	Incorporated	8	No Impact

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes	
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Evaluation

There are 26 parks in the City of San Luis Obispo, including eight community parks, ten neighborhood parks, and eight mini parks. Collectively, these parks include approximately 152 acres of parkland, of which 34 acres are neighborhood parks. In addition to parks, the City owns or manages approximately 7,000 acres of open space within and adjacent to San Luis Obispo. This open space provides recreational opportunities such as fishing, hiking, and biking trails. Existing recreational facilities near the project site include the Damon-Garcia Sports Complex directly north of the project site, and E.A. French Park approximately a half mile east of the site. Damon-Garcia Sports Complex is a Community Park open space area available by reservation containing soccer fields, picnic area, and a large open space. E.A. French Park is a neighborhood park with amenities/activities such as an outdoor barbeque area, basketball court, picnic tables, tennis courts, playgrounds, and open space.

- a) The project includes an assisted living facility which is considered a commercial land use. Accordingly, the project would not be subject to payment of parkland in-lieu fees as required in 16.22.050 through 16.22.100 of the City Municipal Code which are intended to offset potential demand that would arise through new residential development. Therefore, the project is not anticipated to result in increased use of recreational facilities such that there would be substantial physical deterioration or acceleration of recreational facilities. The impact would be less than significant.
- b) The project includes an assisted living facility which is considered a commercial land use. Accordingly, the project is not subject to payment of parkland in-lieu fees as required in 16.22.050 through 16.22.100 of the City Municipal Code which are intended to offset potential demand that would arise through new residential development. The project does not include recreational facilities which could have a physical effect on the environment. The impact would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

17. TRANSPORTATION

Wo	ould the project:				
a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	2, 9, 10, 22, 35, 36, 41	\boxtimes		
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			\boxtimes	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	2, 9, 22, 32		\boxtimes	
d)	Result in inadequate emergency access?	4, 9		\boxtimes	

Issues, Discussion and Supporting Information Sources		
Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		F
1486-2018, SPEC-1482-2018, EID-1484-2018	Sources	S

Evaluation

The City's Circulation Element identifies current traffic levels and delays of public roadways and identifies transportation goals and policies to guide development and express the community's preferences for current and future conditions. Goals included in the plan include, but are not limited to, maintaining accessibility and protecting the environment throughout San Luis Obispo while reducing dependence on single-occupant use of motor vehicles, reducing use of cars by supporting and promoting alternatives such as walking, riding buses and bicycles, and using car pools, promotion of the safe operation of all modes of transportation, and widening and extending streets only when there is a demonstrated need and when the projects would cause no significant, long-term environmental problems.

Level of Service (LOS) is a term used to describe the operating conditions of an intersection or roadway based on factors such as speed, travel time, queuing time, and safety. LOS designations range between A and F, with A representing the best operating conditions and F representing the worst. The circulation element establishes the minimum acceptable LOS standard for vehicles in the downtown area of the city as LOS E and states any degradation of the level of service below this standard shall be determined significant under CEQA.

The City's 2013 Bicycle Transportation Plan outlines the City's official policies for the design and development of bikeways within the city and in adjoining territory under County jurisdiction but within the city's Urban Reserve and includes specific objectives for reducing vehicle use and promoting other modes. This plan identifies existing Class II bike path(s) within the vicinity of project site along Marsh Street. Class II Bikeways are located along major streets and provide direct access to important destinations.

In 2013, Senate Bill 743 was signed into law with the intent to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions" and required the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. As a result, in December 2018, the California Natural Resources Agency certified and adopted updates to the State CEQA Guidelines. The revisions included new requirements related to the implementation of Senate Bill 743 and identified vehicle miles traveled (VMT) per capita, VMT per employee, and net VMT as new metrics for transportation analysis under CEQA (as detailed in Section 15064.3 [b]). Beginning July 1, 2020, the newly adopted VMT criteria for determining significance of transportation impacts must be implemented statewide.

The Mitigation Fee Act (Assembly Bill [AB] 1600) is contained in California Government Code Section 66000 et. seq. establishes constitutional limits and ground rules for the imposition and administration of impact fee programs. AB 1600 became law in January 1988 and requires that local governments document the purposes of a fee, the use of fee revenues, and establish a relationship between the use, need, and amount of the fee and the type of development paying the fee. In 2018 the City adopted a comprehensive development impact fee program, including updated transportation and parks fees and new public safety fees. The Citywide fee program was a key implementation action of the 2014 LUCE update and General Plan Policy 1.13.9 which requires that new development pay its proportionate share of infrastructure cost. Projects included in the transportation impact fee (TIF) program are implemented as needed either as City-initiated capital improvement projects or by private entities as a mitigation requirement or as conditions of approval for private development projects. The timing of implementation depends on when the deficiencies that the improvements address are projected to occur.

The project site would be accessed by Tank Farm Road and Broad Street. Broad Street is a north-south, two-way road. North of its intersection with South Street and Santa Barbara Avenue, it is a 2-lane residential arterial street with a speed limit of 35 mph. This section of road functions as a main connection between residential areas and the downtown core. South of the Broad/South/Santa Barbara intersection, Broad Street is a 4-lane highway/regional route with a speed limit ranging from 40 mph at the north end of the segment to 45 mph at the southern end. This segment serves as a main route to and from the southern industrial and commercial centers to the downtown core and other regions. South of Rockview Place, Broad Street has a paved sidewalk only on the east side of the street. Tank Farm Road an east-west, 2- lane arterial road with a speed limit of 45 mph in the study area. Tank Farm Road serves a major connection from South Higuera Street to Broad Street, connecting residential with commercial and industrial areas. West of Broad Street, Tank Farm Road has no sidewalks on the north side of the road, and between Santa Fe Road and Old Windmill Lane has no sidewalks on either side.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1480-2018, SPEC-1482-2018, EID-1484-2018		Significant	Miligation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

SLO Transit operates transit service in the City of San Luis Obispo and San Luis Obispo Regional Transit Authority (SLORTA) operates transit service throughout San Luis Obispo County and adjacent areas. SLO Transit Routes 1A and AB provide fixed-route service to the study area. RTA offers Dial-A-Ride curb to curb services within the city limits. The nearest bus stops for SLO Transit are located on Tank Farm 400 feet south of Broad Street in front of the Mindbody campus, and on the east side of Broad Street in front of the Marigold Center; all bus stops along Broad Street north of Tank Farm are located on the east side of Broad Street. The Downtown Transit Center, located approximately 2.7 miles from the project site near the intersection of Palm Street and Osos Street, is served by most SLO Transit and SLORTA routes.

The applicant submitted a Multimodal Transportation Impact Study prepared by Central Coast Transportation Consulting, July 2020 (Attachment 9). This study evaluates the potential transportation impacts of the mixed-use project. Nine intersections were evaluated during the weekday morning peak hour (7-9 AM) and weekday evening peak hour (4-6 PM) time periods under Existing and Cumulative conditions with and without the project.

Thresholds of Significance

Significant impacts to transportation facilities are identified under the following circumstances:

For Unsignalized intersections, if Project traffic causes an intersection operating at LOS A, B, C, or D to degrade to unacceptable traffic conditions of LOS E or F; and the volume-demand-to-capacity ratio (V/C), which compares roadway demand (vehicle volumes) with roadway supply (roadway capacity), is increased by 0.01 or more and signal warrants are met; or the project buildout causes or exacerbates 95th percentile turning movement queues exceeding available turn pocket capacity. For Signalized Intersections if project traffic causes an intersection operating at an acceptable LOS D or better to degrade to unacceptable traffic conditions, and the V/C ratio is increased by 0.01 or more; or the project buildout causes or exacerbates 95th percentile turning movement queues exceeding available turn pocket capacity.

For segments, if project traffic causes segment operation level of service degradation as follows:

- For bicycles, a segment operating at LOS A, B, C, or D to degrade to LOS E or F.
- For pedestrians, a segment operating at LOS A, B, or C to degrade to LOS D, E, or F.
- For vehicles, segments operating at LOS A, B, C, or D to degrade to LOS E or F and an increase of the V/C ratio by .01 or more.
- For transit service, a segment operating at LOS A, B, C, or D to degrade to LOS E or F; or a segment with a baseline LOS E or F to degrade in a contextually significant way.

To facilitate potential future CEQA streamlining when a development project application is submitted for the eastern portion of the project site, this section also analyzes the potential transportation impacts of the conceptual plan for the commercial center, which includes a 45,000 square-foot medical office and 15,000 square-feet of retail/restaurant uses.

a) The proposed project, as well as all other development that occurs in the future pursuant to the AASP and the City's General Plan, would increase traffic in the area. The Circulation Element of the City's General Plan identifies the essential primary road system that would be needed to accommodate development within the Plan Area and surrounding growth areas of the city. The LUCE Update EIR determined that the roadway plans of these planning documents are for the most part self-mitigating in that 1) roadway alignments, road extensions, and new intersections are designed and will be built in response to traffic projected at build-out and, 2) development projects in the AASP areas will also contribute their fair share either through adopted city-wide Traffic Impact Fees, improvements to the transportation network, assessments or dedications to specified roadway improvements, or a combination of one or more of these measures. The proposed project would be consistent with these requirements, as mitigated, and would be required to participate in its fair share of both on-site roadway improvements and fee payments for city-wide traffic improvement projects in order to address project-specific and cumulative traffic impacts.

Site Access and On-Site Circulation

On-site circulation deficiencies would occur if project designs fail to meet appropriate standards, fail to provide adequate truck access, or would result in hazardous conditions.

The Westmont Living facility and office/retail sites share access to Broad Street (via Industrial Way) and Tank Farm Road (via Mindbody traffic signal). New limited access driveways are proposed on Broad Street (right-in/right-out/left-in only) and Tank Farm Road (right-in/right-out only). The existing SESLOC driveway on Broad Street would be removed and would share access with the new project driveway on Broad Street.

The project is expected to generate 1,416 daily trips, 98 AM peak hour trips, and 165 PM peak hour trips.

<u>Existing + Project Intersection Operations:</u> this scenario adds project-generated traffic to existing conditions volumes. Note that this scenario includes both the proposed project and the 650 Tank Farm project (mobile home park redevelopment), thereby slightly overstating project trips and associated impacts.

The following intersections operate below the LOS D threshold for vehicles:

- Tank Farm Road/Long Street: the side street approaches to this intersection operate unacceptably both with and without the project during the PM peak hour. A traffic signal is in final design for this location and is required as a condition of approval for a nearby project. Installation of a traffic signal would result in acceptable operations; however, project traffic would contribute to degradation of the intersection until the signal is installed.
- Tank Farm Road/Mindbody Traffic Signal: with the addition of the project, this intersection would operate unacceptably during the PM peak hour. Project traffic would increase critical queues by at least one vehicle length. Providing a second westbound through lane on Tank Farm Road consistent with the cross section in the Airport Area Specific Plan would result in acceptable operations.
- Broad Street/Tank Farm Road Traffic Signal: The existing queue length for the eastbound left turn is near its capacity and the addition of project traffic would increase the eastbound left-turn queue by one to two vehicles. Most of the traffic added to this movement would come from the 650 Tank Farm parcel going north on Broad Street. A vehicular connection between the 650 Tank Farm parcel and the project site would allow 650 Tank Farm to use the traffic signal at Industrial Way, thereby avoiding the impacted intersection, reducing the eastbound left-turn queue, and improving site circulation. Alternatively, the eastbound left-turn queue at Broad Street/Tank Farm Road could be reduced to acceptable levels by providing a second southbound left turn lane. This could require a slight widening of the southbound approach of Broad Street.

No other new deficiencies were noted with the addition of project traffic to existing conditions.

Segment Operations

- Auto: The westbound segment of Tank Farm Road from Santa Fe Road to Broad Street operates at LOS F during the PM peak hour because its volume to capacity ratio is greater than one, resulting in an automatic LOS F. The addition of project traffic would not change the auto LOS score. No other new deficiencies would occur with the addition of project traffic.
- Pedestrian: The northbound segment of Broad Street from Orcutt Road to Industrial Way operates at LOS D during the PM peak hour both with and without the project due to the high vehicular volumes and percentage of vehicles turning at the downstream intersection. The addition of project traffic would increase the LOS score by less than two percent and increase vehicular volumes by less than five percent. This would be an insignificant change that would not substantively worsen pedestrian conditions.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

- Bicycle: No new bicycle deficiencies would occur.
- Transit: Multiple study segments operate below the desired transit service level due to relatively infrequent service or the lack of bus stops on a specific segment. The addition of project traffic would not overburden or otherwise impact the transit network.

Cumulative + Project: this scenario represents future traffic conditions reflective of the buildout of land uses in the area, including the proposed project.

The following intersections would operate below the LOS D threshold for vehicles:

- Tank Farm/South Higuera Street would operate at LOS F during the AM peak hour and at LOS E during the PM peak hour. Queues would exceed storage length during at least one peak hour on the westbound right, northbound right, and southbound left turning movements. Installing a second southbound left turn lane would improve operations to LOS D for the movement and LOS C for the approach and address this impact. This project is included in the City-wide impact fee program.
- Tank Farm Road/Santa Fe Road would operate at LOS F on the northbound approach. The northbound right turn queue length would exceed storage length during the AM and PM peak hours. Installation of a multi-lane roundabout is identified in the General Plan Circulation Element and the Airport Area Specific Plan and would provide acceptable intersection operations. This project is included in the City-wide impact fee program.
- Broad Street/Capitolio Way would operate at LOS F during the PM peak hour. The westbound approach would have a large delay due to the side street stop-controlled intersection and the high volume of traffic along Broad Street. The planned future intersection of Prado Road/Broad Street would be signalized, making signalization of the nearby Broad Street/Capitolio Way intersection undesirable. Capitolio Way is connected to both Orcutt Road and Industrial Way by Sacramento Drive, thereby providing an alternative access point for drivers seeking signalized access to Broad Street. No changes are recommended.
- Broad Street/Industrial Way would operate at LOS F during the PM peak hour due to the presence of long pedestrian crossing times across the north and south approaches. Without pedestrian actuation, the intersection would operate acceptably at LOS D. The southbound left turn queue would exceed storage length during the PM peak hour. Converting the east and west approaches from split phasing to permissive phasing and restriping both approaches to provide dedicated left turn lanes and shared through/right turn lanes would result in LOS C operations. This project is not included in the Citywide impact fee program, therefore the project shall make a fair share contribution to these improvements.
- Broad Street/Tank Farm Road would operate at LOS F during the AM and PM peak hours due to high volumes from all approaches of the intersection. During at least one peak hour, queue would exceed storage on the eastbound left, eastbound right, northbound left, and southbound right movements. Adding a second southbound left turn lane (addressed in Existing + project impacts and mitigation), adding a dedicated northbound right turn lane, and converting the westbound right turn lane to a shared through/right lane would improve conditions. However, while some queue lengths would be decreased, others would be increased. The City's Circulation Element EIR recommends establishing time-of-day timing plans at this intersection. These projects are included in the City-wide impact fee program.

The following intersections would operate below the LOS C threshold for pedestrians:

• Tank Farm Road/Santa Fe Road would operate at LOS F during the AM and PM peak hours due to the presence of side street stop- controlled intersections and high volumes and speeds along Tank Farm Road.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1400 2010, SI LC 1402 2010, LID 1404 2010	Sources	Impact	Incorporated	Impact	No Impact

Installation of a multi-lane roundabout is identified in the General Plan Circulation Element and the Airport Area Specific Plan. This project is included in the City-wide impact fee program.

- Broad Street/Capitolio Way would operate at LOS F during the AM and PM peak hours due to the presence of side street stop- controlled intersections and high volumes and speeds along Broad Street. Pedestrians seeking to cross Broad Street would use one of the nearby signalized intersections with dedicated pedestrian phases.
- Broad Street/Aero Vista Lane would operate at LOS F during the AM and PM peak hours due to the presence of side street stop- controlled intersections and high volumes and speeds along Broad Street. Pedestrians seeking to cross Broad Street would use one of the nearby signalized intersections with dedicated pedestrian phases.

The following intersection would operate below the LOS D threshold for bicycles:

• Tank Farm Road/South Higuera Street would operate at LOS E in the westbound direction during the PM peak hour. The addition of project traffic to would not degrade level of service in a contextually significant way. Therefore, this is an insignificant impact.

Segment Operations

- Auto: The following segments would have a V/C ratio that is greater than one, resulting in an automatic LOS F, even though the LOS scores are acceptable. The addition of project traffic would not change the auto LOS, and the nearby intersections would constrain flow before the segments did, so the project would have an insignificant effect on these segments.
 - o Southbound Broad Street from Orcutt Road to Industrial Way AM and PM
 - Northbound Broad Street from Orcutt Road to Industrial Way PM
 - Southbound Broad Street from Industrial Way to Tank Farm Road AM and PM
 - $\circ \quad \text{Northbound Broad Street from Industrial Way to Tank Farm Road-PM}$
 - Northbound Broad Street from Aero Vista Lane to Tank Farm Road AM and PM
 - Southbound Broad Street from Aero Vista Lane to Aero Drive AM and PM
 - \circ Northbound Broad Street from South City Limits to Aero Drive AM and PM
 - Westbound Tank Farm from Santa Fe to Broad PM

In addition to analysis above, generalized LOS thresholds were also applied to calculate Auto LOS on the segment of Tank Farm Road between Santa Fe Road and Old Windmill Lane to be consistent with the methods applied in the 2014 Circulation Element Update. Peak hour volumes between 2,406 and 3,224 vehicles correspond to LOS E operations.

Under Cumulative conditions the PM peak hour volume along the study segment would be 2,418 vehicles which corresponds to LOS E. The proposed project would add 15 vehicles, for a total of 2,433 vehicles under Cumulative Plus Project conditions, also LOS E. The proposed project's proportional share is 0.62 percent (15/2,433=.0062). The project shall make a fair share contribution of 0.62 percent of the cost of widening Tank Farm Road to four lanes between Santa Fe Road and Old Windmill Lane.

• Pedestrian: Multiple segments do not have a pedestrian LOS reported due to the absence of pedestrian facilities, or the presence of discontinuous pedestrian facilities. Several segments would operate unacceptably at LOS D due to high vehicular volumes and speeds. No mitigations are recommended for the segments with deficient pedestrian LOS scores. On each of these segments, the addition of project traffic would increase the pedestrian LOS score by less than two percent and would increase vehicular volumes by less than three percent. The addition of project traffic to would not degrade level of service in a contextually significant way. Therefore, this is an insignificant impact.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

- Bicycle: No bicycle deficiencies would occur.
- Transit: Several segments operate below the transit LOS threshold due to infrequent service to the study segments. Given the relatively low boardings on stops in the area, the addition of project traffic to would not degrade level of service in a contextually significant way. Therefore, this is an insignificant impact.

In summary, the proposed project would add vehicular trips to streets that serve as entry/exit routes to the project site. These streets with the given improvements specified in the City's adopted planning documents would serve to accommodate the added vehicular traffic.

As is reflected in the above discussion, with incorporation of mitigation measures noted below, which include payment of fair share development impact fees and improvements to Tank Farm Road, impacts will be less than significant with mitigation.

b) On June 16, 2020, San Luis Obispo City Council formally adopted the transition from level of service (LOS) to vehicle miles traveled (VMT) as the primary metric for analysis of transportation impacts under CEQA. In turn, the City established specific VMT impact thresholds and published an update to the City's Transportation Impact Study Guidelines (TISG), which documents performance thresholds and analysis methods consistent with current State guidance. While VMT analysis was prepared for this development project, it should be noted that the findings of this VMT analysis are presented for reference purposes only, as the CEQA review for this project was initiated prior to the City's adoption of VMT thresholds.

The project is located in an area of the City where residential VMT per capita is below the City's impact threshold of 14.25 per the TISG screening map. In addition, assisted living facilities generate fewer vehicle trips per resident when compared to typical residential uses. Relatively few residents drive cars (the applicant estimates 25%) and dining and social activities are provided on site, reducing the need for off-site travel. The assisted living component of the project will have a less-than-significant impact to VMT. The 15,000 s.f. of retail uses will be split among three buildings. The TISG note that local-serving retail development projects with less than 50,000 s.f. of gross floor area can be assumed to cause a less-than significant impact to VMT. Accordingly, this project component will have a less-than-significant impact to VMT. The project is a relatively unique use without specified standards or thresholds. It would serve local patients who currently travel out of San Luis Obispo County to receive treatment and would therefore shorten their trips. (CCTC 2020)

The project would help reduce VMT by providing an office building, residential uses, and retail/restaurant uses in a location close to a regional shopping center and a mix of uses. Therefore, the project would reduce VMT by improving the jobs/housing balance in the southern portion of the city of San Luis Obispo. Further, through compliance with City Zoning Regulations requiring provision of secure bicycle storage, showers, and locker and changing room facilities to encourage project employees to use alternative modes of transportation, as well as being within immediate proximity of the Class II bicycle lane on Broad Street, the project would promote alternate modes of travel that would reduce VMT. Therefore, the project would be consistent with the standards set forth in CEQA Guidelines Section 15064.3 subdivision (b) and impacts would be less than significant.

- c) The Westmont Living facility has been referred to the County of San Luis Obispo Airport Land Use Commission and was found to be consistent with the Airport Land Use Plan. The Airport Area Specific Plan requires that the project provide roadways that are designed and developed in accordance with adopted City standards, thereby assuring predetermined standards necessary to limit safety hazards and provide adequate emergency access. Therefore, impacts would be less than significant.
- d) The Westmont Living facility has been referred to the County of San Luis Obispo Airport Land Use Commission and was found to be consistent with the Airport Land Use Plan. The Airport Area Specific Plan requires that the project provide roadways that are designed and developed in accordance with adopted City standards, thereby

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

assuring predetermined standards necessary to limit safety hazards and provide adequate emergency access. Impacts would be less than significant.

Mitigation Measures

- **TR-1** Tank Farm Road from Broad through Project Site to Mindbody intersection. The applicant shall widen Tank Farm Road along the project frontage to provide two westbound motor vehicle through lanes, bike lanes, landscaped parkway and sidewalk. The ultimate street cross section shall be in substantial conformance with the typical cross section identified for the parkway arterial designation in the Airport Area Specific Plan, with final geometric design elements to be approved to the satisfaction of the Public Works Director.
- **TR-2** Internal intersection with SESLOC property. The applicant shall install a single-lane roundabout at the internal site intersection of the Mindbody Road extension adjacent to SESLOC on the north property line to encourage smooth traffic flow between the sites. The City Transportation Department Division may approve an alternative intersection control type, such as all-way stop control, if a roundabout is found to be geometrically infeasible at this location.
- **TR-3** Existing SESLOC driveway. The applicant shall remove the existing right-in/right-out driveway on Broad Street upon completion of the new Broad Street driveway constructed as part of this project. The applicant shall ensure adequate access is maintained to the SESLOC property during project construction.
- **TR-4** Tank Farm Road from Old Windmill Lane to Santa Fe Road. The project shall make a fair share contribution of the cost of widening Tank Farm Road to four lanes between Santa Fe Road and Old Windmill Lane.
- **TR-5** Broad Street/Industrial Way. The project shall make fair share project contributions to convert the east and west approaches from split phasing to permissive phasing and restriping both approaches to provide dedicated left turn lanes and shared through/right turn lanes.
- **TR-6** Fair Share Contributions. The project applicant shall pay Citywide Traffic Impact Fees to satisfy fair share mitigation obligations towards the following future transportation improvements:
 - Tank Farm Road/Higuera Street: Installation of a second southbound left turn lane.
 - Tank Farm Road/Santa Fe Road: Installation of a multi-lane roundabout.
 - Broad Street/Tank Farm Road: Installation of a dedicated northbound right turn lane, addition of a second southbound left turn lane, conversion of the westbound right turn lane to a shared through/right lane and establish time-of-day timing plans.

Conclusion

Less than significant impact with mitigation incorporated.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1100 2010, SI EC 1102 2010, EID 1101 2010	Sources	Impact	Incorporated	Impact	No Impact

18. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	12, 23		\boxtimes
b)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	24, 26, 36	\boxtimes	

Evaluation

Central Coast Archaeological Research Consultants (CCARC) conducted site visits, a records research, and outreach to local tribal groups, as documented in their April 2018 Report. The results of their archival research, initial consultation with the Chumash community, and an intensive archaeological survey of the Northwest Corner of Broad and Tank Farm Road Archaeological Survey, identified no cultural resources. As a result, no further archaeological work was recommended within the acreage investigated during this study. In the unlikely event that buried cultural materials are encountered during construction, all ground disturbances will cease until a qualified archaeologist is contacted to evaluate the nature, integrity, and significance of the deposit.

On August 13, 2018, local Native American tribal groups were formally noticed that an Initial Study was being completed for the proposed project and invited to provide consultation on the proposed project. Notices regarding local tribal consultation outreach per AB 52 have been provided to tribes that have requested to be on the City's AB 52 consultation list. To date, one reply has been made from a tribal representative requesting further clarification on the surface surveys conducted by the applicant's archaeology consultants. No concerns were noted regarding cultural resources concerns within the project area. No additional comments have been received as of this date. Due to the amount of prior surface improvements and subsequent demolition and rebuilding that has occurred on the project site since 1937, no surface indicators are anticipated at the site.

- a) The project site does not contain any structures that are listed or eligible for listing in the California Register of Historical Resources or local register as defined in Public Resources Section 5020.1(k); therefore, no impacts to listed or eligible historical resources would occur as a result of the proposed project.
- b) The project site does not contain any known resources considered significant by any California Native American tribe. As discussed in Section 5: Cultural Resources, Mitigation Measure CR-1 and CR-2 requires that construction activities halt, the City Community Development Department be notified, and that appropriately mitigation be applied in the event that any materials are encountered. In the event that human remains are unearthed and determined to be Native American, the Most Likely Descendant would be notified. Therefore, with incorporation of the proposed mitigation the project would have a less than significant impact.

Mitigation Measures

None necessary.

Conclusion

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

Less than significant with mitigation.

19. UTILITIES AND SERVICE SYSTEMS

Wo	Would the project:							
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	7, 9, 16, 27, 33, 34, 37			\boxtimes			
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	7, 9, 16, 37			\boxtimes			
c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	5, 7, 9, 16, 30, 31			\boxtimes			
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	5, 8, 9			\boxtimes			
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	5, 8, 9			\boxtimes			

Evaluation

Water: As discussed in the City's LUCE Update EIR, the City of San Luis Obispo Utilities Department provides potable and recycled water to the community and is responsible for water supply, treatment, distribution, and resource planning. The City is the sole water provider within the city limits and most of the City's water is supplied from multiple surface water sources. However, the City also uses groundwater to supplement surface water supplies and recycled water is used to supplement irrigation demand. With the update of the City's General Plan Water and Wastewater Element in 2018, the City obtains water from five sources:

- Salinas Reservoir (Santa Margarita Lake) and Whale Rock Reservoir: Combined Safe Annual Yield 4,910 AF/year
- Nacimiento Reservoir: 5,482 AF/year dependable yield/ contractual limit
- Recycled water from the City's Water Resource Recovery Facility (WRRF): 238 AF/year

Wastewater: The wastewater system for the city includes facilities for wastewater collection and treatment. The City's collection system serves residential, commercial, and industrial customers. Sewer service is provided only to properties within the city limits, with the exception of a few properties located just outside of the city limits, Cal Poly San Luis Obispo, and the County of San Luis Obispo Airport. There are approximately 14,000 service connections.

The City's Water Resource Recovery Facility (WRRF) processes wastewater in accordance with the standards set by the State's RWQCB. The WRRF removes solids, reduces the amount of nutrients, and eliminates bacteria in the treated wastewater, which is then discharged to San Luis Obispo Creek. The WRRF has a current operational capacity of 5.1 million gallons per day (MGD) and is undergoing design for an average dry weather flow capacity of 5.4 million gallons per day (MGD) and a peak wet weather flow capacity of 19 MGD upon completion of this upgrade. In 2017, annual average flows to the WRRF were approximately 3.30 MGD.

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	0	No Impact

Solid Waste: The City's Utilities Department is responsible for administering an exclusive franchise agreement with San Luis Garbage Company to collect and dispose solid waste generated by residential, commercial, and industrial customers in San Luis Obispo. This agreement also includes curbside recycling, and green waste service. There are three solid waste disposal facilities within San Luis Obispo County. Most solid waste collected in the city is disposed of at the Cold Canyon Landfill. Cold Canyon Landfill is currently (2016) permitted to receive up to 1,650 tons of solid waste per day, with an estimated remaining capacity of 14,500,000 cubic yards (60.1 percent remaining capacity). In 2015, the Cold Canyon Landfill operator estimated the landfill is expected to reach capacity in 2040.

- a) The proposed project would result in an incremental increase in demand on City infrastructure, including water, wastewater and storm water facilities. Annual water demand is estimated at 24.45-acre feet/year based on the Westmont Living facility and the conceptual commercial center. Daily wastewater generation is estimated to be 21,820 gallons per day. Development of the site is required to be served by City sewer and domestic and recycled water service, which have adequate capacity to serve the proposed project. Existing storm water facilities are present in the vicinity of the project site, and it is not anticipated the proposed project would result in the need for new facilities or expansion of existing facilities which could have significant environmental effects. This project has been reviewed by the City's Utilities Department and no resource or infrastructure deficiencies have been identified; therefore, impacts would be less than significant.
- b) The proposed project would result in an incremental increase in demand on water supplies, as anticipated under the recent General Plan Update. As analyzed in the LUCE Update EIR, the City has sufficient water supplies for build-out of the City's General Plan. The incremental change created by the proposed project would be less than significant. This project has been reviewed by the City's Utilities Department and no resource or infrastructure deficiencies have been identified; therefore, impacts would be less than significant.
- c) The developer would be required to construct private sewer facilities to convey wastewater to the nearest public sewer on Tank Farm Road. The on-site sewer facilities would be required to be constructed according to the standards in the Uniform Plumbing Code and City standards. Impact fees would be collected at the time building permits are issued to pay for wastewater collection infrastructure and capacity at the City's Water Resource Recovery Facility (WRRF). The fees would be set at a level intended to offset the potential impacts of the project. This project has been reviewed by the City's Utilities Department and no resource or infrastructure deficiencies have been identified; therefore, impacts would be less than significant.
- d) Based on the California Department of Resources Recycling and Recovery (CalRecycle), the Westmont Living facility and conceptual commercial center would result in the generation of approximately 4,315.5 pounds of solid waste per day (see Table 11 below).

Use	Generation Rate	Project	Pounds Solid Waste Per Day
Commercial R–tail - Restaurant	0.005 lb//sf/day	15,000 sf	3,780
Professional Office	0.084 lb/sf/day	45,000 sf	270
Nursing Home	5.00 lb/person/day	50 units	265.5
	·	Total	4,315.5

Table 11. Estimated	Project Solid	Waste Gene	eration
I abic III Estimated	I I Ujece Sona	maste Gene	/I actor

Project demolition and other construction solid waste materials would likely be disposed of at the Cold Canyon Landfill. The Cold Canyon Landfill has approximately 14,500,000 cubic yards of remaining capacity as of January

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
	Sources	Impact	Incorporated	Impact	No Impact

of 2015 and is expected to reach capacity in 2040. San Luis Garbage Company would serve the proposed development and has approved the project's garbage and recycling plan. Therefore, potential impacts would be *less than significant*.

e) The Integrated Waste Management Act of 1989 (AB 939) requires each city and county in California to reduce the flow of materials to landfills by 50% (from 1989 levels) by 2000. The proposed project is required to reduce the waste stream generated by development consistent with the City's Conservation and Open Space Element policies to coordinate waste reduction and recycling efforts (COSE 5.5.3), and Development Standards for Solid Waste Services (available at http://www.slocity.org/home/showdocument?id=4384). A solid waste reduction plan for recycling discarded construction materials is a submittal requirement with the building permit application. The incremental additional waste stream generated by this project is not anticipated to create significant impacts to solid waste disposal. This impact would be considered less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant impact.

20. WILDFIRE

If l	If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:						
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	56			\boxtimes		
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	10, 14			\boxtimes		
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	n/a			\boxtimes		
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	4, 5, 9, 17			\boxtimes		

Evaluation

The project site is located in an urban area within the city of San Luis Obispo. Urban fire hazards result from the materials, size, and spacing of buildings, and from the materials, equipment, and activities they contain. Additional factors are access, available water volume and pressure, and response time for fire fighters. Based on the City's Local Hazard Mitigation Plan, the risk of wildland fires is greatest near the City limits where development meets rural areas of combustible vegetation. Most of the community is within one mile of a designated High or Very High Fire Hazard Severity Zone, which indicates significant risk to wildland fire.

The City Safety Element identifies four policies to address the potential hazards associated with wildfire, included approving development only when adequate fire suppression services and facilities are available, classification of Wildland fire hazard

Issues, Discussion and Supporting Information Sources Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH- 1486-2018, SPEC-1482-2018, EID-1484-2018		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	
1400 2010, SI LC 1402 2010, LID 1404 2010	Sources	Impact	Incorporated	Impact	No Impact

severity zones as prescribed by CAL FIRE, prohibition of new subdivisions located within "Very High" wildland fire hazard severity zones, and continuation of enhancement of fire safety and construction codes for buildings.

- a) Implementation of the proposed project would not result in a significant temporary or permanent impact on any adopted emergency response plans or emergency evacuation plans. No breaks in utility service would occur as a result of project implementation. Therefore, potential impacts would be less than significant.
- b) The project is located within a developed site in an urban area in the City of San Luis Obispo. The project would not substantially change the existing topography of the project site. Based on the City's Municipal Code, the project site is located within the Commercial Fire Zone and is, therefore, required to construct all interior walls, floors, ceilings, and partitions with 5/8 "Type X" gypsum wallboard or install an automatic fire sprinkler system throughout the building to increase the structure's overall fire resistance. A Fire Sprinkler Pre-Design Evaluation was conducted for the project by Alpha Fire Unlimited and provided recommended design components for the proposed automatic fire sprinkler system. The project would be required to meet all applicable standards for fire prevention within the California Building Code and California Fire Code. The project would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire; therefore, potential impacts would be less than significant.
- c) The project would include the installation of new water, emergency water, wastewater, stormwater, and natural gas infrastructure and connections to City infrastructure. These proposed infrastructure components would occur within existing developed land and would be required to be installed in full compliance with applicable CBC and California Fire Code regulations; therefore, potential impacts associated with exacerbation of fire risk from installation of new infrastructure would be less than significant.
- d) The project site is generally flat and would not be located near a hillslope or in an area subject to downstream flooding or landslides. The project does not include any design elements that would expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

Mitigation Measures

None necessary.

Conclusion

Less than significant.

21. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?					
Without mitigation, the project could have the potential to have adverse impacts on all of the issue areas identified herein. As					

Without mitigation, the project could have the potential to have adverse impacts on all of the issue areas identified herein. As discussed above, potential impacts to air quality, biological resources, cultural resources, noise, and transportation/traffic would be less than significant with incorporation of recommended mitigation measures.

Issues, Discussion and Supporting Information Sources			Less Than Significant		
Northwest Corner Mixed-Use (NKT): SBDV-1483-2018, ARCH-		Potentially	with	Less Than	
1486-2018, SPEC-1482-2018, EID-1484-2018		Significant	Mitigation	Significant	
	Sources	Impact	Incorporated	Impact	No Impact

cu m w ef	Does the project have impacts that are individually limited, but umulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the ffects of other current projects, and the effects of probable uture projects)?			\boxtimes		
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The impacts of the proposed project are individually limited and not considered "cumulatively considerable." The proposed project would be consistent with the Land Use Element, Zoning, and Special Focus Area designation for the site. Cumulative impacts of developing this site were analyzed as a part of the Land Use and Circulation Element (LUCE) EIR. Although incremental changes in certain issue areas can be expected as a result of the proposed project, all environmental impacts that could occur as a result of the proposed project would be reduced to a less-than-significant level through compliance with existing regulations and incorporation of required mitigation measures as discussed in this Initial Study.

substantial adverse effects on human beings, either directly or indirectly?		\boxtimes		
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Implementation of the proposed project would result in no environmental effects that would cause substantial direct or indirect adverse effects on human beings. All environmental impacts that could occur as a result of the proposed project would be reduced to a less-than-significant level through compliance with existing regulations and incorporation of required mitigation measures as discussed in this Initial Study.

22. EARLIER ANALYSES

Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063 (c) (3) (D). In this case a discussion should identify the following items:

a) Earlier analysis used. Identify earlier analyses and state where they are available for review.

Airport Area Specific Plan (2014), City of San Luis Obispo Land Use and Circulation Element (LUCE) Update EIR, available for review at the City Community Development Department (919 Palm Street, San Luis Obispo, CA 93401), or at the following web site:

http://www.slocity.org/government/department-directory/community-development/planning-zoning/general-plan

b) **Impacts adequately addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

Applicable excerpts, analysis and conclusions from the AASP and LUCE Update EIR have been added to each impact issue area discussion. Where project specific impacts and mitigation measures have been identified that are not addressed in these EIRs, original analysis has been provided and mitigation has been recommended to reduce impact levels as needed.

c) **Mitigation measures.** For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions of the project.

N/A

23. SOURCE REFERENCES

1.	City of San Luis Obispo General Plan Land Use Element, December 2014, and Final EIR, October 2014.
2.	City of San Luis Obispo General Plan Circulation Element, December 2014, and Final EIR, October 2014
3.	City of San Luis Obispo General Plan Noise Element, May 1996
4.	City of San Luis Obispo General Plan Safety Element, March 2012.
5.	City of San Luis Obispo General Plan Conservation & Open Space Element, 2006.
6.	City of SLO General Plan Housing Element, January 2015
7.	City of SLO General Plan Water and Wastewater Element, March 2018
8.	City of SLO Source Reduction and Recycling Element, on file in the Utilities Department
9.	City of SLO General Plan EIR 2014 for Update to the Land Use and Circulation Elements
10.	City of San Luis Obispo Municipal Code (which includes the City Zoning Regulations, Chapter 17)
11.	City of San Luis Obispo Community Design Guidelines, June 2010
12.	City of San Luis Obispo, Land Use Inventory Database
13.	City of SLO Climate Action Plan, August 2012
14.	2019 California Building Code
15.	City of SLO Waterways Management Plan
16.	Water Resources Status Report, July 2012, on file within the Utilities Department
17.	Beacon Geotechnical Engineering Analyses (for Commercial and Assisted Living) each dated February 9, 2018
18.	Staff Knowledge
19.	Website of the Farmland Mapping and Monitoring Program of the California Resources Agency:
	http://www.consrv.ca.gov/dlrp/FMMP/
20.	CEQA Air Quality Handbook, Air Pollution Control District, April 2012
21.	Clean Air Plan for San Luis Obispo County, Air Pollution Control District, 2001
22.	Institute of Transportation Engineers, Trip Generation Man ^{ua} l, 9th Edition, on file in the Community
	Development Department

22	
23.	City of San Luis Obispo, Historic Resource Preservation Guidelines, on file in the Community Development
24	Department
24.	City of San Luis Obispo, Archaeological Resource Preservation Guidelines, on file in the Community
25	Development Department
25.	City of San Luis Obispo, Historic Site Map
26.	City of San Luis Obispo Burial Sensitivity Map
27.	San Luis Obispo County Airport Land Use Plan
28.	Website of the California Environmental Protection Agency, Cortese List:
20	https://calepa.ca.gov/SiteCleanup/CorteseList/
29.	Project Plans
30.	2012 Sanitary Sewer Flow Monitoring and Inflow/Infiltration Study
31.	2016 Wastewater Collection System Infrastructure Renewal Strategy
32.	City of San Luis Obispo Zoning Regulations, March 2015
33.	City of SLO Climate Action Plan, August 2012
34.	Final Potable Water Distribution System Operations Master Plan, December 2015
35.	Airport Area Specific Plan Updated 2014
36.	Central Coast Archeological Research Consultants Report, April 2018
37.	2015 Urban Water Management Plan, June 14, 2016
38.	Oasis Creek Setback Exhibit L-1, 10-3-2017
39.	Sage Institute Biological and Wetland Resources Assessment, 3-16-2018
40.	45dB Acoustics Residential & Commercial Projects Acoustical Assessment, 10-31-2017
41.	Central Coast Transportation Consulting, Multimodal Transportation Impact Study, 2-2018
42.	CAP Compliance Checklist
43.	Airport Land Use Commission Findings and Conditions of Consistency Staff Report 9-19-2018
44.	Technical Noise Analysis Report, Rincon Consultants, June 2019
45.	SLOACPD. 2016. 2015 Annual Air Quality Report. September 2016. Available at:
	http://www.slocleanair.org/images/cms/upload/files/2015aqrt-FINAL.pdf
46.	SLOAPCD Naturally Occurring Asbestos Map
	https://www.google.com/maps/d/viewer?mid=1YAKjBzVkwi1bZ4rQ1p6b2OMyvIM≪=35.364986805363735%2
47	<u>C-120.52563349999997&z=9</u>
47.	San Luis Obispo Heritage Trees Map, 2019. Available at:
40	<http: apps="" s2.html?appid="74e2e5bf9e534eaabf95b0917da8bbc7" slocity.maps.arcgis.com="" solutions="">.</http:>
48.	California Department of Conservation Fault Activity Map of California, 2010. Available at:
40	">https://maps.conservation.ca.gov/cgs/fam/>
49. 50.	NRCS Web Soil Survey, 2019. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx .
50.	Geologic Map of the Pismo Quadrangle, San Luis Obispo County, California, 2004. Available at: < <u>https://ngmdb.usgs.gov/Prodesc/proddesc_78101.htm</u> >.
51.	Areas of Land Subsidence in California, USGS. Available at: https://ca.water.usgs.gov/land-subsidence/california-
51.	subsidence-areas.html>.
52.	Paleontological Resource Assessment for the California Flats Solar Project, Monterey and San Luis Obispo
52.	Counties, California, 2013. Available at: https://www.co.monterey.ca.us/home/showdocument?id=48222 >.
53.	City of San Luis Obispo Website Community Choice Energy. Available at:
55.	https://www.slocity.org/government/department-directory/city-administration/sustainability/community-choice-
	energy>.
54.	SWIS Facility Detail Cold Canyon Landfill, Inc., California Department of Resources Recycling and Recovery,
54.	Accessed Septem ^{be} r 16th, 2019. Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/40-AA-
	0004/Detail/>.
55.	Estimated Solid Waste Generation Rates, California Department of Resources, Recycling, and Recovery
	(CalRecycle), accessed November 2019. Available at:
	https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates
56.	Diablo Canyon Emergency Planning Zone Map, accessed November 2019. Available at:
	<pre></pre> //www.nrc.gov/docs/ML1203/ML120380327.pdf>.
Note: Al	documents listed above are available for review at the City of San Luis Obispo Community Development Department, 919 Palm

Note: All documents listed above are available for review at the City of San Luis Obispo Community Development Department, 919 Palm Street, San Luis Obispo, California (805) 781-7101.

Attachments

- 1. General Plan, Rezone, and Specific Plan exhibit and associated proposed text amendments
- 2. Project plans (Includes Assisted Living Center, Conceptual Commercial Center (future entitlements required), Public Improvement Plans, and Vesting Tentative Tract #3115)
- 3. Biological Wetland Resource Assessment, Sage Institute Inc., August 28, 2014, updated March 16, 2018
- 4. a) Rincon Consultants, Inc. Air Quality Technical Memorandum, February 26,19
- b) Updated CalEEMod Emissions Modeling, SWCA, July 29, 2020
- 5. ALUC consistency determination, September 19, 2018
- 6. Rincon Consultants, Technical Memorandum (GHG analysis), April 1, 2019
- 7. 45 db Acoustical Assessment, October 31, 2017
- 8. Rincon Consultants, Inc. Technical Noise Analysis Report, June 2019
- 9. Multi-Modal Transportation Impact Study, July 2020



Applicant Acceptance of Mitigation Measures Project: Northwest Corner Mixed-Use Commercial/Assisted Living Center including Vesting Tentative Tract Map 315 EID-1484-2018 (3985 Broad Street and 660 Tank Farm Road)

This agreement is entered into by and between the City of San Luis Obispo and **NKT Development, LLC and Westmont Development, LP** on the 6th day of August, 2020. The following measures are included in the project to mitigate potential adverse environmental impacts. Please sign the original and return it to the Community Development Department.

REQUIRED MITIGATION AND MONITORING PROGRAMS

Air Quality

AQ-1 Standard Control Measures for Construction Equipment

The following standard air quality mitigation measures shall be implemented during the site preparation and grading phases of construction at the project site:

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with CARBcertified motor vehicle diesel fuel nontaxed version suitable for use offroad);
- Comply with the State Off-Road Regulation;
- Use on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOX exempt area fleets) may be eligible by proving alternative compliance;
- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
- Diesel idling within 500 feet of sensitive receptors shall not be not permitted;7
- Staging and queuing areas shall not be located within 500 feet of sensitive receptors;6
- Equipment shall be electrified when feasible;

- Gasoline-powered equipment shall be substituted in place of dieselpowered equipment, where feasible; and
- Alternatively-fueled construction equipment shall be used on-site where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel.
- AQ-2 Best Available Control Technology. Diesel construction equipment used during the site preparation and grading phases shall be equipped with CARB Tier 3 or Tier 4 certified off-road engines and 2010 on-road compliant engines.

Monitoring Program: These measures shall be noted on project grading and building plans for review and approval by the City Community Development Department. Compliance shall be verified during construction by the City during regular inspections, in coordination with the County of San Luis Obispo Air Pollution Control District, as necessary.

AQ-3 The project would result in ROG and NOx operational emissions that exceed the SLOAPCD threshold of 25 lbs/day. Prior to issuance of construction permits, the applicant shall identify at least 8 mitigation measures from Table 3-5 of the SLOAPCD CEQA Air Quality Handbook to incorporate into the project. Prior to occupancy, final inspection, or establishment of the use, whichever occurs first, the project shall demonstrate that it has implements such measures. If the project obtains a GreenPoint rating or is LEED certified, the applicant shall only need to implement 6 mitigation measures from Table 3-5 of the SLOAPCD CEQA Air Quality Handbook.

Monitoring Program: These measures shall be noted on project grading and building plans for review and approval by the City Community Development Department. Compliance shall be verified prior to occupancy or final inspection by the City, in coordination with the County of San Luis Obispo Air Pollution Control District, as necessary.

- AQ-4 This project is greater than 4 acres and within 1,000 feet of sensitive receptors (residential units). Construction activities can generate fugitive dust, which could be a nuisance to residents and businesses in close proximity to the proposed construction site. Projects with grading areas that are greater than 4-acres or are within 1,000 feet of any sensitive receptor shall implement the following measures to manage fugitive dust emissions such that they do not exceed the APCD's 20% opacity limit (APCD Rule 401) or prompt nuisance violations (APCD Rule 402):
 - a. Reduce the amount of the disturbed area where possible;
 - b. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. When drought conditions exist and water use is a concern, the contractor

or builder should consider the use of an APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control. Please refer to the following link from the San Joaquin Valley Air District for a list of potential dust suppressants: <u>Products Available for Controlling Dust;</u>

- c. All dirt stock pile areas should be sprayed daily and covered with tarps or other dust barriers as needed;
- d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible, following completion of any soil disturbing activities;
- e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established;
- f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD;
- g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site;
- i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between top of load and top of trailer) in accordance with California Vehicle Code (CVC) Section 23114;
- j. "Track-Out" is defined as sand or soil that adheres to and/or agglomerates on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in CVC Section 23113 and California Water Code 13304. To prevent 'track out', designate access points and require all employees, subcontractors, and others to use them. Install and operate a 'track-out prevention device' where vehicles enter and exit unpaved roads onto paved streets. The 'trackout prevention device' can be any device or combination of devices that are effective at preventing track out, located at the point of intersection of an unpaved area and a paved road. Rumble strips or steel plate devices need periodic cleaning to be effective. If paved roadways accumulate tracked out soils, the trackout prevention device may need to be modified;
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers shall be used with reclaimed water where feasible. Roads shall be pre-wetted prior to sweeping when feasible;
- I. All PM10 mitigation measures required should be shown on grading and building plans; and
- m. The contractor or builder shall designate a person or persons whose responsibility is to ensure any fugitive dust emissions do not result in a nuisance and to enhance the implementation of the mitigation measures

as necessary to minimize dust complaints and reduce visible emissions below the APCD's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Their duties shall include holidays and weekend periods when work may not be in progress (for example, wind-blown dust could be generated on an open dirt lot). The name and telephone number of such persons shall be provided to the APCD Compliance Division prior to the start of any grading, earthwork or demolition (Contact Tim Fuhs at 805-781-5912).

Monitoring Program: These measures shall be noted on project grading and building plans for review and approval by the City Community Development Department. Compliance shall be verified during construction by the City during regular inspections, in coordination with the County of San Luis Obispo Air Pollution Control District, as necessary.

AQ-5 The applicant shall retain a registered geologist to conduct a geologic evaluation of the property including sampling and testing for naturally occurring asbestos in full compliance with California Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105) and SLOAPCD requirements. This geologic evaluation shall be submitted to the City Community Development Department upon completion. If the geologic evaluation determines that the project would not have the potential to disturb asbestos containing materials (ACM), the applicant must file an Asbestos ATCM exemption request with the SLOAPCD.

Monitoring Program: This applicant shall retain a registered geologist to conduct a geologic evaluation of the property including sampling and testing for naturally occurring asbestos prior to issuance of grading permits or prior to any site disturbance or grading activities. Compliance shall be verified during construction by the City during regular inspections, in coordination with the County of San Luis Obispo Air Pollution Control District, as necessary.

- AQ-6 If asbestos containing materials (ACM) are determined to be present onsite, proposed earthwork, demolition, and construction activities shall be conducted in full compliance with the various regulatory jurisdictions regarding ACM, including the ARB Asbestos Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (93105) and requirements stipulated in the National Emission Standards for Hazardous Air Pollutants (40 CFR 61, Subpart M Asbestos; NESHAP). These requirements include, but are not limited to, the following:
 - 1. Written notification, within at least 10 business days of activities commencing, to the SLOAPCD;
 - 2. Preparation of an asbestos survey conducted by a Certified Asbestos Consultant; and,
 - 3. Implementation of applicable removal and disposal protocol and requirements for identified ACM.

Monitoring Program: If asbestos containing materials (ACM) are determined to be present onsite, this measure shall be noted on project grading and building plans for review and approval by the City Community Development Department. Compliance shall be verified during construction by the City during regular inspections, in coordination with the County of San Luis Obispo Air Pollution Control District, as necessary.

- **AQ-7** The applicant shall implement the following measures to reduce the risk associated with disturbance of ACM and lead-coated materials that may be present within the existing structure onsite:
 - a. Demolition of the on-site structure shall comply with the procedures required by the National Emission Standards for Hazardous Air Pollutants (40 CFR 61, Subpart M – Asbestos) for the control of asbestos emissions during demolition activities. SLOAPCD is the delegated authority by the U.S. EPA to implement the Federal Asbestos NESHAP. Prior to demolition of on-site structures, SLOAPCD shall be notified, per NESHAP requirements. The project applicant shall submit proof that SLOAPCD has been notified prior to demolition activities to the City Community Development Department.
 - b. If during the demolition of the existing structure, paint is separated from the construction materials (e.g., chemically or physically), the paint waste shall be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed of in accordance with local, state, and federal regulations. According to the Department of Toxic Substances Control (DTSC), if the paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as non-hazardous construction debris. The landfill operator shall be contacted prior to disposal of lead-based paint materials. If required, all lead work plans shall be submitted to SLOAPCD at least 10 days prior to the start of demolition. The applicant shall submit proof that paint waste has been evaluated by a qualified hazardous waste materials inspector and handled according to their recommendation to the City Community Development Department.

Monitoring Program: This measure shall be noted on project grading and building plans for review and approval by the City Community Development Department. Compliance shall be verified during construction by the City during regular inspections, in coordination with the County of San Luis Obispo Air Pollution Control District, as necessary.

Biological Resources

BIO-1. Vegetation Removal Timing. Vegetation removal and initial site disturbance for any project elements shall be conducted between September 1st and January 31st outside of the nesting season for birds. If vegetation removal is planned for the nesting bird season (February 1st to August 31st), then preconstruction nesting bird surveys shall be required within one week prior to construction activities to determine if any active nests would be impacted by project construction. If no active nests are found, and vegetation removal is conducted within 5 days of the

survey and is done continuously, then no further survey work shall be required. Additional surveys during the nesting season shall be conducted as needed if there is any break in vegetation removal, grading and/or construction lasting more than 5 days. If any active nests are found that would be impacted by vegetation removal, grading and/or construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by a qualified biologist. Nest sites shall be avoided and protected within the nondisturbance buffer zone until the young are no longer reliant on the nest site for survival (have fledged) as determined by a qualified biologist. All workers shall receive training on good housekeeping practices during construction that will discourage nests from being established within the work area (e.g., cover stored pipe ends, cover all equipment being used daily, etc.) A qualified biologist shall regularly walk the construction area to look for nest starts and review site for good housekeeping practices. As such, avoiding disturbance or take of an active nest would reduce potential impacts on nesting birds to a less-than-significant level.

Monitoring Program: This measure shall be noted on all grading and construction plans. In the event vegetation removal and site disturbance are planning for the bird nesting season, the applicant shall provide evidence that a qualified biologist has been retained to complete nesting bird surveys, prior to any site disturbance or grading. The preconstruction surveys shall occur within one week prior to construction activities. A report shall be submitted by the biologist to the City Community Development Department and Natural Resources Manager within 48 hours of completion of surveys. In the event that active nests are found, no work shall commence in the nest buffer zone until the qualified biologist has provided clearance to commence work. Such clearance shall be provided to the City Community Development Department and Natural Resources Manager within 24 hours of such determination. The City Community Development Department and Natural Resources Manager shall verify compliance.

BIO-2. Clean Water Act Permitting. The applicant shall obtain Clean Water Act (CWA) regulatory compliance in the form of a permit from the U.S. Army Corps of Engineers (Corps) or written documentation from the Corps that no permit would be required for the proposed road crossing. Should a permit be required, the applicant shall implement all the terms and conditions of the permit to the satisfaction of the Corps. Corps permits and authorizations require applicants to demonstrate that the proposed project has been designed and will be implemented in a manner that avoids and minimizes impacts on aquatic resources to the extent practicable. Compliance with Corps permitting would also include obtaining and CWA 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB). In addition, the Corps and RWQCB may require compensatory mitigation for unavoidable permanent impacts on waters of the U.S./State to achieve the goal of a no net loss of wetland values and functions. As such, with implementation of the 3:1 ratio of creek enhancement mitigation plantings and regulatory compliance would reduce potential impacts on waters of the U.S. to a less than significant level.

Monitoring Program: The applicant shall obtain a permit from the Corps prior to issuance of grading or construction permits, or prior to any site disturbance or grading activities.

BIO-3. Streambed Alteration Agreement. The applicant shall obtain compliance with Section 1602 of the California Fish and Game Code (Streambed Alteration Agreements) in the form of a completed Streambed Alteration Agreement or written documentation from the CDFW that no agreement would be required for the proposed road crossing. Should an agreement be required, the property owners shall implement all the terms and conditions of the agreement to the satisfaction of the CDFW. The CDFW Streambed Alteration Agreement process encourages applicants to demonstrate that the proposed project has been designed and will be implemented in a manner that avoids and minimizes impacts in the stream zone. In addition, CDFW may require compensatory mitigation for unavoidable permanent impacts on waters of the State. As such, with implementation of the 3:1 ratio of creek enhancement mitigation plantings and regulatory compliance would reduce potential impacts on waters of the U.S. to a less than significant level.

Monitoring Program: The applicant shall provide evidence of compliance prior to issuance of grading or construction permits, or prior to any site disturbance or grading activities. The City Community Development Department and Natural Resources Manager shall verify compliance.

BIO-4.Wetland Replacement and Riparian Enhancement Plan. The applicant shall retain a qualified biologist to prepare a wetland replacement and riparian enhancement plan. The plan shall provide for a minimum of 3:1 mitigation area for the wetland area to be impacted and shall be designed to the satisfaction of the Corps, RWQCB, and CDFW. The plantings for the riparian enhancement area shall include native species and shall be placed in a manner to ensure their success. The plan shall include a cost estimate for the implementation of the plantings. The applicant shall implement the wetland replacement and riparian enhancement plan within 60 days of completion of grading and site disturbance activities.

Monitoring Program: The applicant shall submit the plan prior to issuance of grading or construction permits, or prior to any site disturbance or grading activities. The plan shall be implemented within 60 days of completion of grading and site disturbance activities. The City Community Development Department and Natural Resources Manager shall verify compliance.

BIO-5.Wetland Replacement and Riparian Enhancement Plan Monitoring. The applicant shall retain a qualified biologist or landscape architect for the purpose of monitoring the success of the mitigation planting area. The monitoring contract shall include a requirement that the monitor conduct, at a minimum, an annual site visit and assessment of the planting success for 10 years and an annual submittal of a monitoring report to the City Community Development Department and Natural

Resources Manager. The applicant shall also post a bond for the cost of implementing the mitigation planting. If the monitoring demonstrates that the plan has been successfully implemented, the bond shall be returned. If the monitoring demonstrates that the plan has not been successfully implemented, the applicant shall submit a revised plan for review and approval. If the revised plan successfully implemented after two years, the City Community Development Department and Natural Resources Manager shall use the bond to hire a licensed landscape architect to implement and maintain the revised plan.

Monitoring Program: The applicant shall provide evidence that a qualified biologist or landscape architect has been retained for the purpose of monitoring the mitigation planting area, and bond shall be posted, prior to issuance of grading or construction permits, or prior to any site disturbance or grading activities. The City Community Development Department and Natural Resources Manager shall verify compliance.

Cultural Resources

- **CR-1** Halt Work Order for Discovery of Previously Unidentified Cultural Resources. In the event that historical or archaeological remains are discovered during earth disturbing activities associated with the project, construction activities shall cease, and the City Community Development Department shall be notified so that the extent and location of discovered materials may be recorded by a qualified specialist (paleontologist, historian, archaeologist) and disposition of artifacts may be accomplished in accordance with state and federal law. After the find has been appropriately mitigated, work in the area may resume. A Native American tribal representative shall monitor any mitigation excavation associated with Native American materials.
- **CR-2.** Halt Work Order for Discovery of Human Remains. In the event that human remains are unearthed, the applicant shall notify the City Community Development Department and shall comply with State Health and Safety Code Section 7050.5, which requires that no further disturbance shall occur until the County of San Luis Obispo Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the human remains are determined to be Native American, the County Coroner will notify the Native American Heritage Commission within 24 hours, which will determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Monitoring Program: These conditions shall be noted on all grading and construction plans. The City Community Development Department shall verify compliance, including preparation and implementation of the Monitoring Plan, and review and approval of cultural resources monitoring reports documenting compliance with required mitigation measures.

Greenhouse Gasses

GHG-1 Monterey Bay Community Power. Prior to final inspection, occupancy, or establishment of the use, the applicant shall demonstrate that the subject use has made an operational commitment to participate in Monterey Bay Community Power. Any rental or lease agreement for individual tenant spaces shall include a requirement that the tenant continue participation in Monterey Bay Community Power. This participation shall continue until PG&E or another electric provider provides 100 percent carbon-free electricity, at which point the applicant or tenant may elect to switch services to such a provider.

Monitoring Program: Compliance shall be verified by the City prior to final inspection or occupancy.

Noise

- N-1 Construction Equipment Best Management Practices. For all construction activity at the project site that exceeds 60 dBA at the property line with the mobile home park to the west, and for future construction activity associated with development on the eastern portion of the project site that exceeds 60 dBA at the property line with the Westmont Living facility, construction equipment noise attenuation techniques shall be employed to ensure that noise levels are maintained within levels allowed by the City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control). Such techniques shall include:
 - Sound blankets on noise-generating equipment.
 - Stationary construction equipment that generates noise levels above 60 dBA at the project boundaries shall be shielded with barriers that meet a sound transmission class (a rating of how well noise barriers attenuate sound) of 25.
 - All diesel equipment shall be operated with closed engine doors and shall be equipped with factory-recommended mufflers.
 - For stationary equipment, the applicant shall designate equipment areas with appropriate acoustic shielding on building and grading plans. Equipment and shielding shall be installed prior to construction and remain in the designated location throughout construction activities.
 - Electrical power shall be used to power air compressors and similar power tools.
 - The movement of construction-related vehicles, with the exception of passenger vehicles, along roadways adjacent to sensitive receptors shall be limited to the hours between 7:00 AM and 7:00 PM, Monday through Saturday. No movement of heavy equipment shall occur on Sundays or official holidays (e.g., Thanksgiving, Labor Day).
 - As needed, temporary sound barriers shall be constructed between the construction site and the mobile home park to the west.

In the event the residential uses at the mobile home park site have been removed (i.e. the site is under construction), and/or if the Westmont Living facility is not occupied or operational during future construction of the eastern portion of the project site, then construction equipment noise attenuation techniques do not need to be implemented.

N-2 Neighboring Property Owner Notification and Construction Noise **Complaints.** The contractor shall inform the property owner and current tenants of the mobile home park to the west of the project site, prior to initiation of any construction activities, of the proposed construction timelines and noise complaint procedures to minimize potential annovance related to construction noise. In the event the residential uses at the mobile home park site have been removed (i.e. the site is under construction), notification is not required. If the Westmont Living facility is occupied or operational prior to construction of future uses on the project site, the contractor shall inform the property owner and current tenants of the facility of the proposed construction timelines and noise complaint procedures to minimize potential annoyance related to construction noise. Proof of mailing the notices shall be provided to the Community Development Department prior to issuance of grading permits or initiation of site disturbance. Signs identifying the noise complaint procedures shall be in place before the beginning of and throughout grading and construction activities. Noise-related complaints shall be directed to the City's Community Development Department.

Monitoring Program: Construction plans shall note construction hours, truck routes, and construction Best Management Practices (BMPs) and shall be submitted to the City for approval prior to grading and building permit issuance for each project phase. BMPs shall be identified and described for submittal to the City for review and approval prior to building or grading permit issuance. BMPs shall be adhered to for the duration of the project. The applicant shall provide and post signs stating these restrictions at construction site entries. Signs shall be posted prior to commencement of construction and maintained throughout construction. Schedule and neighboring property owner notification mailing list shall be submitted 10 days prior to initiation of any earth movement. The Community Development Department shall confirm that construction noise reduction measures are incorporated in plans prior to approval of grading/building permit issuance.

All construction workers shall be briefed at a pre-construction meeting on construction hour limitations and how, why, and where BMP measures are to be implemented. A workday schedule will be adhered to for the duration of construction for all phases.

City staff shall ensure compliance throughout all construction phases. Building inspectors and permit compliance staff shall periodically inspect the site for compliance with activity schedules and respond to complaints.

Transportation

TR-1 Tank Farm Road from Broad through Project Site to Mindbody intersection. The applicant shall widen Tank Farm Road along the project frontage to provide two westbound motor vehicle through lanes, bike lanes, landscaped parkway and sidewalk. The ultimate street cross section shall be in substantial conformance with the typical cross section identified for the parkway arterial designation in the Airport Area Specific Plan, with final geometric design elements to be approved to the satisfaction of the Public Works Director.

Monitoring Program: This improvement shall be incorporated into project improvement plans for review and approval by the City Community Development and Public Works Departments. The improvement shall be installed prior to occupancy/final inspection or establishment of any use on the site. Compliance shall be verified by the City Community Development and Public Works Departments prior to approval of grading plans and prior to issuance of occupancy certificate or approval of final inspections.

- **TR-2** Internal intersection with SESLOC property. The applicant shall install a singlelane roundabout at the internal site intersection of the Mindbody Road extension adjacent to SESLOC on the north property line to encourage smooth traffic flow between the sites. The City Transportation Department Division may approve an alternative intersection control type, such as all-way stop control, if a roundabout is found to be geometrically infeasible at this location.
- **TR-3** Existing SESLOC driveway. The applicant shall remove the existing right-in/rightout driveway on Broad Street upon completion of the new Broad Street driveway constructed as part of this project. The applicant shall ensure adequate access is maintained to the SESLOC property during project construction.

Monitoring Program: This improvement shall be incorporated into project improvement plans for review and approval by the City Community Development and Public Works Departments. The improvement shall be installed prior to occupancy/final inspection or establishment of any use on the site. Compliance shall be verified by the City Community Development and Public Works Departments prior to approval of grading plans and prior to issuance of occupancy certificate or approval of final inspections.

- **TR-4 Tank Farm Road from Old Windmill Lane to Santa Fe Road.** The project shall make a fair share contribution of the cost of widening Tank Farm Road to four lanes between Santa Fe Road and Old Windmill Lane.
- **TR-5** Broad Street/Industrial Way. The project shall make fair share project contributions to convert the east and west approaches from split phasing to permissive phasing and restriping both approaches to provide dedicated left turn lanes and shared through/right turn lanes.
- **TR-6** Fair Share Contributions. The project applicant shall pay Citywide Traffic Impact Fees to satisfy fair share mitigation obligations towards the following future transportation improvements:
 - Tank Farm Road/Higuera Street: Installation of a second southbound left turn lane.

- Tank Farm Road/Santa Fe Road: Installation of a multi-lane roundabout.
- Broad Street/Tank Farm Road: Installation of a dedicated northbound right turn lane, addition of a second southbound left turn lane, conversion of the westbound right turn lane to a shared through/right lane and establish time-ofday timing plans.

Monitoring Program: The applicant shall pay their fair-share contribution for improvements to the intersections prior to issuance of construction permits for any structure. Compliance shall be verified by the City Community Development Department prior to issuance of any construction permits.

If the Community Development Director or hearing body determines that the above mitigation measures are ineffective or physically infeasible, they may add, delete or modify the mitigation to meet the intent of the original measures.

Please note that section 15070 (b) (1) of the California Administrative Code requires the applicant to agree to the above mitigation measures before the proposed Mitigated Negative Declaration is released for public review.

This project will not be scheduled for public review and hearing until this signed original is returned to the Community Development Department.

orey 08/06/2020

Tyler Corey Principal Planner

Date

C.M.Florence, AICP 06 August 2020

Date

Carol Florence authorized agent for NKT Development, LLC Westmont Development, LP

Attachment 1

General Plan, Rezone, and Specific Plan exhibit and associated text amendment

GP Amendment, RZ, SPA 660 Tank Farm Road and 3985 Broad Street

Attachment 1



DRAFT

AIRPORT AREA SPECIFIC PLAN AMENDMENTS (SPEC-1482-2018)

NWC BROAD STREET AND TANK FARM ROAD MIXED-USE A COMMERCIAL CENTER & ASSISTED LIVING FACILITY

3985 Broad Street & 660 Tank Farm Road, San Luis Obispo, CA 053-421-003, 053-421-004 20 July 2018; rev. 06 February 2020; rev. 29 July 2020

I. INTRODUCTION

The Broad Street at Tank Farm Road Site is identified as a special focus area in the General Plan within the Airport Area Specific Plan ("AASP"). It is unique, and the only location in the AASP with this particular designation and zoning. Therefore, the proposed amendment utilizes the "Special Areas" section of the AASP Land Use chapter to identify and describe the special focus area; it's relationship to the General Plan and Specific Plan, and key development standards.

Pursuant to the submitted applications for the Mixed-Use development at 3985 Broad Street and 660 Tank Farm Road, the following excerpts from the Airport Area Specific Plan Chapter 4.0- Land Use include the proposed text amendments. Inserted text is **bold**, **blue and underlined**. Deleted text is **bold**, **red with strikethrough** (strikethrough).

II. AIRPORT AREA SPECIFIC PLAN CHAPTER 4.0 LAND USE

LAND USE PROGRAM [Amend Table 4.1]

Table 4.1 San Luis Obispo Airport Area Specific Plan Land Use Program and Development Capacities							
Residential Land Use	Acres	Units Per Acre	Estimated Dwelling Units				
Undeveloped Land1							
Low Density	12.8	7.9	101				
Medium Density	20.5	10.9	223				
Medium- High/High Density	15.2	21.2	322				
Subtotal	55.3		720				
Developed Land (Existing Mobile Homes)	6.7	4.8	32				
Total Residential Property	55.2		678				
Non-Residential Land Use Designations	Acres	Floor Area Ratio	Estimated Building Square Feet				

Undeveloped Land			
Neighborhood	8.4	0.31	115,000
Commercial			
Community	<u>9.66</u>	0.44	<u>185,147</u>
Commercial			
Business Park	<u>126.6</u> 116.94	0.21	<u>1,102,939</u> 1,018,781
Service	155	0.24	1,620,432
Commercial			
Manufacturing	101.3	0.17	747,642
Subtotal	384.4		<u>3,586,013</u> 3,687,002
Developed Land	145.2	0.28	1,786,745
Total Non-Residential	529.6		<u>5,372,758</u>5,437,474
Property			
Other Land Use	Acres		
Designations			
Agriculture	76.1		
Conservation/Open	294.9		
Space/Parks			
Government	292.5		
Total Other Property	663.5		
Total AASP Acreage2	1255.1		

1 The total potential square footage (and associated acreage) includes future development on properties currently under pre-annexation agreements and properties outside of the City's jurisdiction with alternative fee programs. Since these properties may not be required to pay their fair share of infrastructure costs, the difference will need to be funded by other funding sources (e.g., grants, additional City contributions, etc.).

2 Excludes acreage associated with roads, setbacks, creeks, and other features.

Table 4.2 San Luis Obispo Airport Area Specific Plan LAND USE CONSISTENCY						
General Plan Designation	Specific Plan Designation	Zone				
Open Space	Open Space C/OS-SP					
Public Facility	Airport Facility	PF-SP				
Business Park	Business Park	BP-SP				
Services & Manufacturing	Service Commercial or Manufacturing	C-S-SP or M-SP				
Medium-Density Residential	Medium-Density Residential	R-2-SP				
Agriculture	Agriculture	AG-SP				
Community Commercial (Special Focus Area #12)	CommunityCommercial(Special Focus)	<u>CC-SF</u>				

RELATIONSHIP TO THE GENERAL PLAN [Amend Table 4.2]

SPECIAL AREAS [Insert text at end of section]

BROAD STREET AT TANK FARM ROAD SITE

The Broad Street at Tank Farm Road Site is identified in the General Plan Land Use Element and Map as a Special Focus Area #12¹, and is further iterated by a zoning designation of Community Commercial with Special Focus Overlay (C-C-SF).²

Development of this site shall be consistent with the General Plan description "Located at the northwest corner of Broad Street and Tank Farm Road, this approximate 10 acre site will be used as a mixed use site, providing for a mix of uses as described under the Community Commercial and Office designations. The site will provide a strong commercial presence at the intersection. Areas along the creek on the western edge of the site will be appropriately buffered to provide creek protections. Attention to connectivity, safety and comfort of bicycle and pedestrian circulation will be especially important in the development of this corner." Source: 2014 General Plan Land Use Element- (8.13) Special Focus Area.

The intent of the Office zone is to provide for offices and related functions close to medical facilities and the downtown, convenient to public transportation and related government and business services. The Office zone is also intended to provide for the continuation and development of residential uses where they will be compatible with neighboring offices. The Community Commercial zone is intended to provide for a wide range of retail sales and personal services within the context of distinctive, pedestrian-oriented shopping centers that serve customers and clients from all over the City.

The development plans and project description for this mixed-use area includes:

• <u>A retail shopping center and/or office uses consistent with the Community Commercial</u> and Office zones at the northwest corner of the Tank Farm Road and Broad Street intersection, and a residential assisted living facility located on the western portion of the property.

• <u>North-south road connection from the signalized intersection of Tank Farm Road and</u> <u>Mindbody driveway to the drive aisle on SESLOC property to the north, that ultimately</u> <u>connects to Industrial Way.</u>

• <u>Enhancement of the creek and riparian habitat areas. Limited encroachment into the creek setback area may be necessary for the north-south road connection.</u>

• <u>The development shall comply with the following development standards</u>

Standard	C-C-SF Standard
Maximum Density	Pursuant to Airport Land Use Plan
Minimum Yards (Setbacks)	
Building to Broad and Tank Farm	<u>15 feet</u>
street frontage	
Parking lots to Broad and Tank	<u>10 feet</u>
Farm street frontage	

¹ See Land Use Element Map (December 2014) <u>http://www.slocity.org/home/showdocument?id=5857</u>

² See Zoning Map (January 2015) <u>http://gis.slocity.org/Documents/ZoningMap2015.pdf</u>

Parking lots to interior property lines and adjacent parcels Building to interior property lines and adjacent parcels	<u>None</u> <u>None</u>
Maximum Height	<u>35 feet</u>
Maximum coverage	<u>75 percent</u>
Maximum floor area ratio	<u>2.0</u>
Standard Lot Dimensions	See Tentative Tract Map 3115
Minimum Parking Requirements	
Assisted Living	<u>1 space per every 5 beds (plus 1 space per</u> <u>2 employees on shift</u>
Bank and Credit Union	<u>1 space per 300 SF</u>
<u>Office</u>	<u>1 space per 500 SF</u>
Medical Office	1 space per 300 SF
Retail Sales and Personal Service	1 space per 300 SF
Restaurant	1 space per 100 SF of total restaurant
	area (including any food preparation/
	service area)
Uses not listed	See Zoning Regulation requirements
Accessible, Clean Air, Motorcycle, Bike	See Zoning Regulation requirements
parking	

III. "CLEAN" TEXT

The following duplication of the proposed text amendment is provided in a "clean" format for review reference and formatting purposes.

LAND USE PROGRAM

Table 4.1 San Luis Obispo Airport Area Specific Plan Land Use Program and Development Capacities			
Residential Land Use	Acres	Units Per Acre	Estimated Dwelling Units
Undeveloped Land1			
Low Density	12.8	7.9	101
Medium Density	20.5	10.9	223
Medium- High/High Density	15.2	21.2	322
Subtotal	55.3		720
Developed Land (Existing Mobile Homes)	6.7	4.8	32

Total Residential	55.2		678
Property Non-Residential Land Use Designations	Acres	Floor Area Ratio	Estimated Building Square Feet
Undeveloped Land			
Neighborhood Commercial	8.4	0.31	115,000
Community Commercial	9.66	0.44	185,147
Business Park	116.94	0.21	1,018,781
Service Commercial	155	0.24	1,620,432
Manufacturing	101.3	0.17	747,642
Subtotal	384.4		3,687,002
Developed Land	145.2	0.28	1,786,745
Total Non-Residential Property	529.6		5,437,474
Other Land Use	Acres		
Designations			
Agriculture	76.1		
Conservation/Open Space/Parks	294.9		
Government	292.5		
Total Other Property	663.5		
Total AASP Acreage2	1255.1		

1 The total potential square footage (and associated acreage) includes future

development on properties currently under pre-annexation agreements and properties outside of the City's jurisdiction with alternative fee programs. Since these properties may not be required to pay their fair share of infrastructure costs, the difference will need to be funded by other funding sources (e.g., grants, additional City contributions, etc.).

2 Excludes acreage associated with roads, setbacks, creeks, and other features.

RELATIONSHIP TO THE GENERAL PLAN

Table 4.2 San Luis Obispo Airport Area Specific Plan LAND USE CONSISTENCY			
General Plan Designation	Specific Plan Designation	Zone	
Open Space	Open Space	C/OS-SP	
Public Facility	Airport Facility	PF-SP	
Business Park	Business Park	BP-SP	
Services & Manufacturing	Service Commercial or Manufacturing	C-S-SP or M-SP	
Medium-Density Residential	Medium-Density Residential	R-2-SP	
Agriculture	Agriculture	AG-SP	
Community Commercial (Special Focus Area #12)	Community Commercial (Special Focus)	CC-SF	

SPECIAL AREAS

BROAD STREET AT TANK FARM ROAD SITE

The Broad Street at Tank Farm Road Site is identified in the General Plan Land Use Element and Map as a Special Focus Area #12³, and is further iterated by a zoning designation of Community Commercial with Special Focus Overlay (C-C-SF).⁴

Development of this site shall be consistent with the General Plan description "Located at the northwest corner of Broad Street and Tank Farm Road, this approximate 10-acre site will be used as a mixed use site, providing for a mix of uses as described under the Community Commercial and Office designations. The site will provide a strong commercial presence at the intersection. Areas along the creek on the western edge of the site will be appropriately buffered to provide creek protections. Attention to connectivity, safety and comfort of bicycle and pedestrian circulation will be especially important in the development of this corner." Source: 2014 General Plan Land Use Element- (8.13) Special Focus Area.

The intent of the Office zone is to provide for offices and related functions close to medical facilities and the downtown, convenient to public transportation and related government and business services. The Office zone is also intended to provide for the continuation and development of residential uses where they will be compatible with neighboring offices. The Community Commercial zone is intended to provide for a wide range of retail sales and personal services within the context of distinctive, pedestrian-oriented shopping centers that serve customers and clients from all over the City.

³ See Land Use Element Map (December 2014) <u>http://www.slocity.org/home/showdocument?id=5857</u>

⁴ See Zoning Map (January 2015) <u>http://gis.slocity.org/Documents/ZoningMap2015.pdf</u>

The development plans and project description for this mixed-use area includes:

- A retail shopping center and/or office uses consistent with the Community Commercial and Office zones at the northwest corner of the Tank Farm Road and Broad Street intersection, and a residential assisted living facility located on the western portion of the property.
- North-south road connection from the signalized intersection of Tank Farm Road and Mindbody driveway to the drive aisle on SESLOC property to the north, that ultimately connects to Industrial Way.
- Enhancement of the creek and riparian habitat areas. Limited encroachment into the creek setback area may be necessary for the north-south road connection.
- The development shall comply with the following development standards

Standard	C-C-SF Standard
Maximum Density	Pursuant to Airport Land Use Plan
Minimum Yards (Setbacks)	
Building to Broad and Tank Farm street	15 feet
frontage	
Parking lots to Broad and Tank Farm	10 feet
street frontage	
Parking lots to interior property lines and	None
adjacent parcels	
Building to interior property lines and	None
adjacent parcels	
Maximum Height	35 feet
Maximum coverage	75 percent
Maximum floor area ratio	2.0
Standard Lot Dimensions	See Tentative Tract Map 3115
Minimum Parking Requirements	
Assisted Living	1 space per every 5 beds (plus 1 space per 2
	employees on shift1 space per 300 SF
Bank and Credit Union	1 space per 300 SF
Office	1 space per 500 SF
Medical Office	1 space per 300 SF
Retail Sales and Personal Service	1 space per 300 SF
Restaurant	1 space per 100 SF of total restaurant area
	(including any food preparation/ service area)
Uses not listed	See Zoning Regulation requirements
Accessible, Clean Air, Motorcycle, Bike parking	See Zoning Regulation requirements

Attachment 2

Project Plans

Vesting Tentative Tract Map 3115

VESTING TENTATIVE		3115	\$667.8'51"W 277
FUTURE CONST. PROJECT BOUNDARY CENTERLINE PROPERTY LINE PROPERTY LINE PROPERTY LINE CURB LINE SD EXIST. CURB LINE SD STORM DRAIN SD STORM DRAIN SD SEWER MAIN SS SEWER MAIN SS EXIST. SEWER MAIN SS EXIST. WATER MAIN W EXIST. CONTOURS 200 EXISTING TREE TO Image: Control of the second sec	ABBREVIATIONS ASPHALT CONCRETE A.C. BACK OF WALK B.W. EDGE OF PAVEMENT E.P. EXISTING EX. FINISHED GRADE F.G. FLOW LINE F.L. GRADE BREAK G.B. HIGH POINT H.P. LOW POINT L.P. TOP OF CURB T.C.	EXISTING TREE TO BE REMAIN	TREES TO BE REMOVED EXISTING TREES TO EXISTING TREES TO BE REMOVED
EXISTING TREE TO REMAIN			4" PINE TO BE REMOVED
NUMBER OF LOTS: 5 ASSESSOR PROPOSED ZONING: CC-SF NUMBER OF GROSS ARE LOT NO AREA EXISTING 2 1 208,764 4.79 2 29,961 0.69 3 42,820 0.98			3 19-10 EXISTING TREE TO BE REMOVED
4 40,738 0.93 5 116,790 2.68			EXISTING TREES TO BE REMOVED 2-18" CYDRESS
F.I.R.M. INFORMATION THIS PROJECT IS LOCATED IN FLOOD ZONE X WHICH IS DETERMINED TO BE OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOOD PLAIN.	N N N N N N N N N N N N N N N N N N N N		TREE TO BE REMOVED EXISTING TREES
UTILITIESWATER: WATERS: ELECTRICITY: GAS: TELEPHONE: CABLE TV:CITY OF SAN LUIS OBISPO OF SAN LUIS OBISPO PACIFIC GASTOPOGRAPH MICHAEL B. STAN PLS 5702 3563 SUELDO ST SAN LUIS OBISPO (805)594–1960 DATED: ARPIL 16,	IC SURVEY TON, UNIT Q , CA 93401	40" CYPRESS TREE TO BE	TO BE REMOVED
LEGAL DESCRIPTION ALL THAT REAL PROPERTY SITUATE IN THE CITY OF SAN LUIS OBISPO, COUNT OF SAN LUIS OBISPO, STATE OF CALIFORNIA BEING A PORTION OF LOT 57 OF THE SAN LUIS OBISPO SUBURBAN TRACT, SAID PORTION OF SAID LOT 57 BEING SHOWN ON A RECORD OF SURVEY RECORDED IN BOOK 67 OF RECORDS OF SURVEY AT PAGE 93 IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, SAID PORTION OF SAID LOT 57 BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:		REMOVED 35' CREEK SETBACK 54" CYPRESS TREE TO BE REMOVED	
BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 57 AS SHOWN ON SAID RECORD OF SURVEY, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE ALONG THE EASTERLY LINE OF SAID LOT AS SHOWN ON SAID RECORD OF SURVEY, NORTH 24'53'50"WEST, 462.07 FEET; THENCE LEAVING SAID EASTERLY LINE ALONG THE FOLLOWING COURSES: SOUTH 21'27'20" WEST, 97.84 FEET; SOUTH TO 8'55'32" WEST, 115.43 FEET; SOUTH 14'44'01" EAST, 275.02 FEET; SOUTH 24'52'08"EAST, 22.99 FEET TO A POINT ON THE EXISTING	N66[34	PERMANENT SEWER PIPELINE EASEMENT PER 2008-050324 (OOTTED HATCH AREA)	S23'29'49"E 1.86' N66'30'11"E 276.9
RIGHT OF WAY OF TANK FARM ROAD AS SHOWN ON SAID RECORD OF SURVEY; THENCE ALONG SAID RIGHT OF WAY ALONG THE FOLLOWING COURSES: NORTH 65°07'52"EAST, 163.59 FEET; SOUTH 24°53'50" EAST; NORTH 65°06'25"EAST, 20.00 FEET TO THE TRUE POINT OF BEGINNING.			20'X27.86' EASÉMENT X X FOR SEWER PIPELINE PER 1997-056435
SAID PROPERTY BEING DESCRIBED IN CERTIFICATE OF COMPLIANCE RECORDED JANUARY 13, 1999 AS INSTRUMENT NO.99–2652 OF OFFICIAL RECORDS			
PROPOSED EASEMENTS	BASIS OF BEARING	OWNER/SUBDI	VIDERS
1 PURPOSE: PRIVATE WATERLINE EASEMENT IN FAVOR OF: LOTS 2, 3, 4 AND 5 AFEFOTING: LOT F	ASIS OF BEARINGS FOR THIS PROJECT IS ON CALIFORNIA STATE PLANE ZONE 5, FOUND CITY OF SAN LUIS HORIZONTAL DL NETWORK MONUMENTS, NORTH	053-421-003 ELLA LOUISE TOUCHSTONE, JOHANNAH MARY BRADLEY,	BY DEED RECORDED DECEMBER 28, 1976, AS TO AN UNDI , BY DEED RECORDED DECEMBER 28, 1976, AS TO AN UNDI CALIFORNIA LIMITED LIABILITY COMPANY, AS TO AN UNDIVI

- 2 PURPOSE: PRIVATE SANITARY SEWER EASEMENT AMERICAN DATUM 1983, EPOCH DATE:1991.35. IN FAVOR OF: LOTS 2, 3, 4 AND 5 AFFECTING: LOTS 2, 3, AND 4
- PURPOSE: PUBLIC ACCESS EASEMENT IN FAVOR OF: GENERAL PUBLIC AFFECTING: LOTS 1 AND 5 3
- PURPOSE: PRIVATE WATERLINE EASEMENT IN FAVOR OF: LOT 2 AND 3 AFFECTING: LOT 3 4

BEARING N 87' 56' 14" W BASED ON CITY HORIZONTAL CONTROL NETWORK MONUMENT NUMBERS 8100 AND 8101.

TO OBTAIN GROUND LEVEL DISTANCES MULTIPLY DISTANCES SHOWN BY 1.0000405

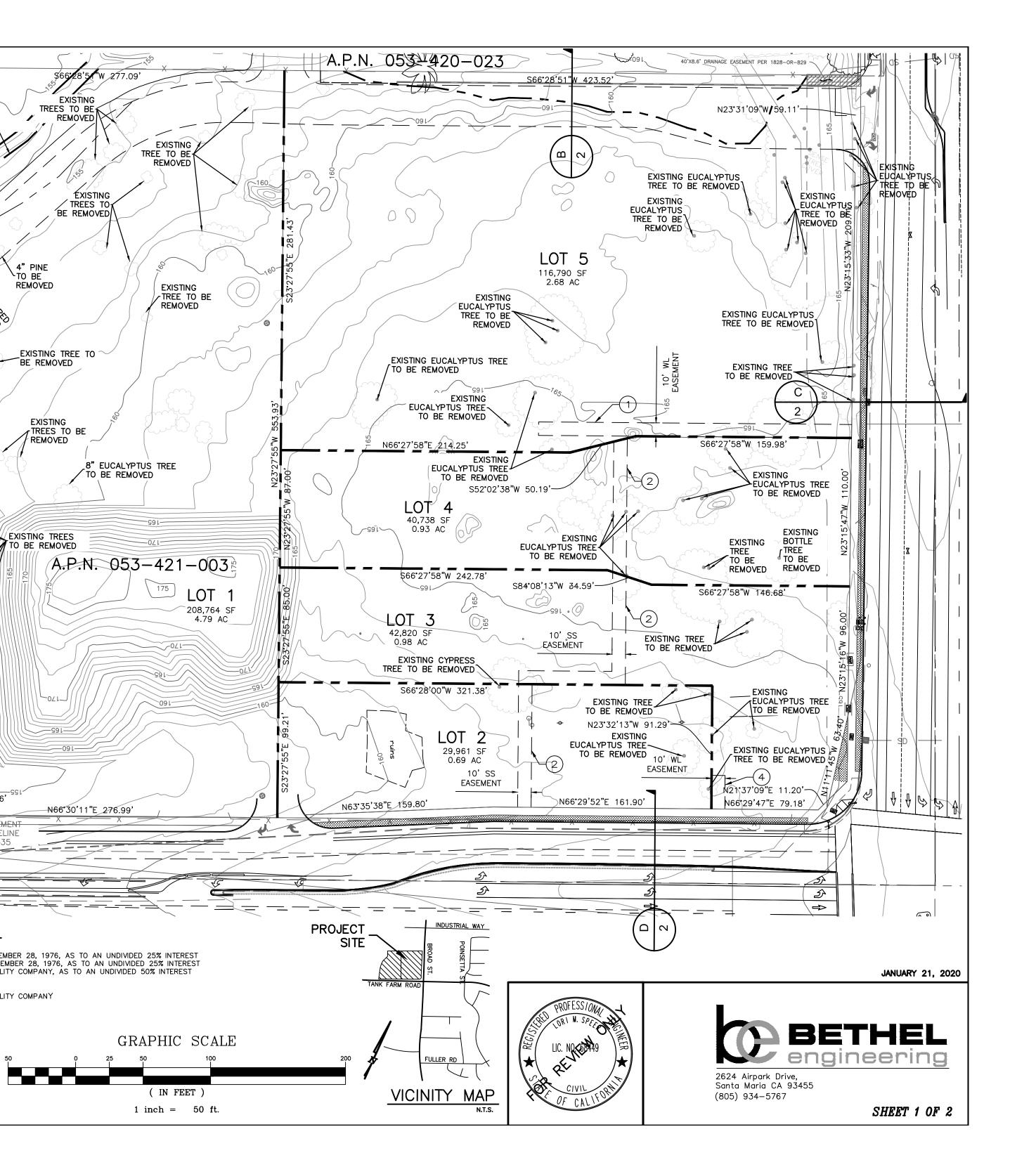
TO OBTAIN GEODETIC BEARINGS ROTATE GRID BEARING -1' 30' 23".

053-421-004

NKT DEVELOPMENT, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY NOTES:

RECIPROCAL ACCESS AND PARKING AGREEMENT TO BE RECORDED PER

SEPARATE DOCUMENT

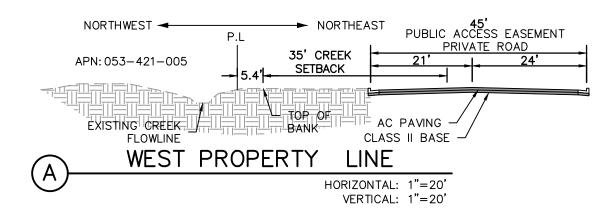


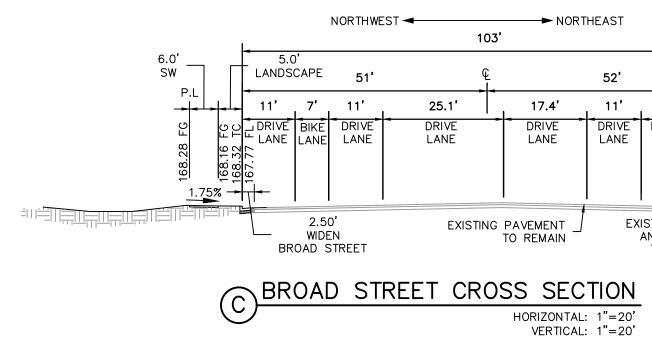
EXISTING EASEMENTS

AFFECTS:

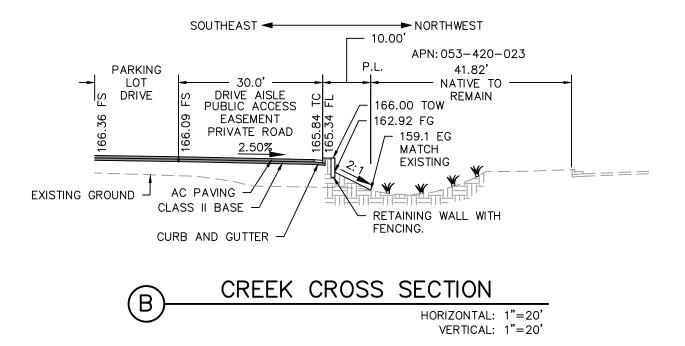
SAID LAND

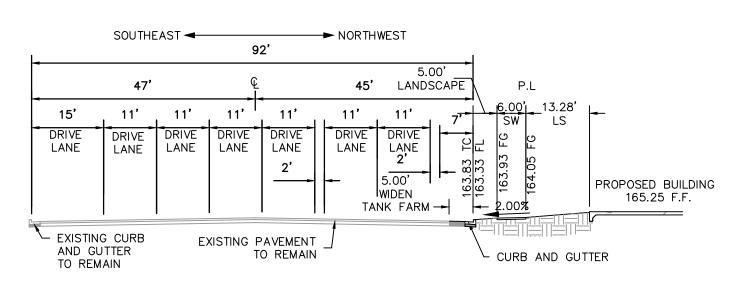
1	GRANTED TO:STATE OF CALIFORNIAPURPOSE:DRAINAGE, SLOPE AND UTILITYRECORDED:APRIL 21, 1975RECORDED NO.:INSTRUMENT NO. 11865, BOOK 1828, PAGE 829, OF OFFICIAL RECORDAFFECTS:AS DESCRIBED THEREIN	5 S	GRANTED TO: M.JOYCE HOFFMAN PURPOSE: SEWER PIPELINE RECORDED: OCTOBER 14, 1997 RECORDED NO.:1997056435, OF OFFICIAL RECORDS AFFECTS: SAID LAND
2	GRANTED TO: COUNTY OF SAN LUIS OBISPO PURPOSE: AVIGATION EASEMENT RECORDED: AUGUST 27, 1985 RECORDED NO.:INSTRUMENT NO. 48471, BOOK 2743, PAGE 308, OF OFFICIAL RECORD AFFECTS: AS DESCRIBED THEREIN	6 S	GRANTED TO: HIDDEN HILLS MOBILELODGE, LLC PURPOSE: SEWER PIPELINE RECORDED: AUGUST 20, 1999 RECORDED NO.:1999061071, OF OFFICIAL RECORDS AFFECTS: SAID LAND
3	GRANTED TO: JUDY KORSMEYER; M JOYCE HOFFMAN, TRUSTEE OF THE M. JOYCE HOFFMAN TRUST DATED SEPTEMBER 23, 1997 PURPOSE: BELOW GROUND SEWER LINE RECORDED: OCTOBER 14, 1997 RECORDED NO.:1997-056436, OF OFFICIAL RECORDS	7	GRANTED TO: CITY OF SAN LUIS OBISPO PURPOSE: SEWER FACILITIES RECORDED: OCTOBER 8, 2008 RECORDED NO.:2008050324, OF OFFICIAL RECORDS AFFECTS: SAID LAND
4	AFFECTS: AS DESCRIBED THEREIN PURPOSE: PUBLIC ACCESS AND PEDESTRIAN EASEMENT RECORDED: SEPTEMBER 17, 2014 RECORDED NO.:2014038159 OF OFFICIAL RECORDS	8	EXECUTED BY: HIDDEN HILLS MOBILELODGE LLC IN FAVOR OF: CITY OF SAN LUIS OBISPO RECORDED: AUGUST 25, 2009 AFFECTS: 2009047771, OF OFFICIAL RECORDS



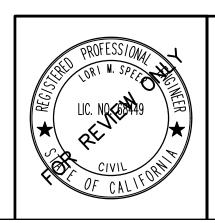


VESTING TENTATIVE TRACT MAP 3115







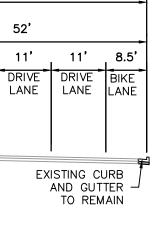




(805) 934–5767

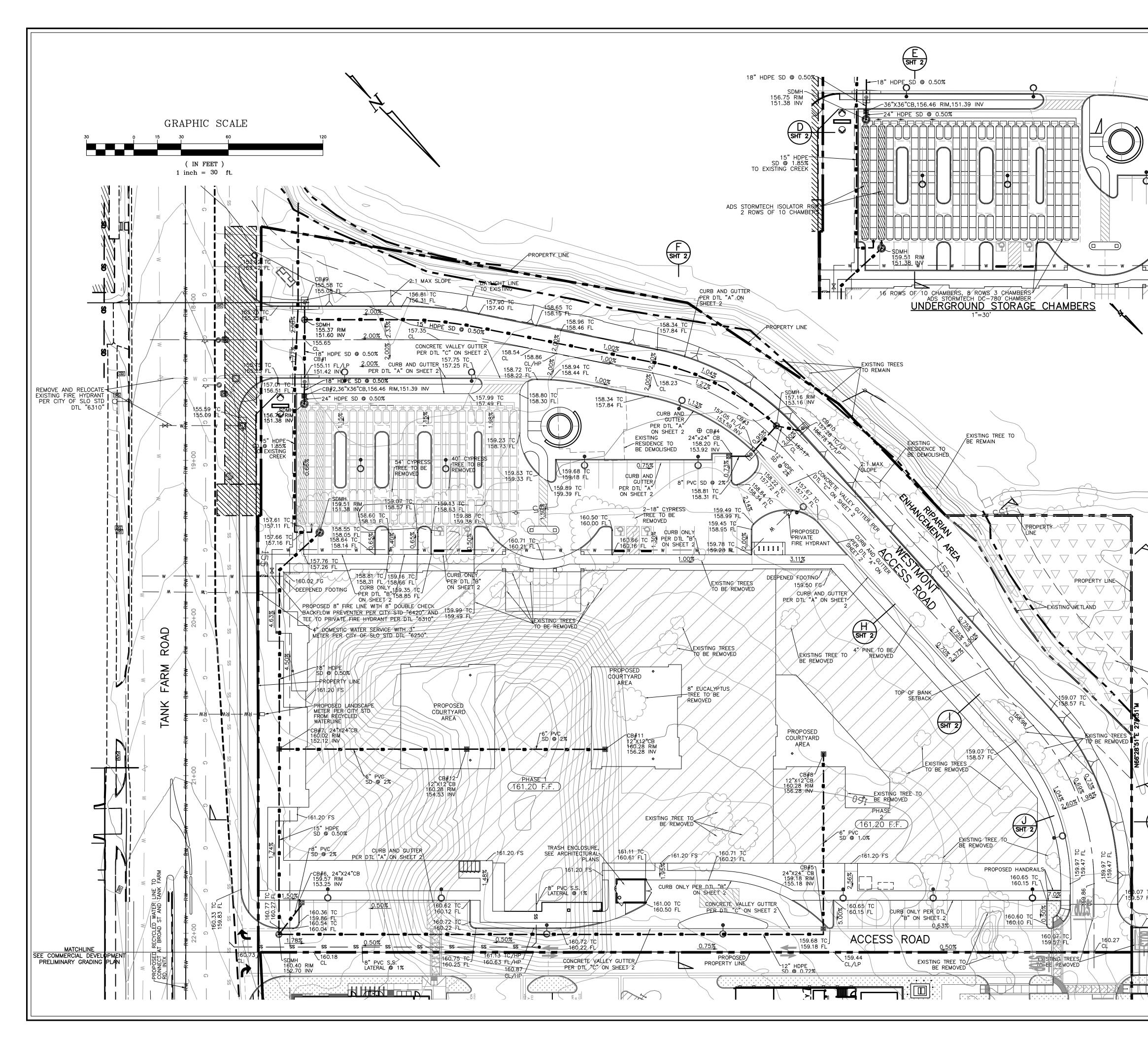
SHEET 2 OF 2

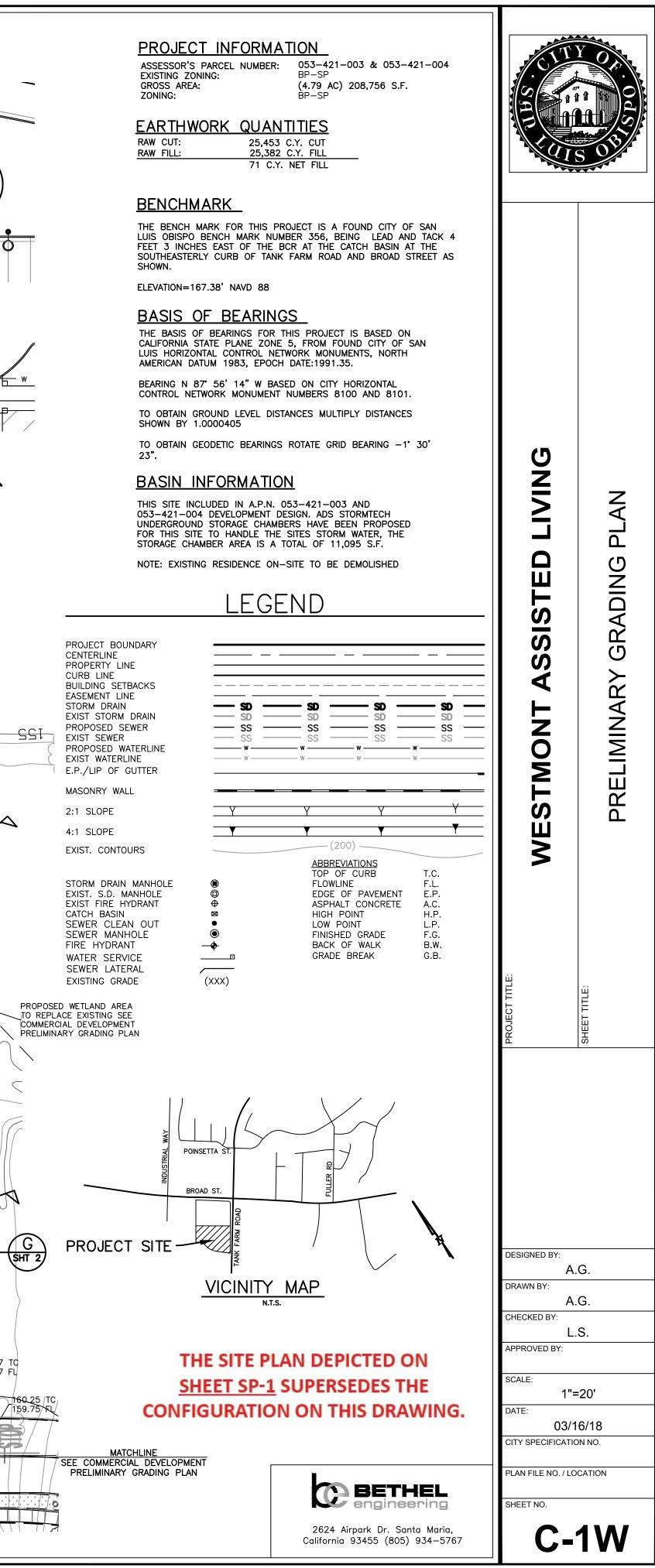
JANUARY 21, 2020

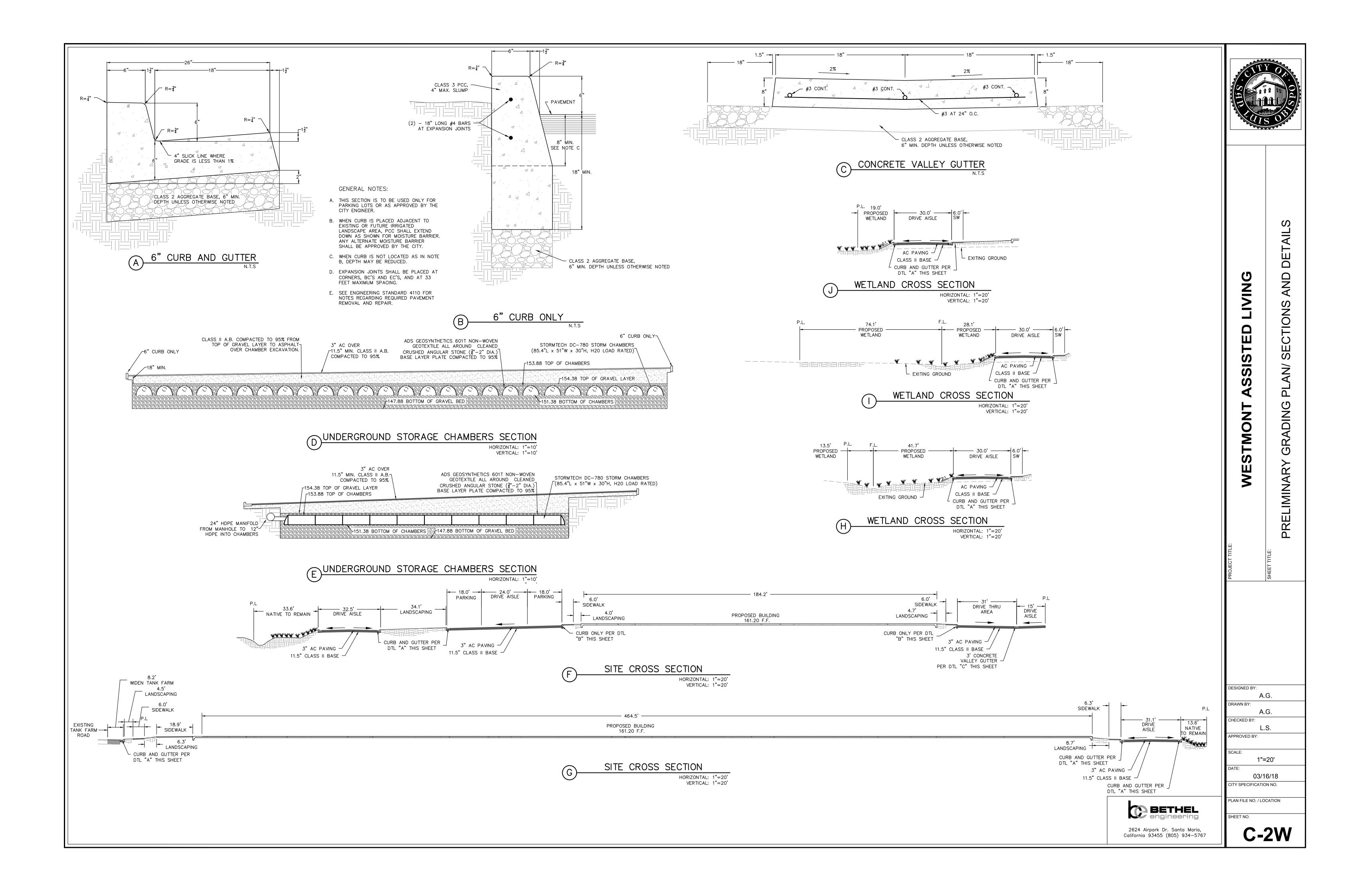


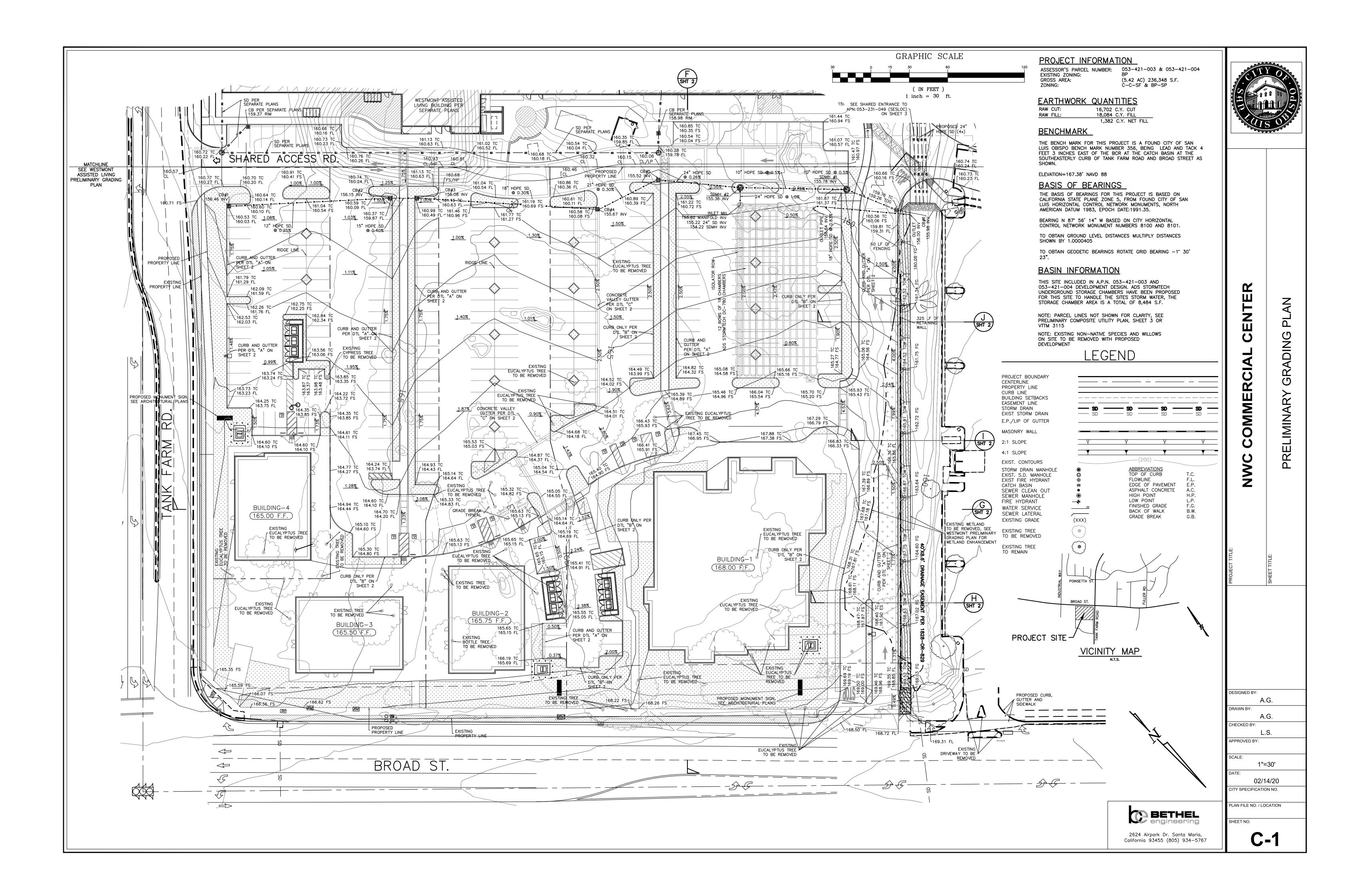


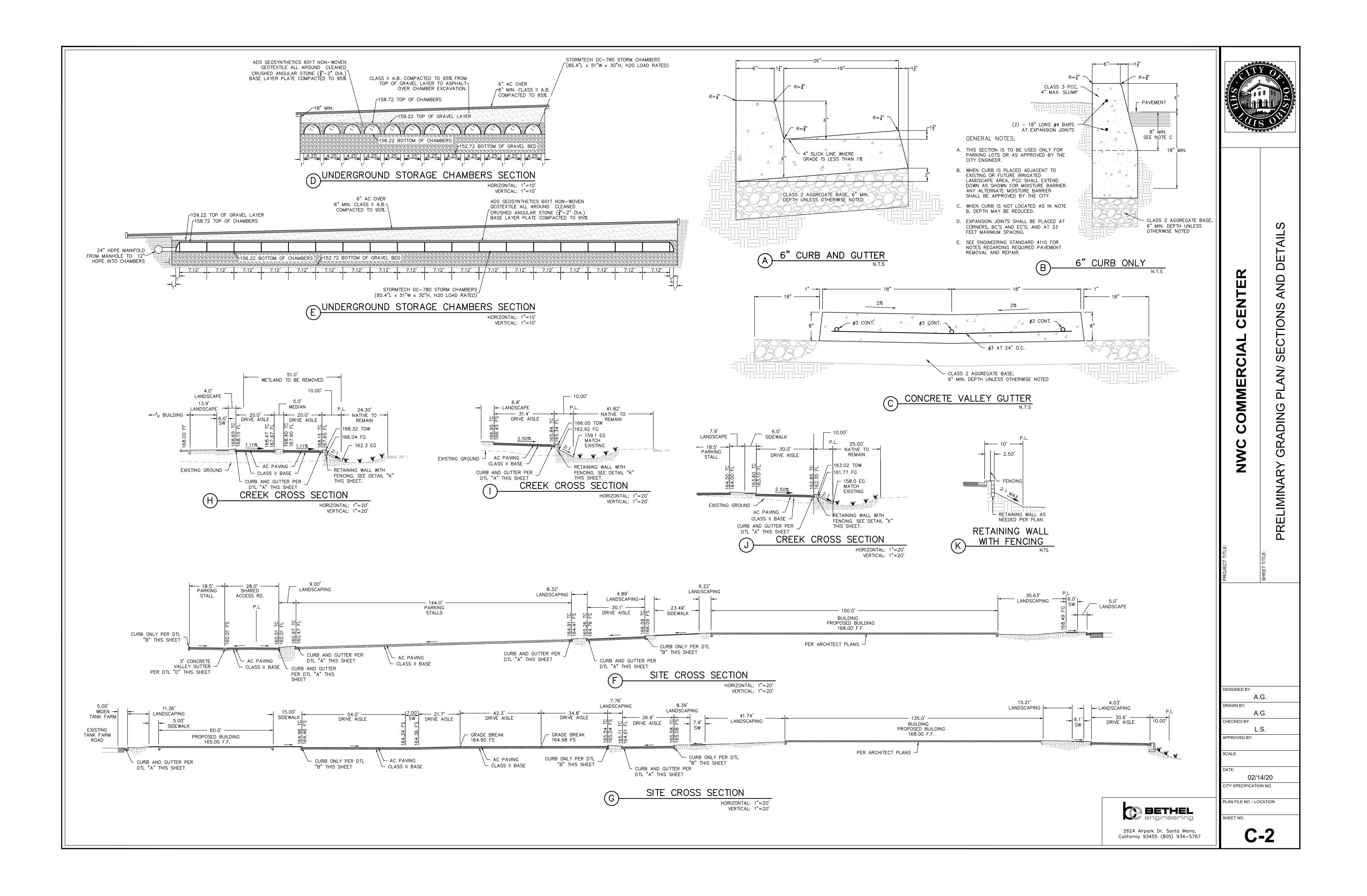
Preliminary Grading Plans (Commercial buildings shown for conceptual purposes only)

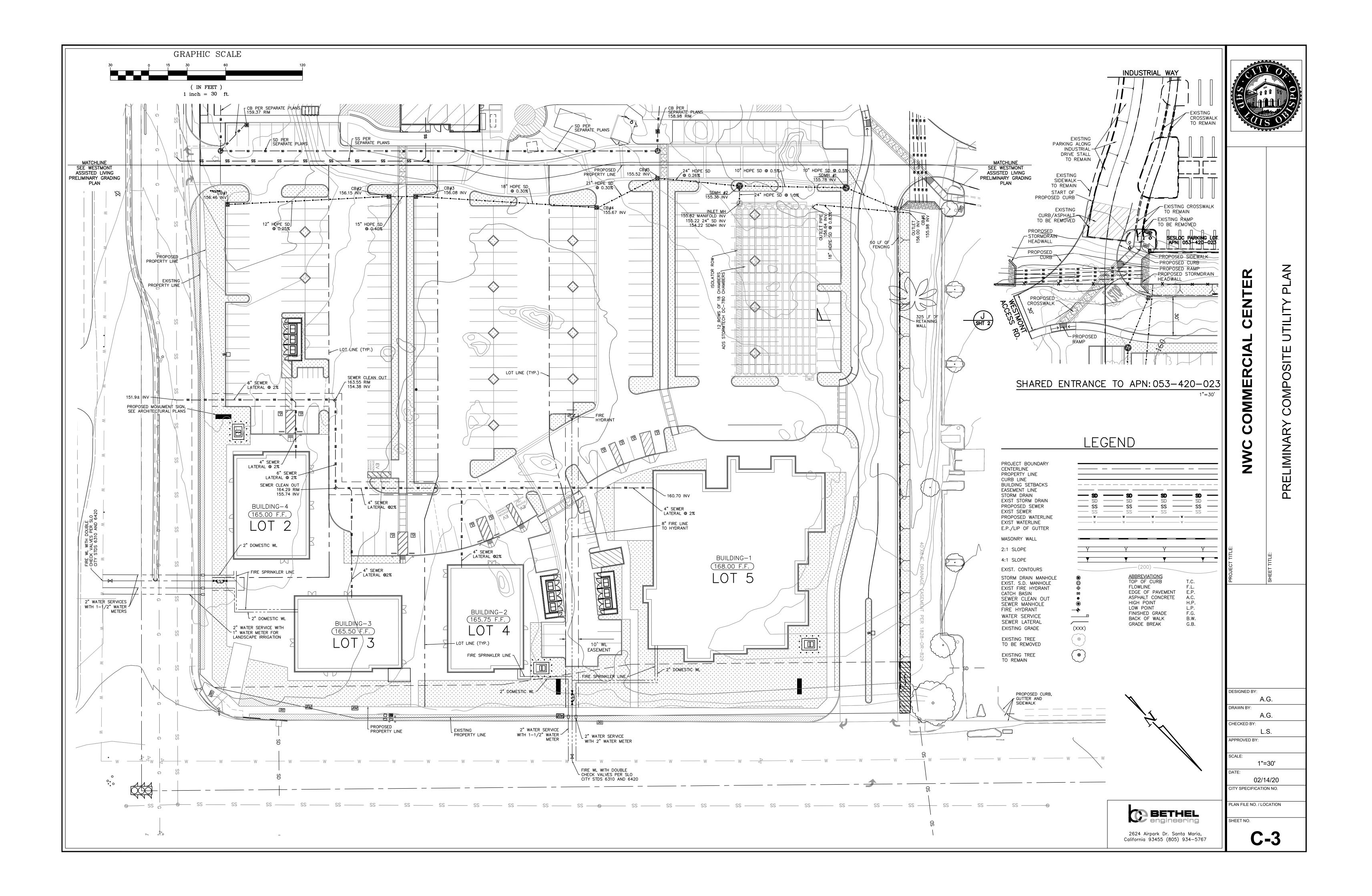












Westmont Assisted Living Facility Plans



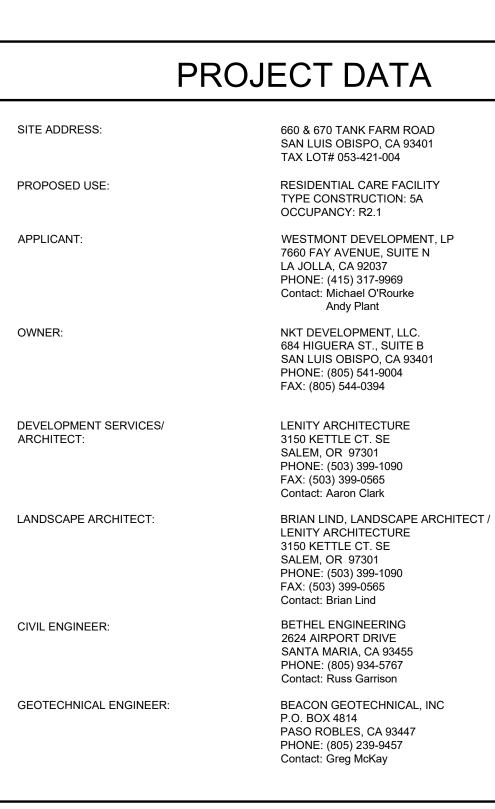


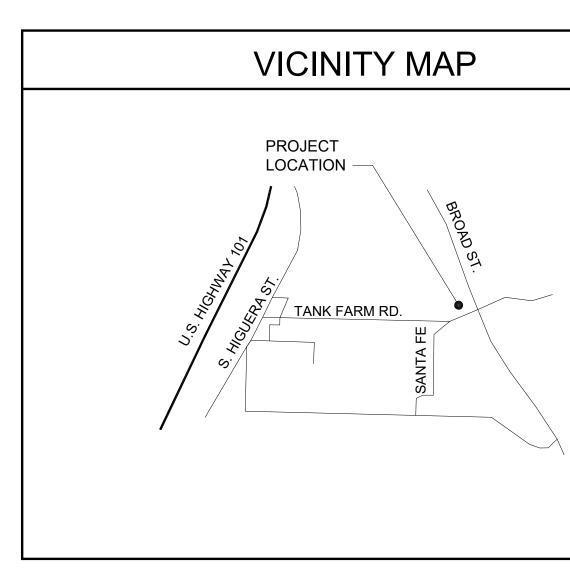


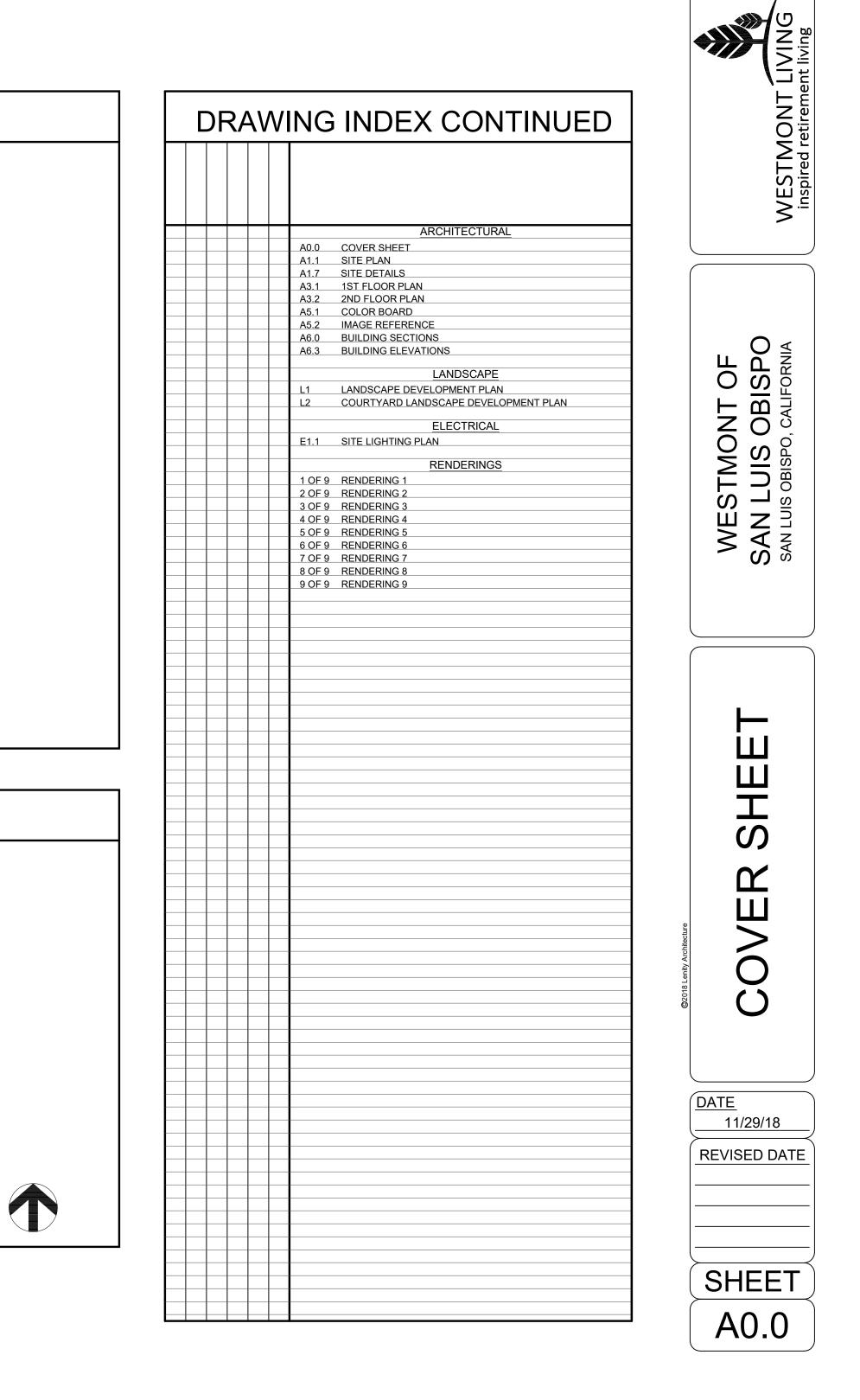
VIEW AT ENTRY

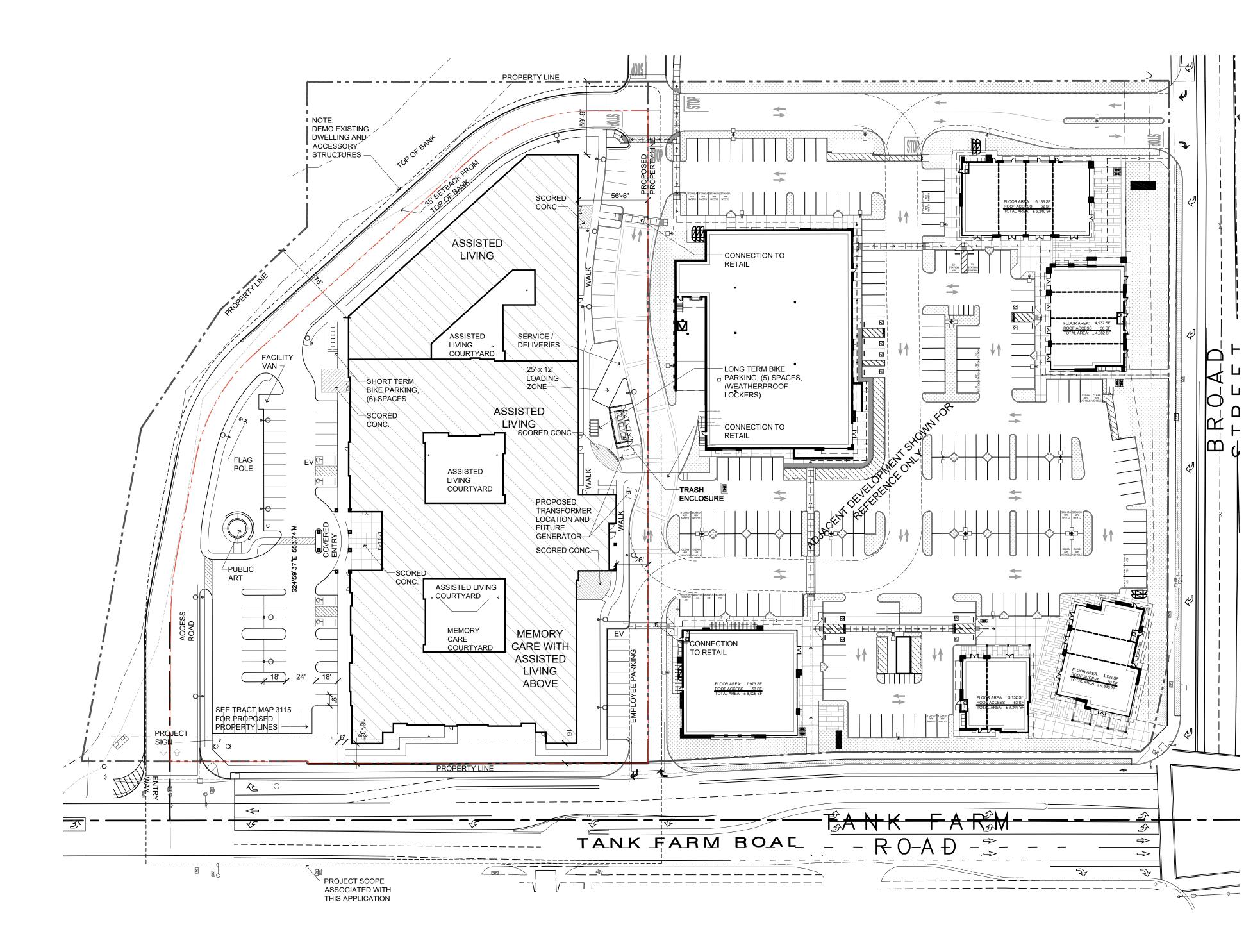
SAN LUIS OBISPO, CA

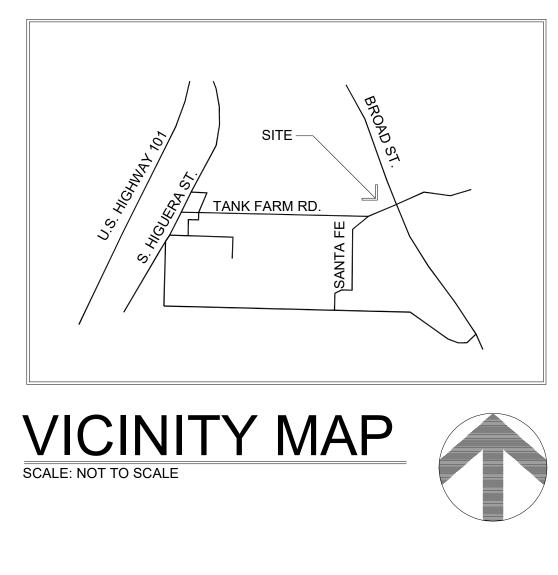
ASSISTED LIVING AND MEMORY CARE FACILITY



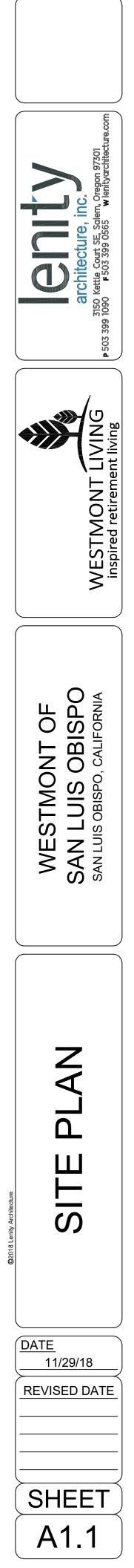








PROJECT DATA		
SITE DATA:		PROPOSED
PROPERTY AREA: 3.80 ACRES	,	165,914 SQ. FT.
SITE AREA BREAKDOWN:		
BUILDING COVERAGE:		SQ.FT. (40.6%)
CURBS/PATIOS / WALKS:		SQ.FT. (13.3%)
DRIVES / PARKING:		3 SQ.FT. (28.3%)
OPEN SPACE:		3 SQ.FT. (17.8%)
TOTAL	165,914	SQ.FT. (100%)
IMPERVIOUS AREA:		6 SQ.FT.
PERVIOUS AREA:	29,458	3 SQ.FT.
PARKING BREAKDOWN: OPEN SPACES:		50
EMPLOYEE SPACES:		58 10
ACCESSIBLE SPACES:		4
TOTAL SPACES:		<u>4</u> 72
TOTAL SPACES:		12
LONG TERM BIKE PARKING:		5
SHORT TERM BIKE PARKING:		6
TOTAL SPACES:		<u> </u>
BUILDING:		
28 BED MEMORY CARE		
111 UNIT ASSISTED LIVING		
FIRST FLOOR:	67,374	SQ.FT.
SECOND FLOOR:		SQ.FT.
TOTAL:	133,655	SQ.FT

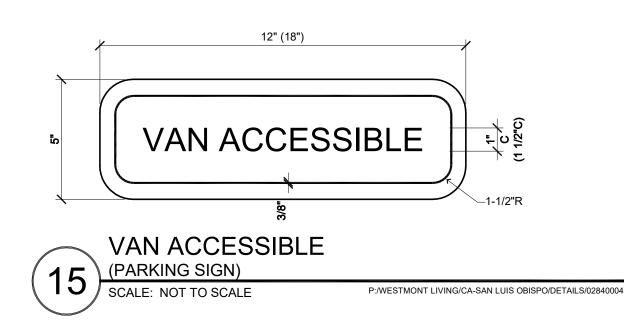


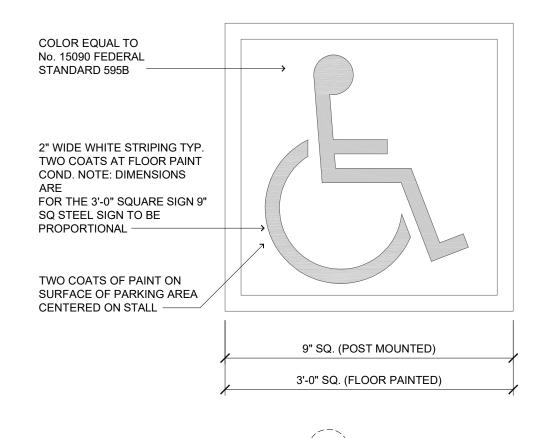
THE SITE PLAN DEPICTED ON <u>SHEET SP-1</u> SUPERSEDES THE CONFIGURATION ON THIS DRAWING.

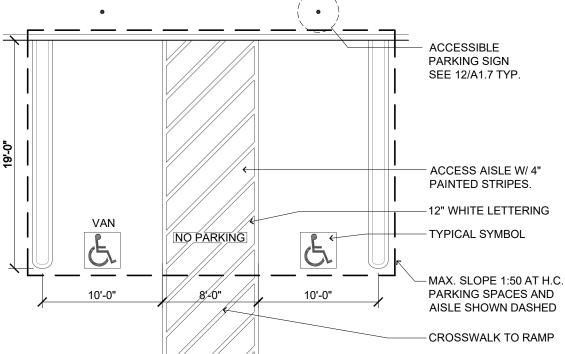


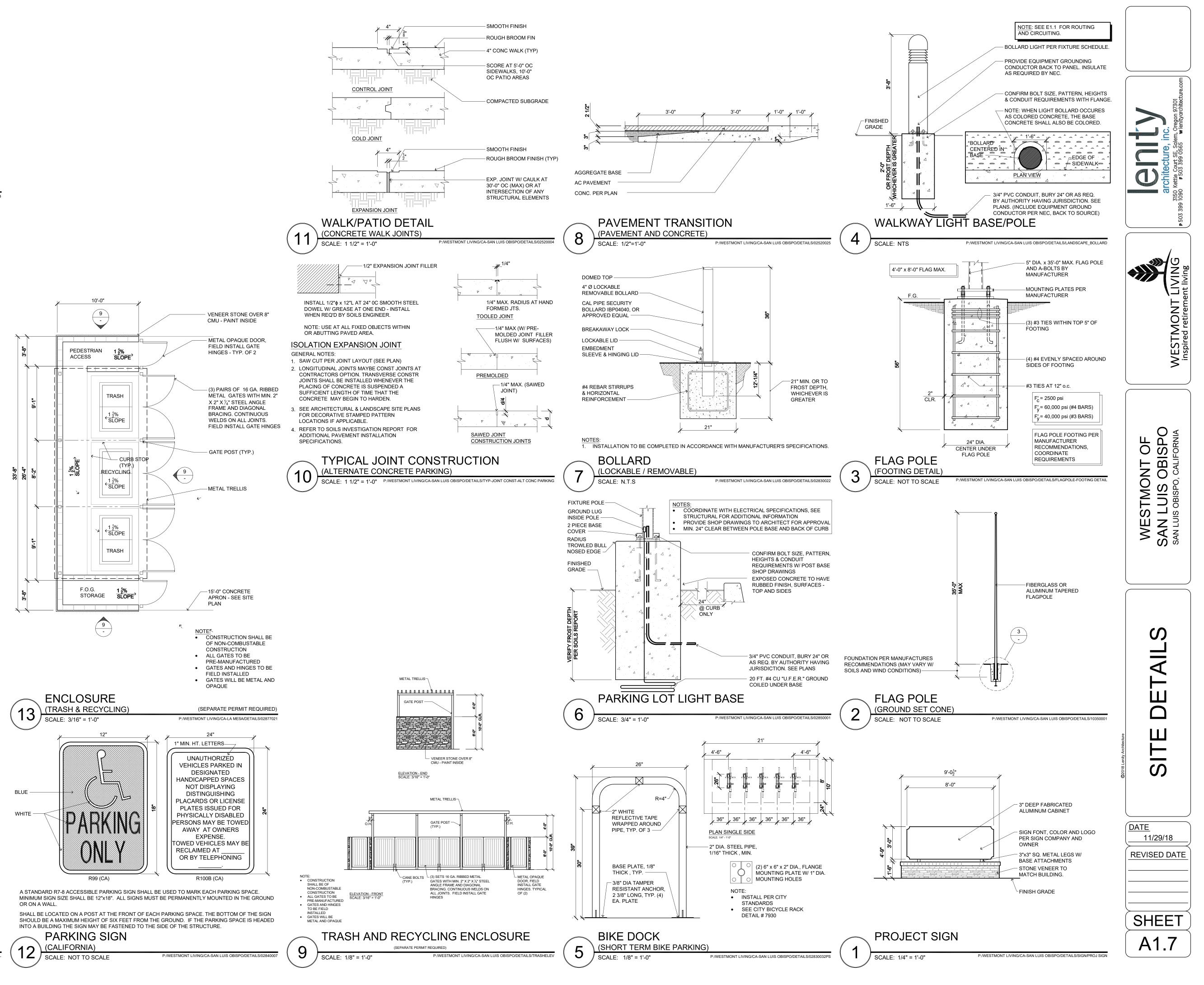
0 25 50 100 150











NOTES:

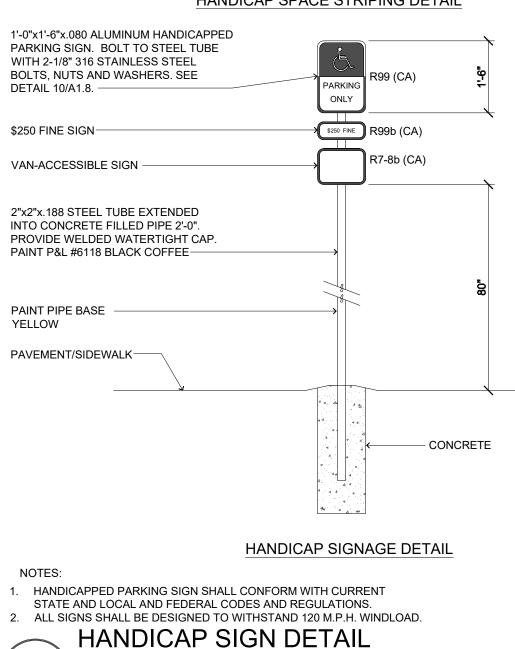
1. WHEN HEADER CURB IS USED IN LIEU OF WHEEL STOPS, SIDEWALK ABUTTING CURB

MUST BE WIDENED BY 18" SO THAT THE TOTAL SIDEWALK WIDTH IS 62", ALLOWING FOR 44" MINIMUM CLEAR ACCESSIBLE ROUTE.

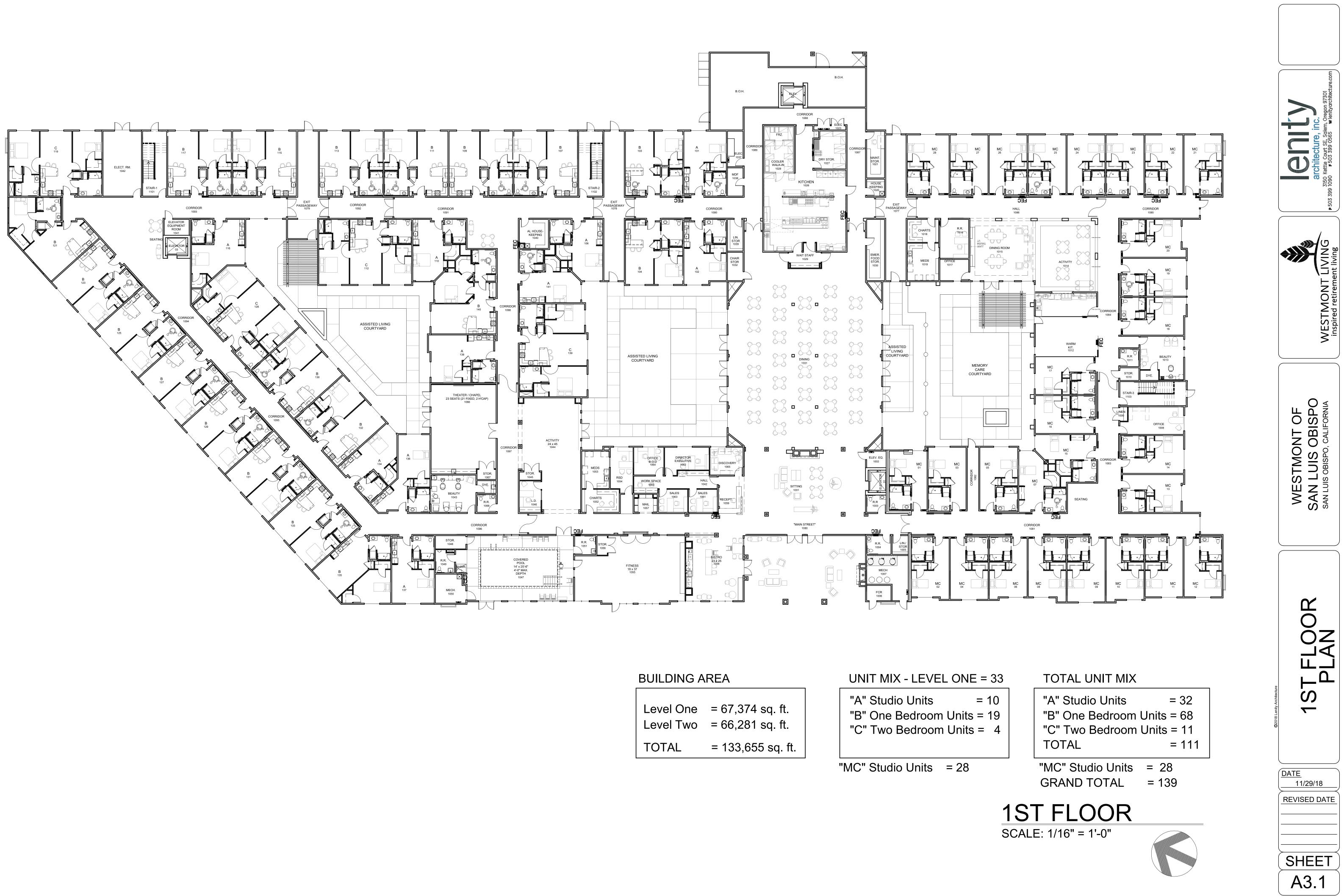
2. FOR COMPLETE DETAIL OF HANDICAPPED SIGN, REFER TO DETAIL.

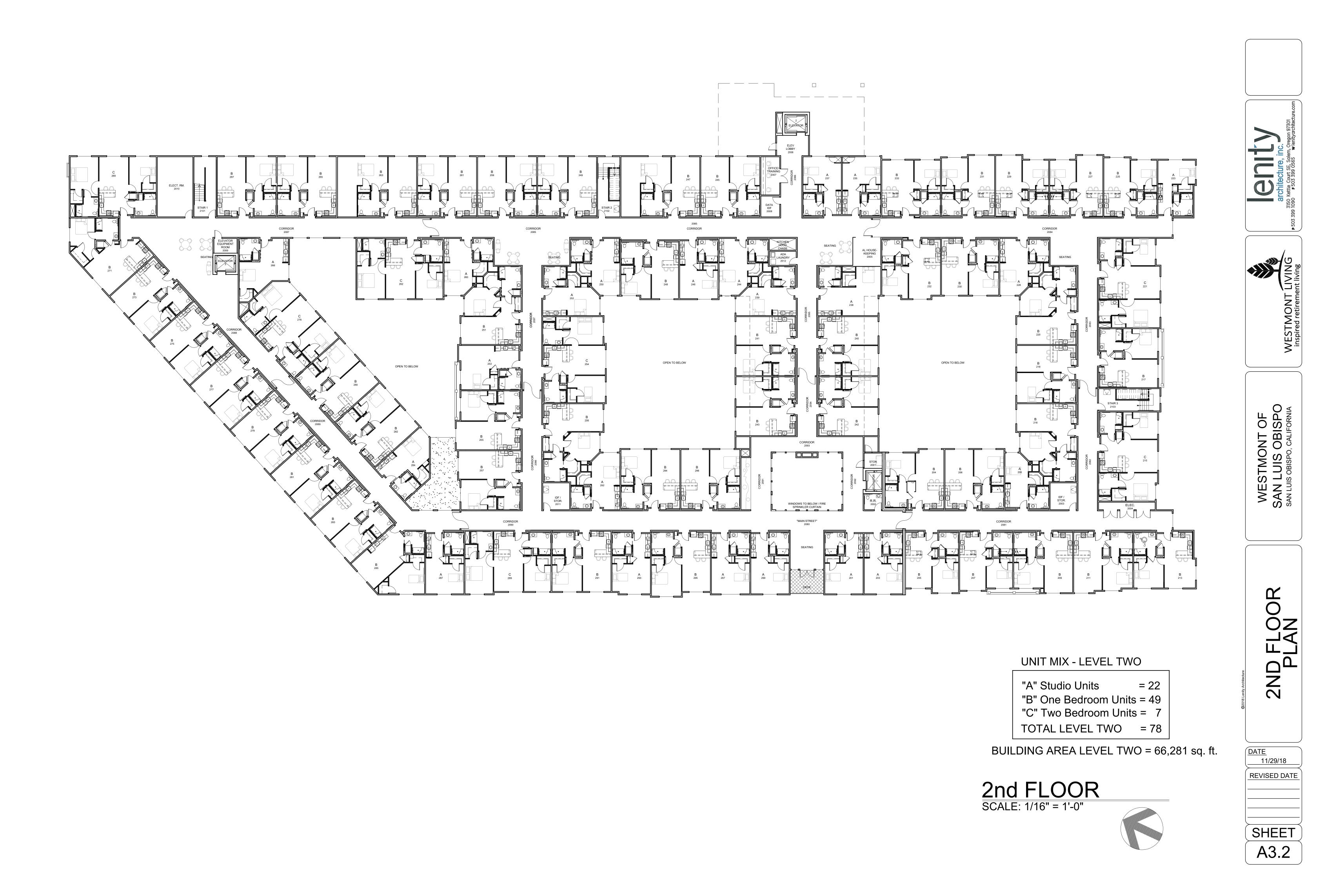
HANDICAP SPACE STRIPING DETAIL

:/WESTMONT LIVING/CA-SAN LUIS OBISPO/DETAILS/02840006C/

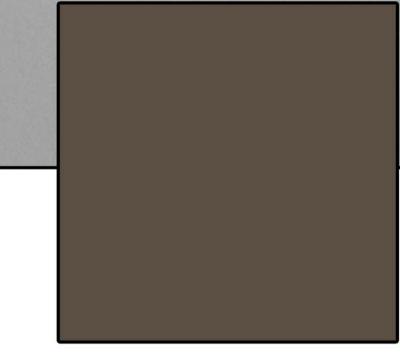


4 CALIFORNIA SCALE: NOT TO SCALE





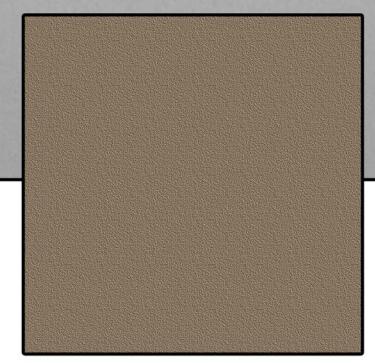




Board & Batten Sherwin Williams SW 7040 Smokehouse



Lap Siding Sherwin Williams SW 7507 Stone Lion

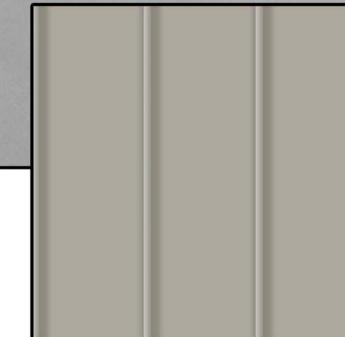


Stucco 1 Sherwin Williams

SW 9117 Urban Jungle



Stucco 2 / Trim Sherwin Williams SW 7656 Rhinestone



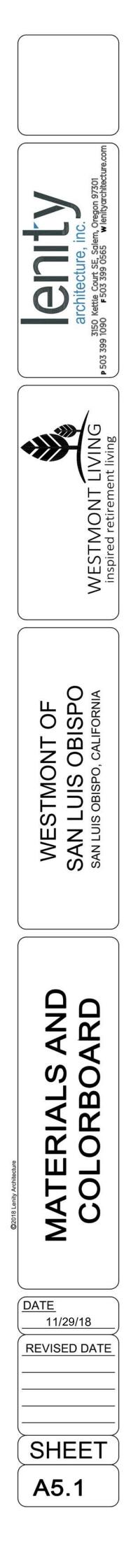
Metal Roof Sherwin Williams SW 2844 **Roycroft Mist Gray**



Stone Veneer Eastern Mountain Ledge Provo Canyon Grey



Wood Columns and Beams "Central Coastal Wood"











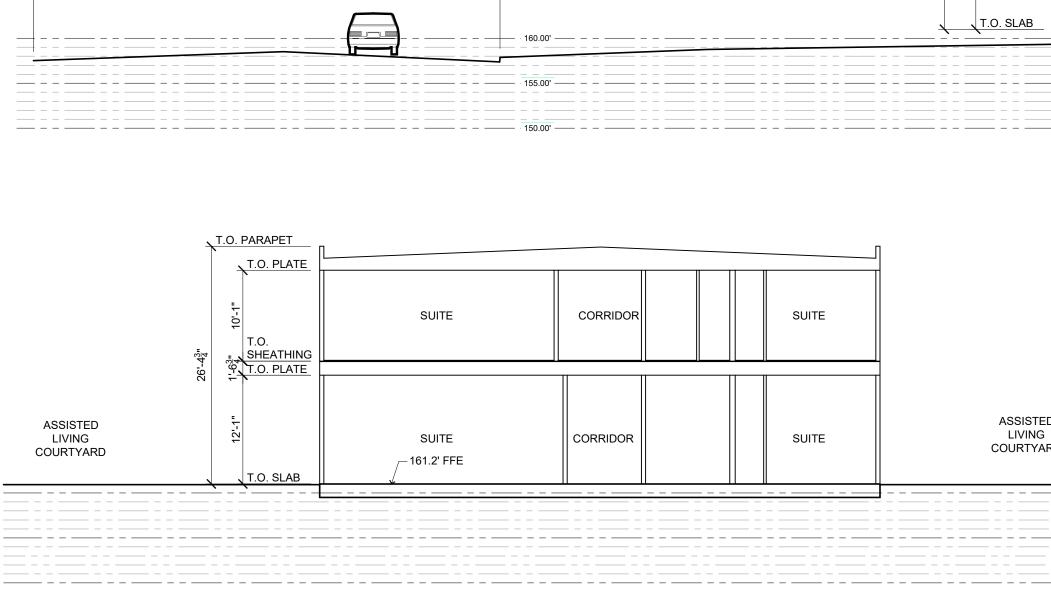






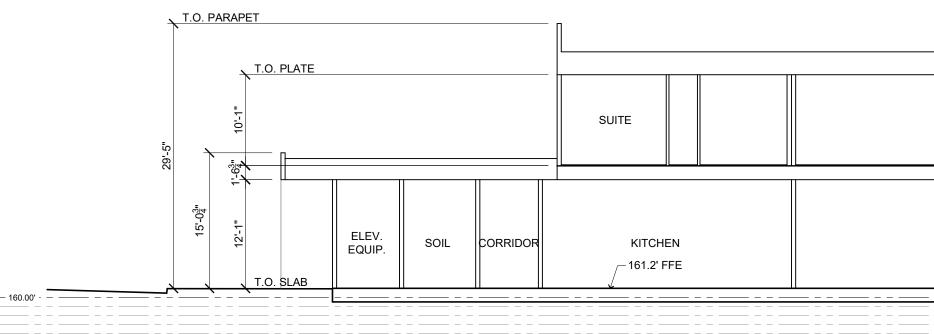








TANK FARM ROAD



T.O. PARAPET

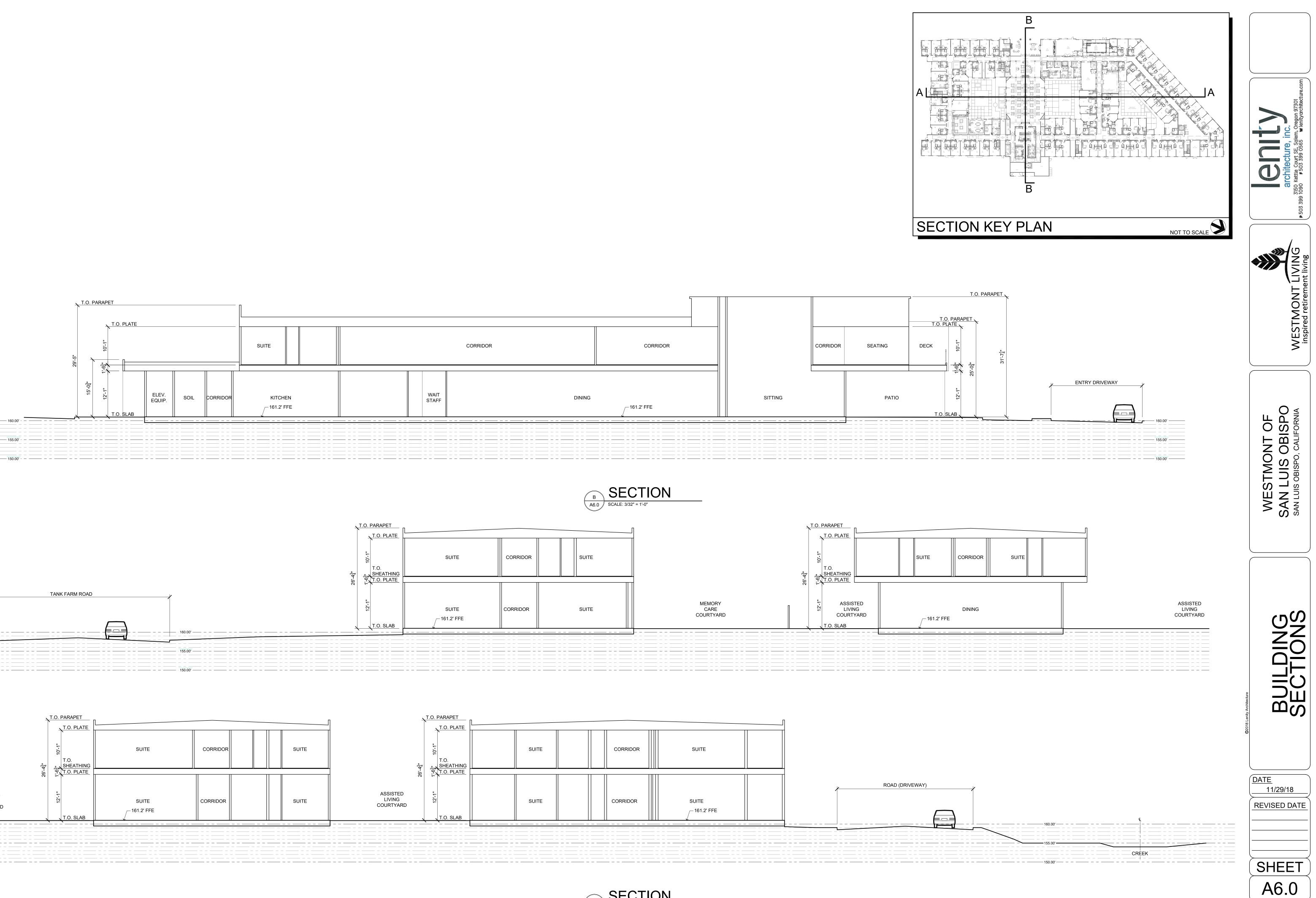


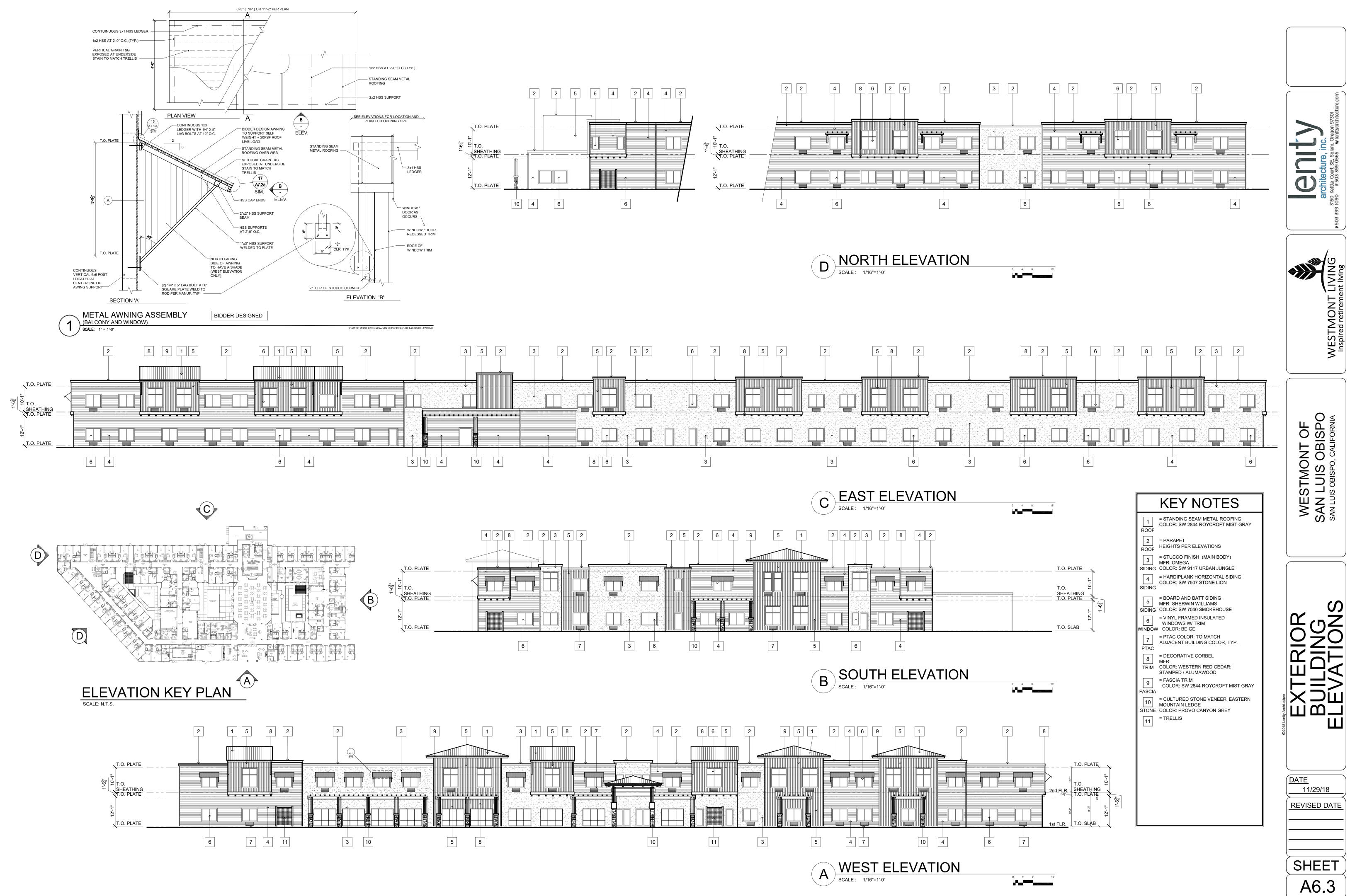
د	T.O. PARAPET	[[]	
26'-4 <u>3</u> "	T.O. SHEATHING	SUIT	≣	CORRIDO	R	SUITE			
-98 TED IG YARD	T.O. SLAB	SUIT	≡	CORRIDOF	۶	SUITE			, ROAD (DRI

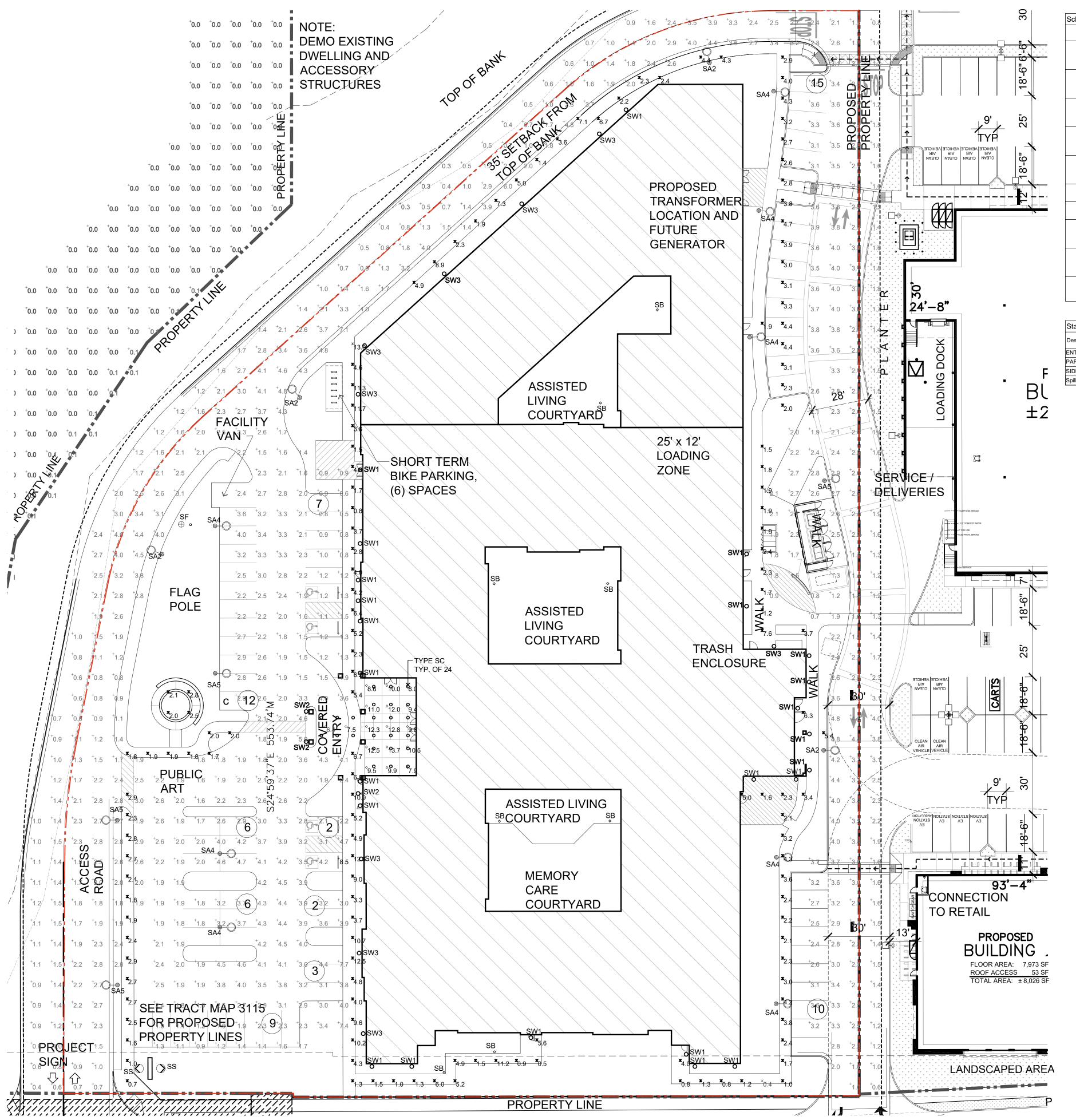
	T.O. PLATE					Ì	<u> </u>		
14"		SUITE	CORRIDOR	SUITE		43	10'-1"	T.O. SHEATHING	
7.07	역 T.O. PLATE					56'-		T.O. PLATE	
	τ.Ο. SLAB	SUITE	CORRIDOR	SUITE	MEMORY CARE COURTYARD		12'-1"	ASSISTED LIVING COURTYARD T.O. SLAB	
							`	·	



	CORRIDOR	CORRIDOR		CORRIDOR	SEATING
WAIT STAFF	DINING	161.2' FFE	SITTING		PATIO

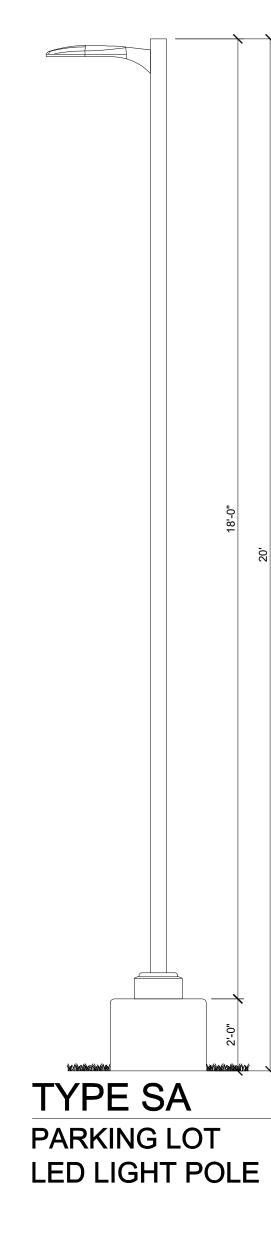


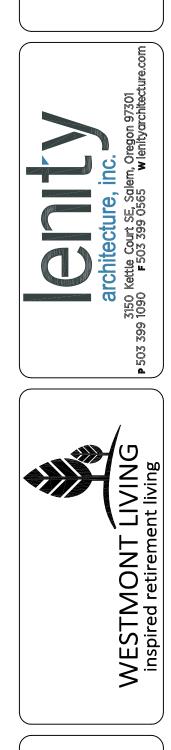




Label	Mount Height	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
SA2	20'	4	Lithonia Lighting	DSX0 LED P6 40K T2M MVOLT HS	DSX0 LED P6 40K T2M MVOLT with houseside shield	LED	1	DSX0_LED_P6_40K _T2M_MVOLT_HS.ie s	13054	0.95	134
SA4	20'	8	Lithonia Lighting	DSX0 LED P6 40K TFTM MVOLT HS	DSX0 LED P6 40K TFTM MVOLT with houseside shield	LED	1	DSX0_LED_P6_40K _TFTM_MVOLT_HS.i es	12465	0.95	134
SA5	20'	4	Lithonia Lighting	DSX0 LED P6 40K T5M MVOLT	DSX0 LED P6 40K T5M MVOLT	LED	1	DSX0_LED_P6_40K _T5M_MVOLT.ies	16575	0.95	134
SB	3'6"	8	Lithonia Lighting	DSXB LED 16C 530 40K SYM	D-SERIES BOLLARD WITH 16 4000K LEDS OPERATED AT 530mA AND SYMMETRIC DISTRIBUTION	LED	1	DSXB_LED_16C_53 0_40K_SYM.ies	2397	0.95	28
SC	Underside of Ceiling	33	COOPER LIGHTING - - HALO	SLD612940WH	HALO 6 INCH SURFACE LED DOWNLIGHT	LED	1	SLD612940WH.ies	1000	0.95	14.8
SF	1'	1	Lithonia Lighting	DSXF1 LED P1 40K NSP	DSXF1 LED P1 40K NSP	LED	1	DSXF1_LED_P14 0K_NSP.ies	2876	0.95	21
SS	1'	2	Lithonia Lighting	DSXF1 LED P1 40K MFL	DSXF1 LED P1 40K MFL	LED	1	DSXF1_LED_P14 0K_MFL.ies	2692	0.95	21
SW1	9'	34	WAC Lighting	WS-W20506	Wall Mount	LED	1	W20506- C14100003_IESNA 2002.ies	866	0.95	16.8
SW2	11'	3	WAC Lighting	DS-WS05-F35S-WT	Wall Mount Tube	LED	1	DS-WS05-F35S- WT.IES	1453	0.95	23.8
SW3	14'	9	Lithonia Lighting	WST LED P3 40K VF MVOLT	WST LED, Performance package 3, 4000 K, visual comfort forward throw, MVOLT	LED	1	WST_LED_P3_40K_ VF_MVOLT.ies	6609	0.95	50

Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	
ENTRY	\diamond	10.1 fc	13.7 fc	6.4 fc	2.1:1	1.6:1	
PARKING	+	2.3 fc	7.7 fc	0.3 fc	25.7:1	7.7:1	
SIDEWALK	Ж	4.1 fc	13.0 fc	0.4 fc	32.5:1	10.3:1	
Spill onto RZ	+	0.0 fc	0.3 fc	0.0 fc	NA	NA	



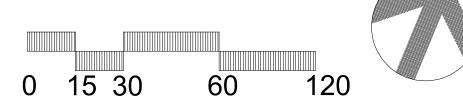


WESTMONT OF SAN LUIS OBISPO SAN LUIS OBISPO, CALIFORNIA

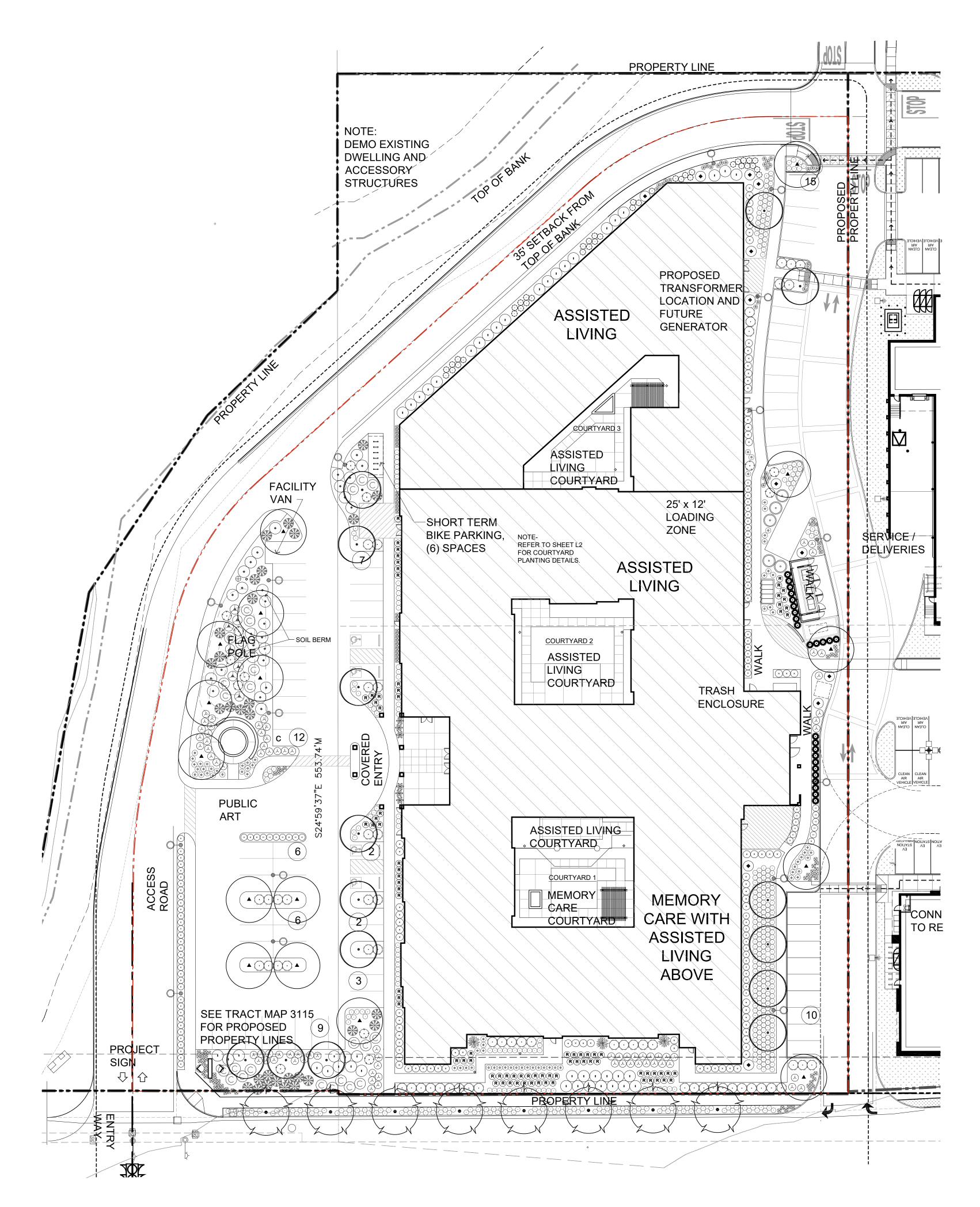




SITE LIGHTING PHOTOMETRIC PLAN SCALE: 1" = 30'



THE SITE PLAN DEPICTED ON <u>SHEET SP-1</u> SUPERSEDES THE CONFIGURATION ON THIS DRAWING.



WATER USE CALCULATIONS

TOTAL SITE LANDSCAPE AREA = 29,458 s.f. RIGHT-OF-WAY LANDSCAPE AREA = 1874 s.f.

TOTAL IRRIGATED LANDSCAPE AREA = 31,332 s.f.

MAXIMUM ANNUAL APPLIED WATER ALLOWANCE (MAAWA)

MAAWA (gallons)= (ETo) x (.62) x ((0.45 x LA) + (0.3 x SLA))

(43.80) x (.62) x ((0.45 x 31,332) + (0.3 x 0)) = MAAWA 382,883 gals.

ESTIMATED ANNUAL APPLIED WATER USE

(ETo) x (PF-Kc) x (HA) x (.62) / (IE)= EAAWU (HYDROZONE) (43.80) x (0.05) x (1959) x (.62) / (1.0) = 2660 gals. EAAWU (VERY LOW- ARTIFICIAL TURF) (43.80) x (0.2) x (19,048) x (.62) / (.81) = 127,720 gals. EAAWU (LOW HYDROZONES) (43.80) x (0.2) x (1874) x (.62) / (.81) = 12,566 gals. EAAWU (LOW HYDROZONES- R.O.W.) (43.80) x (0.5) x (8299) x (.62) / (.81) = 139,116 gals. EAAWU (MODERATE HYDROZONES) (43.80) x (0.9) x (152) x (.62) / (.75) = 4953 gals. EAAWU (HIGH HYDROZONES)

EAAWU TOTAL (EATAWU): 287,015 gals.

EATAWU 287,015 gals. is less than MAAWA 382,883 gals.

NOTE- ETo used for this site in San Luis Obispo, CA = 43.80



15 30 0

PLANTING LEGEND

	_
SYMBOLS STREET TREES	BOTANICAL NAME COMMON NAME
	Tristaniopsis laurina Water Gum
	Cassia leptophylla Gold Medallion Tree
\smile (\cdot)	Lagerstroemia 'Natchez' Natchez Hybrid Crape Myrtle
SHRUBS	
\bigcirc	Arbutus unedo 'Compacta' Compact Strawberry Tree
\bigcirc	Carpenteria californica Bush Anemone
٢	Euonymus japon.'Microphyllus Variega Variegated Box-leaf Euonymus
0	Juniperus scopulorum 'Skyrocket' Skyrocket Juniper
\bigcirc	Myrtus communis 'Compacta' Compact Myrtle
\bigcirc	Phlomis fruticosa Jerusalem Sage
	Rhamnus californica 'Mound San Brun Coffeeberry
$\left(\star \right)$	Rhaphiolepis indica 'Ballerina' Indian Hawthorn
R	Rosa floribunda 'Iceberg' Iceberg Rose
\diamond	Salvia greggii 'Coral' Coral Autumn Sage
GRASSES/PEREN	VIALS
×.	Aspidistra elatior Cast Iron Plant
*	Helictotrichon sempervirens Blue Oat Grass
۲	Lavandula angustifolia 'Twickel Purple' Dwarf English Lavender
	Muhlenbergia capillaris Pink Muhly
凝	Pennisetum alopecuroides 'Little Bunn Little Bunny Fountain Grass
	Phormium 'Maori Queen' Hybrid New Zealand Flax
	Romneya coulteri Matilija Poppy
GROUND COVERS	
\bigcirc	Ceanothus gloriosus 'Anchor Bay' California Lilac
•	Coprosma petriei 'Verde Vista' Creeping Coprosma

-	Tristaniopsis laurina Water Gum	8	15 gal. Std.	Moderate
	Cassia leptophylla Gold Medallion Tree	16	24" box Std.	Low
	Lagerstroemia 'Natchez' Natchez Hybrid Crape Myrtle	15	24" box Std.	Low
	Arbutus unedo 'Compacta' Compact Strawberry Tree	5	15 gal.	Low
	Carpenteria californica Bush Anemone	12	5 gal.	Low
	Euonymus japon.'Microphyllus Variegata' Variegated Box-leaf Euonymus	95	5 gal.	Low
	Juniperus scopulorum 'Skyrocket' Skyrocket Juniper	25	15 gal.	Low
	Myrtus communis 'Compacta' Compact Myrtle	59	5 gal.	Low
	Phlomis fruticosa Jerusalem Sage	13	5 gal.	Low
	Rhamnus californica 'Mound San Bruno' Coffeeberry	45	5 gal.	Low
	Rhaphiolepis indica 'Ballerina' Indian Hawthorn	76	5 gal.	Low
	Rosa floribunda 'Iceberg' Iceberg Rose	83	5 gal.	Moderate
	Salvia greggii 'Coral' Coral Autumn Sage	74	5 gal.	Low
REN	NIALS			
	Aspidistra elatior Cast Iron Plant	6	5 gal.	Moderate
	Helictotrichon sempervirens Blue Oat Grass	32	1 gal.	Low
	Lavandula angustifolia 'Twickel Purple' Dwarf English Lavender	68	1 gal.	Low
	Muhlenbergia capillaris Pink Muhly	31	1 gal.	Low
	Pennisetum alopecuroides 'Little Bunny' Little Bunny Fountain Grass	91	1 gal.	Low
	Phormium 'Maori Queen' Hybrid New Zealand Flax	3	5 gal.	Moderate
	Romneya coulteri Matilija Poppy	7	5 gal.	Very Low
VERS				
	Ceanothus gloriosus 'Anchor Bay' California Lilac	25	5 gal.	Low
	Coprosma petriei 'Verde Vista' Creeping Coprosma	28	1 gal.	Low
	Mahonia repens Creeping Mahonia	40	1 gal.	Low
	Rosmarinus officin. 'Huntington Carpet' Trailing Rosemary	482	1 gal.	Low
	Artificial Turf DuPont Forever Lawn or equal			Very Low
	NOTES 1. All landscape areas shall be irrigated	d with an	automatic irrigation	h
	. An anasoape areas shan be iniyated		aatomatio imyati0i	•

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North-Central Coast





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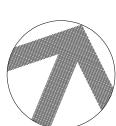
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- 1. All landscape areas shall be irrigated with an automatic irrigation system utilizing SMART Technology with weather sensor.
- 2. Provide 2" min. layer of organic mulch in all planting beds.
- 3. Courtyard plant materials shown on Sheet L2 are not included in Planting Legend.
- SPECIFIC PLAN CRITERIA
- 1. Provide a 36" high screen of cars between parking areas and street with an evergreen hedge/shrubs masses, wall or berm.
- Parking areas are screened with a 36" high evergreen hedge and shrub masses.
- 2. Provide screening of electrical transformers and equipment with evergreen shrubs or berm.
- All equipment is screened with evergreen shrubs.
- 3. Parking Lot Trees:
- A. Use single tree species at end planter islands with second tree species between islands as an option.
- Two tree species have been used in the parking lot planters. B. Provide "Orchard Style" planting in parking lot at a rate of
- 1 tree / 4 parking spaces.
- The parking lot does not have multiple rows of parking but an Orchard Style tree planting approach has been applied where feasible
- 73 spaces / 4= 18 required trees, 31 trees are proposed*
- * additional trees proposed to achieve 50% shade requirement at 10 years.

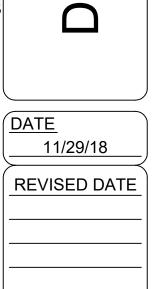


DATE: 1/23/2018, rev. 3/7/2018, rev. 11/29/2018 SCALE: 1" = 30'

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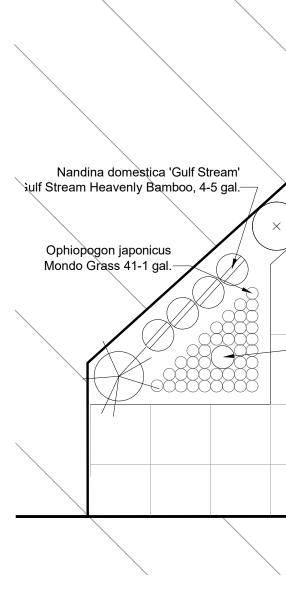
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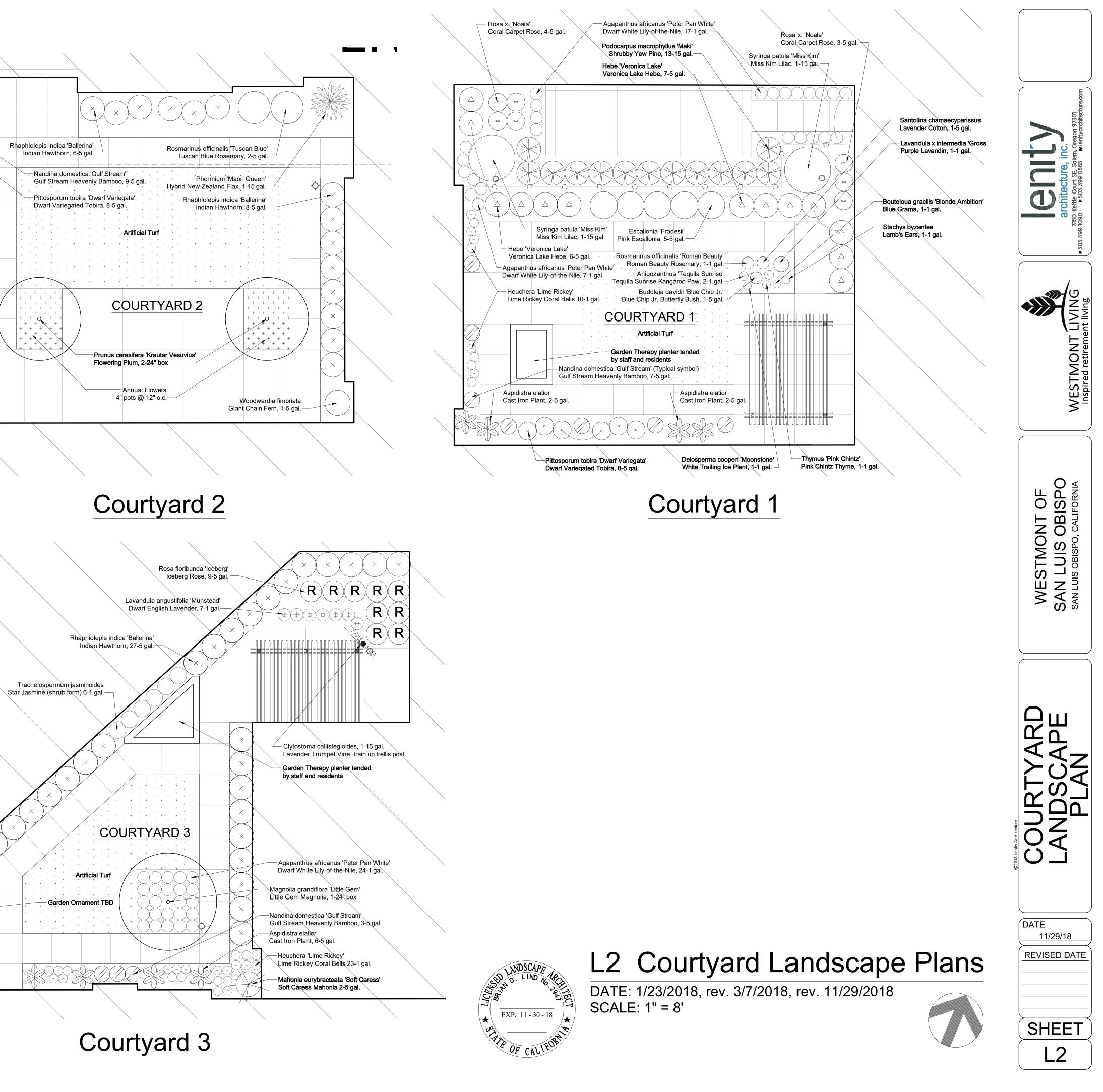
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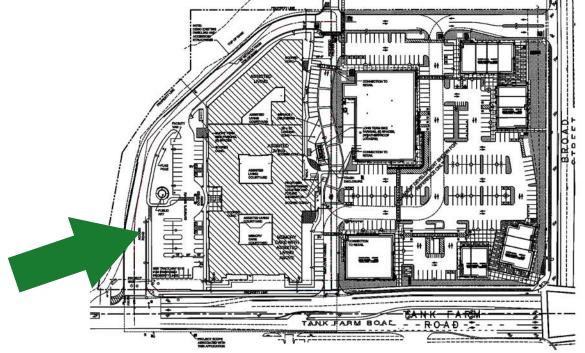
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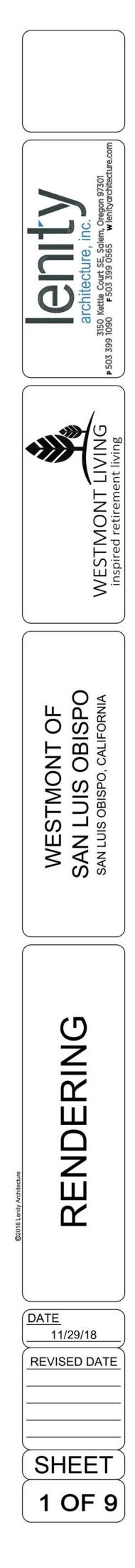


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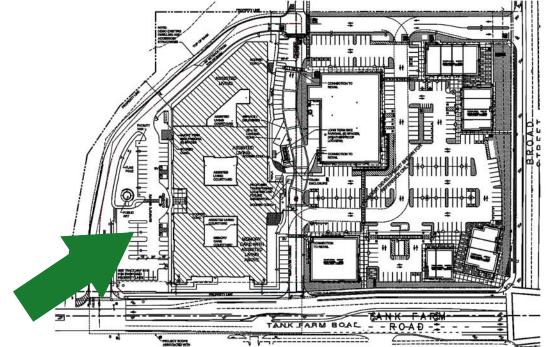


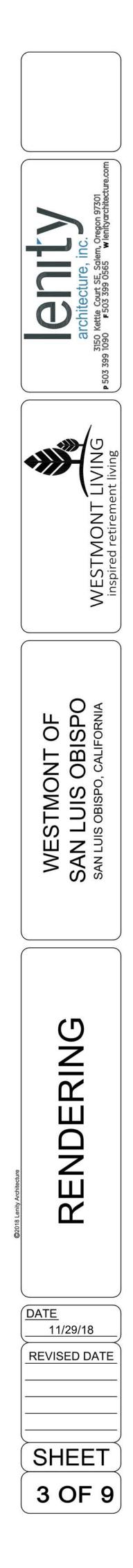




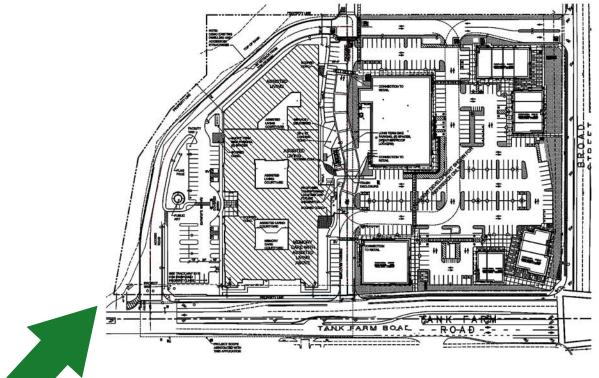


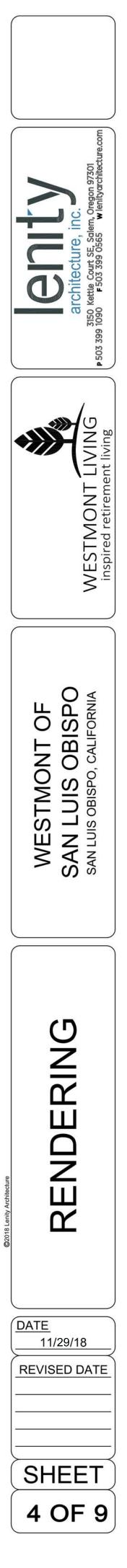




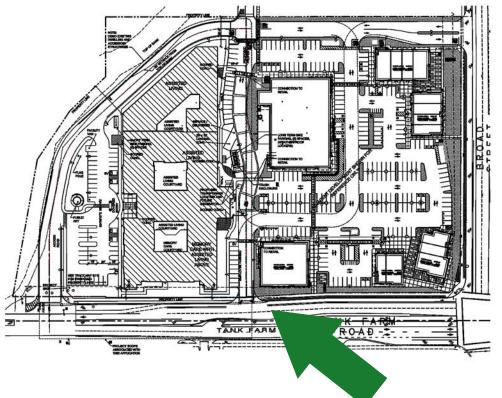


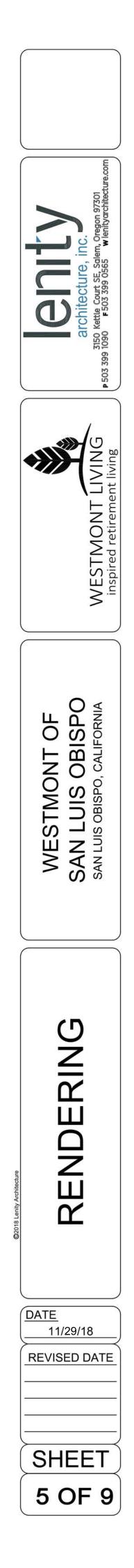


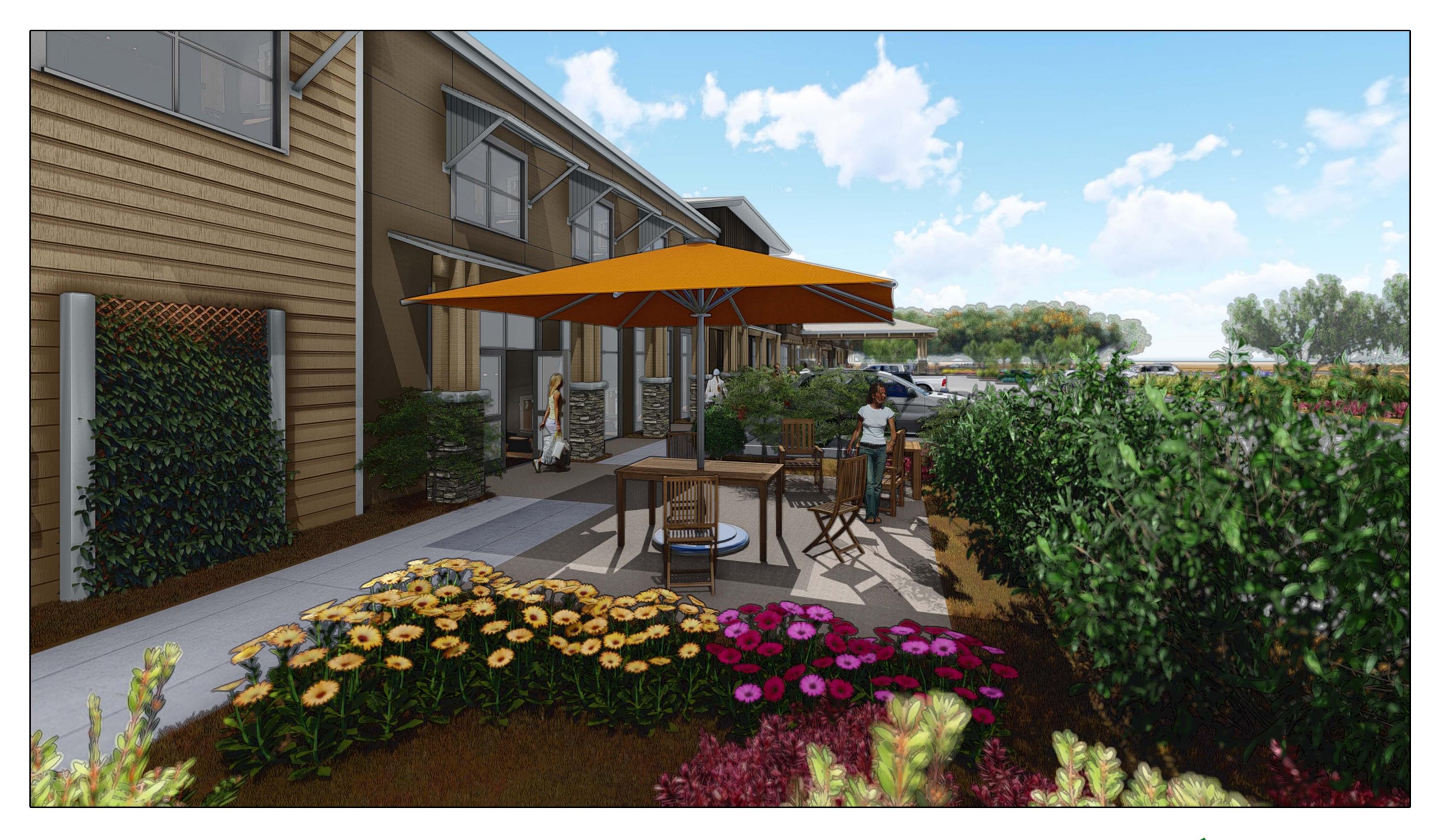


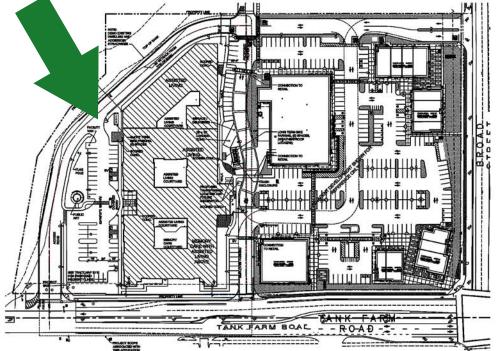


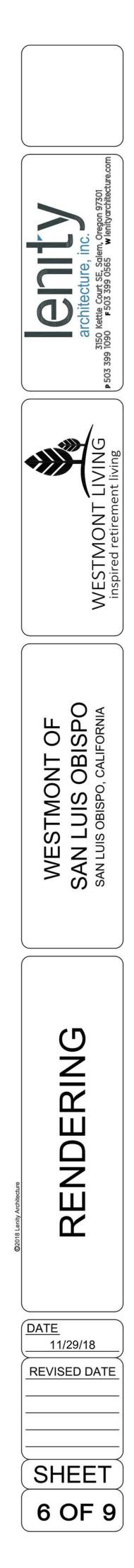
















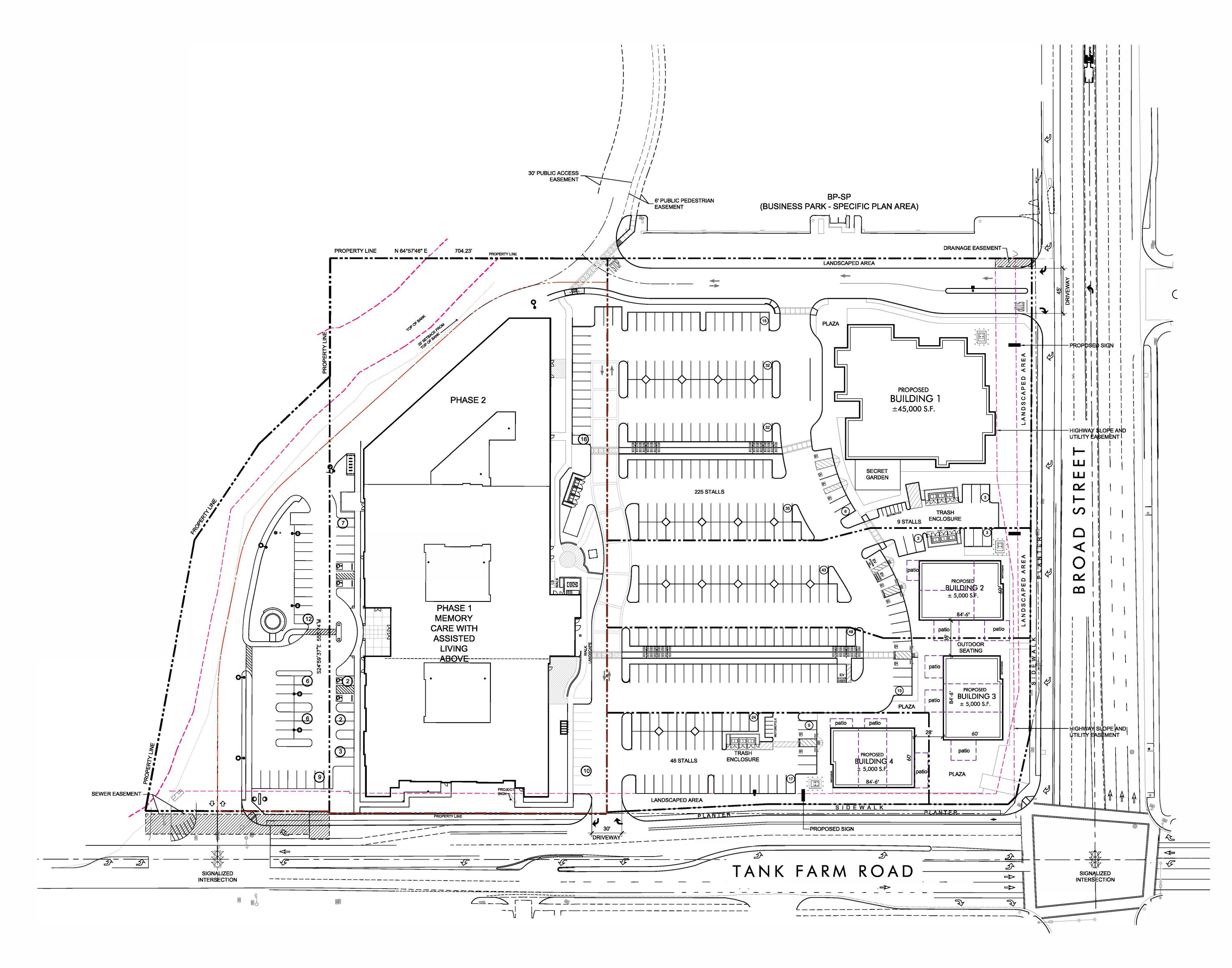








Conceptual Commercial Center Site Plan Requires separate application and entitlements

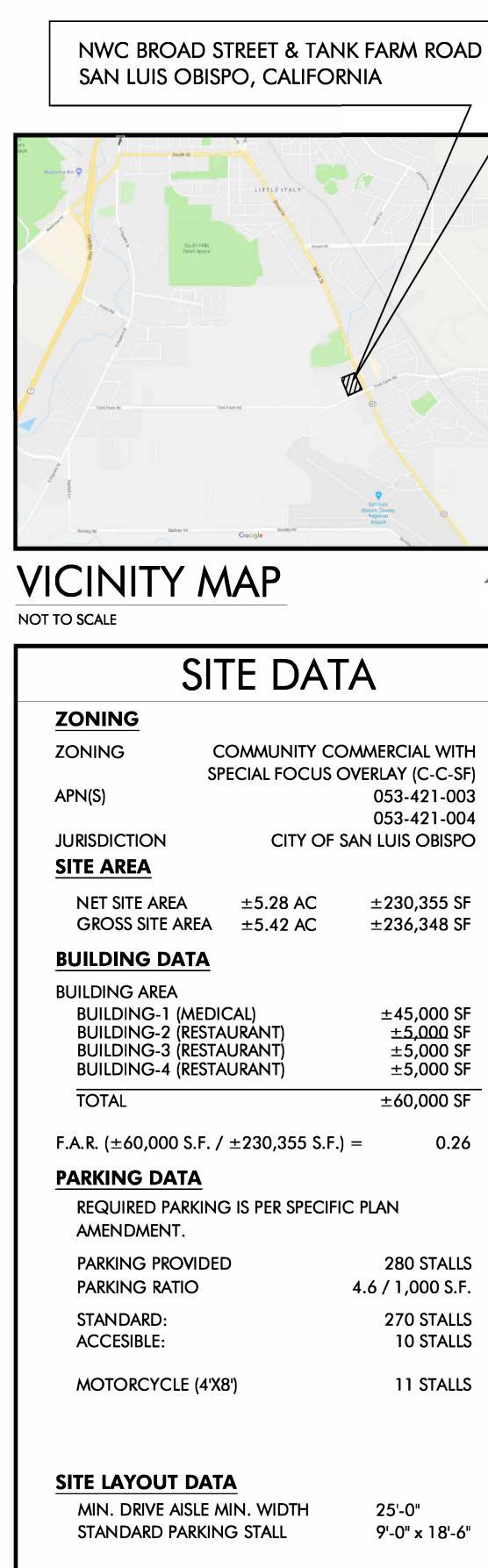


NWC TANK FARM ROAD & BROAD STREET SAN LUIS OBISPO, CA

NKT COMMERCIAL, LLC 684 HIGUERA STREET, SUITE B, SAN LUIS OBISPO, CA

T: 805/541.9094

FOR REFERENCE ONLY





PRELIMINARY SITE PLAN SUBJECT TO CHANGE.





01.20.2020

13215TMA

PROPOSED SITE PLAN

SCALE: 1" = 40'-0"

1 NORTH 053-421-003 053-421-004 CITY OF SAN LUIS OBISPO ±230,355 SF ±236,348 SF ±45,000 SF ±5,000 SF ±5,000 SF ±5,000 SF ±60,000 SF 0.26 280 STALLS 4.6 / 1,000 S.F. 270 STALLS 10 STALLS 11 STALLS 25'-0" 9'-0" x 18'-6"

Attachment 3

Biological Wetland Resource Assessment

NWC BROAD STREET / TANK FARM ROAD MIXED-USE PROJECT APNs 053-421-003 &-004

BIOLOGICAL AND WETLAND RESOURCES ASSESSMENT

August 28, 2014 *Updated* March 16, 2018

Prepared for:

NKT DEVELOPMENT, LLC AND OASIS ASSOCIATES, INC.

Ц

Central Coast Office 1320 Van Beurden Drive, Suite 202-D4 Los Osos, CA 93402 tel 805.434.2804 fax 805.980.5886

www.sageii.com



TABLE OF CONTENTS

1.0	INTRODUCTION AND PURPOSE
2.0	EXISTING CONDITIONS
3.0	METHODS
4.0	RESULTS
4.1	Soils
4.2	PLANT COMMUNITIES
4.3	WILDLIFE
4.4	WATERS OF THE U.S., WATERS OF THE STATE & WETLANDS
4.5	SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES OF SPECIAL CONCERN
4.5.1	Special-Status Botanical Resources
4.5.2	Special-Status Wildlife
5.0	IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES
5.1	IMPACT ASSESSMENT
5.2	RECOMMENDED MITIGATION MEASURES
6.0	CONCLUSIONS
7.0	REFERENCES

APPENDIX A – FIGURES

FIGURE 1: REGIONAL LOCATION MAP
FIGURE 2: VICINITY AERIAL OVERVIEW MAP
FIGURE 3: SOILS MAP
FIGURE 4: HABITAT MAP
FIGURE 5: CNDDB OCCURRENCES MAP (FIVE-MILE SEARCH RADIUS)
FIGURE 6: REPRESENTATIVE PHOTOGRAPHS
FIGURE JD-1: WETLAND DELINEATION MAP
FIGURE JD-2: WETLAND DELINEATION MAP
FIGURE JD-3: WETLAND DELINEATION MAP

APPENDIX B-

WETLAND DELINEATION AND PRELIMINARY JURISDICTIONAL DETERMINATION



NWC BROAD STREET / TANK FARM ROAD MIXED-USE PROJECT BIOLOGICAL AND WETLAND RESOURCES ASSESSMENT

1.0 INTRODUCTION AND PURPOSE

Sage Institute, Inc. (SII) has completed this biological and wetland resources assessment (SII 2018 BA) to describe and map the existing conditions of the NWC Broad Street / Tank Farm Road Mixed-Use Project (proposed project) consisting of the combined approximately 10.6-acre± "McBride" and "Curry" properties, APNs 053-421-003 &-004, respectively. The proposed project includes development of the approximate 9.3-acre McBride parcel and 1.28-acre Curry parcel for commercial uses including site ingress/egress access from Broad Street, Tank Farm Road, and the recently constructed SESLOC development. The purpose of this biological assessment is to document existing conditions of the proposed project site and to evaluate the potential for any direct or indirect potentially significant impacts on biological or wetland resources or adverse effects on any rare, threatened, or endangered plant or wildlife species (special-status species). This report is intended to support the City of San Luis Obispo's environmental review process for the projects. Detailed maps and representative photographs of the properties showing the biological/wetland resources are included in Appendix A. The Wetland Delineation and Preliminary Jurisdictional Determination report is included as Appendix B.

SII conducted the initial biological and wetland resources field reconnaissance and data collection in 2014. The existing conditions documented at that time have been affirmed by SII in subsequent field surveys in both 2017 and 2018, as the site conditions and related biological resources are unchanged over that time period. Additionally, the top of creek bank was established, surveyed, and approved by the City's Natural Resource Manager in 2017.

1.1 PROJECT LOCATION

The proposed project site is composed of two parcels located at the northwest corner of Broad Street and Tank Farm Road in the City of San Luis Obispo. Figure 1 and Figure 2 in Appendix A provided regional and detailed location maps, respectively.

1.2 PROJECT DESCRIPTION

The proposed project includes the development of a retail shopping center and assisted living facility on two parcels located generally on the northwest corner of Broad Street and Tank Farm Road. Access to the project sites will be provided from both Broad Street and Tank Farm Road. Based upon circulation between the proposed projects and the existing SESLOC facility, located north of the subject properties, the Broad Street access will impact 0.19 acres of seasonal wetland. Included in the impact area is a new crossing of the ephemeral drainage required to provide access from the subject properties to the existing SESLOC facility.

Onsite enhancement of approximately 0.60 acre along the Orcutt Creek corridor is a part of the proposed project description and will mitigate for impacts to the 0.19-acre seasonal wetland and ephemeral drainage crossing at a 3:1 replacement ratio. The enhancement plan will also include removal of noxious invasive non-native herbaceous and woody species, while a new native plant planting program is proposed in the northwest corner and creek setback areas along Orcutt Creek. Table CMMP-1 below is a proposed list of creek enhancement plantings proposed as part of the project.



	TABLE CMMP-1								
	McBride and Curry Properties								
COMPENSATORY MITIC	ATION AND MONITORING P	LAN CREEK ENHANCEMEN	T PLANTING PALETTE						
SCIENTIFIC NAME	COMMON NAME	SPACING	NOTES						
		•							
TOP OF BANK HINGE POINT (ALTERNATING PATCHES)									
Carex barbarae	Santa Barbara sedge	3-foot centers	Cluster in 3's to 5's						
Juncus patens	spreading rush	3-foot centers	Cluster in 3's to 5's						
Leymus condensatus	giant wild rye	5-foot centers	Cluster in 3's to 5's						
Muhlenbergia rigens	deer grass	5-foot centers	Cluster in 3's to 5's						
	35-FOOT CREE	К							
	TREE								
Quercus agrifolia	coast live oak	25 to 50-foot centers	Alternating tree pattern						
Platanus racemosa	western sycamore	25 to 50-foot centers	Alternating tree pattern						
Acer macrophyllum	big leaf maple	25 to 50-foot centers	Alternating tree pattern						
California black walnut	Juglans californica	25-foot centers	Alternating tree pattern						
Umbellularia californica	California bay	25-foot centers	Alternating tree pattern						
	Shrub	95							
Artimesia californica	California sagebrush	5-foot centers	Cluster in 3's to 5's						
Eriogonum fasciculatum*	California buckwheat	5-foot centers	Cluster in 3's to 5's						
Frangula californica	California coffeeberry	5-foot centers	Cluster in 3's to 5's						
Heteromeles arbutifolia	toyon	10-foot centers	Cluster in 3's to 5's						
Rosa californica*	California wild rose	3-foot centers	Cluster in 3's to 5's						
Rubus ursinus*	California blackberry	3-foot centers	Cluster in 3's to 5's						
Salvia melifera	Black sage	5-foot centers	Cluster in 3's to 5's						
*Plant adjacent to row of top	of bank hinge point planting								
	Herbaceous Species Hyd	roseed (40 lbs./acre)							
Artemesia douglasiana	mugwort	5							
Bromus carinatus	California brome grass	5							
Elymus glaucus	blue wildrye	5							
Eschscholzia californica	California poppy	5							
Hordeum brachyantherum	meadow barley	5							
Leymus triticoides	beardless wild rye	3							
Lupinus bicolor	miniature lupine	3							
Lupinus nanus	sky lupine	4							
Stipa pulchra	Purple needlegrass	5							

2.0 Existing Conditions

The McBride parcel proposed project site is zoned for commercial development that currently supports disturbed non-native annual grassland, non-native trees, and ruderal (previously disturbed) habitats. The majority of the site has been occupied in the past as recent as 2003 and dating back to at least 1937 with buildings and active equipment/materials storage. The site appears to have been idle from 2004 to present after buildings were removed and the surface was cleared leaving only the non-native trees. A temporary soil stockpile has been placed on the southwest corner of the property in 2014. An

2



ephemeral drainage enters the site through a 24-inch culvert in the northeast corner of the property and flows west to the confluence with Orcutt Creek in the northwest corner of the site, then veers southward as Orcutt Creek to a culvert under Tank Farm Road (Figure 2). The property is bordered by urban development on the north, east, and south sides with residential development to the west. The Curry parcel is developed and ruderal site with residence and storage yards dating back to at least 1959.

3.0 METHODS

SII conducted a review of available background information including the proposed project information, aerial photographs dating back to 1937, NRCS Soils Survey information, and a search and review of the current California Natural Diversity Data Base (CNDDB) within an approximate five-mile search radius of the proposed project site. The five-mile radius was used as the typical 10-mile search radius would have included areas well outside of the city limits that would not be relevant to this study in the urbanized City of San Luis Obispo. The CNDDB provided a list with mapped locations of special-status plant and wildlife species, as well as natural communities of special concern, that have been recorded within the region of the project site. The CNDDB records help focus the field survey efforts and evaluation of potential project effects on specific species or habitats.

SII Principal Ecologist David Wolff conducted field reconnaissance surveys of the proposed project site on May 20, July 10, and July 31, 2014; July 3, 2017; and February 22, 2018. The purpose of the field surveys was to document existing conditions within the project site in terms of habitat for plants and wildlife species, and the potential to support jurisdictional wetlands, riparian habitats, and/or waters of the U.S./State. Plant and wildlife species observed in the field were recorded. The field surveys included a thorough and complete springtime floristic inventory and rare plant survey in 2014 of observable and identifiable plants. The 2017 and 2018 field surveys affirmed conditions are unchanged from the 2014 initial field surveys. A wetland delineation and preliminary jurisdictional determination are summarized in Section 4.4 below and detailed in Appendix B to this report.

The study area habitat types were described by the aggregation of plants and wildlife based on the composition and structure of the dominant vegetation observed at the time the field reconnaissance was conducted. The determination of jurisdictional wetlands and/or waters of the U.S./State was made using the currently accepted U.S. Army Corps of Engineers (Corps) wetland delineation methodology and Clean Water Act Section 404 implementing regulations and guidance.

SII Principal Ecologist David Wolff reviewed the available background information, conducted all the field surveys, and is the primary author and principal in charge of report preparation. The survey data collected on plant and wildlife species and conclusions presented in this biological assessment are based on the methods and field reconnaissance conducted over the project site, as described above.

4.0 RESULTS

4.1 SOILS

The project site supports mostly Cropley clay soils mapping unit as shown in Figure 3. Given the past developed uses and ground clearing, the surface no longer appears to represent the natural surface material of this mapping unit. Aside from review of many years of aerial photography and a cursory view of the surface material during SII field surveys, no further analysis of the onsite soils was conducted as part of this study.



4.2 PLANT COMMUNITIES

The plant communities within the study area are generally described by the assemblages of observed plant species that occur together in the same area forming habitat types. Plant community descriptions are generally based on *A Manual of California Vegetation, 2nd Edition* (Sawyer et al. 2009). Plant names used in this report follow *The Jepson Manual, Vascular Plants of California, Second Edition Thoroughly Revised and Expanded* (Baldwin et al. 2012). The following describes the plant communities and habitat characteristics observed within the project site. The project site supports the following distinct plant communities: 1) disturbed non-native annual grassland with non-native trees; and 2) an ephemeral drainage with mostly herbaceous vegetation along with several willow trees, a patch of bulrush, and a non-native blackberry thicket. Orcutt Creek along the western edge of the project area is choked with non-native forbs and shrubs. Figure 4 provides a habitat map. Figure 6 provides a set of representative photographs of the existing conditions of the proposed project site. All plant species observed during the SII field surveys including rare plant survey are included in the text below.

DISTURBED NON-NATIVE ANNUAL GRASSLAND – The disturbed annual grassland habitat, is dominated by nonnative annual grasses and herbaceous broadleaf plant species, along with very few native species. Disturbed non-native annual grassland habitat occurs as the dominant habitat type over the entire project site with the exception of the ephemeral drainage that runs along the north property border. The approximately 9.3-acres of disturbed annual grassland within the study area was observed to be very low in species diversity and dominated by a near pure stand of wild oats (*Avena barbata*). Other plant species observed in the non-native grassland habitat include, ripgut brome (*Bromus diandrus*), filaree (*Erodium cicutarium*), cheeseweed (*Sidalcea* sp.), fennel (*Foeniculum vulgare*), wild radish (*Raphanus sativus*), poison hemlock (*Conium maculatum*), harding grass (*Phalaris aquatica*), teasel (*Dipsacus sativus*), shortpod mustard (*Hirschfeldia incana*), bur-clover (*Medicago polymorpha*), milk thistle (*Silybum marianum*), narrow-leaf milkweed (*Asclepias fascicularis*), and bristly ox-tongue (*Helminthotheca echioides*). A few coyote brush shrubs (*Baccharis pilularis*) are scattered on the site along with non-native pine, cypress, acacia, and eucalyptus trees.

EPHEMERAL DRAINAGE & SEASONAL WETLAND – An ephemeral drainage swale and low-flow channel runs just offsite along the north property boundary from a 24-inch culvert under Broad Street at the northeast property corner to the confluence with Orcutt Creek, which then cuts across the northwest corner of the site. For the most part, the drainage channel runs outside the property adjacent to the northern border. It appears to sheet flow over some of the property along an upper terrace above the drainage but below the general elevation of the rest of the property. A small stand of arroyo willow (*Salix lasiolepis*) occurs at the northwest corner with one small isolated tree in the center of the drainage. A patch of bulrush (Schoenoplectus sp.), a Himalayan blackberry (Rubus armeniacus) thicket, and one Canary Island date palm (Phoenix canariensis) occur along the drainage. The upper terrace was dominated by Harding grass, teasel, soft chess, rabbitsfoot grass (Polypogon sp.), and bristly ox-tongue. A patch of yerba mansa (Anemopsis californica) is mostly offsite in the swale with a small amount encroaching onto the site along the property line. Orcutt Creek with an established bed, bank, and channel runs along the western property line and is choked with non-native Italian rye grass (Festuca perennis), harding grass, bristly oxtongue, and castor bean (Ricinus communis) for most of its length. See Section 4.4 below, Figures JD-1, JD-2, and JD-3 in Appendix A, and the preliminary jurisdictional determination report included as Appendix B.



4.3 WILDLIFE

The mosaic of remnant patches of ruderal and vacant lands within the urbanized landscape on and around the project area can provide habitat for a variety of wildlife species that have become adapted to the urban environment such as raccoons, opossums, ground squirrels and other rodents, and reptiles. Even in urbanized areas, drainage corridors and trees can provide high quality habitat for a variety of wildlife species that have become adapted to the urban environment, but in particular to resident and migratory birds. Common birds observed during SII field surveys included the northern mockingbird, house finch, American goldfinch, and red-tailed hawk. Given that the site is surrounded by urban development, other wildlife use is likely limited with generally low wildlife values attributed to this disturbed site.

4.4 WATERS OF THE U.S., WATERS OF THE STATE & WETLANDS

The ephemeral drainage swale with low-flow channel is located just offsite adjacent to the northern property line of the McBride parcel. The limits were shown on the SESLOC grading plans as jurisdictional waters of the U.S., subject to U.S. Army Corps of Engineers (Corps), and waters of the State by the California Department of Fish and Wildlife (CDFW). Currently it appears that any source of hydrology for the ephemeral drainage is from a culvert outfall just offsite at the northeast corner of the McBride property from runoff from surrounding commercial and residential development. The drainage appears to become a prominent drainage feature between 1994 and 2002 with the development of the Marigold Shopping Center.

Appendix B provides the details of a wetland delineation and preliminary jurisdictional determination evaluation performed by SII on the terrace that runs on the McBride parcel adjacent to the ephemeral drainage that runs just offsite along the northern property boundary of the McBride parcel. The following summarizes the wetland delineation findings.

There is evidence of overflow flooding wetland hydrology (drift lines of debris and sediment deposits) from the ephemeral drainage onto the McBride parcel on a terrace that runs along the drainage on the McBride property. The evaluation of soils indicated field indicators of hydric soils suggesting a regular flooding regime over time during the wet season. The upper reach of the terrace was dominated by Harding grass (*Phalaris aquatica*), teasel (*Dipsacus sativus*), soft chess (*Bromus hordaceous*), rabbitsfoot grass (*Polypogon* sp.), and bristly ox-tongue (*Helminthotheca echioides*) that does not represent a wetland vegetation community.

While some level of overland flow appears to occur, with the exception of the bulrush patch, the ephemeral nature of the drainage overflow does not manifest a definitive wetland plant community. However, given several years of below normal rainfall at the time of the delineation in 2014, this area was treated as problem area wetland. As such, based on the presence of hydric soils and wetland hydrology, approximately 0.19 acre (8,166 square feet) of jurisdictional seasonal wetland occurs on the bench above the ephemeral drainage along the northern property boundary on the McBride parcel. Figures JD-1 and JD-2 in Appendix A show the location and extent wetlands delineated adjacent to the ephemeral drainage as described above.

The ephemeral drainage meets Orcutt Creek at the northwest corner of the McBride property becoming Orcutt Creek that exhibits a distinct bed, bank and channel. As described above, this reach of Orcutt Creek is choked with non-native grasses, forbs, and shrubs. Orcutt Creek has been in its current



alignment as a tributary drainage since as far back as 1937. Given it flows through a sequence of creeks to San Luis Obispo Creek and the Pacific Ocean, Orcutt Creek is considered a tributary jurisdictional waters of the U.S./State. The Ordinary High Water Mark (OHWM) and top of bank are essentially the same along this reach representing the federal and state jurisdictional limits respectively. Approximately 0.23 acre of jurisdictional waters of the U>S./State are associated with Orcutt Creek through the project area.

4.5 SPECIAL-STATUS SPECIES AND NATURAL COMMUNITIES OF SPECIAL CONCERN

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) under the federal Endangered Species Act (FESA); those considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern" by the CDFW; and plants occurring on lists 1B, 2, and 4 of the CNPS *Inventory of Rare and Endangered Vascular Plants of California.* Natural Communities of Special Concern are habitat types considered rare and worthy of tracking in the California Natural Diversity Database (CNDDB) by the CNPS and CDFW because of their limited distribution or historic loss over time.

The search and review of the CNDDB revealed numerous historic and extant (presumed existing) occurrences of special-status plant and wildlife species within the five-mile search radius of the project site. A five-mile radius was selected, as a 10-mile CNDDB search radius would have captured a large area not relevant to the urbanized landscape surrounding the proposed project site. Figure 5 in Appendix A provides a map and and list of the CNDDB special-status plant and wildlife species recorded occurrences falling within the five-miles of the project site. The following briefly describes or summarizes the special-status species issues and observations or potential for occurrence on the project site.

4.5.1 Special-Status Botanical Resources

The CNDDB search revealed the recorded occurrences of 21 special-status plant species and three natural communities of special concern within a five-mile radius of the project site. While the CNDDB list is exhaustive, most of the species and natural communities are associated with undisturbed lands and specific soil types, such as serpentine outcrops or heavy clay soils, or specific habitat characteristics such as seasonal wetlands. While the ephemeral drainage swale supported wetland plants offsite and a bulrush patch onsite, it does not represent a freshwater marsh habitat as it only seasonally has surface water. The SII field surveys were conducted during the spring and summer 2014 and represent a thorough floristic inventory and rare plant survey for this highly disturbed site. The botanical surveys resulted in no observations of any rare, threatened, or endangered plant species within the project site. Further, the observable and identifiable plants, disturbed soil surface from over 70 years of human use on the site is further evidence the site does not support any special-status plants. Field survey in 2018 confirmed that site conditions are unchanged since the 2014 floristic inventory and rare plant survey.

4.5.2 Special-Status Wildlife

The CNDDB search revealed the recorded occurrences of 16 special-status wildlife species within the five-mile search radius of the project site. Special-status wildlife species known from the region evaluated for this study have specific habitat use requirements (i.e., terrestrial or aquatic). Given the



urban setting with a limited diversity of non-native grassland species, and the ephemeral nature of drainage along the north property line, the project site does not support suitable habitat for any special-status wildlife species. This conclusion is discussed further below.

Aquatic Species – The CNDDB has recorded occurrences of the steelhead (*Oncorhynchus mykiss*), California red-legged frog (*Rana draytonii*), foothill yellow-legged frog (*Rana boylii*), coast range newt (*Taricha torosa*), and western pond turtle (*Emys marmorata*) within the five-mile search radius. These are all highly aquatic species for all or a significant portion of their lifecycle and suitable habitat is not represented in the small remaining reach of the ephemeral drainage or Orcutt Creek. Vernal pool fairy shrimp (*Branchinecta lynchi*) require static seasonal pools, and the San Luis Obispo pyrg (a freshwater snail) requires aquatic habitat neither of which occur within the project site.

Upland Species – The CNDDB includes occurrences for the ferruginous hawk, a wide-ranging winter visitor and a historic occurrence of the western yellow-billed cuckoo that is no longer present. The compacted soils and human use of the site over time are unsuitable habitat for the American badger, coast horned lizard, northern California (silvery) legless lizard, or Atascadero June beetle. No evidence of these species was observed during SII field surveys. The burrowing owl has been observed wintering on the SLO Tank Farm but breeds further inland. The tricolored blackbird is associated with cattail/tule marshes that do not occur on the project site. Other resident and migratory birds such s the loggerhead shrike may use the onsite trees/shrubs for nesting, feeding, and roosting. The pallid bat and western mastiff bat are associated with crevices in rocks and caves not present on the project site. The disturbed urbanized upland site with compacted and altered soil profile, and long-term recent human use does not support habitat for any of the upland special-status species listed in the CNDDB.

5.0 IMPACT ASSESSMENT AND RECOMMENDED MITIGATION MEASURES

SII reviewed available background information and conducted multiple field surveys of the project site from 2014 to 2018 that included a floristic inventory and rare plant survey. The available data and field surveys provided sufficient information to establish existing conditions of the project site for plant and wildlife species, to evaluate potential project impacts on biological and wetland resources, and to identify any potentially significant impacts that may result from project implementation.

5.1 IMPACT ASSESSMENT

Implementation of the proposed project would result in impacts to vegetation and wildlife utilizing disturbed non-native annual grassland habitat from the development of the site. Tree removal and ground disturbance, even to the ruderal annual grassland habitat, could impact nesting birds if conducted during the nesting season. This would be considered a potentially significant impact. Development of access from Broad Street along the north project boundary would impact approximately 0.19 acre of seasonal wetland habitat associated with the ephemeral drainage. This would be considered a potentially significant impact.

5.2 RECOMMENDED MITIGATION MEASURES

The following mitigation measures are recommended to avoid, minimize and compensate for potentially significant impacts on biological resources.

Nesting Birds–The proposed conversion of the disturbed annual grassland and tree removal may impact ground nesting and/or tree nesting bird species if activities are conducted during the nesting season typically February 1st to August 31st. To reduce potential impacts to nesting birds to a less than significant level, the following mitigation measures are recommended:

MM BIO-1: Vegetation removal and initial site disturbance for any project elements shall be conducted between September 1st and January 31st outside of the nesting season for birds. If vegetation removal is planned for the bird nesting season (February 1st to August 31st), then preconstruction nesting bird surveys shall be required to determine if any active nests would be impacted by project construction. If no active nests are found, then no further mitigation shall be required.

If any active nests are found that would be impacted by construction, then the nest sites shall be avoided with the establishment of a non-disturbance buffer zone around active nests as determined by a qualified biologist. Nest sites shall be avoided and protected with the non-disturbance buffer zone until the adults and young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist. As such, avoiding disturbance or take of an active nest would reduce potential impacts on nesting birds to a less-than-significant level.

Seasonal Wetland Habitat and Waters of the U.S./State Impacts – Approximately 0.19 acre of seasonal wetland habitat would be impacted by construction of the new road access to the site from Broad Street. A road crossing of the ephemeral swale is needed for public access from the SESLOC development. This would result in fill of waters of the U.S./State and removal of an herbaceous seasonal wetland habitat that would require regulatory compliance from federal and state agencies. Impacts resulting in fill of waters of the U.S./State would be considered a potentially significant impact. The proposed project includes a creek enhancement planting plan as described above to offset impacts on the waters of the U.S./State to a less than significant level, the following mitigation measures are recommended:

MM BIO-2: The applicant shall obtain Clean Water Act (CWA) regulatory compliance in the form of a permit from the Corps or written documentation from the Corps that no permit would be required for the proposed road crossing. Should a permit be required, the applicant shall implement all the terms and conditions of the permit to the satisfaction of the Corps. Corps permits and authorizations require applicants to demonstrate that the proposed project has been designed and will be implemented in a manner that avoids and minimizes impacts on aquatic resources to the extent practicable. Compliance with Corps permitting would also include obtaining and CWA 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB). In addition, the Corps and RWQCB may require compensatory mitigation for unavoidable permanent impacts on waters of the U.S./State to achieve the goal of a no net loss of wetland values and functions. As such, with implementation of the 3:1 ratio of creek enhancement mitigation plantings and regulatory compliance would reduce potential impacts on waters of the U.S. to a less-than-significant level.



MM BIO-4: The applicant shall obtain compliance with Section 1602 of the California Fish and Game Code (Streambed Alteration Agreements) in the form of a completed Streambed Alteration Agreement or written documentation from the CDFW that no agreement would be required for the proposed road crossing. Should an agreement be required, the property owners shall implement all the terms and conditions of the agreement to the satisfaction of the CDFG. The CDFG Streambed Alteration Agreement process encourages applicants to demonstrate that the proposed project has been designed and will be implemented in a manner that avoids and minimizes impacts in the stream zone. In addition, CDFG may require may require compensatory mitigation for unavoidable permanent impacts on waters of the State. As such, with implementation of the 3:1 ratio of creek enhancement mitigation plantings and regulatory compliance would reduce potential impacts on waters of the U.S. to a less-than-significant level.

6.0 CONCLUSIONS

Based on the findings described above establishing the existing conditions of biological and wetland resources within the project site, and incorporation of the recommended mitigation measures, implementation of the proposed project would not result in any substantial adverse effects on biological, botanical, wetland habitat resources. Therefore, with mitigation measures incorporated into the project, direct and indirect project impacts on biological resources would be considered less than significant.

7.0 REFERENCES

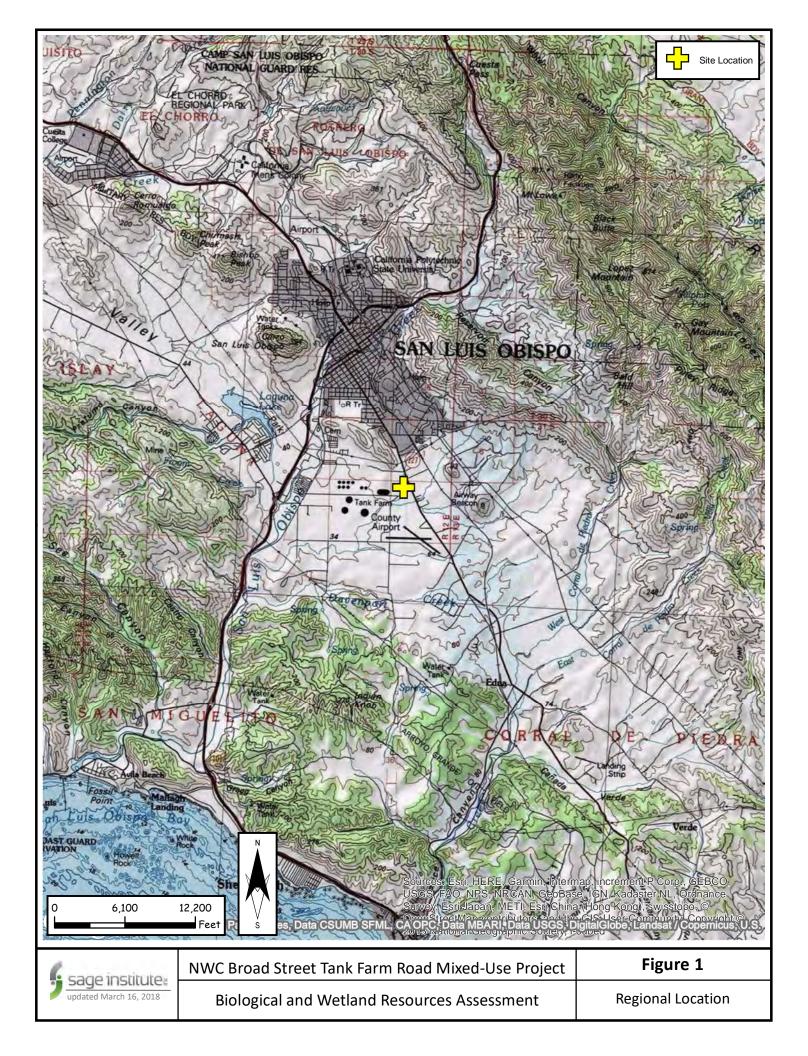
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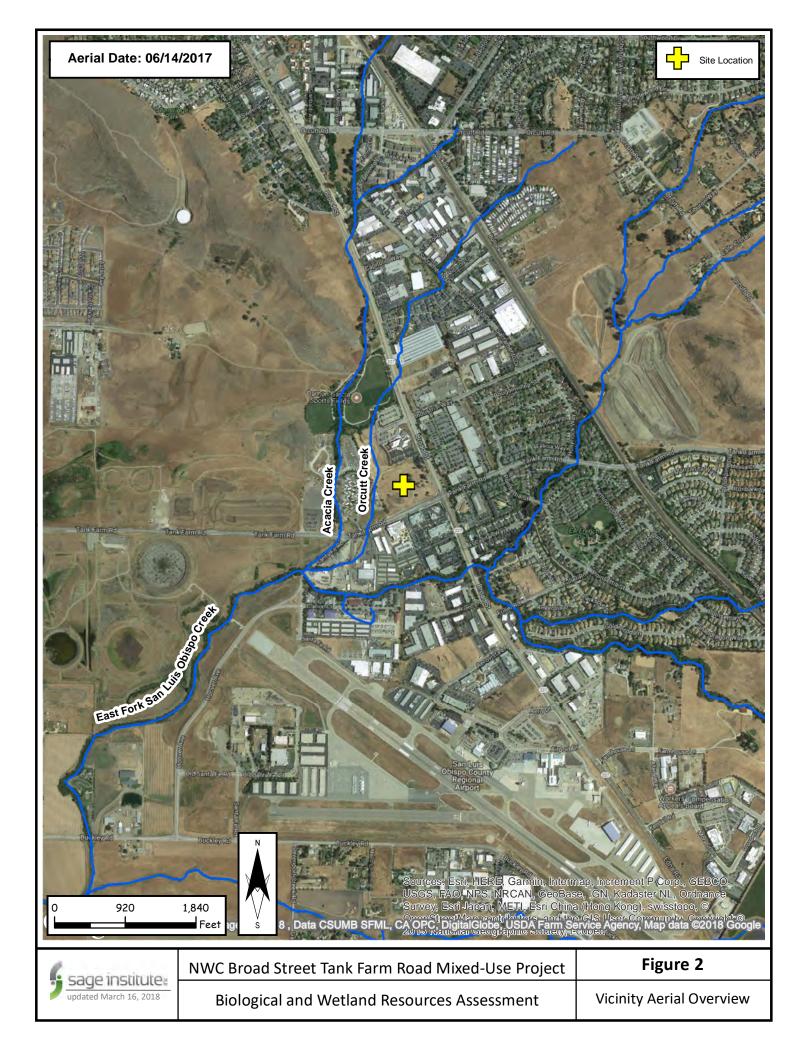


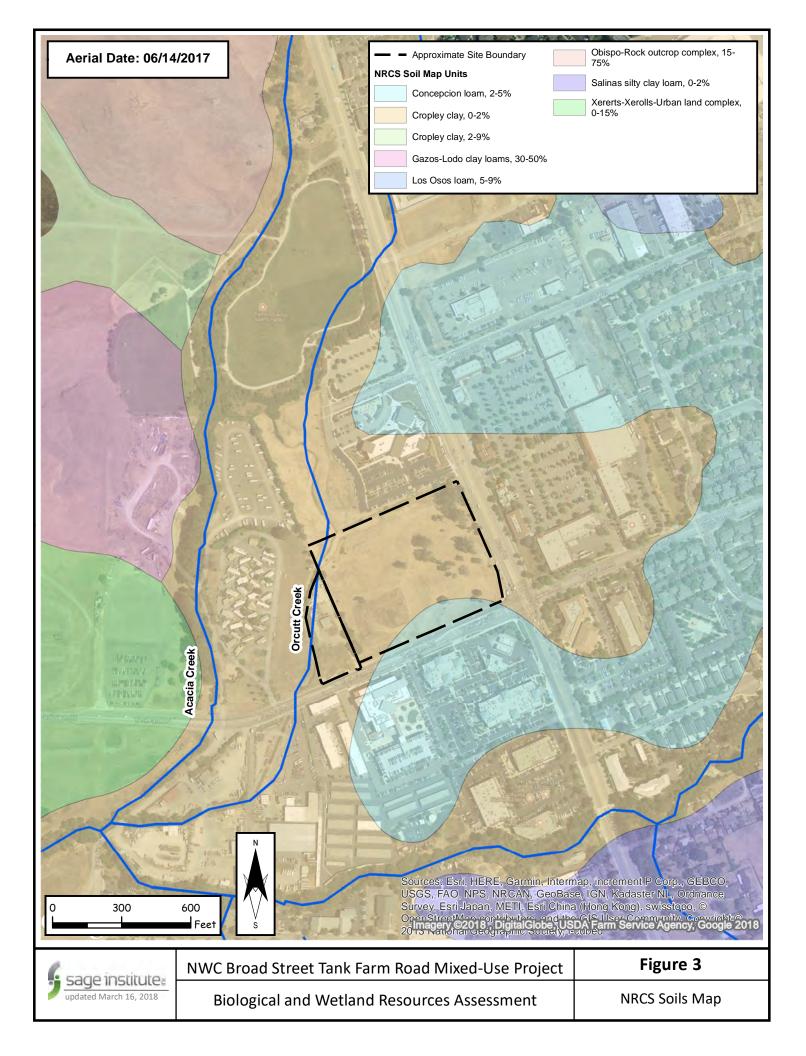
APPENDIX A

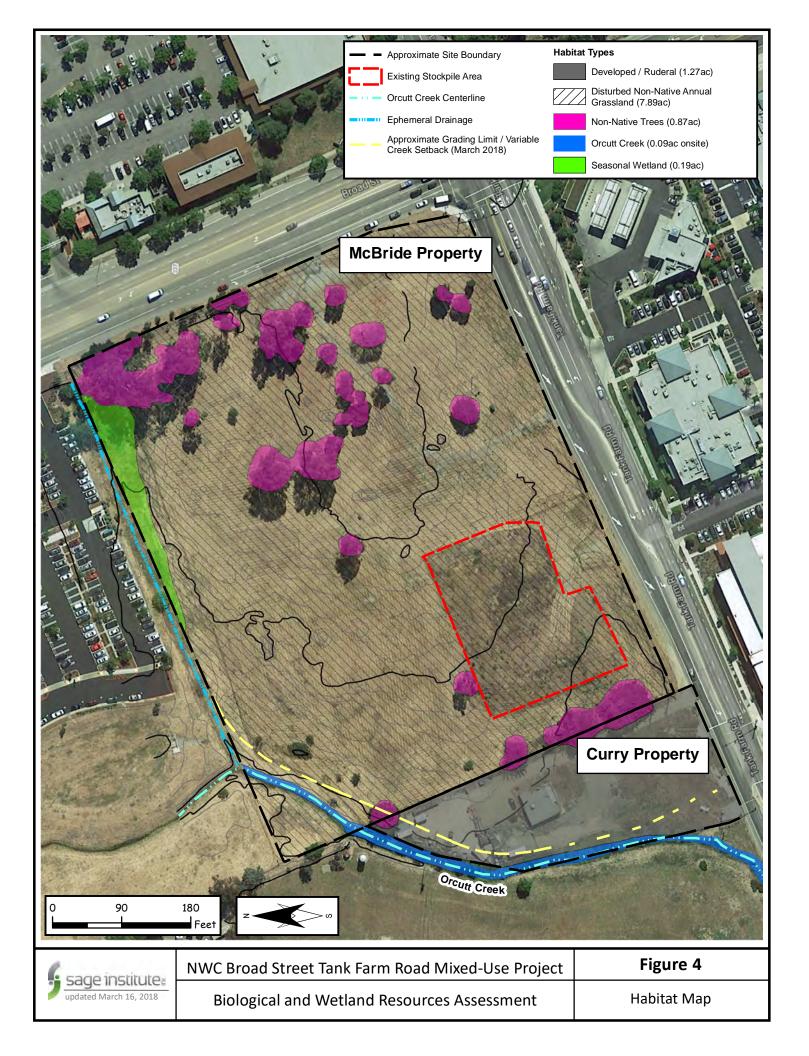
FIGURES

FIGURE 1: REGIONAL LOCATION MAP FIGURE 2: VICINITY AERIAL OVERVIEW MAP FIGURE 3: SOILS MAP FIGURE 4: HABITAT MAP FIGURE 5: CNDDB OCCURRENCES MAP (FIVE-MILE SEARCH RADIUS) FIGURE 6: REPRESENTATIVE PHOTOGRAPHS FIGURE JD-1: WETLAND DELINEATION MAP FIGURE JD-2: WETLAND DELINEATION MAP FIGURE JD-3: WETLAND DELINEATION MAP









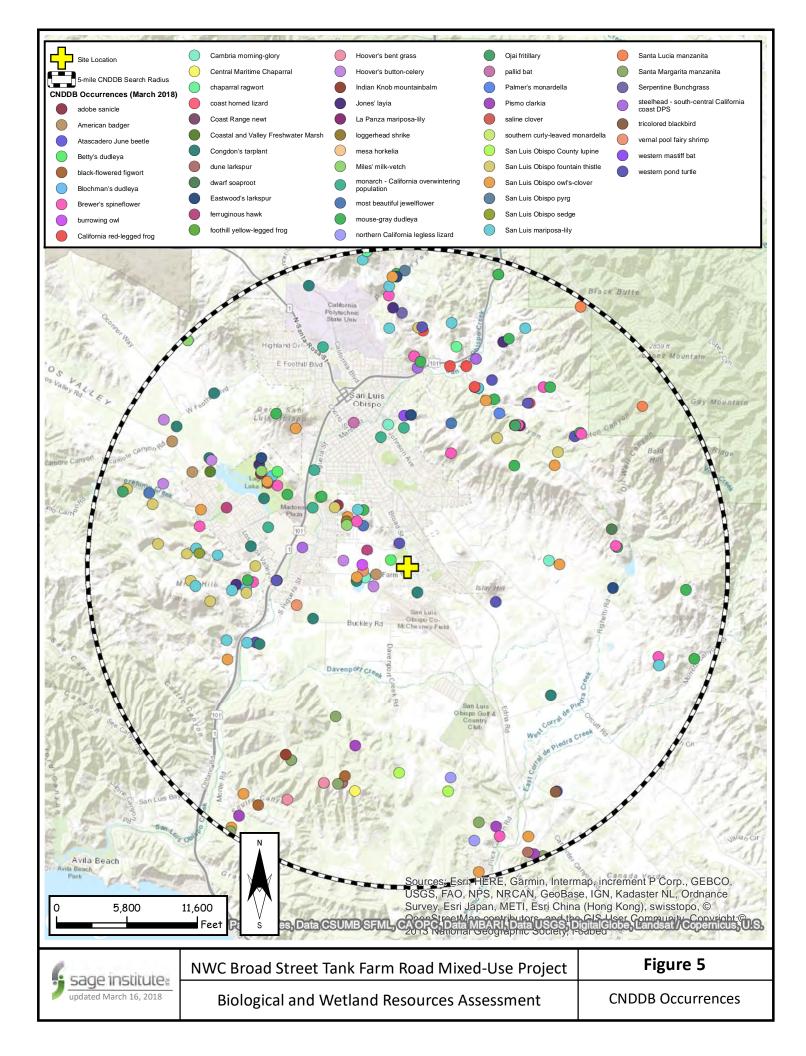




Photo 1: View west from temporary stockpile at McBride parcel non-native annual grassland habitat, non-native trees, and Curry parcel storage yard (arrow). 5/20/2014



Figure 6

Photo 2: View northeast across McBride parcel at non-native annual grassland habitat, nonnative trees, and adjacent SESLOC buildings construction site to the north. 5/20/2014



Photo 3: View east across McBride parcel at non-native annual grassland habitat, non-native trees, former building pads, intersection of Tank Farm Road and Broad Street. 5/20/2014



Photo 4: View south at ruderal vegetation at temporary stockpile and MindBody building construction site across Tank Farm Road to the south. 5/20/2014



NWC BROAD STREET / TANK FARM ROAD MIXED-USE PROJECT **BIOLOGICAL AND WETLAND RESOURCES ASSESSMENT – REPRESENTATIVE PHOTOGRAPHS**



Photo 7: View south (downstream) at confluence of ephemeral drainage and Orcutt Creek across the NW corner of the McBride parcel showing ruderal weedy vegetation along channel. 7/31/2014



Photo 6: View south at Curry parcel towards Tank Farm Road showing developed residence/storage yard. 7/31/2014



Photo 8: View south (downstream) at Orcutt Creek across the west side of the Curry parcel showing ruderal weedy vegetation and non-native trees/shrubs along channel. 7/31/2014

Figure 6

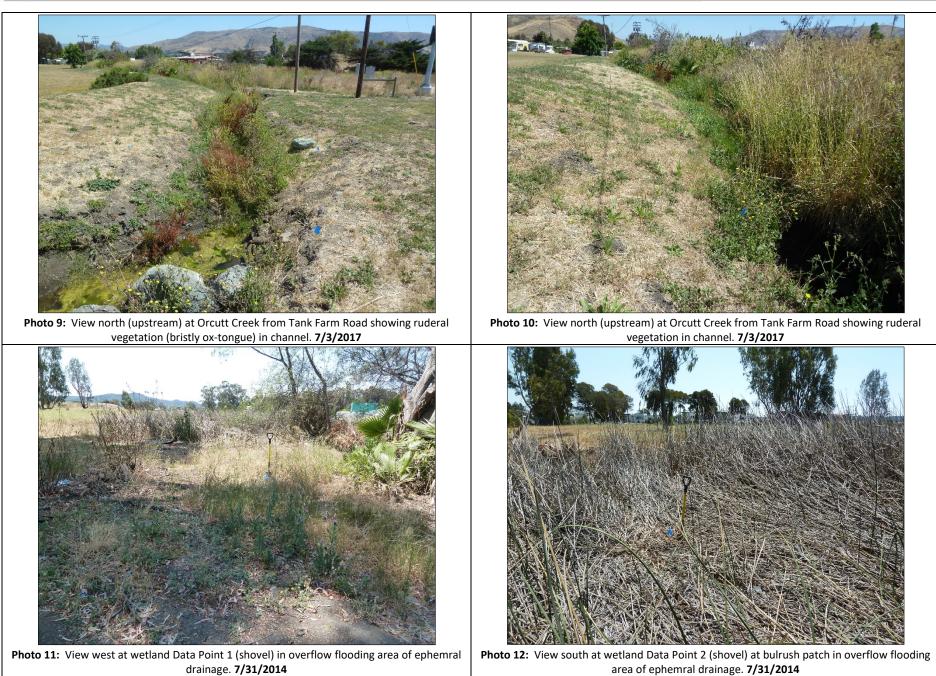






Photo 15: View west at wetland Data Point 5 (shovel) within overflow flooding area of offsite ephemeral drainage. Fenceline is property boundary. 7/31/2014

Photo 16: View west at upland Data Point 6 (shovel) in terrace area outside influence of offsite ephemeral drainage flooding. 7/31/2014





Photo 17: View northeast upstream at seasonal wetland terrace adjacent to ephemeral drainage along northern property line. 2/22/2018



Photo 19: View southwest at Orcutt Creek channel and creek restoration area along creek and northwest corner of the project site. 2/22/2018



Figure 6

Photo 18: View west downstream where seasonal wetland terrace tapers into the adjacent to ephemeral drainage along northern property line. **2/22/2018**



Photo 20: View northwest at developed/ruderal Curry Parcel along western property line with the McBride property. 2/22/2018





Photo 21: View northeast at annual grassland across the McBride property at the SESLOC building facility along northern property line. 2/22/2018



Photo 22: View east across McBride property at non-native annual grassland and non-native trees. 2/22/2018

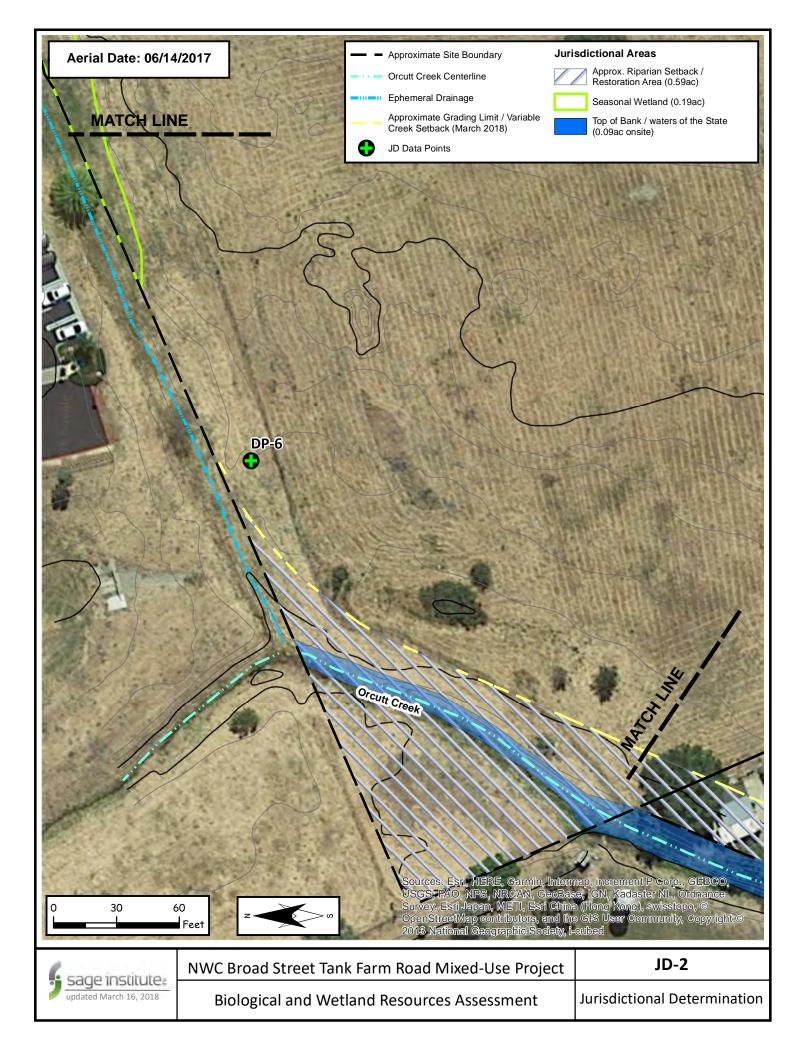


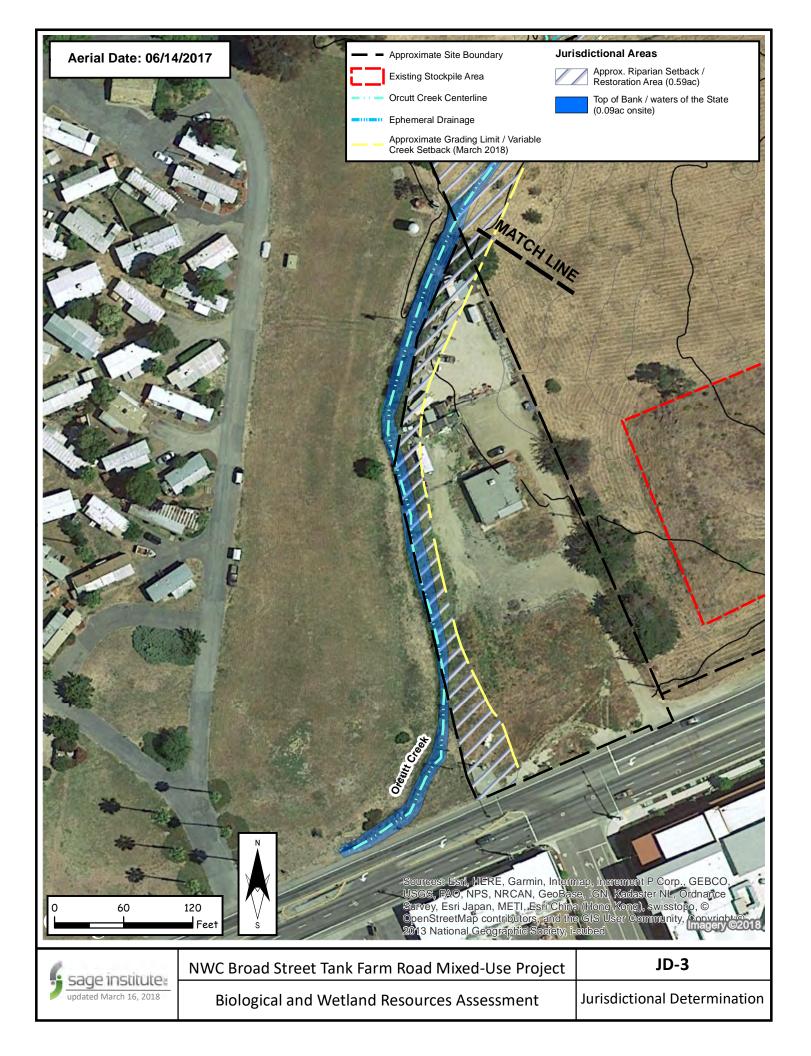
Photo 23: View south at annual grassland and stockpile on McBride property with MindBody building across Tank Farm Road in background. 2/22/2018



Photo 24: View southeast across McBride property towards the intersection of Broad Street and Tank Farm Road from atop the stockpile. 2/22/2018









APPENDIX B

WETLAND DELINEATION AND PRELIMINARY JURISDICTIONAL DETERMINATION

NWC BROAD STREET / TANK FARM ROAD MIXED-USE PROJECT APNs 053-421-003 &-004

APPENDIX B WETLAND DELINEATION AND PRELIMINARY JURISDICTIONAL DETERMINATION

August 28, 2014 *Updated* March 16, 2018

Prepared for:

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B-i

TABLE OF CONTENTS

1.0	INTRODUCTION AND PURPOSE	. B-1
2.0	Метноду	. B-1
3.0	Results	B-2
3.1	Setting	B-2
3.2	ORCUTT CREEK AND EPHEMERAL DRAINAGE ORIGIN	B-2
3.3	Seasonal Wetland	B-3
4.0	Preliminary Jurisdictional Determination	B-4
5.0	References	B-4

APPENDIX A – HISTORIC AERIAL PHOTOGRAPHS

APPENDIX B – WETLAND DELINEATION DATA FORMS



APPENDIX B NWC BROAD STREET / TANK FARM ROAD MIXED-USE PROJECT WETLAND DELINEATION AND PRELIMINARY JURISDICTIONAL DETERMINATION

1.0 INTRODUCTION AND PURPOSE

The NWC Broad Street / Tank Farm Road Mixed-Use Project (proposed project) includes development of the combined approximately 10.6-acre sites for commercial uses. The purpose of this wetland delineation and preliminary jurisdictional determination is to document the methods and results for delineating the location and extent of potential jurisdictional wetlands and other waters of the U.S., and waters of the State within the proposed project boundaries. This wetland delineation is appended as supporting documentation to the existing conditions detailed in the March 16, 2018 *Biological and Wetland Resources Assessment* (2018 BA). Baseline conditions and jurisdictional limits are illustrated in the figures included above in Appendix A of the 2018 BA.

1.1 PROJECT LOCATION

The proposed project site is composed of two parcels located at the northwest corner of Broad Street and Tank Farm Road in the City of San Luis Obispo. Figure 1 and Figure 2 in Appendix A provided regional and detailed location maps respectively.

1.2 PROJECT DESCRIPTION

The proposed project includes the development of a retail shopping center and assisted living facility on two parcels located generally on the northwest corner of Broad Street and Tank Farm Road. Access to the project sites will be provided from both Broad Street and Tank Farm Road. Based upon circulation between the proposed projects and the existing SESLOC facility located north of the subject properties, the Broad Street access will require impacts on 0.19 acre of seasonal wetland including an area for a new crossing of the ephemeral drainage required to provide access from the subject properties to the existing SESLOC facility.

Onsite enhancement of approximately 0.60 acre along the Orcutt Creek corridor is a part of the proposed project to mitigate for impacts to the 0.19-acre seasonal wetland and ephemeral drainage crossing at a 3:1 ratio. The enhancement plan will include removal of noxious invasive non-native herbaceous and woody species and a native plant planting program in the northwest corner and creek setback areas along Orcutt Creek. Table CMMP-1 in the 2018 BA provides a list of creek enhancement plantings proposed as part of the project.

2.0 METHODS

SII Principal Ecologist and wetland specialist David Wolff collected and reviewed available background information and conducted wetland delineation field reconnaissance of the two properties on July 31, 2014. The February 22, 2018 field survey affirmed conditions are unchanged from the 2014 initial field surveys and wetland determination data collection. Available background information included multiple years of aerial photography dating back to 1937 and available soils survey information. The routine and



problem areas methodology detailed in the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* (Corps Manual) were used as the basis to delineate waters of the U.S. including wetlands on the site. The basis of determining and recording indicators for hydrophytic vegetation, hydric soils, and wetland hydrology was the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Arid West Supplement). Both the Corps Manual (Section G – Problem Areas) and Arid West Supplement (Chapter 5 – Difficult Wetland Situations in the Arid West) were used for the determination and evaluation of normal circumstances, atypical situations, and problem area wetlands as needed. Field observations data were collected on vegetation, soils, and hydrology at the project site for recording on the Arid West Data Observation Form at six data points as shown on Figures JD-1 and JD-2 in Appendix A. Plant species wetland indicator status was based on the U.S. Army Corps of Engineers, State of California 2014 Wetland Plant List and updated by the most recent *State of California 2016 Wetland Plant List* (Lichvar, et.al. 2016). The centerline and top of bank of Orcutt Creek was field surveyed and mapped as shown on Figures JD-2 and JD-3 in Appendix A.

3.0 RESULTS

3.1 SETTING

The proposed project site is zoned for commercial development and currently supports disturbed nonnative annual grassland and ruderal (previously disturbed) habitats. The majority of the site has been occupied in the past as recent as 2003 and dating back to at least 1937 with buildings and active equipment/materials storage. The site appears to have been idle between 2004 and 2018 when buildings were removed and the surface was cleared leaving only the non-native trees. A soil stockpile mound has been placed on the southwest corner of the property in 2014. An ephemeral drainage enters the site through a 24-inch culvert in the northeast corner of the property and flows west to the confluence with Orcutt Creek in the northwest corner of the McBride Property site. Orcutt Creek then flows southwesterly along the west edge of the Curry property to a culvert under Tank Farm Road. The property is bordered by urban development the north, east, and south sides with residential development to the west. The Curry parcel is developed and ruderal site with residence and storage yards dating back to at least 1959.

3.2 ORCUTT CREEK AND EPHEMERAL DRAINAGE ORIGIN

The review of aerial photographs dating back as far as 1937 show Orcutt Creek essentially in the same alignment through the two parcels as exists today. Exhibit 1 below provides a set of historic aerial photographs from 1937 to 2005. A short segment of Orcutt Creek upstream of the project site was permitted for realignment in 2003 for construction of the City of San Luis Obispo Damon-Garcia ball fields. Orcutt Creek flows through a culvert under Tank Farm Road southwest of the Curry parcel. Downstream of the Tank Farm Road culvert Orcutt Creek joins Acacia Creek briefly before becoming East Fork San Luis Obispo Creek that then joins San Luis Obispo Creek near Highway 101. As such, Orcutt Creek should be considered a jurisdictional tributary waters of the U.S. as shown on Figure 2, and Figures JD-2 and JD-3 in Appendix A.

The ephemeral drainage swale with low-flow channel is located just offsite adjacent to the northern property line of the McBride parcel. The limits were shown on the SESLOC grading plans as jurisdictional waters of the U.S., subject to U.S. Army Corps of Engineers (Corps), and waters of the State by the California Department of Fish and Wildlife (CDFW). Currently it appears that any source of hydrology for



the ephemeral drainage is from a culvert outfall just offsite at the northeast corner of the McBride property from runoff from surrounding commercial and residential development. The drainage appears to become a prominent drainage feature between 1994 and 2002 with the development of the Marigold Shopping Center (see Exhibit 1).

3.3 SEASONAL WETLAND

There is evidence of overflow flooding wetland hydrology (drift lines of debris and sediment deposits) from the ephemeral drainage onto the McBride parcel on a terrace that runs along the drainage on the McBride property. The evaluation and comparison of soils at six data point locations revealed field indicators of hydric soils on a portion of the terrace suggesting a regular flooding regime over time during the wet season (Data Points 1, 2, 4, and 5).

The apparent overflow supports a small stand of arroyo willow (*Salix lasiolepis*) at the northwest corner with one small isolated tree in the center of the drainage. Two patches of bulrush (*Schoenoplectus acutus*), a Himalayan blackberry (*Rubus armeniacus*) thicket, and one Canary Island date palm (*Phoenix canariensis*) occur along the drainage. The upper reach of the terrace was dominated by Harding grass (*Phalaris aquatica*), teasel (*Dipsacus sativus*), soft chess (*Bromus hordaceous*), rabbitsfoot grass (*Polypogon* sp.), and bristly ox-tongue (*Helminthotheca echioides*). The lower reach along the terrace characterized by Data Point 6 lacked the rabbitsfoot grass component, and did not have any indicators of hydric soils or wetland hydrology.

Harding grass and soft chess are facultative upland plants (FACU), and teasel is presumed upland (UPL) that does not have any wetland indicator status. The Himalayan blackberry is also a FAC plant but not considered in the dominance structure. There is some representation of rabbitsfoot grass that is a facultative wetland plant (FACW). To meet the wetland vegetation criteria, an area needs to be dominated by greater than 50 percent of obligate (OBL), facultative wetland (FACW), and/or facultative (FAC) wetland plants that is not the case here. Updates to from the 2016 wetland indicator plant list changed bristly ox-tongue from FACU to FAC but did not change the wetland vegetation determination as it did not shift to greater than 50 percent of dominant species.

To be considered a jurisdictional wetland under the Federal definition it must meet all three parameters of soils, hydrology, and vegetation. The overflow terrace has evidence of debris drift lines and sediment deposits that are wetland hydrology indicators. Soils test pits revealed low chroma matirix and a significant percentage of redox features considered field indicators of hydric soils. While some level of overland flow appears to occur, with the exception of the bulrush patch, the ephemeral nature of the drainage overflow does not manifest a definitive wetland plant community. However, given several years of below normal rainfall, this area was treated as problem area wetland. As such, based on the presence of hydric soils and wetland hydrology, approximately 0.19 acre (8,166 square feet) of jurisdictional wetland occurs on the bench above the ephemeral drainage along the northern property boundary of the McBride parcel. Figure JD-1 and JD-2 in Appendix A show the location and extent seasonal wetland delineated as described above. Field survey on February 22, 2018 confirmed that the topography of the seasonal wetland adjacent to the ephemeral drainage was unchanged maintaining the hydrologic regime as documented in 2014. See represented photographs of the wetland feature, ephemeral drainage, and Orcutt Creek provided Appendix A Figure 6.



4.0 PRELIMINARY JURISDICTIONAL DETERMINATION

U.S. Army Corps of Engineers Preliminary Jurisdictional Determination – Approximately 0.19 acre of seasonal wetland occurs on the overflow terrace along a portion of the northern property boundary of the McBride parcel adjacent to an offsite ephemeral drainage. This is based on application of the problem area methodology that considers evidence of hydric soils and wetland hydrology in the absence of meeting any definitive wetland vegetation criteria.

Orcutt Creek has been in its current alignment as a tributary drainage since as far back as 1937. Given it flows through a sequence of creeks to San Luis Obispo Creek and the Pacific Ocean, Orcutt Creek is considered a jurisdictional waters of the U.S.

California Fish and Game Code Section 1600 *et.seq.* **Jurisdictional Determination** – Based the evaluation of available background information and the field survey of the McBride and Curry parcels, Orcutt Creek exhibits a bed, bank, and channel that would fall under the 1600 jurisdiction of the California Department of Fish and Wildlife (CDFW). The overflow terrace wetland falls within the floodplain of the offsite ephemeral drainage but is not within a discernable bed, bank or channel. As such, it does not likely fall under CDFW 1600 jurisdiction. However, the CDFW may still exert jurisdiction on a case by case basis on areas within the floodplain of creeks and drainages.

5.0 REFERENCES

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- 2. Hickman, J.C., Editor. 1993. *The Jepson Manual, Higher Plants of California*. University of California Press.
- 3. Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X
- 4. Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society Press, Sacramento.
- 5. U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September 2008.
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Ехнівіт 1

HISTORICAL AERIAL PHOTOGRAPHS





















EXHIBIT 2

WETLAND DELINEATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: McBride and Curry Property	City/County: Sa	an Luis Obispo, San Luis Obispo	Sampling Date: July 31, 2014		
Applicant/Owner: NKT Development, LLC		State: CA	Sampling Point: DP-1		
Investigator(s): David Wolff	Sec	tion, Township, Range:			
Landform (hillslope, terrace, etc.): Urban flat lands	Local relief (co	oncave, convex, none): <u>floodplain</u>	Slope (%): <u>< 3%</u>		
Subregion (LRR): LRRC	Lat: <u>35.249700</u>	Long: <u>-120.644251</u>	Datum: NAD83		
Soil Map Unit Name: Cropley Clay		NWI classification	tion:		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🛛 No 🗌 (If no, explain in Remarks.)					
Are Vegetation No, Soil No, or Hydrology No significantly dis	turbed? Are "Norm	al Circumstances" present? Yes	🛛 No 🗌		
Are Vegetation No, Soil No, or Hydrology Yes naturally proble	matic? (If needed	d, explain any answers in Remarks	3.)		
SUMMARY OF FINDINGS – Attach site map s	howing sampling p	oint locations, transects,	important features, etc.		

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ⊠ No □ Yes ⊠ No □ Yes ⊠ No □	Is the Sampled Area within a Wetland?	Yes 🛛 No 🗌				
Remarks: Ephemeral drainage swale from from culvert outfall from urbanized watershed; prolonged low rainfall drought conditions							

VEGETATION – Use scientific names of plants.

	Absolute		t Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:) 1	% Cover		Status	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)	
2				Total Number of Dominant	
3				Species Across All Strata: 2 (B)	
4				、	
		= Total C	Cover	Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)	
Sapling/Shrub Stratum (Plot size:)					
1				Prevalence Index worksheet:	
2		·		Total % Cover of: Multiply by:	
3				OBL species x 1 =	
4				FACW species $\underline{70}$ x 2 = $\underline{140}$	
5				FAC species <u>15</u> x 3 = <u>45</u>	
		= Total C		FACU species x 4 =	
Herb Stratum (Plot size: 25'x25')				UPL species 40 x 5 = 200	
1. Polypogon monspeliensis	60%	yes	FACW	Column Totals: <u>125</u> (A) <u>385</u> (B)	
2. <u>Stipa miliacea var. miliacea</u>	40%	yes	UPL	()	
3. Epilobium ciliatum	10%	no	FACW	Prevalence Index = $B/A = 3.0$	
4. Lolium perenne	10%	no	FAC	Hydrophytic Vegetation Indicators:	
5. Briza minor	<u>5%</u>	no	FAC	Dominance Test is >50%	
6				☑ Prevalence Index is $\leq 3.0^1$	
7				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
8				Problematic Hydrophytic Vegetation ¹ (Explain)	
Woody Vine Stratum (Plot size:)		= Total C	Cover		
				¹ Indicators of hydric soil and wetland hydrology must	
1				be present, unless disturbed or problematic.	
2				Hydrophytic	
		= Total C	Jover	Vegetation	
% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust 0% Present? Yes 🛛 No 🗌					
Remarks:					

SOIL

Sampling	Point:	DP-1

Profile Desc	cription: (Describe	to the de	oth needed to docu	ment the in	ndicator	or confirn	n the absence	e of indicators.)	
Depth	Matrix		Red	ox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-8	N/A						Root/Gravel	gravely possible non-native matieral	
8-14	10YR 3/1	100%	None				Clay		
0-14	10113/1	10078	INDITE					·	
		·				·		·	
						<u> </u>			
		<u> </u>							
¹ Type: C=C	oncentration, D=Der	pletion, RM	=Reduced Matrix, C	S=Covered	or Coate	d Sand Gi	rains. ² Lo	cation: PL=Pore Lining, M=Matrix.	
			LRRs, unless othe					ors for Problematic Hydric Soils ³ :	
Histosol			Sandy Redox (,			n Muck (A9) (LRR C)	
	vipedon (A2)		Stripped Matrix					n Muck (A10) (LRR B)	
Black His			Loamy Mucky I	. ,	1			Juced Vertic (F18)	
	n Sulfide (A4)		Loamy Gleyed I	· · ,				Parent Material (TF2)	
	Layers (A5) (LRR (C)	Depleted Matrix					er (Explain in Remarks)	
🔲 1 cm Muc	ck (A9) (LRR D)		Redox Dark Su	rface (F6)					
Depleted	Below Dark Surface	e (A11)	Depleted Dark	Surface (F7	')				
	rk Surface (A12)		Redox Depress	sions (F8)			³ Indicators of hydrophytic vegetation and		
•	lucky Mineral (S1)							and hydrology must be present,	
-	leyed Matrix (S4)						unle	ss disturbed or problematic.	
Restrictive	Layer (if present):								
Туре:									
Depth (in	ches):						Hydric Soi	l Present? Yes 🛛 No 🗌	
Remarks: Lo	w Chroma matrix								
HYDROLO	CV								
Wetland Hy	drology Indicators:								
Primary India	cators (minimum of c	one require	d; check all that app	ly)			Seco	ndary Indicators (2 or more required)	
Surface	Water (A1)		Salt Crust (B11)					Vater Marks (B1) (Riverine)	
🔲 High Wa	ter Table (A2)		Biotic Crust (B12)				🖂 S	ediment Deposits (B2) (Riverine)	
Saturatio	on (A3)		Aquatic Invertebrates (B13)					Drift Deposits (B3) (Riverine)	
Water Mater Mater Mater	arks (B1) (Non rive r	rine)	Hydrogen Sulfide Odor (C1)					Drainage Patterns (B10)	
Sedimen	it Deposits (B2) (No	n riverine)	Oxidized I	Rhizosphere	es along L	iving Roo	ts (C3) 🛛 🛛	Dry-Season Water Table (C2)	
Drift Dep	osits (B3) (Non rive	rine)	Presence	of Reduced	I Iron (C4))		Crayfish Burrows (C8)	
Surface	Soil Cracks (B6)		Recent Irc	on Reductio	n in Tilled	Soils (C6) 🗆 S	Saturation Visible on Aerial Imagery (C9)	
🗌 Inundatio	n Visible on Aerial Ir	magery (B7) Thin Muck Surface (C7)				🗆 s	Shallow Aquitard (D3)	
U Water-St	tained Leaves (B9)		Other (Ex	olain in Ren	narks)		🗆 F	AC-Neutral Test (D5)	
Field Obser	vations:								
Surface Wat	er Present? Y	′es 🗌 🛛 N	o 🛛 🛛 Depth (inche	s):					
Water Table	Present? Y		o 🛛 🛛 Depth (inche	s):					
						Wetl	and Hydroloc	gy Present? Yes 🛛 No 🗌	
(includes cap	oillary fringe)			,			_		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									
Remarks: Lil	kely floodplain overfl	ow from of	fsite culvert outfall a	nd epheme	ral draina	ge channe	el.		

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: McBride and Curry Property	City/County: S	an Luis Obispo, San Luis Obispo	Sampling Date: July 31, 2014		
Applicant/Owner: NKT Development, LLC		State: CA	Sampling Point: DP-2		
Investigator(s): David Wolff	Se	ction, Township, Range:			
Landform (hillslope, terrace, etc.): Urban flat lands	Local relief (c	concave, convex, none): <u>floodplain</u>	Slope (%): <u>< 3%</u>		
Subregion (LRR): LRRC	at: <u>35.249614</u>	Long: <u>-120.644370</u>	Datum: NAD83		
Soil Map Unit Name: Cropley Clay		NWI classificat	tion:		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🛛 No 🗌 (If no, explain in Remarks.)					
Are Vegetation No, Soil No, or Hydrology No significantly distur	bed? Are "Norr	nal Circumstances" present? Yes	🛛 No 🗌		
Are Vegetation No, Soil No, or Hydrology Yes naturally problem	atic? (If neede	d, explain any answers in Remarks	3.)		
SUMMARY OF FINDINGS – Attach site map sho	wing sampling p	point locations, transects,	important features, etc.		

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ⊠ No □ Yes ⊠ No □ Yes ⊠ No □	Is the Sampled Area within a Wetland? Yes ⊠ No □					
Remarks: Ephemeral drainage swale from from culvert outfall from urbanized watershed; prolonged low rainfall drought conditions							

VEGETATION – Use scientific names of plants.

	Absolute	Dominant Indicato			
<u>Tree Stratum</u> (Plot size:) 1		Species? Status			
2			Total Number of Dominant		
3					
4					
		T () O	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)		
Sapling/Shrub Stratum (Plot size:)					
1			Prevalence Index worksheet:		
2			Total % Cover of: Multiply by:		
3					
4					
5			FAC species x 3 =		
		= Total Cover	FACU species x 4 =		
Herb Stratum (Plot size: 25'x25')			UPL species x 5 =		
1. Schoenoplectus acutus	100%	yes OBL			
2					
3			Prevalence Index = B/A =		
4			Hydrophytic Vegetation Indicators:		
5					
6			Prevalence Index is ≤3.0 ¹		
7			Morphological Adaptations ¹ (Provide supporting		
			data in Remarks or on a separate sheet)		
8			Problematic Hydrophytic Vegetation ¹ (Explain)		
Woody Vine Stratum (Plot size:)					
1			¹ Indicators of hydric soil and wetland hydrology must		
2			be present, unless disturbed or problematic.		
		= Total Cover	Hydrophytic		
			Vegetation		
% Bare Ground in Herb Stratum 0% % Cover of Biotic Crust 0% Present? Yes ⊠ No □					
Remarks:					

SOIL

Sampling Point: DP-2

Profile Desc	cription: (Describe	to the de	pth needed to docu	iment the	indicator	or confirm	m the absence of indicators.)		
Depth	Matrix			ox Feature					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	_	
<u>0-5"</u>	<u>10YR 3/1</u>	100%	None				Blocky clay		
5"-12"	<u>2.5Y 3/1</u>	80%	<u>7.5YR 4/6</u>	20%	RM	PL	Clay loam		
								_	
								-	
								-	
								_	
								_	
								_	
¹ Type: C=C	oncentration, D=Dep	pletion, RM	I=Reduced Matrix, C	S=Covere	d or Coate	ed Sand G	irains. ² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators: (Applic	able to al	I LRRs, unless oth	erwise not	ed.)		Indicators for Problematic Hydric Soils ³ :		
Histosol	· · /		Sandy Redox				1 cm Muck (A9) (LRR C)		
-	pipedon (A2)		Stripped Matrix				2 cm Muck (A10) (LRR B)	ļ	
Black His	. ,		Loamy Mucky		,		Reduced Vertic (F18)		
	n Sulfide (A4) I Layers (A5) (LRR (.)	Loamy Gleyed Depleted Matrix	, ,			Red Parent Material (TF2) Other (Explain in Remarks)		
	ck (A9) (LRR D)	-)	Redox Dark Su	, ,					
	Below Dark Surfac	e (A11)	Depleted Dark	Surface (F	7)				
	ark Surface (A12)		Redox Depres	sions (F8)			³ Indicators of hydrophytic vegetation and		
-	lucky Mineral (S1)						wetland hydrology must be present,		
-	ileyed Matrix (S4) Layer (if present):						unless disturbed or problematic.		
_	Layer (il present).								
Type: Depth (in	ches):		-				Hydric Soil Present? Yes 🛛 No 🗌		
	ow Chroma matrix wi	th obconv	-						
Nemarks. Lu			able redux realures						
	0)/								
HYDROLO									
	drology Indicators:								
_		one require	ed; check all that app				Secondary Indicators (2 or more required)		
	()		Salt Crus	()			Water Marks (B1) (Riverine)		
•	ter Table (A2)		Biotic Cru		- (D40)		Sediment Deposits (B2) (Riverine)		
Saturatio	on (A3) arks (B1) (Non rive i	rino	Aquatic Ir	Sulfide Oc			 Drift Deposits (B3) (Riverine) Drainage Patterns (B10) 		
	nt Deposits (B2) (No	,		Rhizospher		Living Roo			
	oosits (B3) (Non rive	,		of Reduce	-	-	Crayfish Burrows (C8)		
	Soil Cracks (B6)							3)	
☑ Surface Soil Cracks (B6) □ Recent Iron Reduction in Tilled Soils (C6) □ Inundation Visible on Aerial Imagery (B7) □ Thin Muck Surface (C7)					(□ Shallow Aquitard (D3)	,		
	tained Leaves (B9)	0 , (plain in Re			FAC-Neutral Test (D5)		
Field Obser	vations:								
Surface Wat	er Present?	∕es 🗌 🛛 N	lo 🛛 🛛 Depth (inche	es):					
Water Table	Present?	∕es 🗌 🛛 N	lo 🛛 🛛 Depth (inche	es):					
Saturation P		∕es 🗌 N	lo 🛛 🛛 Depth (inche	es):		Wet	land Hydrology Present? 🛛 Yes 🖾 🛛 No 🗌		
(includes cap Describe Re			nonitoring well, aeria	Inhotos pr	avious in	enections)	if available:		
Describe Re	Concer Data (Stream	i yauye, fi	ionitoning well, aella	i priotos, pl	CVIOUS III	-γ - -ιισιιδ),	, וו מימוומטוב.		
Remarke: Lil	kelv floodolain ovorfl	ow from a	ffsite culvert outfall a	and enham	aral drains	an chang	وا		
Noniairis. Lli			naite cuivert Outiall à			age channe	UI.		

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: McBride and Curry Property	City/County: San	Luis Obispo, San Luis Obispo	Sampling Date: July 31, 2014				
Applicant/Owner: NKT Development, LLC		State: CA	Sampling Point: DP-3				
Investigator(s): David Wolff	Section	on, Township, Range:					
Landform (hillslope, terrace, etc.): Urban flat lands	Local relief (concave, convex, none): <u>floodplain</u> Slope (%): <						
Subregion (LRR): LRRC	Lat: <u>35.249501</u>	Long: <u>-120.644299</u>	Datum: NAD83				
Soil Map Unit Name: Cropley Clay		NWI classificat	tion:				
Are climatic / hydrologic conditions on the site typical for this ti	Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🛛 No 🗌 (If no, explain in Remarks.)						
Are Vegetation No, Soil No, or Hydrology No significantly dist	urbed? Are "Normal	Circumstances" present? Yes	🛛 No 🗖				
Are Vegetation No, Soil No, or Hydrology Yes naturally proble	matic? (If needed, e	explain any answers in Remarks	s.)				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes 🗌 No 🖂	Is the Sam	npled Area					

Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠	within a Wetland?	Yes 🗌 No 🖾
Remarks: Upland outside of floodplain	overflow flooding from ephemeral d	rainage	

VEGETATION – Use scientific names of plants.

	Absolute		t Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)	% Cover			Number of Dominant Species	(•)
				That Are OBL, FACW, or FAC: 1	(A)
2				Total Number of Dominant	
3				Species Across All Strata: <u>3</u> ((B)
4				Percent of Dominant Species	
		= Total C	Cover	•	(A/B)
Sapling/Shrub Stratum (Plot size:)					
1		. <u> </u>		Prevalence Index worksheet:	
2				Total % Cover of: Multiply by:	_
3				OBL species x 1 =	
4				FACW species x 2 =	-
5				FAC species x 3 =	_
		= Total C		FACU species x 4 =	_
Herb Stratum (Plot size: 25'x25')				UPL species x 5 =	
1. Avena sativa	80%	yes	UPL	Column Totals: (A)	
2. Lolium perenne	20%	yes	FAC	()	. (-/
3. Phalaris aquatica	20%	yes	FACU	Prevalence Index = B/A =	
4				Hydrophytic Vegetation Indicators:	
5				Dominance Test is >50%	
6				□ Prevalence Index is ≤3.0 ¹	
7				Morphological Adaptations ¹ (Provide supportin	ng
8				data in Remarks or on a separate sheet)	,
		= Total C		Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)					
1				¹ Indicators of hydric soil and wetland hydrology m	lust
2				be present, unless disturbed or problematic.	
		= Total C	Cover	Hydrophytic	
		_		Vegetation	
	er of Biotic (Present? Yes 🗌 No 🛛	
Remarks: Less than 50% of the dominant species are weth	and indicate	ors.			

SOIL

Sampling Point: DP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix		Rec	lox Feature	S						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Textur	<u>е</u>		Remarks	
0-12"	10YR 3/2	100%	None				Clay lo	am N	o redox fe	eatures	
											<u> </u>
·											
¹ Type: C=C	oncentration, D=De	pletion, RM=	Reduced Matrix, C	CS=Covere	d or Coate	ed Sand G	rains.	² Locati	on: PL=F	Pore Lining	g, M=Matrix.
Hydric Soil	Indicators: (Applie	cable to all	LRRs, unless oth	erwise not	ed.)		In	dicators	for Prob	lematic H	ydric Soils ³ :
Histosol	(A1)		□ Sandy Redox	(S5)] 1 cm M	uck (A9)	(LRR C)	
Histic Ep	pipedon (A2)		Stripped Matri	. ,] 2 cm M	uck (A10)) (LRR B)	
Black Hi	. ,		Loamy Mucky] Reduce		. ,	
	en Sulfide (A4)	-	Loamy Gleyed					Red Par		. ,	
	Layers (A5) (LRR	C)	Depleted Matri	. ,			L] Other (E	Explain in	Remarks)	
	ck (A9) (LRR D)	- (044)	Redox Dark S	· · ·							
	d Below Dark Surfac ark Surface (A12)	e (A11)	 Depleted Dark Redox Depres 	•	7)		31.	ndiantara	of hydron		tation and
	lucky Mineral (S1)			SIULIS (FO)			.11		• •	y must be	
-	Bleyed Matrix (S4)									or problem	•
-	Layer (if present):										
Type:	, , , , ,										
	ches):						Hydri	ic Soil Pr	esent?	Yes 🗌	No 🖂
Remarks:							nyan				
itemarks.											
HYDROLO	GY										
	drology Indicators										
	cators (minimum of		h abaak all that an	alu)				Sacanda	n Indiaa	toro (2 or r	more required)
	•										nore required)
Surface	()		Salt Crus	· · ·						(B1) (Rive	
-	ater Table (A2)			. ,							(Riverine)
Saturatio	. ,									(B3) (Rive	
	larks (B1) (Non rive	,		Sulfide O			ta (CO)		-	erns (B10)	
	nt Deposits (B2) (No			Rhizosphe	-	-	its (C3)	-		Vater Table	e (C2)
-	Dosits (B3) (Non rive	erine)	_	of Reduce			•		fish Burro	• •	rial Imagany (CO)
	Soil Cracks (B6)			on Reducti		a Solis (C6)				rial Imagery (C9)
	on Visible on Aerial li	magery (B7		k Surface (,				ow Aquita	. ,	
U water-S	tained Leaves (B9)			plain in Re	marks)			L FAC	-Neutral 7	lest (D5)	
Field Obser											
Field Obser		/		,							
Surface Wat			Depth (inch								
Water Table			Depth (inch								_
Saturation P		Yes 🗌 No	Depth (inch	es):		Wetl	and Hyd	drology P	resent?	Yes 🗌	No 🖂
(Includes ca Describe Re	pillary fringe) ecorded Data (strean		nitoring well aeria	Inhotos n	evious in	spections)	if availa	hle:			
Describerte		n gaage, me	sintoning wen, dend	r priotos, pi	evieus in	peotiono),	ii availa	510.			
Remarke: U	plands outside of flo	odolain ovo	flow influence from	offeito out	vert outfo	and onbor	moral dr	ainago ch	annel		
Remarks. 0		ouplain ove			ven oulla	anu ephei	neiai ui	anaye ch	annei.		

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: McBride and Curry Property	City/County: <u>Sar</u>	n Luis Obispo, San Luis Obispo	Sampling Date: July 31, 2014			
Applicant/Owner: NKT Development, LLC		State: CA	Sampling Point: DP-4			
Investigator(s): David Wolff	Secti	ion, Township, Range:				
Landform (hillslope, terrace, etc.): Urban flat lands	form (hillslope, terrace, etc.): <u>Urban flat lands</u> Local relief (concave, co					
Subregion (LRR): LRRC	at: <u>35.249495</u>	Long: <u>-120.644604</u>	Datum: NAD83			
Soil Map Unit Name: Cropley Clay		NWI classificat	tion:			
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes 🛛 No	(If no, explain in Remarks.)				
Are Vegetation No, Soil No, or Hydrology No significantly distur	bed? Are "Norma	al Circumstances" present? Yes	No 🗌			
Are Vegetation No, Soil No, or Hydrology Yes naturally problem	atic? (If needed,	explain any answers in Remarks	5.)			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes	Is the Sampled Area within a Wetland?	Yes 🖾 No 🗌						
Remarks: Charactarizes foodplain terra	Remarks: Charactarizes foodplain terrace overflow flooding from ephemeral drainage.								

VEGETATION – Use scientific names of plants.

	Absolute		nt Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			? Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>4</u> (B)
4	<u> </u>			Percent of Dominant Species
		= Total	Cover	That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
Sapling/Shrub Stratum (Plot size:)				Describer on the description of the
1				Prevalence Index worksheet:
2				Total % Cover of: Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
		= Total	Cover	FACU species x 4 =
Herb Stratum (Plot size: 25'x25')				UPL species x 5 =
1. Phalaris aquatica	80%	yes	FACU	Column Totals: (A) (B)
2. <u>Dipsacus sativus</u>	20%	yes	UPL	
3. Polypogon monspeliensis	20%	yes	FACW	Prevalence Index = B/A =
4. Helminthotheca echioides	<u>20%</u>	yes	FAC	Hydrophytic Vegetation Indicators:
5				Dominance Test is >50%
6				□ Prevalence Index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
···		= Total		Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)	14070	10tai		
1				¹ Indicators of hydric soil and wetland hydrology must
2				be present, unless disturbed or problematic.
		= Total	Cover	Hydrophytic
		_		Vegetation
	ver of Biotic			Present? Yes No 🛛
Remarks: Not greater than 50% of dominant species are dominant vegetation.	wetland indi	cators. Se	veral years o	f low rainfall drought conditions may have affected the

SOIL

Sampling Point: DP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
<u>0-4"</u>	Root zone							
4"-12"	10YR 3/1	70%	5YR 4/4	30%	RM	PL	Clay	
		- <u> </u>						
			l=Reduced Matrix, CS I LRRs, unless othe			ed Sand G		ocation: PL=Pore Lining, M=Matrix. tors for Problematic Hydric Soils ³ :
					eu.j			cm Muck (A9) (LRR C)
	pipedon (A2)		Sandy Redox (S					cm Muck (A10) (LRR B)
Black Hi			Loamy Mucky N	. ,	D			educed Vertic (F18)
	n Sulfide (A4)		Loamy Gleyed N					d Parent Material (TF2)
	Layers (A5) (LRR (C)	Depleted Matrix					ner (Explain in Remarks)
	ck (A9) (LRR D)	,	Redox Dark Su					, , , , , , , , , , , , , , , , , , ,
Depleted	Below Dark Surfac	e (A11)	Depleted Dark S	Surface (F	7)			
Thick Da	ark Surface (A12)		Redox Depress	ions (F8)			³ Indica	ators of hydrophytic vegetation and
-	lucky Mineral (S1)							land hydrology must be present,
-	leyed Matrix (S4)						unl	ess disturbed or problematic.
_	Layer (if present):							
· · ·			-					
	ches):		-				Hydric So	oil Present? Yes 🛛 No 🗌
Remarks: Hi	gh percentage of re-	duced mati	rix features.					
HYDROLO	GY							
	drology Indicators	:						
-			ed; check all that appl	V)			Sec	condary Indicators (2 or more required)
Surface			Salt Crust					Water Marks (B1) (Riverine)
	ter Table (A2)		Biotic Crus	. ,				Sediment Deposits (B2) (Riverine)
Saturatio	· · /			. ,	s (B13)			Drift Deposits (B3) (Riverine)
	arks (B1) (Non rive	(and	Hydrogen					Drainage Patterns (B10)
	nt Deposits (B2) (No							Dry-Season Water Table (C2)
	oosits (B3) (Non rive				-	-	. ,	Crayfish Burrows (C8)
	Soil Cracks (B6)	anne)	Recent Iro					Saturation Visible on Aerial Imagery (C9)
	n Visible on Aerial I	magany (B7					, _	Shallow Aquitard (D3)
	tained Leaves (B9)	nagery (Dr	Other (Exp		,			FAC-Neutral Test (D5)
					marksy			
Field Obser	vations:							
Surface Wat		∕es 🔲 N	o 🛛 Depth (inches	s):				
Water Table			o					
Saturation P			o			Wet	land Hydrolo	ogy Present? Yes 🛛 No 🗌
(includes ca	pillary fringe)			·				
Describe Re	corded Data (stream	n gaug e , m	onitoring well, aerial	photos, pr	evious in	spections)	, if available:	
Remarks: Fl	oodplain terrace adj	acent to off	fsite ephemeral drain	age chanr	nel.			

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: McBride and Curry Property	City/County: <u>Sar</u>	n Luis Obispo, San Luis Obispo	Sampling Date: July 31, 2014			
Applicant/Owner: NKT Development, LLC		State: CA	Sampling Point: DP-5			
Investigator(s): David Wolff	Secti	on, Township, Range:				
Landform (hillslope, terrace, etc.): Urban flat lands	Local relief (cor	cal relief (concave, convex, none): <u>floodplain</u>				
Subregion (LRR): LRRC L	at: <u>35.249531</u>	Long: <u>-120.644661</u>	Datum: NAD83			
Soil Map Unit Name: Cropley Clay		NWI classifica	tion:			
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes 🛛 No	(If no, explain in Remarks.)				
Are Vegetation No, Soil No, or Hydrology No significantly distur	bed? Are "Norma	al Circumstances" present? Yes	No 🗌			
Are Vegetation No, Soil No, or Hydrology Yes naturally problem	atic? (If needed,	explain any answers in Remarks	5.)			
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes ⊠ No □ Yes ⊠ No □	Is the Sampled Area within a Wetland?	Yes 🖾 No 🗌						
Remarks: Charactarizes foodplain terra	Remarks: Charactarizes foodplain terrace overflow flooding from ephemeral drainage.								

VEGETATION – Use scientific names of plants.

	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
				That Are OBL, FACW, or FAC: <u>1</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>4</u> (B)
4				Barris (Danis de Casaira
		= Total C		Percent of Dominant Species That Are OBL, FACW, or FAC: 25% (A/B)
Sapling/Shrub Stratum (Plot size:)				()
1				Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
		= Total C		FACU species x 4 =
Herb Stratum (Plot size: 25'x25')				UPL species x 5 =
1. Phalaris aquatica	80%	yes	FACU	Column Totals: (A) (B)
2. <u>Dipsacus sativus</u>	20%	yes	UPL	
3. Polypogon monspeliensis	20%	yes	FACW	Prevalence Index = B/A =
4. Helminthotheca echioides		-		Hydrophytic Vegetation Indicators:
5		-		Dominance Test is >50%
6				Prevalence Index is ≤3.0 ¹
				Morphological Adaptations ¹ (Provide supporting
7				data in Remarks or on a separate sheet)
8		= Total C		Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)	140%		Jover	
1				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
2			over	Hydrophytic
		_ 10tai C		Vegetation
% Bare Ground in Herb Stratum <u>0%</u> % Cov	er of Biotic (Crust <u>0%</u>		Present? Yes 🗌 No 🛛
Remarks: Less than 50% of dominant species are wetland	l indicators.	Several ye	ears of low ra	ainfall drought conditions may have affected the dominant
vegetation.				

SOIL

Sampling Point: DP-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix		Redo	x Feature	s				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-4"	Root zone								
4"-12"	<u>10YR 3/1</u>	70%	5YR 4/4	30%	RM	PL	Clay		
					<u> </u>				
		·							
4-		·							
			I=Reduced Matrix, CS I LRRs, unless othe			ed Sand G		cation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :	
		able to al			ea.)			•	
	()		Sandy Redox (S					n Muck (A9) (LRR C)	
☐ Histic Ep	bipedon (A2)		Loamy Mucky N	. ,				n Muck (A10) (LRR B) luced Vertic (F18)	
	n Sulfide (A4)		Loamy Gleyed N					Parent Material (TF2)	
	d Layers (A5) (LRR (C)	Depleted Matrix					er (Explain in Remarks)	
	ck (A9) (LRR D)	- /	Redox Dark Su						
Depleted	d Below Dark Surfac	e (A11)	Depleted Dark S	Surface (F	7)				
Thick Date	ark Surface (A12)		Redox Depress	ions (F8)			³ Indicators of hydrophytic vegetation and		
-	lucky Mineral (S1)							wetland hydrology must be present,	
	Bleyed Matrix (S4)						unles	ss disturbed or problematic.	
Restrictive	Layer (if present):								
			-						
	ches):		-				Hydric Soi	I Present? Yes 🛛 No 🗌	
Remarks: H	igh percentage of rec	duced mat	rix features.						
HYDROLO	GY								
Wetland Hy	drology Indicators:								
-			ed; check all that appl	V)			Seco	ndary Indicators (2 or more required)	
Surface			Salt Crust					Vater Marks (B1) (Riverine)	
\equiv	iter Table (A2)		Biotic Crus	` '					
Saturatio	. ,		Aquatic Inv	. ,	s (B13)		 Sediment Deposits (B2) (Riverine) Drift Deposits (B3) (Riverine) 		
	larks (B1) (Non rive i	rine)	Hydrogen					Drainage Patterns (B10)	
	nt Deposits (B2) (No					Living Roo		Dry-Season Water Table (C2)	
	oosits (B3) (Non rive				-	-		Crayfish Burrows (C8)	
	Soil Cracks (B6)	inite)	Recent Iro			,		aturation Visible on Aerial Imagery (C9)	
	()	nagery (B7				u 00113 (00		Shallow Aquitard (D3)	
 Inundation Visible on Aerial Imagery (B7) Thin Muck Surface (C7) Water-Stained Leaves (B9) Other (Explain in Remarks) 					AC-Neutral Test (D5)				
					markoj				
Field Obser	vations:								
Surface Wat		′es 🔲 N	o 🛛 Depth (inches	s):					
Water Table			o						
Saturation P			o			Wet	and Hydrolog	y Present? Yes 🛛 No 🗌	
	pillary fringe)			»/·		well			
		n gauge, m	onitoring well, aerial	photos, pr	evious in	spections),	if available:		
Remarks: Fl	Remarks: Floodplain terrace adjacent to offsite ephemeral drainage channel.								

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: McBride and Curry Property	City/County: Sar	n Luis Obispo, San Luis Obispo	Sampling Date: July 31, 2014		
Applicant/Owner: NKT Development, LLC		State: CA	Sampling Point: DP-6		
Investigator(s): David Wolff	Sect	tion, Township, Range:			
Landform (hillslope, terrace, etc.): Urban flat lands	Local relief (co	ncave, convex, none): <u>floodplain</u>	Slope (%): <u>< 3%</u>		
Subregion (LRR): LRRC L	Lat: <u>35.249208</u>	Long: <u>-120.64</u>	Datum: NAD83		
Soil Map Unit Name: Cropley Clay		NWI classificat	lion:		
Are climatic / hydrologic conditions on the site typical for this tin	ne of year?Yes 🛛 No) [] (If no, explain in Remarks.)			
Are Vegetation No, Soil No, or Hydrology No significantly distu	Irbed? Are "Norma	al Circumstances" present? Yes	🖾 No 🗌		
Are Vegetation No, Soil No, or Hydrology Yes naturally problem	natic? (If needed,	, explain any answers in Remarks	s.)		
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes 🗌 No 🖂	Is the Sa	mpled Area			

Hydric Soil Present? Wetland Hydrology Present?	Yes □ No ⊠ Yes □ No ⊠	within a Wetland?	Yes 🗌 No 🛛	
Remarks: Charactarizes foodplain	terrace overflow flooding from o	ephemeral drainage.		

VEGETATION – Use scientific names of plants.

	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: <u>1</u> (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4		. <u></u>		Percent of Dominant Species
		= Total C	Cover	That Are OBL, FACW, or FAC: 33% (A/B)
Sapling/Shrub Stratum (Plot size:)				
1		·		Prevalence Index worksheet:
2				Total % Cover of:Multiply by:
3				OBL species x 1 =
4				FACW species x 2 =
5				FAC species x 3 =
				FACU species x 4 =
Herb Stratum (Plot size: 25'x25')				UPL species x 5 =
1. Phalaris aquatica	<u>70%</u>	yes	FACU	Column Totals: (A) (B)
2. Dipsacus sativus	30%	yes	UPL	
3. Helminthotheca echioides	20%	yes	FAC	Prevalence Index = B/A =
4				Hydrophytic Vegetation Indicators:
5				Dominance Test is >50%
6				□ Prevalence Index is ≤3.0 ¹
7				Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet)
···	120%	= Total C	over	Problematic Hydrophytic Vegetation ¹ (Explain)
Woody Vine Stratum (Plot size:)	12070	- 10tal C		
1				¹ Indicators of hydric soil and wetland hydrology must
2				be present, unless disturbed or problematic.
			Cover	Hydrophytic
				Vegetation
	er of Biotic (Present? Yes 🗌 No 🛛
Remarks: Less than 50% of dominant species are wetland	l indicators.	Several ye	ears of low ra	ainfall drought conditions may have affected the dominant

SOIL

Sampling Point: DP-6

		e to the dep	oth needed to document the indicato	or or confirm	the abse	nce of indicators.)
Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist) % Type ¹	Loc ²	Texture	Remarks
0-12"	10YR 4/4	100	None		Gravely	sandy loam
0-12	1011(4/4	100				sandy loan
		nletion RM	=Reduced Matrix, CS=Covered or Coa	ted Sand Gr	aine	² Location: PL=Pore Lining, M=Matrix.
			LRRs, unless otherwise noted.)			cators for Problematic Hydric Soils ³ :
Histosol			Sandy Redox (S5)			1 cm Muck (A9) (LRR C)
	ipedon (A2)		Stripped Matrix (S6)			2 cm Muck (A10) (LRR B)
Black His	. ,		Loamy Mucky Mineral (F1)			Reduced Vertic (F18)
	n Sulfide (A4)		Loamy Gleyed Matrix (F2)			Red Parent Material (TF2)
	Layers (A5) (LRR	C)	Depleted Matrix (F3)		ЦC	Other (Explain in Remarks)
	k (A9) (LRR D) Below Dark Surfac	ο (Δ11)	 Redox Dark Surface (F6) Depleted Dark Surface (F7) 			
	rk Surface (A12)		Redox Depressions (F8)		³ Indi	cators of hydrophytic vegetation and
	ucky Mineral (S1)					vetland hydrology must be present,
🔲 Sandy G	leyed Matrix (S4)				u	nless disturbed or problematic.
Restrictive I	_ayer (if present):					
Type:						
• •	ches):				Hydric	Soil Present? Yes 🗌 No 🛛
Remarks: No	hydric soil indicate	ors.				
HYDROLO	GY					
Wetland Hyd	drology Indicators	:				
Primary Indic	ators (minimum of	one require	d; check all that apply)		<u>S</u>	econdary Indicators (2 or more required)
Surface \	Nater (A1)		Salt Crust (B11)] Water Marks (B1) (Riverine)
High Wat	ter Table (A2)		Biotic Crust (B12)			Sediment Deposits (B2) (Riverine)
Saturatio	. ,		Aquatic Invertebrates (B13)			Drift Deposits (B3) (Riverine)
	arks (B1) (Non rive	,	Hydrogen Sulfide Odor (C1)			Drainage Patterns (B10)
	t Deposits (B2) (No	,	Oxidized Rhizospheres along			Dry-Season Water Table (C2)
	osits (B3) (Non riv e	erine)	Presence of Reduced Iron (C			Crayfish Burrows (C8)
	Soil Cracks (B6)	magan (DT	Recent Iron Reduction in Till	ed Soils (C6)		Saturation Visible on Aerial Imagery (C9)
	n Visible on Aerial I ained Leaves (B9)	magery (B/	 Thin Muck Surface (C7) Other (Explain in Remarks)] Shallow Aquitard (D3)] FAC-Neutral Test (D5)
	alleu Leaves (D9)				L	
Field Observ	vations:					
Surface Wate		Yes 🗌 N	Depth (inches):			
Water Table			Depth (inches):			
Saturation P			D Depth (inches):	Wetla	and Hydro	ology Present? Yes 🗌 No 🛛
(includes cap	oillary fringe)				-	
Describe Ree	corded Data (strear	n gauge, m	onitoring well, aerial photos, previous i	nspections), i	if available	<u> </u>
Remarks: Te	rrace above epher	neral draina	ge lacking evidence of overflow floodin	g.		

Attachment 4a

Air Quality Technical Memorandum

Attachment 4 Rincon Consultants, Inc.

1530 Monterey Street, Suite D San Luis Obispo, California 93401

805 547 0900 office and fax

info@rinconconsultants.com www.rinconconsultants.com



February 26, 2019 Project No: 19-07096

Brian Leveille City of San Luis Obispo Community Development Long Range Planning 919 Palm Street San Luis Obispo, California 93401

Subject:Tank Farm Road Assisted Living Facility and Retail Project3985 Broad Street and 660 Tank Farm Road, San Luis Obispo, California 93401

Dear Mr. Leveille:

This technical memorandum analyzes the potential air quality impacts of the proposed assisted living facility and retail development on an approximately 10.24-acre project site located at 3985 Broad Street and 660 Tank Farm Road in San Luis Obispo, California (Assessor's Parcel Numbers 053-421-003 and 053-421-004). Rincon Consultants, Inc. (Rincon) prepared this memorandum under contract to the City of San Luis Obispo, in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The project is located in the South Central Coast Air Basin (SCCAB) under the jurisdiction of the San Luis Obispo Air Pollution Control District (SLOAPCD). This assessment is based on significance thresholds and methodologies in the SLOAPCD's 2012 *CEQA Air Quality Handbook* and 2017 "Clarification memorandum for the San Luis Obispo Air Pollution Control District's 2012 CEQA Air Quality Handbook."¹

Project Description

The proposed project would involve construction of an approximately 133,655-square foot assisted living facility with 111 suites and 28 memory care beds, and six retail buildings with a total floor area of 45,269 square feet. The project would also include a surface parking lot with approximately 288 vehicle spaces and 67 bicycle parking spaces. The project site is bound by Tank Farm Road to the south, Broad Street to the east, commercial development to the north, and a partially-vacant mobile home park to the west.²

The following sections discuss the SLOAPCD regional thresholds, project impact analysis, and recommendations and conclusions related to air pollutant emissions from project construction and operation.

¹ SLOAPCD. 2012. CEQA Air Quality Handbook. April 2012. Available at:

http://www.slocleanair.org/images/cms/upload/files/CEQA Handbook 2012 v1.pdf

_____. 2017. "Clarification memorandum for the San Luis Obispo Air Pollution Control District's 2012 CEQA Air Quality Handbook." November 14, 2017. Available at: https://storage.googleapis.com/slocleanair-

org/images/cms/upload/files/FINAL Clarification%20Memorandum%2020172.pdf

² The mobile home park located at 650 Tank Farm is planned for redevelopment as a mixed-use development with 249 residential units and 17,500 square feet of commercial space. On completion, these planned residential units would be sensitive receptors.



Setting

The City of San Luis Obispo is in the San Luis Obispo County portion of the SCCAB, which is under the jurisdiction of SLOAPCD. SLOAPCD monitors air pollutant levels to assure that air quality standards are met, and if they are not met, develops strategies to meet the standards. Depending on whether the standards are met or exceeded, the air basin is classified as being in "attainment" or as "non-attainment." San Luis Obispo County is in non-attainment for the state 24-hour standard for particulate matter (PM_{10}) and the state eight-hour standard for ozone (O_3).³

The major sources of PM_{10} in the SCCAB are agricultural operations, vehicle dust, grading, and dust produced by high winds. Additional sources of particulate pollution include diesel exhaust; mineral extraction and production; combustion products from industry and motor vehicles; smoke from open burning; paved and unpaved roads; condensation of gaseous pollutants into liquid or solid particles; and wind-blown dust from soils disturbed by demolition and construction, agricultural operations, off-road vehicle recreation, and other activities. Ozone is a secondary pollutant that is formed by a reaction between nitrogen oxides (NO_x) and reactive organic gases (ROGs) in the presence of sunlight. Therefore, ozone levels are dependent on the amount of these precursors. In the SCCAB, the major sources of ROGs are motor vehicles, organic solvents, petroleum production, and pesticides. The major sources of NO_x are motor vehicles, public utility power generation, and fuel combustion by various industrial sources.⁴

Thresholds

The SLOAPCD *CEQA Air Quality Handbook* (2012) provides project-level air quality thresholds for project construction and operation. These project-level thresholds, described below, represent the levels at which a project's individual emissions of criteria air pollutants, precursors, or toxic air pollutants would result in a cumulatively considerable contribution to the SCCAB's existing air quality status. The project would result in a significant air quality impact if construction or operational emissions would exceed any of the thresholds described below.

Construction Emissions

The SLOAPCD has developed specific daily and quarterly quantitative thresholds that apply to construction projects within the SCCAB. Daily ROG and NO_x thresholds are for all projects, and daily diesel particulate matter (DPM) thresholds are for projects that would be completed in less than one quarter (90 days).⁵ Quarterly ROG and NO_x, DPM, and PM₁₀ thresholds are applicable to the project because construction would last for more than one quarter. The applicable thresholds from SLOAPCD's

³ SLOACPD. 2016. 2015 Annual Air Quality Report. September 2016. Available at:

http://www.slocleanair.org/images/cms/upload/files/2015agrt-FINAL.pdf

⁴ SLOACPD. 2016. *2015 Annual Air Quality Report*. September 2016. Available at: http://www.slocleanair.org/images/cms/upload/files/2015agrt-FINAL.pdf

⁵ SLOAPCD. 2012. *CEQA Air Quality Handbook*. April 2012. Available at: http://www.slocleanair.org/images/cms/upload/files/CEQA Handbook 2012 v1.pdf

^{2017. &}quot;Clarification memorandum for the San Luis Obispo Air Pollution Control District's 2012 CEQA Air Quality Handbook." November 14, 2017. Available at: <u>https://storage.googleapis.com/slocleanair-</u>

org/images/cms/upload/files/FINAL Clarification%20Memorandum%2020172.pdf



CEQA Air Quality Handbook (2012) and "Clarification memorandum for the San Luis Obispo Air Pollution Control District's 2012 CEQA Air Quality Handbook" (2017) are described below.

ROG AND NO_X EMISSIONS

- Daily. Exceedance of the 137 pounds per day threshold requires Standard Mitigation Measures;
- Quarterly Tier 1. Exceedance of the 2.5 tons per quarter threshold requires Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. Off-site mitigation may be required if feasible mitigation measures are not implemented, or if no mitigation measures are feasible for the project; and
- Quarterly Tier 2. Exceedance of the 6.3 tons per quarter threshold requires Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and off-site mitigation.

DIESEL PARTICULATE MATTER (DPM) EMISSIONS

- Quarterly Tier 1. For construction projects lasting more than one quarter, exceedance of the 0.13 tons per quarter threshold requires Standard Mitigation Measures, BACT for construction equipment; and
- Quarterly Tier 2. For construction projects lasting more than one quarter, exceedance of the 0.32 ton per quarter threshold requires Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

FUGITIVE PARTICULATE MATTER (PM10), DUST EMISSIONS

 Quarterly. Exceedance of the 2.5 tons per quarter threshold requires Fugitive PM₁₀ Mitigation Measures and may require the implementation of a CAMP.

Operational Emissions

SLOAPCD's long-term operational emission thresholds are summarized in Table 1.

Table 1 SLOAPCD Operational Emissions Significance Thresholds

Pollutant	Daily Thresholds (Ibs/day)	Annual Thresholds (tons/year)
$ROG + NO_{X}$ (combined) ¹	25	25
Diesel Particulate Matter (DPM) ¹	1.25	-
Fugitive Particulate Matter (PM_{10}), Dust	25	25
со	550	_

¹ SLOAPCD specifies that CalEEMod winter emission outputs be compared to operational thresholds for these pollutants.

http://www.slocleanair.org/images/cms/upload/files/CEQA Handbook 2012 v1.pdf

Methodology

SLOAPCD recommends the use of the most recent version of California Emissions Estimator Model (CalEEMod) (version 2016.3.2) to estimate construction and operational emissions of a project.

Source: SLOAPCD. 2012. CEQA Air Quality Handbook. April 2012. Available at:



CalEEMod uses project-specific information, including the project's land uses, square footages for different uses, and location, to estimate a project's emissions. The emissions model for the project was based on buildout under the proposed project which would include an assisted living facility with 111 suites and 28 memory care beds and 45,269 square feet of retail and office space. Because the project site is undeveloped, no demolition would occur. CalEEMod default values for the SCCAB developed by SLOAPCD were used to determine construction equipment, while construction phase modeling was based on information provided by the applicant, as outlined below:

- Site Preparation: September 2019 October 2019
- Grading: September 2019 November 2019
- Building Construction: February 2020 February 2022
- Asphalt Paving: August 2021 December 2021
- Architectural Coating: August 2021 December 2021

In addition, the emissions modeling assumes export of 1,029 cubic yards of soil to the site during the grading phase of project construction. The CalEEMod model file and output results are included as Attachments 1 and 2.

Operational emissions modeled include area, energy, and mobile source emissions (i.e., vehicle emissions). Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coatings. Emissions from energy are generated through the transport and use of electricity and natural gas. The following project design features, which would reduce energy usage, were included in CalEEMod using the "mitigation" tabs":

- Low-flow plumbing fixtures
- Energy-efficiency appliances
- Use of reclaimed water for outdoor irrigation

Mobile source emissions include emissions generated by trips to and from the project site. The trip generation rates applied for project were from the Institute of Traffic Engineers (ITE) 9th Edition for congregate care (assisted living) and regional shopping center (ITE codes 253 and 820, respectively) based on CalEEMod default values for the proposed land uses.

Impact Analysis

Construction Emissions

Temporary construction activities associated with development under the proposed project would generate criteria pollutant emissions (i.e., fugitive dust and ozone precursor emissions) as well as toxic air emissions (i.e., DPM emissions), which would contribute to the existing San Luis Obispo County non-attainment status for ozone and PM_{10} . Table 2 summarizes the estimated short-term emissions from construction. Table 2 shows maximum daily and quarterly emissions during construction compared to the applicable SLOAPCD construction emissions thresholds (see Attachments 1 and 2 for complete CalEEMod model file, results, and assumptions).



	Daily (lbs/day)	Quarterly (tons/quarter)			
	ROG + NO _X (combined)	ROG + NO _X (combined) ¹	Fugitive PM10 (dust) ²	DPM ^{2,3}	
Maximum Construction Emissions	115.8	3.0	0.2	0.1	
SLOAPCD Significance Threshold	137	2.5 (Tier 1)	2.5 (Tier 1)	0.13 (Tier 1)	
Threshold Exceeded?	No	Yes	Νο	No	

Table 2 Maximum Construction Emissions

See Appendix A for CalEEMod results.

¹ The combined ROG and NO_x emissions were derived from the rolling maximum quarterly emissions for "ROG + NO_x" from CalEEMod. ² Quarterly emissions for Fugitive PM₁₀ and DPM were calculated by dividing maximum annual construction emissions from CalEEMod

by 4, since construction activities would extend for a duration exceeding 90 days, as recommended by SLOAPCD.

³ The DPM estimations were derived from the "PM₁₀ Exhaust" and "PM_{2.5} Exhaust" output from CalEEMod as recommended by SLOAPCD. This estimation represents a worst case scenario because it includes other PM₁₀ exhaust other than DPM.

As shown in Table 2, maximum construction emissions would not exceed the quarterly SLOAPCD thresholds for PM₁₀ or DPM or the daily SLOAPCD threshold for ROG and NO_x. However, maximum quarterly construction emissions would exceed the quarterly SLOAPCD threshold for ROG and NO_x during the first quarter of construction, which includes the site preparation and grading phases. Therefore, temporary construction impacts related to emissions of ROG and NO_x would be potentially significant. See *Recommendations and Conclusions* for recommendations that would reduce this impact to a less than significant level.

Operational Emissions

Development of the proposed project would result in an increase in vehicle trips that would generate new criteria pollutant emissions in the SCCAB. In addition, operation of new land uses on the project site would result in ongoing emissions associated with natural gas use and area sources, such as landscaping, consumption of consumer products, and off-gassing from architectural coatings. Table 3 shows the daily and annual operational emissions associated with the development under the proposed project compared to the applicable SLOAPCD operational emissions thresholds (see Attachments 1 and 2 for complete CalEEMod model files, results, and assumptions). The analysis of operational emissions does not consider toxic air contaminants because the project does not include a stationary source of toxic air emissions that would impact adjacent sensitive receptors and the project site is not located close to a freeway or urban road with daily traffic volumes of greater than 100,000 vehicles.⁶

⁶ The CARB *Air Quality and Land Use Handbook* (2005) recommends avoiding siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 vehicles per day.



Table 3 Operational Emissions

	ROG + NO _X (combined)	Fugitive PM ₁₀ (dust)	DPM ¹	со
Proposed Project Daily Emissions	23.5 lbs/day ²	9.2 lbs/day	0.4 lb/day ²	50.1 lbs/day
SLOAPCD Daily Threshold	25 lbs/day	25 lbs/day	1.25 lbs/day	550 lbs/day
Threshold Exceeded?	No	No	No	No
Proposed Project Annual Emissions	3.8 tons/year	1.4 tons/year	0.06 ton/year	7.7 tons/year
SLOAPCD Annual Threshold	25 tons/year	25 tons/year	n/a	n/a
Threshold Exceeded?	No	No	n/a	n/a

¹ DPM estimates were derived from the "PM₁₀ Exhaust" and "PM_{2.5} Exhaust" output from CalEEMod as recommended by SLOAPCD. This estimate represents a worst case scenario because it includes all PM₁₀ exhaust.

² SLOAPCD specifies that CalEEMod winter emission outputs be compared to operational thresholds for these pollutants. Note: All numbers may not sum exactly due to rounding.

As shown in Table 3, daily operational emissions associated with development under the proposed project would not exceed SLOAPCD operational daily and annual thresholds for ROG and NO_x, PM₁₀, DPM, or CO. Therefore, long-term operational emissions would be less than significant.

Recommendations and Conclusions

Recommendations

Construction-related air quality impacts during site preparation and grading would exceed the quarterly SLOAPCD threshold for ROG and NO_x during the first quarter of construction. Measures AQ-1 and AQ-2 are recommended to reduce this potential impact to a less than significant level. Measures AQ-1 and AQ-2 incorporate the standard construction equipment mitigation measures and BACT measures required by SLOAPCD for construction projects that exceed the 2.5 tons per quarter threshold for ROG and NO_x emissions. As discussed under *Thresholds*, because the project would not exceed the quarterly Tier 2 threshold of 6.3 tons per quarter for ROG and NO_x emissions, implementation of a Construction Activity Management Plan and off-site mitigation would not be required by SLOAPCD.

AQ-1 Standard Control Measures for Construction Equipment

The following standard air quality mitigation measures shall be implemented during the site preparation and grading phases of construction at the project site:

- Maintain all construction equipment in proper tune according to manufacturer's specifications;
- Fuel all off-road and portable diesel powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
- Comply with the State Off-Road Regulation;
- Use on-road heavy-duty trucks that meet the CARB's 2007 or cleaner certification standard for onroad heavy-duty diesel engines, and comply with the State On-Road Regulation;
- Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NO_x exempt area fleets) may be eligible by proving alternative compliance;



- All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit;
- Diesel idling within 500 feet of sensitive receptors shall not be not permitted;⁷
- Staging and queuing areas shall not be located within 500 feet of sensitive receptors;⁶
- Equipment shall be electrified when feasible;
- Gasoline-powered equipment shall be substituted in place of diesel-powered equipment, where feasible; and
- Alternatively-fueled construction equipment shall be used on-site where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel.

AQ-2 Best Available Control Technology

Diesel construction equipment used during the site preparation and grading phases shall be equipped with CARB Tier 3 or Tier 4 certified off-road engines and 2010 on-road compliant engines.

REQUIREMENTS AND TIMING

Standard control measures and BACT measures for construction equipment shall be shown on grading and construction plans prior to issuance of permits.

MONITORING

The City of San Luis Obispo Community Development Department shall verify compliance prior to issuance of grading or construction permits. The Community Development Department shall site inspect to ensure construction activities are completed in accordance with approved construction equipment control measures and BACT measures.

SIGNIFICANCE AFTER MITIGATION

The standard construction equipment mitigation measures and BACT measures have been developed by SLOAPCD to enhance the consistency of projects with the goals and policies of the Clean Air Plan, and SLOAPCD has identified the measures as contributing to achieving and maintaining attainment of State and federal ambient air quality standards. SLOAPCD does not quantify the potential emission reductions achieved by these measures. However, CalEEMod is capable of estimating emissions reductions that would result from implementation of Measure AQ-2, which requires the use of minimum CARB Tier 3 certified off-road engines during the site preparation and grading phases. Table 4 summarizes mitigated maximum daily and quarterly emissions during construction compared to the applicable SLOAPCD construction emissions thresholds (see Attachments 1 and 2 for complete CalEEMod model file, results, and assumptions).

⁷ SLOAPCD recommends that diesel idling and staging/queuing areas be prohibited within 1,000 feet of sensitive receptors. However, these restrictions would be infeasible for the proposed project because the project site is approximately 850 feet in length, and the nearest sensitive receptors would be the planned residential units located on the parcel immediately adjacent to the project site's western boundary (650 Tank Farm Road). Therefore, the diesel idling and staging/queuing area restrictions has been reduced to 500 feet.

	Daily (lbs/day)		Quarterly (tons/quarter)
	ROG + NO _X (combined)	ROG + NO _X (combined) ¹	Fugitive PM ₁₀ (dust) ²	DPM ^{2,3}
Mitigated Maximum Construction Emissions	65.8	1.7	0.2	0.1
SLOAPCD Significance Threshold	137	2.5 (Tier 1)	2.5 (Tier 1)	0.13 (Tier 1)
Threshold Exceeded?	No	No	No	No

Table 4 Mitigated Maximum Construction Emissions

See Appendix A for CalEEMod results.

¹ The combined ROG and NO_x emissions were derived from the rolling maximum quarterly emissions for "ROG + NO_x" from CalEEMod. ² Quarterly emissions for Fugitive PM₁₀ and DPM were calculated by dividing maximum annual construction emissions from CalEEMod

by 4, since construction activities would extend for a duration exceeding 90 days, as recommended by SLOAPCD.

³ The DPM estimations were derived from the "PM₁₀ Exhaust" and "PM_{2.5} Exhaust" output from CalEEMod as recommended by SLOAPCD. This estimation represents a worst case scenario because it includes other PM₁₀ exhaust other than DPM.

As shown in Table 4, implementation of Measure AQ-2 would reduce maximum quarterly emissions of ROG and NO_x to below the SLOAPCD significance threshold. Implementation of Measure AQ-1 would further reduce ROG and NO_x emissions. Therefore, implementation of Measures AQ-1 and AQ-2 during the site preparation and grading phases would reduce construction-related air quality impacts to a less than significant level.

Conclusion

As discussed under *Project Impacts*, construction-related emissions of ROG and NO_x would be reduced to below applicable thresholds with implementation of Measures AQ-1 and AQ-2. During the site preparation and grading phases, implementation of Measure AQ-1 would provide for the use of standard construction equipment control measures, and implementation of Measure AQ-2 would provide for the use of construction equipment equipped with minimum CARB Tier 3 certified engines and 2010 on-road compliant engines. No measures are recommended for operational emissions because the project's operational emissions would be below SLOAPCD thresholds and would therefore be less than significant.

Sincerely, Rincon Consultants, Inc.

Chris Bersbach, MESM Senior Environmental Planner

Attachments

Attachment 1CalEEMod Model FileAttachment 2CalEEMod Modeling Results

Richard Daulton, MURP Principal/Vice President

Tank Farm Road Assisted Living and Retail Project - Mitigated

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.20	Acre	1.20	52,272.00	0
Parking Lot	288.00	Space	3.19	115,200.00	0
City Park	1.63	Acre	1.63	71,002.80	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	2.52	133,655.00	398
Regional Shopping Center	45.27	1000sqft	1.70	45,269.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Cor	mpany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Page 2 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

Project Characteristics -

Land Use - Adjustments based on site plan. Other Asphalt Surfaces for circulation roadways. City Park for landscaping+sidewalk on west, north, and east.

Construction Phase - Construction schedule provided by applicant.

Grading -

Architectural Coating - 2016 CALGreen Building Code - 50 g/L for flat coatings and 100 g/L for traffic markings

Vehicle Trips - City park proxy for landscaping and sidewalk.

Area Coating - 2016 CALGreen Code - 50g/L for flat coatings and 100 g/L for traffic markings

Solid Waste -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Construction Off-road Equipment Mitigation - SLOAPCD BACT mitigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	300.00	541.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	10.00	44.00
tblGrading	MaterialExported	0.00	1,029.00
tblLandUse	LandUseSquareFeet	139,000.00	133,655.00
tblLandUse	LandUseSquareFeet	45,270.00	45,269.00
tblLandUse	LotAcreage	2.59	3.19
tblLandUse	LotAcreage	8.69	2.52
tblLandUse	LotAcreage	1.04	1.70
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
			•

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton				МТ	/yr						
2019	0.2551	2.8019	1.6159	3.0000e- 003	0.6906	0.1302	0.8208	0.3384	0.1198	0.4582	0.0000	269.8991	269.8991	0.0817	0.0000	271.9408
2020	0.3928	3.1536	3.1270	6.9600e- 003	0.2805	0.1393	0.4197	0.0753	0.1310	0.2063	0.0000	623.9450	623.9450	0.0828	0.0000	626.0142
2021	1.0329	3.9382	4.2652	9.2000e- 003	0.3370	0.1716	0.5086	0.0904	0.1609	0.2513	0.0000	821.7842	821.7842	0.1259	0.0000	824.9304
2022	0.0554	0.4473	0.4935	1.1600e- 003	0.0481	0.0172	0.0653	0.0129	0.0161	0.0291	0.0000	104.3177	104.3177	0.0137	0.0000	104.6603
Maximum	1.0329	3.9382	4.2652	9.2000e- 003	0.6906	0.1716	0.8208	0.3384	0.1609	0.4582	0.0000	821.7842	821.7842	0.1259	0.0000	824.9304

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	2 Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr				_			M	T/yr		
2019	0.0838	1.4525	1.7424	3.0000e- 003	0.6906	0.0651	0.7557	0.3384	0.0644	0.4027	0.0000	269.8988	269.8988	0.0817	0.0000	271.9405
2020	0.3651	3.0769	3.1399	6.9600e- 003	0.2805	0.1369	0.4173	0.0753	0.1308	0.2061	0.0000	623.9446	623.9446	0.0828	0.0000	626.0139
2021	1.0077	3.9017	4.2837	9.2000e- 003	0.3370	0.1738	0.5108	0.0904	0.1652	0.2555	0.0000	821.7837	821.7837	0.1259	0.0000	824.9299
2022	0.0522	0.4494	0.4972	1.1600e- 003	0.0481	0.0183	0.0664	0.0129	0.0175	0.0304	0.0000	104.3176	104.3176	0.0137	0.0000	104.6602
Maximum	1.0077	3.9017	4.2837	9.2000e- 003	0.6906	0.1738	0.7557	0.3384	0.1652	0.4027	0.0000	821.7837	821.7837	0.1259	0.0000	824.9299
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	13.09	14.12	-1.70	0.00	0.00	14.02	3.54	0.00	11.69	5.29	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	St	art Date	Enc	d Date	Maxim	um Unmitig	ated ROG +	NOX (tons/	quarter)	Maxin	num Mitigat	ted ROG + N	IOX (tons/qı	iarter)		
1	9	-2-2019	12-1	1-2019			2.9852					1.5005				
2	12	2-2-2019	3-1	-2020			0.2972					0.2885				
3	3.	-2-2020	6-1	-2020			0.9719					0.9432				
4	6	-2-2020	9-1	-2020			0.9696					0.9409				
5	9	-2-2020	12-1	1-2020			0.9638					0.9354				
6	12	2-2-2020	3-1	-2021			0.8973					0.8778				
7	3	-2-2021	6-1	-2021			0.8833					0.8678				
8	6	-2-2021	9-1	-2021			1.1733					1.1578				

Page 6 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

9	9-2-2021	12-1-2021	1.7343	1.7190
10	12-2-2021	3-1-2022	1.0902	1.0840
		Highest	2.9852	1.7190

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Area	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Energy	7.0500e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	389.2549	389.2549	0.0158	4.2700e- 003	390.9214
Mobile	0.5930	2.2575	5.7903	0.0153	1.3600	0.0162	1.3762	0.3641	0.0152	0.3793	0.0000	1,397.259 9	1,397.259 9	0.0605	0.0000	1,398.772 9
Waste	6,					0.0000	0.0000		0.0000	0.0000	35.4240	0.0000	35.4240	2.0935	0.0000	87.7613
Water	6,					0.0000	0.0000		0.0000	0.0000	3.9370	29.4177	33.3547	0.4057	9.8200e- 003	46.4246
Total	1.4227	2.3400	7.7181	0.0157	1.3600	0.0316	1.3916	0.3641	0.0305	0.3946	39.3610	1,819.034 3	1,858.395 3	2.5785	0.0141	1,927.057 3

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5			PM2.5 Total	Bio- CC	2 NBio	o- CO2	Total CO2	CH4	N2O	CO2e
Category					1	ons/yr									М	T/yr		
Area	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0	105	0.0105	0.0000	3.	1018	3.1018	3.0100e 003	- 0.0000	3.1771
6,	7.0500e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003	 	4.87 00		4.8700e- 003	0.0000	389	.2549	389.2549	0.0158	4.2700e 003	- 390.9214
Woblie	0.5930	2.2575	5.7903	0.0153	1.3600	0.0162	1.3762	0.3641	1 0.0 ⁻	152	0.3793	0.0000	1,39	97.259 9	1,397.259 9	0.0605	0.0000	1,398.772 9
Waste	e,					0.0000	0.0000		0.0	000	0.0000	35.424) 0.(0000	35.4240	2.0935	0.0000	87.7613
Water	e,					0.0000	0.0000	 	0.0	000	0.0000	3.1496	21.	5575	24.7071	0.3245	7.8400e 003	- 35.1552
Total	1.4227	2.3400	7.7181	0.0157	1.3600	0.0316	1.3916	0.3641	l 0.03	305	0.3946	38.573	5 1,81	1.174 1	1,849.747 7	2.4973	0.0121	1,915.788 0
	ROG	1	lOx	CO S					ugitive PM2.5	Exha PM2			o- CO2	NBio-	CO2 Tota	CO2	CH4	N20 CO2
Percent Reduction	0.00	(0.00	0.00 0	.00	0.00 0	0.00 0	.00	0.00	0.0	0.0	00	2.00	0.4	3 0.	47 :	3.15	4.05 0.58

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/2/2019	10/31/2019	5	44	
2	Grading	Grading	9/2/2019	11/29/2019	5	65	
3	Building Construction	Building Construction	2/3/2020	2/28/2022	5	541	
4	Paving	Paving	8/2/2021	12/31/2021	5	110	
5	Architectural Coating	Architectural Coating	8/2/2021	12/31/2021	5	110	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 162.5

Acres of Paving: 4.39

Residential Indoor: 270,651; Residential Outdoor: 90,217; Non-Residential Indoor: 67,904; Non-Residential Outdoor: 22,635; Striped Parking Area: 10,048 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	129.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	215.00	61.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	43.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2

Page 10 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Fugitive Dust					0.3975	0.0000	0.3975	0.2185	0.0000	0.2185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0954	1.0026	0.4854	8.4000e- 004		0.0526	0.0526		0.0484	0.0484	0.0000	75.1711	75.1711	0.0238	0.0000	75.7657
Total	0.0954	1.0026	0.4854	8.4000e- 004	0.3975	0.0526	0.4501	0.2185	0.0484	0.2669	0.0000	75.1711	75.1711	0.0238	0.0000	75.7657

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				MT	'/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943
Total	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Fugitive Dust					0.3975	0.0000	0.3975	0.2185	0.0000	0.2185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0252	0.4375	0.5039	8.4000e- 004		0.0219	0.0219		0.0215	0.0215	0.0000	75.1710	75.1710	0.0238	0.0000	75.7656
Total	0.0252	0.4375	0.5039	8.4000e- 004	0.3975	0.0219	0.4193	0.2185	0.0215	0.2400	0.0000	75.1710	75.1710	0.0238	0.0000	75.7656

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943
Total	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.2820	0.0000	0.2820	0.1169	0.0000	0.1169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1540	1.7719	1.0847	2.0200e- 003		0.0774	0.0774		0.0712	0.0712	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612
Total	0.1540	1.7719	1.0847	2.0200e- 003	0.2820	0.0774	0.3594	0.1169	0.0712	0.1881	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	6.6000e- 004	0.0227	4.9100e- 003	5.0000e- 005	1.1000e- 003	1.3000e- 004	1.2300e- 003	3.0000e- 004	1.3000e- 004	4.3000e- 004	0.0000	5.0052	5.0052	2.8000e- 004	0.0000	5.0123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e- 003	2.9300e- 003	0.0254	6.0000e- 005	6.2600e- 003	4.0000e- 005	6.3000e- 003	1.6600e- 003	4.0000e- 005	1.7000e- 003	0.0000	5.4023	5.4023	2.0000e- 004	0.0000	5.4074
Total	3.7800e- 003	0.0256	0.0303	1.1000e- 004	7.3600e- 003	1.7000e- 004	7.5300e- 003	1.9600e- 003	1.7000e- 004	2.1300e- 003	0.0000	10.4075	10.4075	4.8000e- 004	0.0000	10.4196

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.2820	0.0000	0.2820	0.1169	0.0000	0.1169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0530	0.9876	1.1926	2.0200e- 003		0.0430	0.0430		0.0427	0.0427	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610
Total	0.0530	0.9876	1.1926	2.0200e- 003	0.2820	0.0430	0.3250	0.1169	0.0427	0.1596	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	6.6000e- 004	0.0227	4.9100e- 003	5.0000e- 005	1.1000e- 003	1.3000e- 004	1.2300e- 003	3.0000e- 004	1.3000e- 004	4.3000e- 004	0.0000	5.0052	5.0052	2.8000e- 004	0.0000	5.0123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e- 003	2.9300e- 003	0.0254	6.0000e- 005	6.2600e- 003	4.0000e- 005	6.3000e- 003	1.6600e- 003	4.0000e- 005	1.7000e- 003	0.0000	5.4023	5.4023	2.0000e- 004	0.0000	5.4074
Total	3.7800e- 003	0.0256	0.0303	1.1000e- 004	7.3600e- 003	1.7000e- 004	7.5300e- 003	1.9600e- 003	1.7000e- 004	2.1300e- 003	0.0000	10.4075	10.4075	4.8000e- 004	0.0000	10.4196

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.2533	2.2927	2.0134	3.2200e- 003		0.1335	0.1335		0.1255	0.1255	0.0000	276.7739	276.7739	0.0675	0.0000	278.4620
Total	0.2533	2.2927	2.0134	3.2200e- 003		0.1335	0.1335		0.1255	0.1255	0.0000	276.7739	276.7739	0.0675	0.0000	278.4620

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				МТ	/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0271	0.7588	0.2299	1.4500e- 003	0.0331	4.1400e- 003	0.0373	9.5700e- 003	3.9600e- 003	0.0135	0.0000	140.2416	140.2416	8.4400e- 003	0.0000	140.4524
Worker	0.1124	0.1021	0.8837	2.2900e- 003	0.2474	1.6200e- 003	0.2490	0.0657	1.5000e- 003	0.0672	0.0000	206.9295	206.9295	6.8100e- 003	0.0000	207.0998
Total	0.1395	0.8609	1.1136	3.7400e- 003	0.2805	5.7600e- 003	0.2862	0.0753	5.4600e- 003	0.0808	0.0000	347.1710	347.1710	0.0153	0.0000	347.5522

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Off-Road	0.2257	2.2160	2.0263	3.2200e- 003		0.1311	0.1311	1 1 1	0.1253	0.1253	0.0000	276.7736	276.7736	0.0675	0.0000	278.4617
Total	0.2257	2.2160	2.0263	3.2200e- 003		0.1311	0.1311		0.1253	0.1253	0.0000	276.7736	276.7736	0.0675	0.0000	278.4617

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0271	0.7588	0.2299	1.4500e- 003	0.0331	4.1400e- 003	0.0373	9.5700e- 003	3.9600e- 003	0.0135	0.0000	140.2416	140.2416	8.4400e- 003	0.0000	140.4524
Worker	0.1124	0.1021	0.8837	2.2900e- 003	0.2474	1.6200e- 003	0.2490	0.0657	1.5000e- 003	0.0672	0.0000	206.9295	206.9295	6.8100e- 003	0.0000	207.0998
Total	0.1395	0.8609	1.1136	3.7400e- 003	0.2805	5.7600e- 003	0.2862	0.0753	5.4600e- 003	0.0808	0.0000	347.1710	347.1710	0.0153	0.0000	347.5522

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0243	0.7578	0.2220	1.5800e- 003	0.0362	2.1600e- 003	0.0383	0.0105	2.0700e- 003	0.0125	0.0000	152.2328	152.2328	8.9800e- 003	0.0000	152.4573
Worker	0.1144	0.0997	0.8747	2.4200e- 003	0.2701	1.7200e- 003	0.2718	0.0718	1.5800e- 003	0.0734	0.0000	218.2758	218.2758	6.6100e- 003	0.0000	218.4410
Total	0.1386	0.8574	1.0967	4.0000e- 003	0.3063	3.8800e- 003	0.3102	0.0822	3.6500e- 003	0.0859	0.0000	370.5086	370.5086	0.0156	0.0000	370.8983

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Off-Road	0.2229	2.2384	2.1816	3.5100e- 003		0.1273	0.1273		0.1218	0.1218	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	0.2229	2.2384	2.1816	3.5100e- 003		0.1273	0.1273		0.1218	0.1218	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0243	0.7578	0.2220	1.5800e- 003	0.0362	2.1600e- 003	0.0383	0.0105	2.0700e- 003	0.0125	0.0000	152.2328	152.2328	8.9800e- 003	0.0000	152.4573
Worker	0.1144	0.0997	0.8747	2.4200e- 003	0.2701	1.7200e- 003	0.2718	0.0718	1.5800e- 003	0.0734	0.0000	218.2758	218.2758	6.6100e- 003	0.0000	218.4410
Total	0.1386	0.8574	1.0967	4.0000e- 003	0.3063	3.8800e- 003	0.3102	0.0822	3.6500e- 003	0.0859	0.0000	370.5086	370.5086	0.0156	0.0000	370.8983

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Off-Road	0.0350	0.3201	0.3355	5.5000e- 004		0.0166	0.0166		0.0156	0.0156	0.0000	47.5037	47.5037	0.0114	0.0000	47.7882
Total	0.0350	0.3201	0.3355	5.5000e- 004		0.0166	0.0166		0.0156	0.0156	0.0000	47.5037	47.5037	0.0114	0.0000	47.7882

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5300e- 003	0.1131	0.0322	2.5000e- 004	5.6800e- 003	3.0000e- 004	5.9800e- 003	1.6400e- 003	2.9000e- 004	1.9300e- 003	0.0000	23.7511	23.7511	1.3900e- 003	0.0000	23.7859
Worker	0.0169	0.0141	0.1259	3.7000e- 004	0.0424	2.6000e- 004	0.0427	0.0113	2.4000e- 004	0.0115	0.0000	33.0629	33.0629	9.3000e- 004	0.0000	33.0862
Total	0.0204	0.1272	0.1581	6.2000e- 004	0.0481	5.6000e- 004	0.0487	0.0129	5.3000e- 004	0.0135	0.0000	56.8140	56.8140	2.3200e- 003	0.0000	56.8721

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0318	0.3222	0.3392	5.5000e- 004		0.0177	0.0177		0.0170	0.0170	0.0000	47.5036	47.5036	0.0114	0.0000	47.7881
Total	0.0318	0.3222	0.3392	5.5000e- 004		0.0177	0.0177		0.0170	0.0170	0.0000	47.5036	47.5036	0.0114	0.0000	47.7881

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5300e- 003	0.1131	0.0322	2.5000e- 004	5.6800e- 003	3.0000e- 004	5.9800e- 003	1.6400e- 003	2.9000e- 004	1.9300e- 003	0.0000	23.7511	23.7511	1.3900e- 003	0.0000	23.7859
Worker	0.0169	0.0141	0.1259	3.7000e- 004	0.0424	2.6000e- 004	0.0427	0.0113	2.4000e- 004	0.0115	0.0000	33.0629	33.0629	9.3000e- 004	0.0000	33.0862
Total	0.0204	0.1272	0.1581	6.2000e- 004	0.0481	5.6000e- 004	0.0487	0.0129	5.3000e- 004	0.0135	0.0000	56.8140	56.8140	2.3200e- 003	0.0000	56.8721

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0691	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1291	110.1291	0.0356	0.0000	111.0196
Paving	5.7500e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0748	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1291	110.1291	0.0356	0.0000	111.0196

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230
Total	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0691	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1290	110.1290	0.0356	0.0000	111.0195
Paving	5.7500e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0748	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1290	110.1290	0.0356	0.0000	111.0195

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230
Total	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.5464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670
Total	0.5584	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127
Total	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.5464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670
Total	0.5584	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127
Total	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.5930	2.2575	5.7903	0.0153	1.3600	0.0162	1.3762	0.3641	0.0152	0.3793	0.0000	1,397.259 9	1,397.259 9	0.0605	0.0000	1,398.772 9
Unmitigated	0.5930	2.2575	5.7903	0.0153	1.3600	0.0162	1.3762	0.3641	0.0152	0.3793	0.0000	1,397.259 9	1,397.259 9	0.0605	0.0000	1,398.772 9

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Congregate Care (Assisted Living)	380.86	305.80	339.16	925,584	925,584
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	1,933.03	2,262.14	1142.61	2,695,948	2,695,948
Total	2,313.89	2,567.94	1,481.77	3,621,533	3,621,533

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11

CalEEMod Version: CalEEMod.2016.3.2

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Congregate Care (Assisted Living)	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Parking Lot	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Regional Shopping Center	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category													MT	'/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	319.4459	319.4459	0.0144	2.9900e- 003	320.6976
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	319.4459	319.4459	0.0144	2.9900e- 003	320.6976
NaturalGas Mitigated	7.0500e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2800e- 003	70.2238
NaturalGas Unmitigated	7.0500e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2800e- 003	70.2238

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr											МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)		6.4800e- 003	0.0553	0.0236	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	64.0837	64.0837	1.2300e- 003	1.1700e- 003	64.4645
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		5.8000e- 004	5.2600e- 003	4.4200e- 003	3.0000e- 005		4.0000e- 004	4.0000e- 004		4.0000e- 004	4.0000e- 004	0.0000	5.7253	5.7253	1.1000e- 004	1.0000e- 004	5.7593
Total		7.0600e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2700e- 003	70.2238

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr											МТ	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	1.20088e +006	6.4800e- 003	0.0553	0.0236	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	64.0837	64.0837	1.2300e- 003	1.1700e- 003	64.4645
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		5.8000e- 004	5.2600e- 003	4.4200e- 003	3.0000e- 005		4.0000e- 004	4.0000e- 004		4.0000e- 004	4.0000e- 004	0.0000	5.7253	5.7253	1.1000e- 004	1.0000e- 004	5.7593
Total		7.0600e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2700e- 003	70.2238

5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΜT	ī/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	573841	166.9368	7.5500e- 003	1.5600e- 003	167.5909
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	40320	11.7296	5.3000e- 004	1.1000e- 004	11.7755
Regional Shopping Center	483926	140.7795	6.3700e- 003	1.3200e- 003	141.3311
Total		319.4459	0.0145	2.9900e- 003	320.6976

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	573841	166.9368	7.5500e- 003	1.5600e- 003	167.5909
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	40320	11.7296	5.3000e- 004	1.1000e- 004	11.7755
Regional Shopping Center	483926	140.7795	6.3700e- 003	1.3200e- 003	141.3311
Total		319.4459	0.0145	2.9900e- 003	320.6976

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Unmitigated	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											МТ	/yr		
Architectural Coating	0.0546					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0577	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Total	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr												МТ	/yr		
Architectural Coating	0.0546					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0577	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Total	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Page 33 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category		MT	ī/yr	
initigated	24.7071	0.3245	7.8400e- 003	35.1552
Grinnigatou	33.3547	0.4057	9.8200e- 003	46.4246

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal		MT/yr				
City Park	0/ 1.94211	1.9774	9.0000e- 005	2.0000e- 005	1.9852		
Congregate Care (Assisted Living)		22.9424	0.2960	7.1600e- 003	32.4751		
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Regional Shopping Center	3.35326 / 2.05523	8.4349	0.1096	2.6500e- 003	11.9643		
Total		33.3547	0.4057	9.8300e- 003	46.4246		

Page 34 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.16527	1.1865	5.0000e- 005	1.0000e- 005	1.1911
Congregate Care (Assisted Living)		17.1913	0.2368	5.7100e- 003	24.8129
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.68261 / 1.23314	6.3294	0.0877	2.1200e- 003	9.1513
Total		24.7071	0.3245	7.8400e- 003	35.1552

8.0 Waste Detail

8.1 Mitigation Measures Waste

Page 35 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
ininguiou	35.4240	2.0935	0.0000	87.7613	
Grinnigatou	35.4240	2.0935	0.0000	87.7613	

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons		MT/yr			
City Park	0.14	0.0284	1.6800e- 003	0.0000	0.0704	
Congregate Care (Assisted Living)	126.84	25.7474	1.5216	0.0000	63.7880	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	
Regional Shopping Center	47.53	9.6482	0.5702	0.0000	23.9029	
Total		35.4240	2.0935	0.0000	87.7614	

Page 36 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons		MT/yr				
City Park	0.14	0.0284	1.6800e- 003	0.0000	0.0704		
Congregate Care (Assisted Living)	126.84	25.7474	1.5216	0.0000	63.7880		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		
Regional Shopping Center	47.53	9.6482	0.5702	0.0000	23.9029		
Total		35.4240	2.0935	0.0000	87.7614		

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

Page 37 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

User Defined Equipment

Equipment Type Number

11.0 Vegetation

Tank Farm Road Assisted Living and Retail Project - Mitigated

San Luis Obispo County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.20	Acre	1.20	52,272.00	0
Parking Lot	288.00	Space	3.19	115,200.00	0
City Park	1.63	Acre	1.63	71,002.80	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	2.52	133,655.00	398
Regional Shopping Center	45.27	1000sqft	1.70	45,269.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Cor	npany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Adjustments based on site plan. Other Asphalt Surfaces for circulation roadways. City Park for landscaping+sidewalk on west, north, and east.

Construction Phase - Construction schedule provided by applicant.

Grading -

Architectural Coating - 2016 CALGreen Building Code - 50 g/L for flat coatings and 100 g/L for traffic markings

Vehicle Trips - City park proxy for landscaping and sidewalk.

Area Coating - 2016 CALGreen Code - 50g/L for flat coatings and 100 g/L for traffic markings

Solid Waste -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Construction Off-road Equipment Mitigation - SLOAPCD BACT mitigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

			1
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	300.00	541.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	10.00	44.00
tblGrading	MaterialExported	0.00	1,029.00
tblLandUse	LandUseSquareFeet	139,000.00	133,655.00
tblLandUse	LandUseSquareFeet	45,270.00	45,269.00
tblLandUse	LotAcreage	2.59	3.19
tblLandUse	LotAcreage	8.69	2.52
tblLandUse	LotAcreage	1.04	1.70
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/c	lay		
2019	9.2726	100.9300	57.1137	0.1052	27.1528	4.7796	31.9324	13.6367	4.3974	18.0341	0.0000	10,439.51 61	10,439.51 61	3.1571	0.0000	10,518.44 37
2020	3.2606	26.2486	26.2844	0.0592	2.4087	1.1648	3.5735	0.6453	1.0956	1.7409	0.0000	5,849.710 8	5,849.710 8	0.7630	0.0000	5,868.784 6
2021	14.6819	38.5150	43.4370	0.0894	2.9821	1.7633	4.7455	0.7974	1.6498	2.4472	0.0000	8,780.975 1	8,780.975 1	1.4957	0.0000	8,818.368 8
2022	2.6768	21.7157	24.1903	0.0576	2.4088	0.8360	3.2448	0.6453	0.7865	1.4319	0.0000	5,698.475 6	5,698.475 6	0.7361	0.0000	5,716.878 7
Maximum	14.6819	100.9300	57.1137	0.1052	27.1528	4.7796	31.9324	13.6367	4.3974	18.0341	0.0000	10,439.51 61	10,439.51 61	3.1571	0.0000	10,518.44 37

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	l Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/	day		
2019	2.9729	51.1110	61.2762	0.1052	27.1528	2.3226	29.4754	13.6367	2.2968	15.9335	0.0000	10,439.51 61	10,439.51 61	3.1571	0.0000	10,518.44 37
2020	3.0293	25.6062	26.3924	0.0592	2.4087	1.1448	3.5534	0.6453	1.0940	1.7392	0.0000	5,849.710 8	5,849.710 8	0.7630	0.0000	5,868.784 6
2021	14.4891	38.2353	43.5788	0.0894	2.9821	1.7802	4.7624	0.7974	1.6822	2.4796	0.0000	8,780.975 1	8,780.975 1	1.4957	0.0000	8,818.368 8
2022	2.5231	21.8175	24.3707	0.0576	2.4088	0.8904	3.2992	0.6453	0.8535	1.4988	0.0000	5,698.475 6	5,698.475 6	0.7361	0.0000	5,716.878 7
Maximum	14.4891	51.1110	61.2762	0.1052	27.1528	2.3226	29.4754	13.6367	2.2968	15.9335	0.0000	10,439.51 61	10,439.51 61	3.1571	0.0000	10,518.44 37
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percen Reducti	23.01	27.02	-3.04	0.00	0.00	28.16	5.53	0.00	25.26	8.47	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Area	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252
Energy	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563
Mobile	4.0847	14.1327	36.5604	0.1014	8.9688	0.1037	9.0726	2.3959	0.0973	2.4932		10,235.23 30	10,235.23 30	0.4257		10,245.87 51
Total	8.6646	14.5975	48.2280	0.1041	8.9688	0.1940	9.1628	2.3959	0.1875	2.5835	0.0000	10,677.60 59	10,677.60 59	0.4539	7.7300e- 003	10,691.25 66

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Area	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252
Energy	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563
Mobile	4.0847	14.1327	36.5604	0.1014	8.9688	0.1037	9.0726	2.3959	0.0973	2.4932		10,235.23 30	10,235.23 30	0.4257		10,245.87 51
Total	8.6646	14.5975	48.2280	0.1041	8.9688	0.1940	9.1628	2.3959	0.1875	2.5835	0.0000	10,677.60 59	10,677.60 59	0.4539	7.7300e- 003	10,691.25 66

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/2/2019	10/31/2019	5	44	
2	Grading	Grading	9/2/2019	11/29/2019	5	65	
3	Building Construction	Building Construction	2/3/2020	2/28/2022	5	541	
4	Paving	Paving	8/2/2021	12/31/2021	5	110	
5	Architectural Coating	Architectural Coating	8/2/2021	12/31/2021	5	110	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 162.5

Acres of Paving: 4.39

Residential Indoor: 270,651; Residential Outdoor: 90,217; Non-Residential Indoor: 67,904; Non-Residential Outdoor: 22,635; Striped Parking Area: 10,048 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	129.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	215.00	61.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	43.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2

Page 9 of 30

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Summer

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.452 9	3,766.452 9	1.1917		3,796.244 5

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0846	0.0729	0.7233	1.7200e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		171.6027	171.6027	6.3000e- 003		171.7603
Total	0.0846	0.0729	0.7233	1.7200e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		171.6027	171.6027	6.3000e- 003		171.7603

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	1.1445	19.8857	22.9065	0.0380		0.9931	0.9931		0.9761	0.9761	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	1.1445	19.8857	22.9065	0.0380	18.0663	0.9931	19.0594	9.9307	0.9761	10.9068	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0846	0.0729	0.7233	1.7200e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		171.6027	171.6027	6.3000e- 003		171.7603
Total	0.0846	0.0729	0.7233	1.7200e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		171.6027	171.6027	6.3000e- 003		171.7603

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6763	0.0000	8.6763	3.5969	0.0000	3.5969			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.019 5	6,140.019 5	1.9426		6,188.585 4
Total	4.7389	54.5202	33.3768	0.0620	8.6763	2.3827	11.0589	3.5969	2.1920	5.7890		6,140.019 5	6,140.019 5	1.9426		6,188.585 4

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Hauling	0.0202	0.6832	0.1469	1.5900e- 003	0.0346	4.1100e- 003	0.0387	9.4800e- 003	3.9300e- 003	0.0134		170.7713	170.7713	9.5000e- 003		171.0087
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0940	0.0810	0.8037	1.9200e- 003	0.1977	1.3100e- 003	0.1990	0.0524	1.2100e- 003	0.0537		190.6697	190.6697	7.0000e- 003		190.8448
Total	0.1141	0.7642	0.9506	3.5100e- 003	0.2323	5.4200e- 003	0.2378	0.0619	5.1400e- 003	0.0671		361.4410	361.4410	0.0165		361.8535

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust					8.6763	0.0000	8.6763	3.5969	0.0000	3.5969			0.0000			0.0000
Off-Road	1.6298	30.3882	36.6958	0.0620		1.3229	1.3229		1.3144	1.3144	0.0000	6,140.019 5	6,140.019 5	1.9426		6,188.585 4
Total	1.6298	30.3882	36.6958	0.0620	8.6763	1.3229	9.9991	3.5969	1.3144	4.9113	0.0000	6,140.019 5	6,140.019 5	1.9426		6,188.585 4

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0202	0.6832	0.1469	1.5900e- 003	0.0346	4.1100e- 003	0.0387	9.4800e- 003	3.9300e- 003	0.0134		170.7713	170.7713	9.5000e- 003		171.0087
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0940	0.0810	0.8037	1.9200e- 003	0.1977	1.3100e- 003	0.1990	0.0524	1.2100e- 003	0.0537		190.6697	190.6697	7.0000e- 003		190.8448
Total	0.1141	0.7642	0.9506	3.5100e- 003	0.2323	5.4200e- 003	0.2378	0.0619	5.1400e- 003	0.0671		361.4410	361.4410	0.0165		361.8535

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2212	6.2954	1.8041	0.0123	0.2832	0.0342	0.3173	0.0816	0.0327	0.1143		1,310.290 1	1,310.290 1	0.0753		1,312.173 7
Worker	0.9196	0.7671	7.6318	0.0200	2.1255	0.0136	2.1391	0.5637	0.0125	0.5763		1,986.357 7	1,986.357 7	0.0648		1,987.976 4
Total	1.1408	7.0625	9.4359	0.0323	2.4087	0.0478	2.4564	0.6453	0.0452	0.6905		3,296.647 8	3,296.647 8	0.1401		3,300.150 1

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.8885	18.5437	16.9566	0.0269		1.0970	1.0970		1.0487	1.0487	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	1.8885	18.5437	16.9566	0.0269		1.0970	1.0970		1.0487	1.0487	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2212	6.2954	1.8041	0.0123	0.2832	0.0342	0.3173	0.0816	0.0327	0.1143		1,310.290 1	1,310.290 1	0.0753		1,312.173 7
Worker	0.9196	0.7671	7.6318	0.0200	2.1255	0.0136	2.1391	0.5637	0.0125	0.5763		1,986.357 7	1,986.357 7	0.0648		1,987.976 4
Total	1.1408	7.0625	9.4359	0.0323	2.4087	0.0478	2.4564	0.6453	0.0452	0.6905		3,296.647 8	3,296.647 8	0.1401		3,300.150 1

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1808	5.7658	1.5910	0.0122	0.2832	0.0162	0.2994	0.0816	0.0155	0.0970		1,302.694 2	1,302.694 2	0.0734		1,304.529 2
Worker	0.8565	0.6861	6.9305	0.0193	2.1255	0.0132	2.1387	0.5637	0.0121	0.5759		1,918.664 8	1,918.664 8	0.0576		1,920.105 3
Total	1.0373	6.4519	8.5214	0.0315	2.4087	0.0293	2.4381	0.6453	0.0276	0.6729		3,221.359 0	3,221.359 0	0.1310		3,224.634 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.7081	17.1525	16.7170	0.0269		0.9755	0.9755	1 1 1	0.9337	0.9337	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.7081	17.1525	16.7170	0.0269		0.9755	0.9755		0.9337	0.9337	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.1808	5.7658	1.5910	0.0122	0.2832	0.0162	0.2994	0.0816	0.0155	0.0970		1,302.694 2	1,302.694 2	0.0734		1,304.529 2	
Worker	0.8565	0.6861	6.9305	0.0193	2.1255	0.0132	2.1387	0.5637	0.0121	0.5759		1,918.664 8	1,918.664 8	0.0576		1,920.105 3	
Total	1.0373	6.4519	8.5214	0.0315	2.4087	0.0293	2.4381	0.6453	0.0276	0.6729		3,221.359 0	3,221.359 0	0.1310		3,224.634 5	

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day									lb/day						
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1672	5.4831	1.4673	0.0121	0.2833	0.0142	0.2975	0.0816	0.0136	0.0952		1,294.081 0	1,294.081 0	0.0725		1,295.893 2
Worker	0.8034	0.6170	6.3596	0.0186	2.1255	0.0128	2.1383	0.5637	0.0118	0.5755		1,850.061 0	1,850.061 0	0.0517		1,851.353 3
Total	0.9706	6.1001	7.8269	0.0307	2.4088	0.0270	2.4358	0.6453	0.0254	0.6707		3,144.142 0	3,144.142 0	0.1242		3,147.246 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.5525	15.7174	16.5438	0.0269		0.8634	0.8634		0.8281	0.8281	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.5525	15.7174	16.5438	0.0269		0.8634	0.8634		0.8281	0.8281	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1672	5.4831	1.4673	0.0121	0.2833	0.0142	0.2975	0.0816	0.0136	0.0952		1,294.081 0	1,294.081 0	0.0725		1,295.893 2
Worker	0.8034	0.6170	6.3596	0.0186	2.1255	0.0128	2.1383	0.5637	0.0118	0.5755		1,850.061 0	1,850.061 0	0.0517		1,851.353 3
Total	0.9706	6.1001	7.8269	0.0307	2.4088	0.0270	2.4358	0.6453	0.0254	0.6707		3,144.142 0	3,144.142 0	0.1242		3,147.246 5

3.5 Paving - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.1046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3601	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0479	0.4835	1.3400e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		133.8603	133.8603	4.0200e- 003		133.9608
Total	0.0598	0.0479	0.4835	1.3400e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		133.8603	133.8603	4.0200e- 003		133.9608

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.1046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3601	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0598	0.0479	0.4835	1.3400e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		133.8603	133.8603	4.0200e- 003		133.9608
Total	0.0598	0.0479	0.4835	1.3400e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		133.8603	133.8603	4.0200e- 003		133.9608

3.6 Architectural Coating - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	9.9337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	10.1526	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1713	0.1372	1.3861	3.8500e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		383.7330	383.7330	0.0115		384.0211
Total	0.1713	0.1372	1.3861	3.8500e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		383.7330	383.7330	0.0115		384.0211

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Archit. Coating	9.9337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	10.1526	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1713	0.1372	1.3861	3.8500e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		383.7330	383.7330	0.0115		384.0211
Total	0.1713	0.1372	1.3861	3.8500e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		383.7330	383.7330	0.0115		384.0211

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	4.0847	14.1327	36.5604	0.1014	8.9688	0.1037	9.0726	2.3959	0.0973	2.4932		10,235.23 30	10,235.23 30	0.4257		10,245.87 51
Unmitigated	4.0847	14.1327	36.5604	0.1014	8.9688	0.1037	9.0726	2.3959	0.0973	2.4932		10,235.23 30	10,235.23 30	0.4257	 - - - -	10,245.87 51

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Congregate Care (Assisted Living)	380.86	305.80	339.16	925,584	925,584
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	1,933.03	2,262.14	1142.61	2,695,948	2,695,948
Total	2,313.89	2,567.94	1,481.77	3,621,533	3,621,533

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11

CalEEMod Version: CalEEMod.2016.3.2

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Summer

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Congregate Care (Assisted Living)	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Parking Lot	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Regional Shopping Center	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
NaturalGas Mitigated	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563
NaturalGas Unmitigated	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)		0.0355	0.3032	0.1290	1.9400e- 003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e- 003	7.1000e- 003	389.3698
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		3.1700e- 003	0.0288	0.0242	1.7000e- 004		2.1900e- 003	2.1900e- 003		2.1900e- 003	2.1900e- 003		34.5810	34.5810	6.6000e- 004	6.3000e- 004	34.7865
Total		0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	3.29009	0.0355	0.3032	0.1290	1.9400e- 003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e- 003	7.1000e- 003	389.3698
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		3.1700e- 003	0.0288	0.0242	1.7000e- 004		2.1900e- 003	2.1900e- 003		2.1900e- 003	2.1900e- 003		34.5810	34.5810	6.6000e- 004	6.3000e- 004	34.7865
Total		0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Mitigated	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252
Unmitigated	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636	 	0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		lb/day											lb/c	lay		
Architectural Coating	0.2994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3499	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636		20.7223	20.7223	0.0201		21.2252
Total	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		lb/day											lb/c	lay		
Architectural Coating	0.2994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8920		, , , , ,			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3499	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636		20.7223	20.7223	0.0201		21.2252
Total	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
10.0 Stationary Equipment	t					
Fire Pumps and Emergency Ge	enerators					
Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						-
Equipment Type	Number					

Tank Farm Road Assisted Living and Retail Project - Mitigated

San Luis Obispo County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.20	Acre	1.20	52,272.00	0
Parking Lot	288.00	Space	3.19	115,200.00	0
City Park	1.63	Acre	1.63	71,002.80	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	2.52	133,655.00	398
Regional Shopping Center	45.27	1000sqft	1.70	45,269.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Cor	mpany			
CO2 Intensity (Ib/MWhr)	641.35	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Page 2 of 30

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Winter

Project Characteristics -

Land Use - Adjustments based on site plan. Other Asphalt Surfaces for circulation roadways. City Park for landscaping+sidewalk on west, north, and east.

Construction Phase - Construction schedule provided by applicant.

Grading -

Architectural Coating - 2016 CALGreen Building Code - 50 g/L for flat coatings and 100 g/L for traffic markings

Vehicle Trips - City park proxy for landscaping and sidewalk.

Area Coating - 2016 CALGreen Code - 50g/L for flat coatings and 100 g/L for traffic markings

Solid Waste -

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Construction Off-road Equipment Mitigation - SLOAPCD BACT mitigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	300.00	541.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	10.00	44.00
tblGrading	MaterialExported	0.00	1,029.00
tblLandUse	LandUseSquareFeet	139,000.00	133,655.00
tblLandUse	LandUseSquareFeet	45,270.00	45,269.00
tblLandUse	LotAcreage	2.59	3.19
tblLandUse	LotAcreage	8.69	2.52
tblLandUse	LotAcreage	1.04	1.70
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
			1

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/c	day		
2019	9.2977	100.9562	57.0898	0.1050	27.1528	4.7797	31.9325	13.6367	4.3975	18.0342	0.0000	10,420.16 56	10,420.16 56	3.1571	0.0000	10,499.09 27
2020	3.4020	26.3209	26.3048	0.0579	2.4087	1.1659	3.5746	0.6453	1.0966	1.7419	0.0000	5,717.106 4	5,717.106 4	0.7660	0.0000	5,736.257 0
2021	14.8482	38.5946	43.3859	0.0879	2.9821	1.7643	4.7464	0.7974	1.6507	2.4481	0.0000	8,626.920 4	8,626.920 4	1.4984	0.0000	8,664.379 6
2022	2.8042	21.7588	24.1844	0.0564	2.4088	0.8369	3.2457	0.6453	0.7874	1.4327	0.0000	5,571.547 5	5,571.547 5	0.7394	0.0000	5,590.032 3
Maximum	14.8482	100.9562	57.0898	0.1050	27.1528	4.7797	31.9325	13.6367	4.3975	18.0342	0.0000	10,420.16 56	10,420.16 56	3.1571	0.0000	10,499.09 27

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

Percent Reduction 22.66

26.99

-3.04

0.00

0.00

28.15

5.53

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/	day		
2019	2.9980	51.1372	61.2523	0.1050	27.1528	2.3227	29.4755	13.6367	2.2968	15.9336	0.0000	10,420.16 56	10,420.16 56	3.1571	0.0000	10,499.09 26
2020	3.1707	25.6785	26.4129	0.0579	2.4087	1.1458	3.5545	0.6453	1.0950	1.7403	0.0000	5,717.106 4	5,717.106 4	0.7660	0.0000	5,736.257 0
2021	14.6554	38.3149	43.5277	0.0879	2.9821	1.7812	4.7633	0.7974	1.6831	2.4805	0.0000	8,626.920 4	8,626.920 4	1.4984	0.0000	8,664.379 5
2022	2.6504	21.8606	24.3648	0.0564	2.4088	0.8913	3.3001	0.6453	0.8543	1.4996	0.0000	5,571.547 5	5,571.547 5	0.7394	0.0000	5,590.032 3
Maximum	14.6554	51.1372	61.2523	0.1050	27.1528	2.3227	29.4755	13.6367	2.2968	15.9336	0.0000	10,420.16 56	10,420.16 56	3.1571	0.0000	10,499.09 26
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

0.00

25.25

8.47

0.00

0.00

0.00

0.00

0.00

0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e				lb/c	lay						
Area	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252
Energy	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563
Mobile	3.9384	14.5532	38.3967	0.0974	8.9688	0.1052	9.0740	2.3959	0.0987	2.4946		9,820.639 7	9,820.639 7	0.4383		9,831.598 1
Total	8.5183	15.0179	50.0643	0.1001	8.9688	0.1955	9.1643	2.3959	0.1889	2.5849	0.0000	10,263.01 26	10,263.01 26	0.4665	7.7300e- 003	10,276.97 96

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Area	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252
Energy	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563
Mobile	3.9384	14.5532	38.3967	0.0974	8.9688	0.1052	9.0740	2.3959	0.0987	2.4946		9,820.639 7	9,820.639 7	0.4383		9,831.598 1
Total	8.5183	15.0179	50.0643	0.1001	8.9688	0.1955	9.1643	2.3959	0.1889	2.5849	0.0000	10,263.01 26	10,263.01 26	0.4665	7.7300e- 003	10,276.97 96

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/2/2019	10/31/2019	5	44	
2	Grading	Grading	9/2/2019	11/29/2019	5	65	
3	Building Construction	Building Construction	2/3/2020	2/28/2022	5	541	
4	Paving	Paving	8/2/2021	12/31/2021	5	110	
5	Architectural Coating	Architectural Coating	8/2/2021	12/31/2021	5	110	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 162.5

Acres of Paving: 4.39

Residential Indoor: 270,651; Residential Outdoor: 90,217; Non-Residential Indoor: 67,904; Non-Residential Outdoor: 22,635; Striped Parking Area: 10,048 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	129.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	215.00	61.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	43.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2

Page 9 of 30

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Winter

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Preparation - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.452 9	3,766.452 9	1.1917		3,796.244 5

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day				lb/c	day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0962	0.0828	0.7075	1.6400e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		163.5759	163.5759	6.1400e- 003		163.7294
Total	0.0962	0.0828	0.7075	1.6400e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		163.5759	163.5759	6.1400e- 003		163.7294

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	1.1445	19.8857	22.9065	0.0380		0.9931	0.9931		0.9761	0.9761	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5
Total	1.1445	19.8857	22.9065	0.0380	18.0663	0.9931	19.0594	9.9307	0.9761	10.9068	0.0000	3,766.452 9	3,766.452 9	1.1917		3,796.244 5

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0962	0.0828	0.7075	1.6400e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		163.5759	163.5759	6.1400e- 003		163.7294
Total	0.0962	0.0828	0.7075	1.6400e- 003	0.1780	1.1800e- 003	0.1791	0.0472	1.0900e- 003	0.0483		163.5759	163.5759	6.1400e- 003		163.7294

3.3 Grading - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					8.6763	0.0000	8.6763	3.5969	0.0000	3.5969			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.019 5	6,140.019 5	1.9426		6,188.585 4
Total	4.7389	54.5202	33.3768	0.0620	8.6763	2.3827	11.0589	3.5969	2.1920	5.7890		6,140.019 5	6,140.019 5	1.9426		6,188.585 4

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Hauling	0.0207	0.6885	0.1564	1.5600e- 003	0.0346	4.2000e- 003	0.0388	9.4800e- 003	4.0200e- 003	0.0135		168.3664	168.3664	9.8200e- 003		168.6118
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1069	0.0920	0.7861	1.8300e- 003	0.1977	1.3100e- 003	0.1990	0.0524	1.2100e- 003	0.0537		181.7510	181.7510	6.8200e- 003		181.9215
Total	0.1276	0.7805	0.9425	3.3900e- 003	0.2323	5.5100e- 003	0.2379	0.0619	5.2300e- 003	0.0672		350.1174	350.1174	0.0166		350.5333

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					8.6763	0.0000	8.6763	3.5969	0.0000	3.5969			0.0000			0.0000
Off-Road	1.6298	30.3882	36.6958	0.0620		1.3229	1.3229		1.3144	1.3144	0.0000	6,140.019 5	6,140.019 5	1.9426		6,188.585 4
Total	1.6298	30.3882	36.6958	0.0620	8.6763	1.3229	9.9991	3.5969	1.3144	4.9113	0.0000	6,140.019 5	6,140.019 5	1.9426		6,188.585 4

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Hauling	0.0207	0.6885	0.1564	1.5600e- 003	0.0346	4.2000e- 003	0.0388	9.4800e- 003	4.0200e- 003	0.0135		168.3664	168.3664	9.8200e- 003		168.6118
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	,,,,,,,	0.0000
Worker	0.1069	0.0920	0.7861	1.8300e- 003	0.1977	1.3100e- 003	0.1990	0.0524	1.2100e- 003	0.0537		181.7510	181.7510	6.8200e- 003		181.9215
Total	0.1276	0.7805	0.9425	3.3900e- 003	0.2323	5.5100e- 003	0.2379	0.0619	5.2300e- 003	0.0672		350.1174	350.1174	0.0166		350.5333

3.4 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2339	6.2641	2.0314	0.0120	0.2832	0.0353	0.3184	0.0816	0.0337	0.1153		1,270.694 9	1,270.694 9	0.0806		1,272.708 9
Worker	1.0482	0.8707	7.4249	0.0190	2.1255	0.0136	2.1391	0.5637	0.0125	0.5763		1,893.348 4	1,893.348 4	0.0626		1,894.913 6
Total	1.2822	7.1348	9.4563	0.0310	2.4087	0.0488	2.4575	0.6453	0.0463	0.6915		3,164.043 3	3,164.043 3	0.1432		3,167.622 5

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Off-Road	1.8885	18.5437	16.9566	0.0269		1.0970	1.0970		1.0487	1.0487	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	1.8885	18.5437	16.9566	0.0269		1.0970	1.0970		1.0487	1.0487	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2339	6.2641	2.0314	0.0120	0.2832	0.0353	0.3184	0.0816	0.0337	0.1153		1,270.694 9	1,270.694 9	0.0806		1,272.708 9
Worker	1.0482	0.8707	7.4249	0.0190	2.1255	0.0136	2.1391	0.5637	0.0125	0.5763		1,893.348 4	1,893.348 4	0.0626		1,894.913 6
Total	1.2822	7.1348	9.4563	0.0310	2.4087	0.0488	2.4575	0.6453	0.0463	0.6915		3,164.043 3	3,164.043 3	0.1432		3,167.622 5

3.4 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1925	5.7281	1.8014	0.0119	0.2832	0.0171	0.3003	0.0816	0.0164	0.0980		1,262.721 7	1,262.721 7	0.0786		1,264.686 7
Worker	0.9782	0.7785	6.7245	0.0184	2.1255	0.0132	2.1387	0.5637	0.0121	0.5759		1,828.819 9	1,828.819 9	0.0556		1,830.209 4
Total	1.1707	6.5066	8.5259	0.0302	2.4087	0.0303	2.4390	0.6453	0.0285	0.6738		3,091.541 6	3,091.541 6	0.1342		3,094.896 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7081	17.1525	16.7170	0.0269		0.9755	0.9755	1 1 1	0.9337	0.9337	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.7081	17.1525	16.7170	0.0269		0.9755	0.9755		0.9337	0.9337	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1925	5.7281	1.8014	0.0119	0.2832	0.0171	0.3003	0.0816	0.0164	0.0980		1,262.721 7	1,262.721 7	0.0786		1,264.686 7
Worker	0.9782	0.7785	6.7245	0.0184	2.1255	0.0132	2.1387	0.5637	0.0121	0.5759		1,828.819 9	1,828.819 9	0.0556		1,830.209 4
Total	1.1707	6.5066	8.5259	0.0302	2.4087	0.0303	2.4390	0.6453	0.0285	0.6738		3,091.541 6	3,091.541 6	0.1342		3,094.896 2

3.4 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090	1 1 1	0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1781	5.4432	1.6653	0.0118	0.2833	0.0151	0.2984	0.0816	0.0144	0.0960		1,253.759 3	1,253.759 3	0.0777		1,255.701 0
Worker	0.9199	0.6999	6.1557	0.0177	2.1255	0.0128	2.1383	0.5637	0.0118	0.5755		1,763.454 7	1,763.454 7	0.0498		1,764.699 0
Total	1.0980	6.1432	7.8210	0.0295	2.4088	0.0279	2.4367	0.6453	0.0262	0.6716		3,017.214 0	3,017.214 0	0.1275		3,020.400 1

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.5525	15.7174	16.5438	0.0269		0.8634	0.8634		0.8281	0.8281	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.5525	15.7174	16.5438	0.0269		0.8634	0.8634		0.8281	0.8281	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1781	5.4432	1.6653	0.0118	0.2833	0.0151	0.2984	0.0816	0.0144	0.0960		1,253.759 3	1,253.759 3	0.0777		1,255.701 0
Worker	0.9199	0.6999	6.1557	0.0177	2.1255	0.0128	2.1383	0.5637	0.0118	0.5755		1,763.454 7	1,763.454 7	0.0498		1,764.699 0
Total	1.0980	6.1432	7.8210	0.0295	2.4088	0.0279	2.4367	0.6453	0.0262	0.6716		3,017.214 0	3,017.214 0	0.1275		3,020.400 1

3.5 Paving - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.1046					0.0000	0.0000		0.0000	0.0000		 - - - -	0.0000			0.0000
Total	1.3601	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.210 9	2,207.210 9	0.7139		2,225.057 3

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0683	0.0543	0.4692	1.2800e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		127.5921	127.5921	3.8800e- 003		127.6890
Total	0.0683	0.0543	0.4692	1.2800e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		127.5921	127.5921	3.8800e- 003		127.6890

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3
Paving	0.1046					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3601	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.210 9	2,207.210 9	0.7139		2,225.057 3

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0683	0.0543	0.4692	1.2800e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		127.5921	127.5921	3.8800e- 003		127.6890
Total	0.0683	0.0543	0.4692	1.2800e- 003	0.1483	9.2000e- 004	0.1492	0.0393	8.5000e- 004	0.0402		127.5921	127.5921	3.8800e- 003		127.6890

3.6 Architectural Coating - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	9.9337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	10.1526	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1956	0.1557	1.3449	3.6700e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		365.7640	365.7640	0.0111		366.0419
Total	0.1956	0.1557	1.3449	3.6700e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		365.7640	365.7640	0.0111		366.0419

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	9.9337					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309	
Total	10.1526	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309	

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.1956	0.1557	1.3449	3.6700e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		365.7640	365.7640	0.0111		366.0419	
Total	0.1956	0.1557	1.3449	3.6700e- 003	0.4251	2.6300e- 003	0.4277	0.1128	2.4300e- 003	0.1152		365.7640	365.7640	0.0111		366.0419	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	3.9384	14.5532	38.3967	0.0974	8.9688	0.1052	9.0740	2.3959	0.0987	2.4946		9,820.639 7	9,820.639 7	0.4383		9,831.598 1
Unmitigated	3.9384	14.5532	38.3967	0.0974	8.9688	0.1052	9.0740	2.3959	0.0987	2.4946		9,820.639 7	9,820.639 7	0.4383		9,831.598 1

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Congregate Care (Assisted Living)	380.86	305.80	339.16	925,584	925,584
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	1,933.03	2,262.14	1142.61	2,695,948	2,695,948
Total	2,313.89	2,567.94	1,481.77	3,621,533	3,621,533

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11

CalEEMod Version: CalEEMod.2016.3.2

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Winter

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Congregate Care (Assisted Living)	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Parking Lot	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Regional Shopping Center	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
NaturalGas Mitigated	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563
NaturalGas Unmitigated	0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	, , ,	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)		0.0355	0.3032	0.1290	1.9400e- 003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e- 003	7.1000e- 003	389.3698
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		3.1700e- 003	0.0288	0.0242	1.7000e- 004		2.1900e- 003	2.1900e- 003	1 1 1 1	2.1900e- 003	2.1900e- 003		34.5810	34.5810	6.6000e- 004	6.3000e- 004	34.7865
Total		0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)		0.0355	0.3032	0.1290	1.9400e- 003		0.0245	0.0245		0.0245	0.0245		387.0696	387.0696	7.4200e- 003	7.1000e- 003	389.3698
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.293938	3.1700e- 003	0.0288	0.0242	1.7000e- 004		2.1900e- 003	2.1900e- 003		2.1900e- 003	2.1900e- 003		34.5810	34.5810	6.6000e- 004	6.3000e- 004	34.7865
Total		0.0387	0.3320	0.1532	2.1100e- 003		0.0267	0.0267		0.0267	0.0267		421.6506	421.6506	8.0800e- 003	7.7300e- 003	424.1563

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Mitigated	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252
Unmitigated	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/	day							lb/c	lay		
Architectural Coating	0.2994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3499	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636		20.7223	20.7223	0.0201		21.2252
Total	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day							lb/d	lay		
Architectural Coating	0.2994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8920					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3499	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636		20.7223	20.7223	0.0201		21.2252
Total	4.5413	0.1327	11.5144	6.1000e- 004		0.0636	0.0636		0.0636	0.0636	0.0000	20.7223	20.7223	0.0201	0.0000	21.2252

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
10.0 Stationary Equipment						
Fire Pumps and Emergency Ger						Evel Tures
Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					
11.0 Vegetation						

Attachment 4b

Updated CalEEMod Emissions Modeling

Tank Farm Road Assisted Living and Commercial Project

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	45.00	1000sqft	0.41	45,000.00	0
Other Asphalt Surfaces	1.03	Acre	1.03	44,866.80	0
Other Asphalt Surfaces	1.03	Acre	1.03	44,866.80	0
Parking Lot	285.50	Space	2.57	114,200.00	0
Parking Lot	70.00	Space	0.63	28,000.00	0
City Park	0.93	Acre	0.93	40,510.80	0
City Park	1.35	Acre	1.35	58,806.00	0
Quality Restaurant	15.00	1000sqft	0.34	15,000.00	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	1.78	133,655.00	398

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Cor	npany			
CO2 Intensity (Ib/MWhr)	298.65	CH4 Intensity (Ib/MWhr)	0.014	N2O Intensity (Ib/MWhr)	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E was at 14% renewables in 2008 aaccording to the PG&E website, as of 2019 they had achieved 33% per the CEC. Adjusted for 2030 RPS

Land Use - Adjustments based on site plan. Other Asphalt Surfaces for circulation roadways. City Park for landscaping+sidewalk on west, north, and east.

Construction Phase - Construction schedule provided by applicant.

Off-road Equipment -

Demolition - Per assessor records

Grading - Grading information provided by applicant (acerage

Architectural Coating - CALGreen Code - 50g/L for flat coatings and 100 g/L for traffic markings

Vehicle Trips - City park proxy for landscaping and sidewalk..

Trips updated per TIA

Area Coating - CALGreen Code - 50g/L for flat coatings and 100 g/L for traffic markings

Energy Use - High efficacy lighting not inlcuded in CalEEMod Concregate Care 741.44-75%=185.36

Water And Wastewater - CalGreen Code -20% indoor water use

Solid Waste - 25% waste diversion congregate Care 126.84-25%=95.13, Park 0.14-25%=0.105, and retail 47.53-25%=35.65

Construction Off-road Equipment Mitigation - SLOAPCD BACT mitigation

Mobile Land Use Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	139,000.00	133,655.00
tblLandUse	LotAcreage	1.03	0.41
tblLandUse	LotAcreage	8.69	1.78
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.014
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.65
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblTripsAndVMT	HaulingTripNumber	0.00	129.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year		tons/yr											МТ	/yr		
2020	0.0866	0.9076	0.5642	1.0700e- 003	0.1775	0.0429	0.2204	0.0785	0.0396	0.1180	0.0000	94.4597	94.4597	0.0276	0.0000	95.1493
2021	0.4266	3.5517	3.5476	8.4900e- 003	0.4411	0.1380	0.5790	0.1256	0.1294	0.2550	0.0000	764.0607	764.0607	0.1012	0.0000	766.5898
2022	2.9373	0.7763	0.8932	2.0700e- 003	0.0852	0.0297	0.1149	0.0229	0.0279	0.0508	0.0000	186.2299	186.2299	0.0260	0.0000	186.8795
Maximum	2.9373	3.5517	3.5476	8.4900e- 003	0.4411	0.1380	0.5790	0.1256	0.1294	0.2550	0.0000	764.0607	764.0607	0.1012	0.0000	766.5898

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year		tons/yr											МТ	/yr		
2020	0.0866	0.9076	0.5642	1.0700e- 003	0.1775	0.0429	0.2204	0.0785	0.0396	0.1180	0.0000	94.4596	94.4596	0.0276	0.0000	95.1492
2021	0.4266	3.5517	3.5476	8.4900e- 003	0.4411	0.1379	0.5790	0.1256	0.1294	0.2550	0.0000	764.0603	764.0603	0.1012	0.0000	766.5894
2022	2.9373	0.7763	0.8932	2.0700e- 003	0.0852	0.0297	0.1149	0.0229	0.0279	0.0508	0.0000	186.2298	186.2298	0.0260	0.0000	186.8794
Maximum	2.9373	3.5517	3.5476	8.4900e- 003	0.4411	0.1379	0.5790	0.1256	0.1294	0.2550	0.0000	764.0603	764.0603	0.1012	0.0000	766.5894

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2020	1-31-2021	1.4917	1.4917
2	2-1-2021	4-30-2021	0.9233	0.9233
3	5-1-2021	7-31-2021	0.9496	0.9496
4	8-1-2021	10-31-2021	0.9521	0.9521
5	11-1-2021	1-31-2022	0.9286	0.9286
6	2-1-2022	4-30-2022	2.0955	2.0955
7	5-1-2022	7-31-2022	1.3251	1.3251
		Highest	2.0955	2.0955

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												МТ	/yr		
Area	1.1132	0.0219	1.8984	1.0000e- 004		0.0105	0.0105	1 1 1	0.0105	0.0105	0.0000	3.1046	3.1046	3.0000e- 003	0.0000	3.1796
Energy	0.0273	0.2443	0.1823	1.4900e- 003		0.0188	0.0188		0.0188	0.0188	0.0000	529.4479	529.4479	0.0173	7.5500e- 003	532.1327
Mobile	0.6506	2.3008	6.1173	0.0175	1.6607	0.0163	1.6770	0.4444	0.0152	0.4596	0.0000	1,601.818 2	1,601.818 2	0.0641	0.0000	1,603.420 0
Waste						0.0000	0.0000		0.0000	0.0000	127.2205	0.0000	127.2205	7.5185	0.0000	315.1835
Water	r,					0.0000	0.0000		0.0000	0.0000	6.1091	18.7575	24.8666	0.6283	0.0150	45.0462
Total	1.7911	2.5670	8.1980	0.0191	1.6607	0.0456	1.7063	0.4444	0.0446	0.4889	133.3296	2,153.128 2	2,286.457 7	8.2313	0.0226	2,498.962 0

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	С	0	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugit PM		aust //2.5	PM2.5 Total	Bio- CO	2 NBio	o- CO2	Total CO	2 Cł	H4	N2O	CO2e
Category						tc	ns/yr									1	MT/yr			
Area	1.1132	0.0219	1.8	984 1.	.0000e- 004		0.0105	0.0105		0.0	105	0.0105	0.0000	3.1	1046	3.1046	3.00 00	00e- 03	0.0000	3.1796
Energy	0.0273	0.2443	0.1	823 1.	.4900e- 003		0.0188	0.0188		0.0	188	0.0188	0.0000	529	.4479	529.4479) 0.0 ⁻	173	7.5500e- 003	532.1327
Mobile	0.6506	2.3008	6.1	173 (0.0175	1.6607	0.0163	1.6770	0.44	44 0.0)152	0.4596	0.0000	1,60)1.818 2	1,601.81 2	8 0.0	641	0.0000	1,603.420 0
Waste	#1						0.0000	0.0000		0.0	0000	0.0000	127.220	5 0.(0000	127.220	5 7.5	185	0.0000	315.1835
Water	#1				· · · · · · · · · · · · · · · · · · ·		0.0000	0.0000		0.0	0000	0.0000	6.1091	18.	7575	24.8666	0.6	283	0.0150	45.0462
Total	1.7911	2.5670	8.1	980 (0.0191	1.6607	0.0456	1.7063	0.44	44 0.0	446	0.4889	133.329	6 2,15	53.128 2	2,286.45 7	7 8.2	313	0.0226	2,498.962 0
	ROG		NOx	со	so				M10 otal	Fugitive PM2.5	Exha PM			- CO2	NBio-	CO2 Tot	al CO2	СН	4 N	20 CO2
Percent Reduction	0.00		0.00	0.00	0.0	00	0.00	0.00).00	0.00	0.	00 0.0	00	0.00	0.0	0 0	0.00	0.0	0 0.	00 0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2020	11/27/2020	5	20	
2	Site Preparation	Site Preparation	11/28/2020	12/11/2020	5	10	
3	Grading	Grading	12/12/2020	1/22/2021	5	30	
4	Building Construction	Building Construction	1/23/2021	3/18/2022	5	300	
5	Paving	Paving	3/19/2022	4/15/2022	5	20	
6	Architectural Coating	Architectural Coating	4/16/2022	5/13/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 5.26

Residential Indoor: 270,651; Residential Outdoor: 90,217; Non-Residential Indoor: 90,000; Non-Residential Outdoor: 30,000; Striped Parking Area: 13,916 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1 1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	6.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	129.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	260.00	79.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	jory tons/yr											MT	/yr			
Fugitive Dust					6.2000e- 004	0.0000	6.2000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e- 004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e- 004	6.2000e- 004	0.0166	0.0172	9.0000e- 005	0.0154	0.0155	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2386

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					MT	/yr				
Hauling	3.0000e- 005	9.6000e- 004	2.1000e- 004	0.0000	5.0000e- 005	0.0000	6.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005	0.0000	0.2308	0.2308	1.0000e- 005	0.0000	0.2311
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	6.0000e- 004	5.1600e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2081	1.2081	4.0000e- 005	0.0000	1.2091
Total	6.9000e- 004	1.5600e- 003	5.3700e- 003	1.0000e- 005	1.4900e- 003	1.0000e- 005	1.5100e- 003	3.9000e- 004	1.0000e- 005	4.1000e- 004	0.0000	1.4389	1.4389	5.0000e- 005	0.0000	1.4402

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Fugitive Dust					6.2000e- 004	0.0000	6.2000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e- 004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e- 004	6.2000e- 004	0.0166	0.0172	9.0000e- 005	0.0154	0.0155	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2385

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	3.0000e- 005	9.6000e- 004	2.1000e- 004	0.0000	5.0000e- 005	0.0000	6.0000e- 005	1.0000e- 005	0.0000	2.0000e- 005	0.0000	0.2308	0.2308	1.0000e- 005	0.0000	0.2311
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	6.0000e- 004	5.1600e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2081	1.2081	4.0000e- 005	0.0000	1.2091
Total	6.9000e- 004	1.5600e- 003	5.3700e- 003	1.0000e- 005	1.4900e- 003	1.0000e- 005	1.5100e- 003	3.9000e- 004	1.0000e- 005	4.1000e- 004	0.0000	1.4389	1.4389	5.0000e- 005	0.0000	1.4402

3.3 Site Preparation - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e- 004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e- 003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e- 004	0.0903	0.0110	0.1013	0.0497	0.0101	0.0598	0.0000	16.7153	16.7153	5.4100e- 003	0.0000	16.8505

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e- 004	3.6000e- 004	3.1000e- 003	1.0000e- 005	8.7000e- 004	1.0000e- 005	8.7000e- 004	2.3000e- 004	1.0000e- 005	2.4000e- 004	0.0000	0.7249	0.7249	2.0000e- 005	0.0000	0.7255
Total	3.9000e- 004	3.6000e- 004	3.1000e- 003	1.0000e- 005	8.7000e- 004	1.0000e- 005	8.7000e- 004	2.3000e- 004	1.0000e- 005	2.4000e- 004	0.0000	0.7249	0.7249	2.0000e- 005	0.0000	0.7255

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e- 004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e- 003	0.0000	16.8505
Total	0.0204	0.2121	0.1076	1.9000e- 004	0.0903	0.0110	0.1013	0.0497	0.0101	0.0598	0.0000	16.7153	16.7153	5.4100e- 003	0.0000	16.8505

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e- 004	3.6000e- 004	3.1000e- 003	1.0000e- 005	8.7000e- 004	1.0000e- 005	8.7000e- 004	2.3000e- 004	1.0000e- 005	2.4000e- 004	0.0000	0.7249	0.7249	2.0000e- 005	0.0000	0.7255
Total	3.9000e- 004	3.6000e- 004	3.1000e- 003	1.0000e- 005	8.7000e- 004	1.0000e- 005	8.7000e- 004	2.3000e- 004	1.0000e- 005	2.4000e- 004	0.0000	0.7249	0.7249	2.0000e- 005	0.0000	0.7255

3.4 Grading - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0819	0.0000	0.0819	0.0275	0.0000	0.0275	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.3514	0.2237	4.3000e- 004		0.0152	0.0152		0.0140	0.0140	0.0000	38.1390	38.1390	0.0123	0.0000	38.4474
Total	0.0312	0.3514	0.2237	4.3000e- 004	0.0819	0.0152	0.0971	0.0275	0.0140	0.0415	0.0000	38.1390	38.1390	0.0123	0.0000	38.4474

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr						MT	/yr			
Hauling	2.6000e- 004	9.6800e- 003	2.1000e- 003	2.0000e- 005	9.5000e- 004	4.0000e- 005	1.0000e- 003	2.5000e- 004	4.0000e- 005	2.9000e- 004	0.0000	2.3154	2.3154	1.3000e- 004	0.0000	2.3187
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	6.1000e- 004	5.6000e- 004	4.8200e- 003	1.0000e- 005	1.3500e- 003	1.0000e- 005	1.3600e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.1276	1.1276	4.0000e- 005	0.0000	1.1285
Total	8.7000e- 004	0.0102	6.9200e- 003	3.0000e- 005	2.3000e- 003	5.0000e- 005	2.3600e- 003	6.1000e- 004	5.0000e- 005	6.6000e- 004	0.0000	3.4430	3.4430	1.7000e- 004	0.0000	3.4472

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0819	0.0000	0.0819	0.0275	0.0000	0.0275	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.3514	0.2237	4.3000e- 004		0.0152	0.0152		0.0140	0.0140	0.0000	38.1390	38.1390	0.0123	0.0000	38.4473
Total	0.0312	0.3514	0.2237	4.3000e- 004	0.0819	0.0152	0.0971	0.0275	0.0140	0.0415	0.0000	38.1390	38.1390	0.0123	0.0000	38.4473

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	2.6000e- 004	9.6800e- 003	2.1000e- 003	2.0000e- 005	9.5000e- 004	4.0000e- 005	1.0000e- 003	2.5000e- 004	4.0000e- 005	2.9000e- 004	0.0000	2.3154	2.3154	1.3000e- 004	0.0000	2.3187
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.1000e- 004	5.6000e- 004	4.8200e- 003	1.0000e- 005	1.3500e- 003	1.0000e- 005	1.3600e- 003	3.6000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.1276	1.1276	4.0000e- 005	0.0000	1.1285
Total	8.7000e- 004	0.0102	6.9200e- 003	3.0000e- 005	2.3000e- 003	5.0000e- 005	2.3600e- 003	6.1000e- 004	5.0000e- 005	6.6000e- 004	0.0000	3.4430	3.4430	1.7000e- 004	0.0000	3.4472

3.4 Grading - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0880	0.0000	0.0880	0.0308	0.0000	0.0308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0335	0.3712	0.2470	5.0000e- 004		0.0159	0.0159		0.0146	0.0146	0.0000	43.5960	43.5960	0.0141	0.0000	43.9485
Total	0.0335	0.3712	0.2470	5.0000e- 004	0.0880	0.0159	0.1038	0.0308	0.0146	0.0454	0.0000	43.5960	43.5960	0.0141	0.0000	43.9485

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.8000e- 004	0.0101	2.2900e- 003	3.0000e- 005	9.7000e- 004	4.0000e- 005	1.0200e- 003	2.6000e- 004	4.0000e- 005	3.0000e- 004	0.0000	2.6165	2.6165	1.5000e- 004	0.0000	2.6203
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e- 004	5.7000e- 004	4.9900e- 003	1.0000e- 005	1.5400e- 003	1.0000e- 005	1.5500e- 003	4.1000e- 004	1.0000e- 005	4.2000e- 004	0.0000	1.2447	1.2447	4.0000e- 005	0.0000	1.2457
Total	9.3000e- 004	0.0107	7.2800e- 003	4.0000e- 005	2.5100e- 003	5.0000e- 005	2.5700e- 003	6.7000e- 004	5.0000e- 005	7.2000e- 004	0.0000	3.8612	3.8612	1.9000e- 004	0.0000	3.8660

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Fugitive Dust					0.0880	0.0000	0.0880	0.0308	0.0000	0.0308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0335	0.3712	0.2470	5.0000e- 004		0.0159	0.0159		0.0146	0.0146	0.0000	43.5959	43.5959	0.0141	0.0000	43.9484
Total	0.0335	0.3712	0.2470	5.0000e- 004	0.0880	0.0159	0.1038	0.0308	0.0146	0.0454	0.0000	43.5959	43.5959	0.0141	0.0000	43.9484

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	2.8000e- 004	0.0101	2.2900e- 003	3.0000e- 005	9.7000e- 004	4.0000e- 005	1.0200e- 003	2.6000e- 004	4.0000e- 005	3.0000e- 004	0.0000	2.6165	2.6165	1.5000e- 004	0.0000	2.6203
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e- 004	5.7000e- 004	4.9900e- 003	1.0000e- 005	1.5400e- 003	1.0000e- 005	1.5500e- 003	4.1000e- 004	1.0000e- 005	4.2000e- 004	0.0000	1.2447	1.2447	4.0000e- 005	0.0000	1.2457
Total	9.3000e- 004	0.0107	7.2800e- 003	4.0000e- 005	2.5100e- 003	5.0000e- 005	2.5700e- 003	6.7000e- 004	5.0000e- 005	7.2000e- 004	0.0000	3.8612	3.8612	1.9000e- 004	0.0000	3.8660

3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.2329	2.1354	2.0305	3.3000e- 003		0.1174	0.1174		0.1104	0.1104	0.0000	283.7557	283.7557	0.0685	0.0000	285.4671
Total	0.2329	2.1354	2.0305	3.3000e- 003		0.1174	0.1174		0.1104	0.1104	0.0000	283.7557	283.7557	0.0685	0.0000	285.4671

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0295	0.9212	0.2699	1.9200e- 003	0.0440	2.6300e- 003	0.0466	0.0127	2.5200e- 003	0.0152	0.0000	185.0679	185.0679	0.0109	0.0000	185.3408
Worker	0.1298	0.1132	0.9929	2.7400e- 003	0.3066	1.9500e- 003	0.3086	0.0815	1.8000e- 003	0.0833	0.0000	247.7799	247.7799	7.5000e- 003	0.0000	247.9675
Total	0.1593	1.0343	1.2629	4.6600e- 003	0.3506	4.5800e- 003	0.3552	0.0942	4.3200e- 003	0.0985	0.0000	432.8478	432.8478	0.0184	0.0000	433.3082

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.2329	2.1354	2.0305	3.3000e- 003		0.1174	0.1174	1 1 1	0.1104	0.1104	0.0000	283.7553	283.7553	0.0685	0.0000	285.4668
Total	0.2329	2.1354	2.0305	3.3000e- 003		0.1174	0.1174		0.1104	0.1104	0.0000	283.7553	283.7553	0.0685	0.0000	285.4668

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0295	0.9212	0.2699	1.9200e- 003	0.0440	2.6300e- 003	0.0466	0.0127	2.5200e- 003	0.0152	0.0000	185.0679	185.0679	0.0109	0.0000	185.3408
Worker	0.1298	0.1132	0.9929	2.7400e- 003	0.3066	1.9500e- 003	0.3086	0.0815	1.8000e- 003	0.0833	0.0000	247.7799	247.7799	7.5000e- 003	0.0000	247.9675
Total	0.1593	1.0343	1.2629	4.6600e- 003	0.3506	4.5800e- 003	0.3552	0.0942	4.3200e- 003	0.0985	0.0000	432.8478	432.8478	0.0184	0.0000	433.3082

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0469	0.4294	0.4500	7.4000e- 004		0.0223	0.0223	1 1 1	0.0209	0.0209	0.0000	63.7244	63.7244	0.0153	0.0000	64.1061
Total	0.0469	0.4294	0.4500	7.4000e- 004		0.0223	0.0223		0.0209	0.0209	0.0000	63.7244	63.7244	0.0153	0.0000	64.1061

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1200e- 003	0.1965	0.0559	4.3000e- 004	9.8700e- 003	5.2000e- 004	0.0104	2.8500e- 003	5.0000e- 004	3.3500e- 003	0.0000	41.2629	41.2629	2.4200e- 003	0.0000	41.3233
Worker	0.0274	0.0228	0.2042	5.9000e- 004	0.0688	4.3000e- 004	0.0693	0.0183	3.9000e- 004	0.0187	0.0000	53.6358	53.6358	1.5100e- 003	0.0000	53.6736
Total	0.0335	0.2193	0.2601	1.0200e- 003	0.0787	9.5000e- 004	0.0797	0.0211	8.9000e- 004	0.0220	0.0000	94.8987	94.8987	3.9300e- 003	0.0000	94.9969

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Off-Road	0.0469	0.4294	0.4500	7.4000e- 004		0.0223	0.0223	1 1 1	0.0209	0.0209	0.0000	63.7244	63.7244	0.0153	0.0000	64.1060
Total	0.0469	0.4294	0.4500	7.4000e- 004		0.0223	0.0223		0.0209	0.0209	0.0000	63.7244	63.7244	0.0153	0.0000	64.1060

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.1200e- 003	0.1965	0.0559	4.3000e- 004	9.8700e- 003	5.2000e- 004	0.0104	2.8500e- 003	5.0000e- 004	3.3500e- 003	0.0000	41.2629	41.2629	2.4200e- 003	0.0000	41.3233
Worker	0.0274	0.0228	0.2042	5.9000e- 004	0.0688	4.3000e- 004	0.0693	0.0183	3.9000e- 004	0.0187	0.0000	53.6358	53.6358	1.5100e- 003	0.0000	53.6736
Total	0.0335	0.2193	0.2601	1.0200e- 003	0.0787	9.5000e- 004	0.0797	0.0211	8.9000e- 004	0.0220	0.0000	94.8987	94.8987	3.9300e- 003	0.0000	94.9969

3.6 Paving - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0110	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0276	20.0276	6.4800e- 003	0.0000	20.1895
Paving	6.8900e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0179	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0276	20.0276	6.4800e- 003	0.0000	20.1895

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.8000e- 004	4.2800e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1252	1.1252	3.0000e- 005	0.0000	1.1260
Total	5.7000e- 004	4.8000e- 004	4.2800e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1252	1.1252	3.0000e- 005	0.0000	1.1260

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	ſ/yr		
Off-Road	0.0110	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0275	20.0275	6.4800e- 003	0.0000	20.1895
Paving	6.8900e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0179	0.1113	0.1458	2.3000e- 004		5.6800e- 003	5.6800e- 003		5.2200e- 003	5.2200e- 003	0.0000	20.0275	20.0275	6.4800e- 003	0.0000	20.1895

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.8000e- 004	4.2800e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1252	1.1252	3.0000e- 005	0.0000	1.1260
Total	5.7000e- 004	4.8000e- 004	4.2800e- 003	1.0000e- 005	1.4400e- 003	1.0000e- 005	1.4500e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.1252	1.1252	3.0000e- 005	0.0000	1.1260

3.7 Architectural Coating - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	2.8344					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	2.8365	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9900e- 003	1.6600e- 003	0.0149	4.0000e- 005	5.0100e- 003	3.0000e- 005	5.0400e- 003	1.3300e- 003	3.0000e- 005	1.3600e- 003	0.0000	3.9008	3.9008	1.1000e- 004	0.0000	3.9035
Total	1.9900e- 003	1.6600e- 003	0.0149	4.0000e- 005	5.0100e- 003	3.0000e- 005	5.0400e- 003	1.3300e- 003	3.0000e- 005	1.3600e- 003	0.0000	3.9008	3.9008	1.1000e- 004	0.0000	3.9035

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	2.8344					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e- 003	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574
Total	2.8365	0.0141	0.0181	3.0000e- 005		8.2000e- 004	8.2000e- 004		8.2000e- 004	8.2000e- 004	0.0000	2.5533	2.5533	1.7000e- 004	0.0000	2.5574

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9900e- 003	1.6600e- 003	0.0149	4.0000e- 005	5.0100e- 003	3.0000e- 005	5.0400e- 003	1.3300e- 003	3.0000e- 005	1.3600e- 003	0.0000	3.9008	3.9008	1.1000e- 004	0.0000	3.9035
Total	1.9900e- 003	1.6600e- 003	0.0149	4.0000e- 005	5.0100e- 003	3.0000e- 005	5.0400e- 003	1.3300e- 003	3.0000e- 005	1.3600e- 003	0.0000	3.9008	3.9008	1.1000e- 004	0.0000	3.9035

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.6506	2.3008	6.1173	0.0175	1.6607	0.0163	1.6770	0.4444	0.0152	0.4596	0.0000	1,601.818 2	1,601.818 2	0.0641	0.0000	1,603.420 0
Unmitigated	0.6506	2.3008	6.1173	0.0175	1.6607	0.0163	1.6770	0.4444	0.0152	0.4596	0.0000	1,601.818 2	1,601.818 2	0.0641	0.0000	1,603.420 0

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	1.76	21.16	15.57	13,214	13,214
City Park	2.55	30.71	22.60	19,182	19,182
Congregate Care (Assisted Living)	380.86	305.80	339.16	925,584	925,584
Medical Office Building	1,625.85	403.20	69.75	2,229,147	2,229,147
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	1,349.25	1,415.40	1082.40	1,238,740	1,238,740
Total	3,360.27	2,176.27	1,529.48	4,425,866	4,425,866

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Medical Office Building	13.00	5.00	5.00	29.60	51.40	19.00	60	30	10
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Quality Restaurant	13.00	5.00	5.00	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Congregate Care (Assisted Living)	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Medical Office Building	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Other Asphalt Surfaces	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Parking Lot	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Quality Restaurant	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	259.6547	259.6547	0.0122	2.6100e- 003	260.7362
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	259.6547	259.6547	0.0122	2.6100e- 003	260.7362
NaturalGas Mitigated	0.0273	0.2443	0.1823	1.4900e- 003		0.0188	0.0188		0.0188	0.0188	0.0000	269.7932	269.7932	5.1700e- 003	4.9500e- 003	271.3964
NaturalGas Unmitigated	0.0273	0.2443	0.1823	1.4900e- 003		0.0188	0.0188		0.0188	0.0188	0.0000	269.7932	269.7932	5.1700e- 003	4.9500e- 003	271.3964

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)		6.4800e- 003	0.0553	0.0236	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	64.0837	64.0837	1.2300e- 003	1.1700e- 003	64.4645
Medical Office Building	736650	3.9700e- 003	0.0361	0.0303	2.2000e- 004		2.7400e- 003	2.7400e- 003		2.7400e- 003	2.7400e- 003	0.0000	39.3105	39.3105	7.5000e- 004	7.2000e- 004	39.5441
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.1182e +006	0.0168	0.1529	0.1284	9.2000e- 004		0.0116	0.0116	 	0.0116	0.0116	0.0000	166.3990	166.3990	3.1900e- 003	3.0500e- 003	167.3879
Total		0.0273	0.2443	0.1823	1.4900e- 003		0.0188	0.0188		0.0188	0.0188	0.0000	269.7932	269.7932	5.1700e- 003	4.9400e- 003	271.3964

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)		6.4800e- 003	0.0553	0.0236	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	64.0837	64.0837	1.2300e- 003	1.1700e- 003	64.4645
Medical Office Building	736650	3.9700e- 003	0.0361	0.0303	2.2000e- 004		2.7400e- 003	2.7400e- 003		2.7400e- 003	2.7400e- 003	0.0000	39.3105	39.3105	7.5000e- 004	7.2000e- 004	39.5441
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.1182e +006	0.0168	0.1529	0.1284	9.2000e- 004		0.0116	0.0116		0.0116	0.0116	0.0000	166.3990	166.3990	3.1900e- 003	3.0500e- 003	167.3879
Total		0.0273	0.2443	0.1823	1.4900e- 003		0.0188	0.0188		0.0188	0.0188	0.0000	269.7932	269.7932	5.1700e- 003	4.9400e- 003	271.3964

5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	573841	77.7355	3.6400e- 003	7.8000e- 004	78.0593
Medical Office Building	802350	108.6906	5.1000e- 003	1.0900e- 003	109.1434
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	39970	5.4146	2.5000e- 004	5.0000e- 005	5.4371
Parking Lot	9800	1.3276	6.0000e- 005	1.0000e- 005	1.3331
Quality Restaurant	490800	66.4864	3.1200e- 003	6.7000e- 004	66.7633
Total		259.6547	0.0122	2.6000e- 003	260.7362

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΜT	7/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	573841	77.7355	3.6400e- 003	7.8000e- 004	78.0593
Medical Office Building	802350	108.6906	5.1000e- 003	1.0900e- 003	109.1434
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	39970	5.4146	2.5000e- 004	5.0000e- 005	5.4371
Parking Lot	9800	1.3276	6.0000e- 005	1.0000e- 005	1.3331
Quality Restaurant	490800	66.4864	3.1200e- 003	6.7000e- 004	66.7633
Total		259.6547	0.0122	2.6000e- 003	260.7362

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	1.1132	0.0219	1.8984	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1046	3.1046	3.0000e- 003	0.0000	3.1796
Unmitigated	1.1132	0.0219	1.8984	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1046	3.1046	3.0000e- 003	0.0000	3.1796

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.2834					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7723					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0575	0.0219	1.8984	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1046	3.1046	3.0000e- 003	0.0000	3.1796
Total	1.1132	0.0219	1.8984	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1046	3.1046	3.0000e- 003	0.0000	3.1796

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.2834		1 1 1	1 1 1		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7723					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0575	0.0219	1.8984	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1046	3.1046	3.0000e- 003	0.0000	3.1796
Total	1.1132	0.0219	1.8984	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1046	3.1046	3.0000e- 003	0.0000	3.1796

7.0 Water Detail

7.1 Mitigation Measures Water

Page 36 of 42

Tank Farm Road Assisted Living and Commercial Project - San Luis Obispo County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
	24.8666	0.6283	0.0150	45.0462
	24.8666	0.6283	0.0150	45.0462

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
City Park	0 / 2.71658	1.2880	6.0000e- 005	1.0000e- 005	1.2934
Congregate Care (Assisted Living)		12.2186	0.2955	7.0600e- 003	21.7116
Medical Office Building	5.64662 / 1.07555	6.4404	0.1842	4.3900e- 003	12.3543
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	4.55301 / 0.290617	4.9196	0.1485	3.5400e- 003	9.6870
Total		24.8666	0.6283	0.0150	45.0462

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
City Park	0 / 2.71658	1.2880	6.0000e- 005	1.0000e- 005	1.2934
Congregate Care (Assisted Living)		12.2186	0.2955	7.0600e- 003	21.7116
Medical Office Building	5.64662 / 1.07555	6.4404	0.1842	4.3900e- 003	12.3543
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	4.55301 / 0.290617	4.9196	0.1485	3.5400e- 003	9.6870
Total		24.8666	0.6283	0.0150	45.0462

8.0 Waste Detail

8.1 Mitigation Measures Waste

Page 39 of 42

Tank Farm Road Assisted Living and Commercial Project - San Luis Obispo County APCD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	/yr	
Intigation	127.2205	7.5185	0.0000	315.1835
	127.2205	7.5185	0.0000	315.1835

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
City Park	0.2	0.0406	2.4000e- 003	0.0000	0.1006
Congregate Care (Assisted Living)	126.84	25.7474	1.5216	0.0000	63.7880
Medical Office Building	486	98.6536	5.8303	0.0000	244.4101
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	13.69	2.7790	0.1642	0.0000	6.8847
Total		127.2205	7.5185	0.0000	315.1835

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/yr	
City Park	0.2	0.0406	2.4000e- 003	0.0000	0.1006
Congregate Care (Assisted Living)	126.84	25.7474	1.5216	0.0000	63.7880
Medical Office Building	486	98.6536	5.8303	0.0000	244.4101
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	13.69	2.7790	0.1642	0.0000	6.8847
Total		127.2205	7.5185	0.0000	315.1835

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type Number Hours/Day Hours/Year Horse Power Load Factor Fu	Fuel Type	lype
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Boilers

CalEEMod Version: CalEEMod.2016.3.2

Page 42 of 42

Tank Farm Road Assisted Living and Commercial Project - San Luis Obispo County APCD Air District, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
User Defined Equipment					
Equipment Type	Number				
11.0 Vegetation					

Attachment 5

Airport Land Use Commission Consistency Determination



SAN LUIS OBISPO COUNTY

AIRPORT LAND USE COMMISSION

Chairman: Roger Oxborrow Commissioners: Bill Borgsmiller Michael Cripe John Eichler Craig Piper Erich Schaefer Allen Settle

NOTICE OF AIRPORT LAND USE COMMISSION ACTION

ALUC 2018-0002

HEARING DATE: September 19, 2018

RECOMMENDATION TO: City of San Luis Obispo

Continued hearing to consider a Mandatory Referral by the City of San Luis Obispo (City) for a determination of consistency or inconsistency for proposed amendments to the City's Airport Area Specific Plan (AASP) amendments, to implement the NWC Broad Street and Tank Farm Road Development Plan Project. The AASP encompasses approximately 1,500 acres in the City generally bounded by Prado Lane, south Higuera Street, Tank Farm Road, and Broad Street. The Project is located at 3985 Broad Street and 660 Tank Farm Road in the City. The Project is located in County of San Luis Obispo Regional Airport Land Use Plan (ALUP) Airport Safety Areas S-1c, and S-2. (Corrected to remove Area S-1b). [Continued from August 15, 2018]

Applicant: NKT Commercial, LLC & Westmont Living, Inc. City File # 1482-2018 City of San Luis Obispo Project Manager: Brian Leveille, Senior Planner

On **September 19, 2018**, the Airport Land Use Commission determined the amendments described above (Amendments) are <u>consistent</u> with the Airport Land Use Plan for the San Luis Obispo County Regional Airport (ALUP) under the authority of Section 2.7 of the ALUP based on the findings and subject to the conditions, attached hereto and incorporated herein by this reference, and referred the Amendments back to the City of San Luis Obispo.

If you have any questions regarding this matter, please contact me at (805) 781-1392.

Sincerely,

Theresa Braden, Secretary Airport Land Use Commission

FINDINGS OF CONSISTENCY NWC Broad Street and Tank Farm Road Development Plan

CONSISTENCY WITH STRICT APPLICATION OF ALUP POLICIES

For the reasons described in the Staff Report and subject to the Conditions of Consistency set forth below, the Amendments are consistent with the Specific Policies for Noise, Airspace Protection and Overflight as well as the Safety Policies *related to maximum density*.

CONSISTENCY WITH THE ALUP UNDER ALUP SECTION 2.7

Applicability of ALUP Section 2.7

- a) The Amendments represent "unique circumstances" as described in Section 2.7 of the ALUP because the Project includes unique characteristics as described under the heading "Justification for Deviation from Strict Application of Specific Safety Policies under Authority of Section 2.7 of the ALUP" below.
- b) The Amendments represent a "small-scale individual project" as described in Section 2.7 because the total acreage proposed for use within the S1-c Safety Area in a manner inconsistent with the strict application of the ALUP is 4.8 acres, and thus the area of inconsistency is of limited scope or extent.
- c) The Amendments apply only to the property proposed to be occupied by the Project.
- d) Based on representations by the Applicant and as conditioned in the attached Conditions of Consistency, no development other than the exact Project referred to and considered by the ALUC, *i.e.* the Project, may be established within the referral area without subsequent prior referral to the ALUC.

Justification for Deviation from Strict Application of Specific Safety Policies under Authority of Section 2.7

- e) <u>Safety</u>. Notwithstanding any inconsistencies with the provisions of the ALUP related to impaired egress uses and the Land Use Compatibility Table, the Amendments are consistent with the ALUP, because they are consistent with the underlying policy of "reducing the potential severity of an aviation-related incident by prohibiting, in areas of aviation safety hazard, land uses characterized by a limited ability of occupants to evacuate an accident scene" as more specifically set forth below:
 - 1. The assisted living facility includes a relatively low percentage of non-ambulatory residents compared with other impaired egress uses, such as nursing homes, which are primarily non-ambulatory; and
 - 2. The assisted living facility includes a staff to resident ratio (approximately 1:8) that is higher than other impaired egress uses identified in the ALUP such as elementary and secondary schools (approximately 1:21.5); and
 - 3. The assisted living facility is located where flight paths from the Airport do not generally cross based on ALUP Figure 10 (Aircraft Flight Paths), as well as confirmation from flight maneuvers from members of the ALUC, which render the

site outside the published higher crash potential from aircraft departing from or arriving at the Airport; and

4. The assisted living facility is a planned "shelter in place" facility, whereby employees and residents are trained with a Disaster and Emergency Manual that provides a comprehensive overview of disaster preparedness, and the facility includes a 72-hour supply of emergency food and water for residents, staff, and pets

The fact that the vast majority of daily life at the proposed assisted living facility takes place indoors and that the residents do not have an ownership interest in their units serves to further increase the consistency of the proposed use with the ALUP policies, particularly those related to noise.

ALUC CONDITIONS NWC Broad Street and Tank Farm Road Development Plan

- 1. The City shall prepare conditions of approval to ensure that all applicable ALUP policies and aviation related development restrictions are enforced (Conditions of Approval), including but not limited to, those in Section 2.7 of the ALUP that require that no development other than **the Project** as specifically described to the ALUC in the Project Description of the Referral Letter dated July 25, 2018, the Development Plan and testimony by the Applicant during the ALUC hearing may be established without subsequent prior referral to the ALUC.
- 2. The Amendments shall apply only to the property currently proposed to be occupied by the Project, *i.e.* to the Project site.
- 3. The Amendments and Conditions of Approval shall limit non-residential density for the portion of the Project site within the S-1c Safety Area to 120 persons per acre.
- 4. The maximum height limit of structures on the site shall be consistent with City height requirements and shall not exceed 35 feet.
- 5. The assisted living facility shall meet interior noise exposure maximum standards in Table 4 and Section 4.3.3 of the ALUP and shall include noise mitigation in the form of a wall, and window and door assemblies with enhanced sound rating for noise from Tank Farm Road.
- 6. No structure, landscaping, apparatus, or other feature, whether temporary or permanent in nature shall constitute an obstruction to air navigation or a hazard to air navigation, as defined by the ALUP.
- 7. Any use is prohibited that may entail characteristics which would potentially interfere with the takeoff, landing, or maneuvering of aircraft at the Airport, including:
 - creation of electrical interference with navigation signals or radio communication between the aircraft and airport;
 - lighting which is difficult to distinguish from airport lighting;
 - glare in the eyes of pilots using the airport;
 - uses which attract birds and create bird strike hazards;
 - uses which produce visually significant quantities of smoke; and
 - uses which entail a risk of physical injury to operators or passengers of aircraft (e.g., exterior laser light demonstrations or shows).
- 8. Avigation easements shall be recorded for each property developed within the Project site prior to the issuance of any building permit or conditional use permit.
- 9. All owners, potential purchasers, occupants (whether as owners or renters), and potential occupants (whether as owners or renters) shall receive full and accurate disclosure concerning the noise, safety, or overflight impacts associated with Airport

operations prior to entering any contractual obligation to purchase, lease, rent, or otherwise occupy any property or properties within the Airport area.

10. To the best of its ability and consistent with its verbal and written representations, Applicant shall complete the additional noise mitigation measures set forth on page 23 of the September 19, 2018 hearing agenda packet, including, without limitation, sponsorship of an "Airport Ombudsman" in coordination with the developers of other projects recently referred to the ALUC and commonly known as the San Luis Ranch and Avila Ranch Projects.

Attachment 6

Greenhouse Gas Technical Memorandum



Rincon Consultants, Inc.

1530 Monterey Street, Suite D San Luis Obispo, California 93401

805 547 0900 office and fax

info@rinconconsultants.com www.rinconconsultants.com

April 1, 2019 Project No: 19-07096

Brian Leveille City of San Luis Obispo Community Development Long Range Planning 919 Palm Street San Luis Obispo, California 93401

Subject:Tank Farm Road Assisted Living Facility and Retail Project3985 Broad Street and 660 Tank Farm Road, San Luis Obispo, California 93401

Dear Mr. Leveille:

This technical memorandum analyzes the potential greenhouse gas emissions impacts of the proposed assisted living facility and retail development on an approximately 10.24-acre project site located at 3985 Broad Street and 660 Tank Farm Road in San Luis Obispo, California (Assessor's Parcel Numbers 053-421-003 and 053-421-004). Rincon Consultants, Inc. (Rincon) prepared this memorandum under contract to the City of San Luis Obispo, in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The project is located in the South Central Coast Air Basin (SCCAB) under the jurisdiction of the San Luis Obispo Air Pollution Control District (SLOAPCD). This assessment is based on significance thresholds and methodologies in the SLOAPCD's 2012 *CEQA Air Quality Handbook* and 2012 *GHG Thresholds and Supporting Evidence.*"¹

Project Description

The proposed project would involve construction of an approximately 133,655-square foot assisted living facility with 111 suites and 28 memory care beds, and six retail buildings with a total floor area of 45,269 square feet. The project would also include a surface parking lot with approximately 288 vehicle spaces and 67 bicycle parking spaces. The project site is bound by Tank Farm Road to the south, Broad Street to the east, commercial development to the north, and a partially-vacant mobile home park to the west.² If approved, the project would begin construction in September 2019 and would be operational by March 2022.

The following sections discuss the SLOAPCD regional thresholds, project impact analysis, and recommendations and conclusions related to air pollutant emissions from project construction and operation.

¹ SLOAPCD. 2012. CEQA Air Quality Handbook. April 2012. Available at:

http://www.slocleanair.org/images/cms/upload/files/CEQA Handbook 2012 v1.pdf

_____. 2012. Greenhouse Gas Thresholds and Supporting Evidence. March 28. Available at: <u>https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/Greenhouse%20Gas%20Thresholds%20and%20Supporting%20Evidence%204-2-2012.pdf</u>

² The mobile home park located at 650 Tank Farm is planned for redevelopment as a mixed-use development with 249 residential units and 17,500 square feet of commercial space. On completion, these planned residential units would be sensitive receptors.



Setting

Climate Change and Greenhouse Gases

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO_2), methane (CH_4), nitrous oxides (N_2O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills.

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆.³ Different types of GHGs have varying global warming potentials (GWPs). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO₂e), and is the amount of a GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 25, meaning its global warming effect is 25 times greater than carbon dioxide on a molecule per molecule basis.⁴

Regulatory Setting

In response to an increase in man-made GHG concentrations over the past 150 years, California has implemented AB 32, the "California Global Warming Solutions Act of 2006." AB 32 codifies the Statewide goal of reducing emissions to 1990 levels by 2020 (essentially a 15% reduction below 2005 emission levels) and the adoption of regulations to require reporting and verification of statewide GHG emissions. Furthermore, on September 8, 2016, the governor signed Senate Bill 32 (SB 32) into law, which requires the State to further reduce GHGs to 40 percent below 1990 levels by 2030. SB 32 extends AB 32, directing the California Air Resources Board (CARB) to ensure that GHGs are reduced to 40 percent below the 1990 level by 2030.

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050. As stated in the 2017 Scoping Plan, these goals may be appropriate

³ United States Environmental Protection Agency (U.S. EPA). 2018. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016. U. S. EPA #430-R-18-003. April 2018. Available at: <u>https://www.epa.gov/sites/production/files/2018-01/documents/2018_complete_report.pdf</u>

⁴ Intergovernmental Panel on Climate Change (IPCC). 2007. Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.



for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

Local Climate

The project site is located in the South Central Coast Air Basin (SCCAB), which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The climate of the Santa Barbara County area and all of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the semipermanent high pressure cell in the northeastern Pacific. The Mediterranean climate of the region produces moderate average temperatures, although extreme temperatures can be reached in the winter and summer.

Cool, humid marine air causes frequent fog and low clouds along the coast, generally during the night and morning hours in the late spring and early summer months. The project area is subject to a diurnal cycle in which daily onshore winds from the west and northwest are replaced by mild offshore breezes flowing from warm inland valleys during night and early morning hours. This alternating cycle can create a situation where suspended pollutants are swept offshore at night, and then carried back onshore the following day. Dispersion of pollutants is further degraded when the wind velocity for both day and nighttime breezes is low. The region is also subject to seasonal Santa Ana winds. These winds are typically hot, dry northerly winds which blow offshore at 15 to 20 miles per hour (mph), but can reach speeds in excess of 60 mph.

Two types of temperature inversions (warmer air on top of cooler air) are created in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high pressure area to the low pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but it is most evident during the summer months. Radiational, or surface, inversions are formed by the more rapid cooling of air near the ground during the night, especially during winter. This type of inversion is typically lower (0 to 500 feet at Vandenberg Air Force Base, for example) and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed, with the more stable the air (low wind speeds, uniform temperatures), the lower the amount of pollutant dispersion.

Significance Criteria and Analysis Methodologies

Significance Thresholds

The California Environmental Quality Act (CEQA) Guidelines, Appendix G Environmental Checklist, includes the following two questions regarding assessment of GHG emissions:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of GHGs?

As stated in the CEQA Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form).



The CEQA Guidelines require lead agencies to adopt GHG thresholds of significance. When adopting these thresholds, the Guidelines allow lead agencies to develop their own significance thresholds and/or to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence.

The City of San Luis Obispo has not adopted GHG emissions thresholds for use in CEQA documents. According to the adopted SLOAPCD guidance, the following three quantitative thresholds may be used to evaluate the level of significance of GHG emissions impacts for residential and commercial projects:

- <u>Qualified GHG Reductions Strategies</u>. A project would have a significant impact if it is not consistent with a qualified GHG reduction strategy that meets the requirements of the State CEQA Guidelines. If a project is consistent with a qualified GHG reduction strategy, it would not have a significant impact; OR,
- 2. <u>Bright-Line Threshold</u>. A project would have a significant impact if it would generate GHG emissions in excess of the "bright-line threshold" of 1,150 MT of CO₂e per year; OR,
- 3. <u>Efficiency Threshold</u>. A project would have a significant impact if it would generate GHG emissions in excess of the efficiency threshold of 4.9 MT of CO₂e per service population per year. The service population is defined as the number of residents plus employees for a given project.

The efficiency threshold is specifically intended to avoid penalizing large-scale plans or projects that incorporate emissions-reducing features and/or that are located in a manner that results in relatively low vehicle miles traveled. The City of San Luis Obispo Climate Action Plan (CAP), adopted in 2012, serves as the City's qualified GHG reduction strategy. The GHG-reducing policy provisions contained in the CAP were prepared with the purpose of complying with the requirements of AB 32 and achieving the goals of the AB 32 Scoping Plan, which have a horizon year of 2020. Therefore, the City's CAP is not considered a qualified GHG reduction strategy for assessing the significance of GHG emissions generated by projects with a horizon year post-2020. Therefore, to assess the proposed project, the SLOAPCD GHG thresholds were reduced by 40 percent to account for the continued reductions required by 2030 under SB 32. Therefore, the bright line threshold was reduced to 1,035 MT CO₂e and the efficiency threshold was reduced to 4.41 MT of CO₂e per service population for assessing 2022.

Methodology and Assumptions

GHG emissions were estimated using CalEEMod, version 2016.3.2.⁵ In brief, the model estimates GHG emissions by multiplying emission source intensity factors by estimated quantities of emission sources based on the land use information. All CalEEMod estimates are in terms of total MT of CO_2e .

Emission estimates were calculated for the three GHGs of primary concern (CO₂, CH₄, and N₂O) that would be emitted from the five primary operational sources that would be associated with buildout of the proposed project: mobile sources, area sources, energy use, water use, and solid waste disposal. GHG emissions were quantified and projected to year 2022.

Construction Emissions

Construction activities emit GHGs primarily though combustion of fuels (mostly diesel) in the engines of off-road construction equipment and through combustion of diesel and gasoline in on-road construction

⁵ California Emissions Estimator Model, 2016.3.2. Available at: <u>http://www.caleemod.com/</u>



vehicles and in the commute vehicles of the construction workers. Smaller amounts of GHGs are also emitted indirectly through the energy use embodied in any water use for fugitive dust control and lighting for the construction activity. Every phase of the construction process, including demolition, grading, paving, and building, emits GHG emissions in volumes proportional to the quantity and type of construction equipment used. Heavier equipment typically emits more GHGs per hour of use than the lighter equipment because of their greater fuel consumption and engine design.

CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction was assumed to begin in September 2019 and be complete by March 2022. Construction emissions were amortized over a 25 period per SLOAPCD guidelines.

Mobile Source Emissions

GHG emissions from vehicles are generated by the combustion of fossil fuels in vehicle engines. Vehicle emissions are calculated based on the vehicle type and the trip rate for each land use. The vehicle emission factors and fleet mix used in CalEEMod are derived from CARB's Emission Factors 2011 model, which includes GHG reductions achieved by implementation of Pavley I (Clean Car Standards) and the Low Carbon Fuel Standard and are thus considered in the calculation of standards for project emissions.

The trip generation rates applied for project were sourced from the Institute of Traffic Engineers (ITE) 9th Edition for congregate care (assisted living) and regional shopping center (ITE codes 253 and 820, respectively) based on CalEEMod default values for the proposed land uses.

Energy Use Emissions

As a result of the consumption of electricity and natural gas during project operation, GHGs are emitted on-site during the combustion of natural gas for space and water heating and off-site during the generation of electricity from fossil fuels in power plants. CalEEMod estimates GHG emissions from energy use by multiplying average rates of residential and non-residential energy consumption by the quantities of residential units and non-residential square footage entered in the land use module to obtain total projected energy use. This value is then multiplied by electricity and natural gas GHG emission factors applicable to the project location and utility provider.

Building energy use is typically divided into energy consumed by the built environment and energy consumed by uses that are independent of the building, such as plug-in appliances. Non-building energy use, or "plug-in energy use," can be further subdivided by specific end-use (refrigeration, cooking, office equipment, etc.). In California, Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting.

The project would be served by Pacific Gas & Electric (PG&E). Therefore, PG&E's specific energy intensity factors (i.e., the amount of CO_2 , CH_4 , and N_2O per kilowatt-hour) are used in the calculations of GHG emissions. PG&E currently has renewable energy procurement of 33.0 percent as of 2017^6 . Per SB 100, the statewide Renewable Portfolio Standard (RPS) Program requires electricity providers to increase procurement from eligible renewable energy sources to 33 percent by 2020 and 60 percent by 2030. However, the energy intensity factors included in CalEEMod are based on 2009 data by default at

⁶ 2018 California Renewables Portfolio Standard Annual Report to the Legislature. Available at: <u>http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-</u> <u>Electricity_and_Natural_Gas/Renewables%20Portfolio%20Standard%20Annual%20Report%202018.pdf</u>



which time PG&E had only achieved a 14.1 percent procurement of renewable energy⁷. To account for the continuing effects of the RPS, the energy intensity factors included in CalEEMod were reduced based on the percentage of renewables reported by PG&E. PG&E energy intensity factors that include this reduction are shown in Table 1.

	2009 (Ibs/MWh)	2020 (lbs/MWh)
Percent Procurement	14.1%	33.0%
Carbon dioxide (CO ₂)	641.35	499.66
Methane (CH ₄)	0.029	0.022
Nitrous oxide (N ₂ O)	0.006	0.005

Table 1 Pacific Gas & Electric Energy Intensity Factors

Area Source Emissions

Area sources include GHG emissions that would occur from the use of landscaping equipment. The use of landscape equipment emits GHGs associated with the equipment's fuel combustion. The landscaping equipment emission values were derived from the 2011 Off-Road Equipment Inventory Model.

Water and Wastewater Emissions

The amount of water used and the amount of wastewater generated by a project generate indirect GHG emissions. These emissions are a result of the energy used to supply, convey, and treat water and wastewater. In addition to the indirect GHG emissions associated with energy use, the wastewater treatment process itself can directly emit both CH_4 and N_2O .

The indoor and outdoor water use consumption data for each land use subtype comes from the Pacific Institute's *Waste Not, Want Not: The Potential for Urban Water Conservation in California* (2003).⁸ Based on that report, a percentage of total water consumption was dedicated to landscape irrigation, which is used to determine outdoor water use. Wastewater generation was similarly based on a reported percentage of total indoor water use.

New development would be subject to CalGreen, which requires a 20 percent increase in indoor water use efficiency. Thus, in order to account for compliance with CalGreen, a 20 percent reduction in indoor water use was included in the water consumption calculations for new development. The project would also use 100 percent recycled water for exterior areas.

In addition to water reductions associated with building code compliance and project design features, the GHG emissions from the energy used to transport the water for both existing and new development account for compliance with the RPS as discussed under "Energy Emissions".

Solid Waste Emissions

The disposal of solid waste produces GHG emissions from the transportation of waste, anaerobic decomposition in landfills, and incineration. To calculate the GHG emissions generated by solid waste

⁷ California Public Utilities Commission (CPUC). Renewables Portfolio Standard Quarterly Report. 1st Quarter 2011. Available at: <u>http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=5858</u>

⁸ California Emissions Estimator Model, User Guide, Appendix D. Available at: <u>http://www.caleemod.com/</u>



disposal, the total volume of solid waste was calculated using waste disposal rates identified by the California Department of Resources Recycling and Recovery (CalRecycle). The methods for quantifying GHG emissions from solid waste are based on the Intergovernmental Panel of Climate Change (IPCC) method, using the degradable organic content of waste. GHG emissions associated with the project's waste disposal were calculated using these parameters. According to a CalRecyle report to the Legislature, as of 2013 California had achieved a statewide 50 percent diversion of solid waste from landfills through "reduce/recycle/compost" programs⁹. However, AB 341 mandates that 75 percent of the solid waste generated be reduced, recycled, or composted by 2020. Therefore, to account for the continuing actions of recycling requirements under state law (i.e., AB 341), a 25 percent solid waste diversion rate was included in the modeled.

Service Population

The service population is defined as the number of residents plus employees for a given project. The number of residents was calculated assuming one person per memory care bed and 1.25 person per suite. The number of employees was calculated assuming 0.33 nurse/employee per resident (multiplied by three for 24-hour care) for the assisted living facility¹⁰ and 2.5 employees per 1,000 square feet for the retail component¹¹. Therefore, the proposed project would have a service population of 417.

Impact Analysis

GHG Emissions

As discussed under "Significance Thresholds," the project would result in a significant GHG impact if implementation of the proposed project would generate GHG emissions that exceed an annual efficiency threshold of 4.41 MT of CO₂E per service population.

Based on the methodology summarized in "Methodology and Assumptions", the primary sources of direct and indirect GHG emissions have been calculated for year 2022. Table 2 summarizes the project's GHG emissions. The complete model outputs for year 2022 GHG emission calculations are included in Attachment 1.

 ⁹ CalRecycle. AB 341 Report to the Legislature, August 2015. Available at: <u>https://www2.calrecycle.ca.gov/Publications/Download/1168</u>
 ¹⁰ City of San Diego. 2015. The Glen at Scripps Ranch Project Final Environmental Impact Report, Sch #:2013071013. October 30. .

http://docs.sandiego.gov/citybulletin_publicnotices/CEQA/PN1300%20%23264823%20Draft%20EIR%20Part%202%20Date%203-30-15.pdf ¹¹ City Of Los Angeles. 2003. Final Master Environmental Impact Report For Corbin And Nordhoff Redevelopment Project Sch #: 2002051125.

² City Of Los Angeles. 2003. Final Master Environmental Impact Report For Corbin And Nordhoff Redevelopment Project Sch #: 2002051125. Available at: <u>https://planning.lacity.org/eir/Corbin_Nordhoff/FINAL_MEIR/index.htm</u>



Table 2 Year 2022 Annual GHG Emissions

Construction173Area Sources2Energy Use30Mobile Sources1,2Solid Waste Disposal6Water Use2Total1,7Service Population4GHG Emissions per Service Population4
Energy Use30Mobile Sources1,2Solid Waste Disposal6Water Use2Total1,7Service Population4
Mobile Sources1,2Solid Waste Disposal6Water Use2Total1,7Service Population4
Solid Waste Disposal6Water Use2Total1,7Service Population4
Water Use 2 Total 1,7 Service Population 4
Total 1,7 Service Population 4
Service Population 4
•
CHC Emissions per Service Deputation
and emissions per service ropulation 4
4

As shown in Table 2, annual GHG emissions associated with implementation of the proposed project would be 1,739.9 MT CO₂e, or 4.17 MT of CO₂e per service person, which would not exceed the significance threshold of 4.41 MT of CO₂e per service person.

Applicable Adopted Plans, Policies, and Regulations Intended to Reduce GHG Emissions

CAP Consistency

The City of San Luis Obispo CAP serves as a qualified GHG reduction strategy consistent with *State CEQA Guidelines*. The CAP outlines a course of action to improve environmental, social, and economic sustainability and includes six emission reductions strategies: 1) buildings, 2) renewable energy, 3) transportation and land use, 4) water, 5) solid waste, and 6) parks and open space. A project is considered consistent with the City's CAP if it includes provisions to further the emissions reduction goals in the Plan. Measures and goals from the CAP include transportation and land use goals that promote residential developments in close proximity to transit development and commercial areas to reduce the need for commuting, promoting mixed—use development, and to implement water conservation techniques. The proposed project would locate mixed-use development in close proximity to stops on the SLO Transit 1A (Johnson/Tank Farm) route, as well as commercial business park and industrial uses south of Tank Farm and east of Broad Street. The project would not conflict with any of the goals, policies, and programs of the CAP; therefore, the project would be consistent with the CAP.

2017 Scoping Plan

The 2017 Scoping Plan provides a framework for achieving the 2030 statewide emissions target codified by SB 32 and recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six MT CO₂e by 2030¹². As discussed above, the project would not conflict with the goals of the locally-adopted GHG reduction strategy. Furthermore,

¹² California Air Resources Board (CARB). 2017. California's 2017 Climate Change Scoping Plan. December 14, 2017. Available at: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf



the project's GHG emissions would not exceed the adjusted SLOAPCD GHG emissions threshold of 4.41 MT of CO_2e per service person in 2022, which was developed in light of the 2030 target of a 40 percent reduction below 2020 levels established by SB 32. Because the project would be consistent with SB 32, the project would also be consistent with the 2017 Scoping Plan, which was developed to achieve the statewide emissions target set by SB 32.

Conclusions

As summarized in Table 2, in year 2022, the proposed project would result in GHG emissions of 4.17 MT of CO₂e per service population annually. By emitting less than 4.41 MT of CO₂e per service population, the project's contribution of GHG emissions to cumulative statewide emissions would be less than cumulatively considerable. Therefore, the project's direct and indirect GHG emissions would have a less than significant impact on the environment. In addition, the project would not conflict with the goals and strategies of local and state plans, policies, and regulations adopted to reduce GHG emissions. Thus, impacts associated with applicable policies, plans, and regulations would be less than significant.

If you have any questions, please contact us at <u>bmaddux@rinconconsultants.com</u> or (805) 644-4455, extension 2038.

Sincerely, Rincon Consultants, Inc.

Willi M. Mulle

William A. Maddux Senior Environmental Scientist

Attachment

Attachment 1 GHG Mc

GHG Modeling Results



Attachment 1 GHG Modeling Results

Tank Farm Road Assisted Living and Retail Project - Mitigated

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.20	Acre	1.20	52,272.00	0
Parking Lot	288.00	Space	3.19	115,200.00	0
City Park	1.63	Acre	1.63	71,002.80	0
Congregate Care (Assisted Living)	139.00	Dwelling Unit	2.52	133,655.00	398
Regional Shopping Center	45.27	1000sqft	1.70	45,269.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.2	Precipitation Freq (Days)	44
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Cor	npany			
CO2 Intensity (Ib/MWhr)	499.38	CH4 Intensity (Ib/MWhr)	0.023	N2O Intensity (Ib/MWhr)	0.005

1.3 User Entered Comments & Non-Default Data

Page 2 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

Project Characteristics - PG&E was at 14% renewables in 2008 aaccording to the PG&E website, as of 2019 they had achieved 33% per the CEC.

Land Use - Adjustments based on site plan. Other Asphalt Surfaces for circulation roadways. City Park for landscaping+sidewalk on west, north, and east.

Construction Phase - Construction schedule provided by applicant.

Grading -

Architectural Coating - 2016 CALGreen Building Code - 50 g/L for flat coatings and 100 g/L for traffic markings

Vehicle Trips - City park proxy for landscaping and sidewalk.

Area Coating - 2016 CALGreen Code - 50g/L for flat coatings and 100 g/L for traffic markings

Energy Use - High efficacy lighting not inlcuded in CalEEMod Concregate Care 741.44-75%=185.36

Water And Wastewater - CalGreen Code -20% indoor water use 9,056,409.56-20%=7245127.65, 3,353,263.05-20%=2682610.44

Solid Waste - 25% waste diversion congregate Care 126.84-25%=95.13, Park 0.14-25%=0.105, and retail 47.53-25%=35.65

Construction Off-road Equipment Mitigation - SLOAPCD BACT mitigation

Mobile Land Use Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Area Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	150	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50

tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	300.00	541.00
tblConstructionPhase	NumDays	30.00	65.00
tblConstructionPhase	NumDays	20.00	110.00
tblConstructionPhase	NumDays	10.00	44.00
tblEnergyUse	LightingElect	741.44	185.36
tblGrading	MaterialExported	0.00	1,029.00
tblLandUse	LandUseSquareFeet	139,000.00	133,655.00
tblLandUse	LandUseSquareFeet	45,270.00	45,269.00
tblLandUse	LotAcreage	2.59	3.19
tblLandUse	LotAcreage	8.69	2.52
tblLandUse	LotAcreage	1.04	1.70
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.023
tblProjectCharacteristics	CO2IntensityFactor	641.35	499.38
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblSolidWaste	SolidWasteGenerationRate	0.14	0.11

tblSolidWaste	SolidWasteGenerationRate	126.84	95.13
tblSolidWaste	SolidWasteGenerationRate	47.53	35.65
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblWater	IndoorWaterUseRate	9,056,409.56	7,245,127.65
tblWater	IndoorWaterUseRate	3,353,263.05	2,682,610.44

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Year	tons/yr										MT/yr							
2019	0.2551	2.8019	1.6159	3.0000e- 003	0.6906	0.1302	0.8208	0.3384	0.1198	0.4582	0.0000	269.8991	269.8991	0.0817	0.0000	271.9408		
2020	0.3928	3.1536	3.1270	6.9600e- 003	0.2805	0.1393	0.4197	0.0753	0.1310	0.2063	0.0000	623.9450	623.9450	0.0828	0.0000	626.0142		
2021	1.0329	3.9382	4.2652	9.2000e- 003	0.3370	0.1716	0.5086	0.0904	0.1609	0.2513	0.0000	821.7842	821.7842	0.1259	0.0000	824.9304		
2022	0.0554	0.4473	0.4935	1.1600e- 003	0.0481	0.0172	0.0653	0.0129	0.0161	0.0291	0.0000	104.3177	104.3177	0.0137	0.0000	104.6603		
Maximum	1.0329	3.9382	4.2652	9.2000e- 003	0.6906	0.1716	0.8208	0.3384	0.1609	0.4582	0.0000	821.7842	821.7842	0.1259	0.0000	824.9304		

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Year	tons/yr										MT/yr							
2019	0.0838	1.4525	1.7424	3.0000e- 003	0.6906	0.0651	0.7557	0.3384	0.0644	0.4027	0.0000	269.8988	269.8988	0.0817	0.0000	271.9405		
2020	0.3651	3.0769	3.1399	6.9600e- 003	0.2805	0.1369	0.4173	0.0753	0.1308	0.2061	0.0000	623.9446	623.9446	0.0828	0.0000	626.0139		
2021	1.0077	3.9017	4.2837	9.2000e- 003	0.3370	0.1738	0.5108	0.0904	0.1652	0.2555	0.0000	821.7837	821.7837	0.1259	0.0000	824.9299		
2022	0.0522	0.4494	0.4972	1.1600e- 003	0.0481	0.0183	0.0664	0.0129	0.0175	0.0304	0.0000	104.3176	104.3176	0.0137	0.0000	104.6602		
Maximum	1.0077	3.9017	4.2837	9.2000e- 003	0.6906	0.1738	0.7557	0.3384	0.1652	0.4027	0.0000	821.7837	821.7837	0.1259	0.0000	824.9299		
	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e		
Percent Reduction	13.09	14.12	-1.70	0.00	0.00	14.02	3.54	0.00	11.69	5.29	0.00	0.00	0.00	0.00	0.00	0.00		
Quarter	St	Start Date		End Date		Maximum Unmitigated ROG + NOX (tons/quarter)					Maximum Mitigated ROG + NOX (tons/quarter)							
1	9.	9-2-2019		12-1-2019		2.9852												
2	12	-2-2019 3-1-2020		-2020	0.2972													
3	3.	3-2-2020 6-1-2		-2020	0.9719													
4	4 6-2-2020		9-1	9-1-2020			0.9696				0.9409							
5	9.	9-2-2020 12-1		1-2020	0.9638					1								
6	12	-2-2020	-2020 3-1-2021		0.8973					1								
7	7 3-2-2021		6-1	-2021		0.8833				1								
8	8 6-2-2021		9-1	-2021		1.1733												

Page 6 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

9	9-2-2021	12-1-2021	1.7343	1.7190
10	12-2-2021	3-1-2022	1.0902	1.0840
		Highest	2.9852	1.7190

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Area	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Energy	7.0500e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	301.0335	301.0335	0.0120	3.5900e- 003	302.4044
Mobile	0.5930	2.2575	5.7903	0.0153	1.3600	0.0162	1.3762	0.3641	0.0152	0.3793	0.0000	1,397.259 9	1,397.259 9	0.0605	0.0000	1,398.772 9
Waste	6,	,				0.0000	0.0000		0.0000	0.0000	26.5695	0.0000	26.5695	1.5702	0.0000	65.8248
Water	6,	,				0.0000	0.0000		0.0000	0.0000	3.1496	19.8637	23.0134	0.3244	7.8400e- 003	33.4591
Total	1.4227	2.3400	7.7181	0.0157	1.3600	0.0316	1.3916	0.3641	0.0305	0.3946	29.7191	1,721.258 9	1,750.978 0	1.9701	0.0114	1,803.638 4

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhau PM2.		2.5 Total	Bio- CO2	NBio- CC	2 Total CC	02 CH4	N20) CO2e	÷
Category					to	ns/yr									MT/yr			
Area	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.010	5 0.	.0105	0.0000	3.1018	3.1018	3.0100 003		00 3.177 [.]	1
Energy	7.0500e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003	 - - - -	4.8700 003		3700e- 003	0.0000	301.033	5 301.033	5 0.012	0 3.590 003		44
Mobile	0.5764	2.1237	5.3941	0.0138	1.2118	0.0147	1.2265	0.3244	0.013	8 0.	.3382	0.0000	1,258.36 7	7 1,258.36 7	0.056	2 0.00	00 1,259.7 4	71
Waste	F1					0.0000	0.0000		0.000	0 0.	.0000	26.5695	0.0000	26.569	5 1.570	2 0.00	0 65.824	8
Water	F1					0.0000	0.0000	 - - - -	0.000	0 0.	.0000	2.5197	14.3519	16.8710	6 0.259	5 6.250 003		8
Total	1.4061	2.2062	7.3219	0.0142	1.2118	0.0301	1.2419	0.3244	0.029	2 0.	.3536	29.0892	1,576.85 9	4 1,605.94 0	4 1.900	8 9.840 003		99
	ROG	1	IOx	co s					ugitive PM2.5	Exhaust PM2.5	PM2 Tot		CO2 NBi	o-CO2 Tot	al CO2	CH4	N20	CO2e
Percent Reduction	1.17		5.72	5.13 9	.59 1	0.90 4	.63 10	0.76	10.90	4.49	10.4	40 2.	12 8	3.39	8.28	3.52	13.91	8.16

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/2/2019	10/31/2019	5	44	
2	Grading	Grading	9/2/2019	11/29/2019	5	65	
3	Building Construction	Building Construction	2/3/2020	2/28/2022	5	541	
4	Paving	Paving	8/2/2021	12/31/2021	5	110	
5	Architectural Coating	Architectural Coating	8/2/2021	12/31/2021	5	110	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 162.5

Acres of Paving: 4.39

Residential Indoor: 270,651; Residential Outdoor: 90,217; Non-Residential Indoor: 67,904; Non-Residential Outdoor: 22,635; Striped Parking Area: 10,048 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	129.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	215.00	61.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	43.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2

Page 10 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.3975	0.0000	0.3975	0.2185	0.0000	0.2185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0954	1.0026	0.4854	8.4000e- 004		0.0526	0.0526		0.0484	0.0484	0.0000	75.1711	75.1711	0.0238	0.0000	75.7657
Total	0.0954	1.0026	0.4854	8.4000e- 004	0.3975	0.0526	0.4501	0.2185	0.0484	0.2669	0.0000	75.1711	75.1711	0.0238	0.0000	75.7657

3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943
Total	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.3975	0.0000	0.3975	0.2185	0.0000	0.2185	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0252	0.4375	0.5039	8.4000e- 004		0.0219	0.0219		0.0215	0.0215	0.0000	75.1710	75.1710	0.0238	0.0000	75.7656
Total	0.0252	0.4375	0.5039	8.4000e- 004	0.3975	0.0219	0.4193	0.2185	0.0215	0.2400	0.0000	75.1710	75.1710	0.0238	0.0000	75.7656

3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943
Total	1.9000e- 003	1.7900e- 003	0.0155	4.0000e- 005	3.8100e- 003	3.0000e- 005	3.8400e- 003	1.0100e- 003	2.0000e- 005	1.0400e- 003	0.0000	3.2913	3.2913	1.2000e- 004	0.0000	3.2943

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category			<u>.</u>		ton	s/yr							MT	/yr		
Fugitive Dust					0.2820	0.0000	0.2820	0.1169	0.0000	0.1169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1540	1.7719	1.0847	2.0200e- 003		0.0774	0.0774		0.0712	0.0712	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612
Total	0.1540	1.7719	1.0847	2.0200e- 003	0.2820	0.0774	0.3594	0.1169	0.0712	0.1881	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612

3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	6.6000e- 004	0.0227	4.9100e- 003	5.0000e- 005	1.1000e- 003	1.3000e- 004	1.2300e- 003	3.0000e- 004	1.3000e- 004	4.3000e- 004	0.0000	5.0052	5.0052	2.8000e- 004	0.0000	5.0123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e- 003	2.9300e- 003	0.0254	6.0000e- 005	6.2600e- 003	4.0000e- 005	6.3000e- 003	1.6600e- 003	4.0000e- 005	1.7000e- 003	0.0000	5.4023	5.4023	2.0000e- 004	0.0000	5.4074
Total	3.7800e- 003	0.0256	0.0303	1.1000e- 004	7.3600e- 003	1.7000e- 004	7.5300e- 003	1.9600e- 003	1.7000e- 004	2.1300e- 003	0.0000	10.4075	10.4075	4.8000e- 004	0.0000	10.4196

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.2820	0.0000	0.2820	0.1169	0.0000	0.1169	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0530	0.9876	1.1926	2.0200e- 003		0.0430	0.0430		0.0427	0.0427	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610
Total	0.0530	0.9876	1.1926	2.0200e- 003	0.2820	0.0430	0.3250	0.1169	0.0427	0.1596	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610

3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	6.6000e- 004	0.0227	4.9100e- 003	5.0000e- 005	1.1000e- 003	1.3000e- 004	1.2300e- 003	3.0000e- 004	1.3000e- 004	4.3000e- 004	0.0000	5.0052	5.0052	2.8000e- 004	0.0000	5.0123
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e- 003	2.9300e- 003	0.0254	6.0000e- 005	6.2600e- 003	4.0000e- 005	6.3000e- 003	1.6600e- 003	4.0000e- 005	1.7000e- 003	0.0000	5.4023	5.4023	2.0000e- 004	0.0000	5.4074
Total	3.7800e- 003	0.0256	0.0303	1.1000e- 004	7.3600e- 003	1.7000e- 004	7.5300e- 003	1.9600e- 003	1.7000e- 004	2.1300e- 003	0.0000	10.4075	10.4075	4.8000e- 004	0.0000	10.4196

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.2533	2.2927	2.0134	3.2200e- 003		0.1335	0.1335		0.1255	0.1255	0.0000	276.7739	276.7739	0.0675	0.0000	278.4620
Total	0.2533	2.2927	2.0134	3.2200e- 003		0.1335	0.1335		0.1255	0.1255	0.0000	276.7739	276.7739	0.0675	0.0000	278.4620

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0271	0.7588	0.2299	1.4500e- 003	0.0331	4.1400e- 003	0.0373	9.5700e- 003	3.9600e- 003	0.0135	0.0000	140.2416	140.2416	8.4400e- 003	0.0000	140.4524
Worker	0.1124	0.1021	0.8837	2.2900e- 003	0.2474	1.6200e- 003	0.2490	0.0657	1.5000e- 003	0.0672	0.0000	206.9295	206.9295	6.8100e- 003	0.0000	207.0998
Total	0.1395	0.8609	1.1136	3.7400e- 003	0.2805	5.7600e- 003	0.2862	0.0753	5.4600e- 003	0.0808	0.0000	347.1710	347.1710	0.0153	0.0000	347.5522

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.2257	2.2160	2.0263	3.2200e- 003		0.1311	0.1311	1 1 1	0.1253	0.1253	0.0000	276.7736	276.7736	0.0675	0.0000	278.4617
Total	0.2257	2.2160	2.0263	3.2200e- 003		0.1311	0.1311		0.1253	0.1253	0.0000	276.7736	276.7736	0.0675	0.0000	278.4617

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0271	0.7588	0.2299	1.4500e- 003	0.0331	4.1400e- 003	0.0373	9.5700e- 003	3.9600e- 003	0.0135	0.0000	140.2416	140.2416	8.4400e- 003	0.0000	140.4524
Worker	0.1124	0.1021	0.8837	2.2900e- 003	0.2474	1.6200e- 003	0.2490	0.0657	1.5000e- 003	0.0672	0.0000	206.9295	206.9295	6.8100e- 003	0.0000	207.0998
Total	0.1395	0.8609	1.1136	3.7400e- 003	0.2805	5.7600e- 003	0.2862	0.0753	5.4600e- 003	0.0808	0.0000	347.1710	347.1710	0.0153	0.0000	347.5522

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0243	0.7578	0.2220	1.5800e- 003	0.0362	2.1600e- 003	0.0383	0.0105	2.0700e- 003	0.0125	0.0000	152.2328	152.2328	8.9800e- 003	0.0000	152.4573
Worker	0.1144	0.0997	0.8747	2.4200e- 003	0.2701	1.7200e- 003	0.2718	0.0718	1.5800e- 003	0.0734	0.0000	218.2758	218.2758	6.6100e- 003	0.0000	218.4410
Total	0.1386	0.8574	1.0967	4.0000e- 003	0.3063	3.8800e- 003	0.3102	0.0822	3.6500e- 003	0.0859	0.0000	370.5086	370.5086	0.0156	0.0000	370.8983

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Off-Road	0.2229	2.2384	2.1816	3.5100e- 003		0.1273	0.1273	1 1 1	0.1218	0.1218	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	0.2229	2.2384	2.1816	3.5100e- 003		0.1273	0.1273		0.1218	0.1218	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0243	0.7578	0.2220	1.5800e- 003	0.0362	2.1600e- 003	0.0383	0.0105	2.0700e- 003	0.0125	0.0000	152.2328	152.2328	8.9800e- 003	0.0000	152.4573
Worker	0.1144	0.0997	0.8747	2.4200e- 003	0.2701	1.7200e- 003	0.2718	0.0718	1.5800e- 003	0.0734	0.0000	218.2758	218.2758	6.6100e- 003	0.0000	218.4410
Total	0.1386	0.8574	1.0967	4.0000e- 003	0.3063	3.8800e- 003	0.3102	0.0822	3.6500e- 003	0.0859	0.0000	370.5086	370.5086	0.0156	0.0000	370.8983

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0350	0.3201	0.3355	5.5000e- 004		0.0166	0.0166		0.0156	0.0156	0.0000	47.5037	47.5037	0.0114	0.0000	47.7882
Total	0.0350	0.3201	0.3355	5.5000e- 004		0.0166	0.0166		0.0156	0.0156	0.0000	47.5037	47.5037	0.0114	0.0000	47.7882

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5300e- 003	0.1131	0.0322	2.5000e- 004	5.6800e- 003	3.0000e- 004	5.9800e- 003	1.6400e- 003	2.9000e- 004	1.9300e- 003	0.0000	23.7511	23.7511	1.3900e- 003	0.0000	23.7859
Worker	0.0169	0.0141	0.1259	3.7000e- 004	0.0424	2.6000e- 004	0.0427	0.0113	2.4000e- 004	0.0115	0.0000	33.0629	33.0629	9.3000e- 004	0.0000	33.0862
Total	0.0204	0.1272	0.1581	6.2000e- 004	0.0481	5.6000e- 004	0.0487	0.0129	5.3000e- 004	0.0135	0.0000	56.8140	56.8140	2.3200e- 003	0.0000	56.8721

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0318	0.3222	0.3392	5.5000e- 004		0.0177	0.0177		0.0170	0.0170	0.0000	47.5036	47.5036	0.0114	0.0000	47.7881
Total	0.0318	0.3222	0.3392	5.5000e- 004		0.0177	0.0177		0.0170	0.0170	0.0000	47.5036	47.5036	0.0114	0.0000	47.7881

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5300e- 003	0.1131	0.0322	2.5000e- 004	5.6800e- 003	3.0000e- 004	5.9800e- 003	1.6400e- 003	2.9000e- 004	1.9300e- 003	0.0000	23.7511	23.7511	1.3900e- 003	0.0000	23.7859
Worker	0.0169	0.0141	0.1259	3.7000e- 004	0.0424	2.6000e- 004	0.0427	0.0113	2.4000e- 004	0.0115	0.0000	33.0629	33.0629	9.3000e- 004	0.0000	33.0862
Total	0.0204	0.1272	0.1581	6.2000e- 004	0.0481	5.6000e- 004	0.0487	0.0129	5.3000e- 004	0.0135	0.0000	56.8140	56.8140	2.3200e- 003	0.0000	56.8721

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0691	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1291	110.1291	0.0356	0.0000	111.0196
Paving	5.7500e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0748	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1291	110.1291	0.0356	0.0000	111.0196

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230
Total	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0691	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1290	110.1290	0.0356	0.0000	111.0195
Paving	5.7500e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0748	0.7106	0.8059	1.2500e- 003		0.0373	0.0373		0.0343	0.0343	0.0000	110.1290	110.1290	0.0356	0.0000	111.0195

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	'/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230
Total	3.3600e- 003	2.9300e- 003	0.0257	7.0000e- 005	7.9400e- 003	5.0000e- 005	7.9900e- 003	2.1100e- 003	5.0000e- 005	2.1600e- 003	0.0000	6.4182	6.4182	1.9000e- 004	0.0000	6.4230

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.5464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670
Total	0.5584	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670

3.6 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127
Total	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	∵/yr		
Archit. Coating	0.5464					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670
Total	0.5584	0.0840	0.1000	1.6000e- 004		5.1800e- 003	5.1800e- 003		5.1800e- 003	5.1800e- 003	0.0000	14.0429	14.0429	9.6000e- 004	0.0000	14.0670

3.6 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127
Total	9.6400e- 003	8.4000e- 003	0.0737	2.0000e- 004	0.0228	1.4000e- 004	0.0229	6.0500e- 003	1.3000e- 004	6.1800e- 003	0.0000	18.3987	18.3987	5.6000e- 004	0.0000	18.4127

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Increase Transit Accessibility

Integrate Below Market Rate Housing

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.5764	2.1237	5.3941	0.0138	1.2118	0.0147	1.2265	0.3244	0.0138	0.3382	0.0000	1,258.367 7	1,258.367 7	0.0562	0.0000	1,259.771 4
Unmitigated	0.5930	2.2575	5.7903	0.0153	1.3600	0.0162	1.3762	0.3641	0.0152	0.3793	0.0000	1,397.259 9	1,397.259 9	0.0605	0.0000	1,398.772 9

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Congregate Care (Assisted Living)	380.86	305.80	339.16	925,584	824,696
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	1,933.03	2,262.14	1142.61	2,695,948	2,402,090
Total	2,313.89	2,567.94	1,481.77	3,621,533	3,226,786

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Congregate Care (Assisted	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Parking Lot	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11

CalEEMod Version: CalEEMod.2016.3.2

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Congregate Care (Assisted Living)	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Other Asphalt Surfaces	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Parking Lot	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422
Regional Shopping Center	0.575581	0.029595	0.198288	0.120539	0.026172	0.006482	0.012911	0.019591	0.002354	0.001214	0.005068	0.000784	0.001422

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	∵/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	231.2245	231.2245	0.0107	2.3200e- 003	232.1806
Electricity Unmitigated	r:					0.0000	0.0000		0.0000	0.0000	0.0000	231.2245	231.2245	0.0107	2.3200e- 003	232.1806
NaturalGas Mitigated	7.0500e- 003	0.0606	0.0280	3.8000e- 004	,	4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2800e- 003	70.2238
NaturalGas Unmitigated	7.0500e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2800e- 003	70.2238

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	ī/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)		6.4800e- 003	0.0553	0.0236	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	64.0837	64.0837	1.2300e- 003	1.1700e- 003	64.4645
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		5.8000e- 004	5.2600e- 003	4.4200e- 003	3.0000e- 005		4.0000e- 004	4.0000e- 004		4.0000e- 004	4.0000e- 004	0.0000	5.7253	5.7253	1.1000e- 004	1.0000e- 004	5.7593
Total		7.0600e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2700e- 003	70.2238

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	1.20088e +006	6.4800e- 003	0.0553	0.0236	3.5000e- 004		4.4700e- 003	4.4700e- 003		4.4700e- 003	4.4700e- 003	0.0000	64.0837	64.0837	1.2300e- 003	1.1700e- 003	64.4645
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center		5.8000e- 004	5.2600e- 003	4.4200e- 003	3.0000e- 005		4.0000e- 004	4.0000e- 004		4.0000e- 004	4.0000e- 004	0.0000	5.7253	5.7253	1.1000e- 004	1.0000e- 004	5.7593
Total		7.0600e- 003	0.0606	0.0280	3.8000e- 004		4.8700e- 003	4.8700e- 003		4.8700e- 003	4.8700e- 003	0.0000	69.8090	69.8090	1.3400e- 003	1.2700e- 003	70.2238

5.3 Energy by Land Use - Electricity

<u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	496546	112.4750	5.1800e- 003	1.1300e- 003	112.9401
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	40320	9.1331	4.2000e- 004	9.0000e- 005	9.1709
Regional Shopping Center	483926	109.6164	5.0500e- 003	1.1000e- 003	110.0697
Total		231.2245	0.0107	2.3200e- 003	232.1806

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
City Park	0	0.0000	0.0000	0.0000	0.0000
Congregate Care (Assisted Living)	496546	112.4750	5.1800e- 003	1.1300e- 003	112.9401
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	40320	9.1331	4.2000e- 004	9.0000e- 005	9.1709
Regional Shopping Center	483926	109.6164	5.0500e- 003	1.1000e- 003	110.0697
Total		231.2245	0.0107	2.3200e- 003	232.1806

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	7/yr		
Mitigated	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Unmitigated	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0546					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0577	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Total	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	bCategory tons/yr										МТ	/yr				
Architectural Coating	0.0546					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7103					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0577	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771
Total	0.8227	0.0219	1.8999	1.0000e- 004		0.0105	0.0105		0.0105	0.0105	0.0000	3.1018	3.1018	3.0100e- 003	0.0000	3.1771

7.0 Water Detail

7.1 Mitigation Measures Water

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Page 33 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category		MT	ī/yr	
initigated	16.8716	0.2595	6.2500e- 003	25.2218
Grinnigatou	23.0134	0.3244	7.8400e- 003	33.4591

7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	√yr	
City Park	0/ 1.94211	1.5397	7.0000e- 005	2.0000e- 005	1.5461
Congregate Care (Assisted Living)		15.7052	0.2367	5.7100e- 003	23.3239
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.68261 / 2.05523	5.7685	0.0876	2.1100e- 003	8.5892
Total		23.0134	0.3244	7.8400e- 003	33.4591

Page 34 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 1.16527	0.9238	4.0000e- 005	1.0000e- 005	0.9277
Congregate Care (Assisted Living)		11.6589	0.1893	4.5600e- 003	17.7501
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	2.14609 / 1.23314	4.2889	0.0701	1.6900e- 003	6.5441
Total		16.8716	0.2595	6.2600e- 003	25.2218

8.0 Waste Detail

8.1 Mitigation Measures Waste

Page 35 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
Mitigated		1.5702	0.0000	65.8248	
Unmitigated		1.5702	0.0000	65.8248	

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.11	0.0223	1.3200e- 003	0.0000	0.0553
Congregate Care (Assisted Living)	95.13	19.3105	1.1412	0.0000	47.8410
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	35.65	7.2366	0.4277	0.0000	17.9284
Total		26.5695	1.5702	0.0000	65.8248

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.11	0.0223	1.3200e- 003	0.0000	0.0553
Congregate Care (Assisted Living)	95.13	19.3105	1.1412	0.0000	47.8410
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	35.65	7.2366	0.4277	0.0000	17.9284
Total		26.5695	1.5702	0.0000	65.8248

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

Page 37 of 37

Tank Farm Road Assisted Living and Retail Project - Mitigated - San Luis Obispo County APCD Air District, Annual

User Defined Equipment

Equipment Type Number

11.0 Vegetation

N2O Operational GHG Emission Mobile Calculations

Project Code & Title: 19-07096, Tank Farm Road Assisted Living Facility and Retail Project

Vehicle Population Breakdown* 232825 Gasoline vehicles 12777 Diesel vehicles 94.8% Gasoline vehicle % 5.2% Diesel vehicle %

VMT per Vehicle Type					
3226786	Project VMT (CalEEMod output)				
3058923	Gasoline vehicle VMT				
167863	Diesel vehicle VMT				

Gasoline Vehicles				
94.8%	Gasoline vehicle %			
2.12	Tons per year mobile NOX emissions (annual output in CalEEMod)			
2.01	Gasoline vehicle tons per year NOX emissions			
4.16%	Percentage to convert NOX emissions to N2O **			
0.0838	Tons per year N2O emissions for gasoline vehicles			
0.0760	Metric tons per year N2O emissions for gasoline vehicles			

Diesel Vehicles

0.3316 grams N2O per gallon of fuel for diesel vehicles**

17.26 Diesel average miles per gallon*

0.01921 grams per mile N2O for diesel vehicles

3224.2 grams per year N2O for diesel vehicles

0.0032242 Metric tons per year N2O emissions for diesel vehicles

CO2E Emissions from N2O

0.0792 Metric tons per year from gasoline + diesel vehicles 298 GWP of N2O***

23.6 CO2E emissions per year from N2O emissions from gasoline + diesel vehicles

Sources

*Vehicle population source:

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: District

Region: San Luis Obispo

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2011 Categories

**Methodology source:

EMFAC2011 Frequently Asked Questions https://www.arb.ca.gov/msei/emfac2011-faq.htm

***GWP source:

Intergovernmental Panel on Climate Change (IPCC). 2007. AR4 Climate Change 2007: The Physical Science Basis. Contrbution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.

Attachment 7

Acoustical Assessment



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October 31, 2017

Project 1758

RE: Acoustical Assessment of Proposed Residential & Commercial projects at Northwest Corner, Tank Farm and Broad Street San Luis Obispo, CA

Requested by: NKT Commercial, LLC 684 Higuera St., Suite B San Luis Obispo, CA 93423

1 Introduction

The subject of this assessment is the proposed development at the northwest corner of Tank Farm Road and Broad Street in San Luis Obispo, with regard to the potential impact of all surrounding noise sources.

Noise sources examined in this study are vehicular traffic along the two busy ground transportation corridors, as well as operations associated with the San Luis Obispo County Regional Airport. In addition, there are potential existing or future stationary noise sources from neighboring commercial activities along the south boundary of the site.

Existing sound levels were measured on the proposed site. SoundPLAN, an acoustic software sound level modeling tool, was used to generate sound level contours which were based on physical characteristics of the topography, measured sound level values, and traffic volume data.

Contents

1	Iı	ntroduction	1
3	L	Location	4
	3.1	Airport Sound Level	5
	3.2	Calculated Airport SENEL	8
	3.1	Helicopter Flight Training	8
4	S	Sound Level Measurement	9
5	Si	ite Sound Level Contours	12
6	C	Contour Disparities	15
7	R	Regulatory Setting	17
	7.1	State Regulation	17
	7.2	Local Regulation	18
8	Т	Fraffic Characteristics	19
	8.1	Traffic Volume on Broad Street and on Tank Farm Road	19
	8.1	Traffic Growth	
	8.2	Traffic Flow and Sound Level	21
9	С	Conclusion	23
1	0 G	Glossary	24
1	1 A	Appendix	26
	11.1	Sound level modeling	
	11.2	2 Sound Level Measurement	26
	11.3	8 Wind Speed	
12	2 R	References	27

List of Figures

FIGURE 1: VICINITY MAP SHOWING RELATIONSHIP OF SITE TO POTENTIAL NOISE SOURCES	4
FIGURE 2: AIRPORT NOISE CONTOURS IN RELATION TO THE SITE, ALUP	5
FIGURE 3: GRAPHICAL DEPICTION OF A SINGLE EVENT SOUND EXPOSURE LEVEL	6
FIGURE 4: DESCRIPTION OF SINGLE EVENT NOISE EXPOSURE LEVEL	7
Figure 5: Single Event Noise Contours, ALUP	7
FIGURE 6: ATTENUATION WITH DISTANCE FROM END OF RUNWAY TO ASSISTED LIVING FACILITY	8
FIGURE 7: LOCATION OF ON-SITE SOUND LEVEL MEASUREMENTS, SEPTEMBER 30, 2017	10
FIGURE 8: TANK FARM ROAD AND BROAD STREET SIMULTANEOUS SOUND LEVELS	
Figure 9: Third Octave Band sound levels, A-weighted, Tank Farm Road	11
FIGURE 10: THIRD OCTAVE BAND SOUND LEVELS, A-WEIGHTED, BROAD STREET	12
FIGURE 11: SOUND LEVEL CONTOURS AT THE NORTHWEST CORNER OF	13
FIGURE 12: SOUND LEVEL CONTOURS AT NWC BROAD AND TANK FARM FROM TRAFFIC NOISE	14
FIGURE 13: CROSS SECTION NOISE CONTOURS FROM	15
FIGURE 14: 1990 NOISE CONTOURS FROM CITY OF SAN LUIS OBISPO	
FIGURE 15: BUILDOUT NOISE CONTOURS FROM CITY OF SAN LUIS OBISPO	17
FIGURE 16. COMMUNITY NOISE EXPOSURE LDN / CNEL	18
FIGURE 17. MAXIMUM EXPOSURE FOR NOISE SENSITIVE USES DUE TO TRAFFIC	19
FIGURE 18: TRAFFIC VOLUMES FOR TANK FARM ROAD, WITH 2-DAY AVERAGE FLOW	
FIGURE 19: TRAFFIC VOLUMES FOR BROAD STREET, WITH 2-DAY AVERAGE FLOW	20
FIGURE 20. GROWTH OF NOISE FROM AVERAGE DAILY TRAFFIC, TANK FARM ROAD	
FIGURE 21. RELATIONSHIP BETWEEN PEAK-HOUR AND AVERAGE DAILY TRAFFIC VOLUMES	
FIGURE 22. LEVEL OF SERVICE VS GENERAL OPERATING CONDITIONS	
Figure 23: September 30, 2017 Climate Data	27

3 Location

The project is located north of Tank Farm Road and west of Broad Street. These two arterial streets are the primary sources ground transportation noise potentially impacting the site. The southwest corner of the site is closest to the San Luis Obispo County Regional Airport, a separate potential source of on-site noise. Another potential source of noise is the helicopter training flight path that passes over the site. Each of these potential sources of noise was observed and measured to evaluate their contribution to on-site noise levels. The general vicinity and configuration of the site are shown in Figure 1.

Figure 1: Vicinity map showing relationship of site to potential noise sources



3.1 Airport Sound Level

The California Airport Noise Regulations define airport noise compatibility as follows: "The level of noise acceptable to a reasonable person residing in the vicinity of an airport is established as a community noise equivalent level (CNEL) value of 65 dB for purposes of these regulations. This criterion level has been chosen for reasonable persons residing in urban residential areas where houses are of typical California construction and may have windows partially open. It has been selected with reference to speech, sleep and community reaction."

It is important to understand, however, that the compatibility criterion (i.e., 65 dB CNEL) identified in the Airport Noise regulations is only mandated for a few airports (less than a dozen) that have been formally declared to have a "noise problem", the regulations do not establish a mandatory criterion for evaluating the compatibility of proposed land use development around other airports. Airport noise contours in relation to the site are shown in Figure 2.

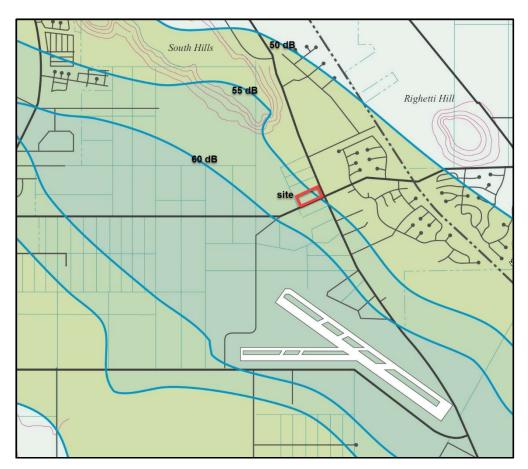


Figure 2: Airport Noise Contours in relation to the site, ALUP

The Equivalent Sound Level, abbreviated Leq, is a measure of the exposure resulting from the accumulation of sound levels over a particular period of interest; e.g., an hour, an eight-hour

school day, nighttime, or a full 24-hour day. The applicable period should always be identified or clearly understood when discussing the metric.

The Equivalent Sound Level may be thought of as a constant sound level over the period of interest that contains as much sound energy as the actual varying level. It is a way of assigning a single number to a time-varying sound level.

The Community Noise Equivalent Level (CNEL) is the Leq of the A-weighted noise level over a 24-hour period with a 5dB penalty applied to noise levels between 7 p.m. and 10 p.m. and a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m. CNEL is similar to Ldn. Sound levels resulting from aircraft operations at San Luis Obispo County Airport have been measured for this report as Leq sound equivalent level. The SEL or Sound Exposure Level, explained below is derived from Leq sound level data.

Refer to the Glossary at the end of this report for more definitions and terminology.

Sound Exposure Level: This metric is used to describe and measure aircraft flyover. The Sound Exposure Level, or SEL is a summation of the A-weighted sound energy over the entire duration of a noise event. SEL expresses the accumulated energy in terms of the one-second-long steady-state sound level that would contain the same amount of energy as the actual time-varying level. In simple terms, SEL "compresses" the energy into a single second. Figure 3 below depicts this compression:

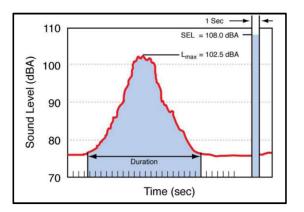


Figure 3: Graphical depiction of a single event Sound Exposure Level

Single Event Noise Exposure Level, or SENEL: Caltrans Division of Aeronautics noise standards regulations require use of a measure called the Single Event Noise Exposure Level, or SENEL, to describe the cumulative noise exposure for an individual noise event, such as an aircraft flyover. SENEL is a very slight variation on SEL. Just like SEL, it is the one-second-long steady-state level that contains the same amount of energy as the actual time-varying level. However, unlike SEL, it is calculated only over the period when the level exceeds a selected threshold. Figure 4 illustrates the Single Event Noise Exposure Level.

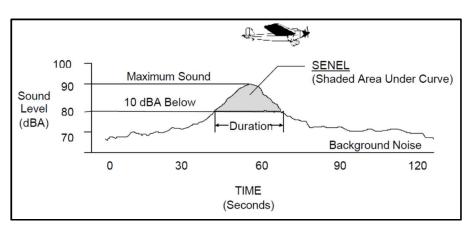
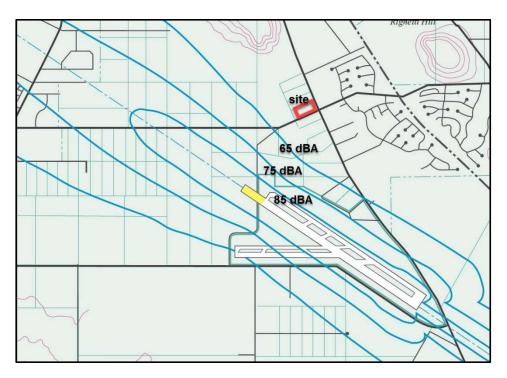


Figure 4: Description of Single Event Noise Exposure Level

Because of the normalization procedure, for most aircraft overflights, the SENEL is on the order of 7 to 12 dBA higher than the Lmax. SENEL measurements generally correlate well with the degree of annoyance generated by a noise event. The SENEL is also the mandated measure of noise for a single aircraft fly-over in California.

Single Event Noise contours for San Luis Obispo County Airport shown in the Airport Land Use Plan are shown Figure 5.

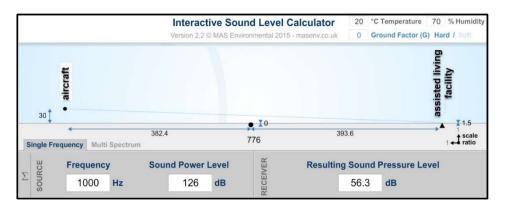




3.2 Calculated Airport SENEL

Calculated Single Event Noise Exposure Level for the loudest departing flight during a 24-hour measurement period is determined, based on the distance from the end-of-runway measurement point, illustrated by the graphic shown below in Figure 6. A departing jet aircraft was measured at 89 dB Lmax at the end of the runway; the SENEL is 103 dBA. Meanwhile, the edge of Assisted Living Facility on Tank Farm Road is 776 meters away and has an SENEL of 56.3 dBA.

Figure 6: Attenuation with distance from End of Runway to Assisted Living Facility



Along with single event metric SENEL, the 24-hour metric CNEL is also used to describe noise around airports. The U.S. Environmental Protection Agency identified CNEL as the most appropriate measure of evaluating airport noise based on the following considerations:

- 1. It is applicable to the evaluation of pervasive long-term noise in various defined areas and under various conditions over long periods of time.
- 2. It correlates well with known effects of noise on individuals and the public.
- 3. It is simple, practical, and accurate. In principal, it is useful for planning as well as for enforcement or monitoring purposes.
- 4. The required measurement equipment, with standard characteristics, is commercially available.
- 5. It is closely related to existing methods currently in use.

Representative values of CNEL in an urban environment range from a low of 40 to 45 dB in extremely quiet, isolated locations, to highs of 80 or 85 decibels immediately adjacent to a busy transportation route.

CNEL is typically in the range of 50 to 55 dB in a quiet suburban residential community and 60 to 65 decibels in an urban residential neighborhood.

3.1 Helicopter Flight Training

In general, helicopter operations at airports are a minor issue in terms of overall noise exposure, although they generate a more specific type of noise complaint due to the nature of helicopter flight paths at relatively low altitudes. An international helicopter flight training school operates

from San Luis Obispo County Regional Airport. In the year 2016, 22 pilots earned certification, which requires 70 to 200 hours of flight training for each pilot. During each year there are about 3,000 hours of helicopter operations in and around the airport. At an average 30 minutes per flight, this would potentially be 20 departures per day during 300 days of operation. Flight patterns during and after departure might mean that student training flights occasionally overfly the 760 Tank Farm Road site. The observed, estimated altitude of the overflights is about 500 to 1,000 feet above ground level.

The primary training aircraft is the Robinson model R22 helicopter, which is powered by a Lycoming O-320-A2B or a Lycoming O-320-B2C reciprocating engine. According to the type-certificate for this aircraft, a level overflight at an altitude of 492 ± 30 feet (150 ± 9 meters) creates a ground-level noise impact of 81 dB EPNL during the overflight. The duration of an overflight is typically 10 to 20 seconds, and may occur as many as ten times per day and only during daytime hours.

EPNL (effective perceived noise level) is a measurement value which recognizes the psychological annoyance of single event aircraft noise, taking into account duration of the overflight and predominant tonal components of the noise. The EPNL, specified in units of EPNdB, is a single number measure calculated from objective acoustic measurements in accordance with the procedures defined by the Federal Aviation Administration (FAA) and the American National Standards Institute (ANSI). EPNL is calculated from a time sequence of tone-adjusted perceived noise levels which are calculated from one-third octave band noise spectra. The tone adjustments are determined from one-third octave band spectra, by a procedure which estimates the extent of discrete frequency (tone) components from irregularities in the shape of the one-third octave band noise spectra.

Periodic helicopter overflights were observed and measured during this study, and are judged to have a less-than-significant impact on the site when duration and frequency are considered against the total background daytime wall of noise from Tank Farm Road and Broad Street traffic noise sources.

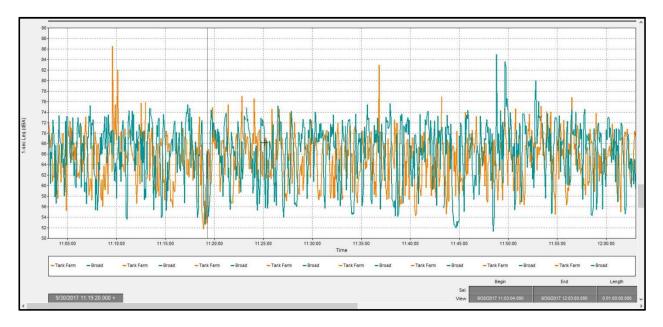
4 Sound Level Measurement

Sound level measurements were made on September 30, 2017 with two calibrated Type 1 Sound Level Meters. The two on-site sound level measurement locations are shown in Figure 7. Weather data including wind speed during the period of measurement is shown in Figure 23 in the Appendix to this report.



Figure 7: Location of on-site sound level measurements, September 30, 2017

The on-site sound level measurements are used to verify the SoundPLAN acoustic model of sound level contours across the site. The two stations plotted simultaneously yielded results that are superimposed and shown in Figure 8. Third Octave Band data was also collected. These data are important in evaluating sound transmission of traffic noise through building assemblies, such as walls, windows and roofs facing the noise source. Third Octave Band data for Tank Farm Road are shown in Figure 9. Third Octave Band data for Broad Street are shown in Figure 10.



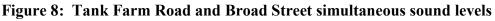
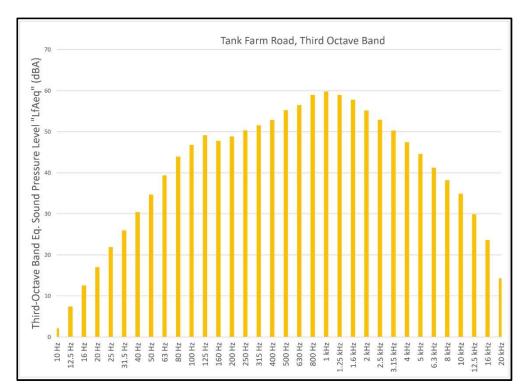


Figure 9: Third Octave Band sound levels, A-weighted, Tank Farm Road



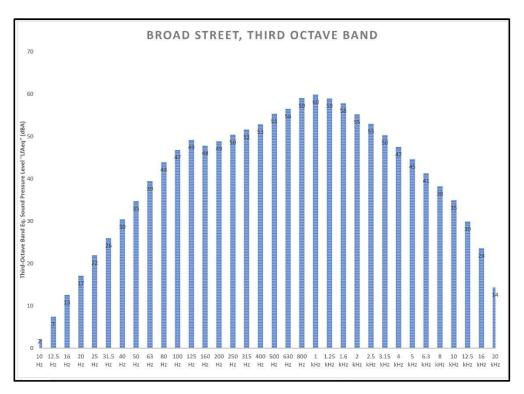


Figure 10: Third Octave Band sound levels, A-weighted, Broad Street

5 Site Sound Level Contours

A Sound Level Contour is a line on a map that represents equal levels of noise exposure. In this case, noise exposure is calculated and modeled as a CNEL value over a 24-hour period. SoundPLAN is the acoustics modeling software program used to calculate noise contours, based on topographic relationships of noise sources and noise receivers. Measured traffic flow and sound level values are used to verify the SoundPLAN generated contours. The following sound level contours depict sound level on the site under two major conditions.

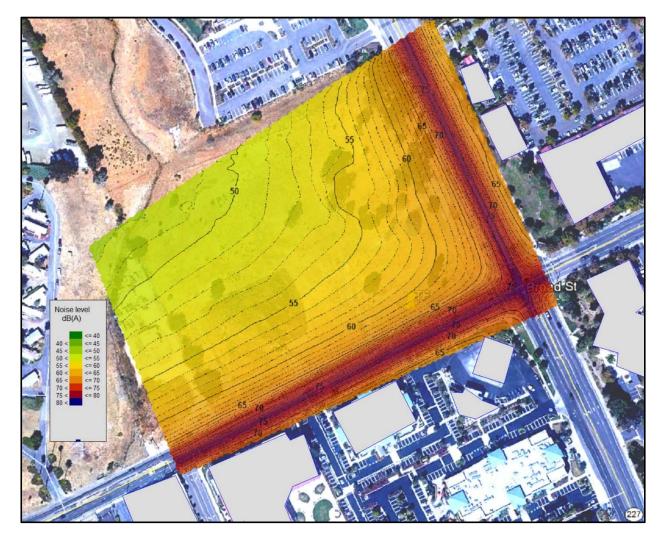
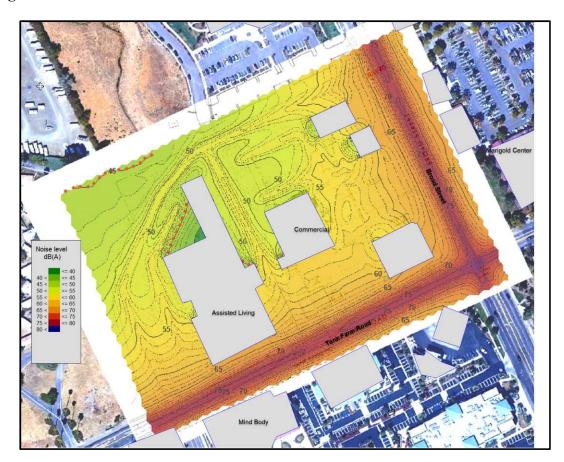
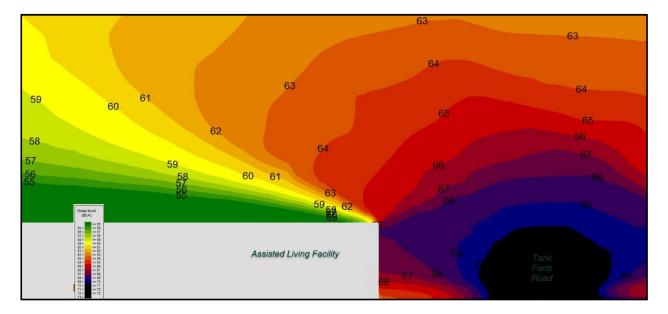


Figure 11: Sound Level Contours at the northwest corner of Broad and Tank Farm Road with no project









6 Contour Disparities

The difference between the sound level contours shown by the City in its 1996 Noise Element exhibit and the measured and modeled contemporaneous sound level contours presented in this report can be attributed to the difference in technology utilized in the 1990s and that used today.

In 1990, when the City's commissioned noise study was completed by Brown-Buntin Associates, the method for drawing sound level contours was based on a mathematical calculation of sound level at fixed and specific distances from the centerline of the roadway. The calculations ignored the effects of topography, shielding by buildings, ground surface variations, absorption and reflection. In 1990, sound level contours were drawn at a constant distance along major roads in the city that ended at the city limits. The calculations accommodated three vehicle types: autos, heavy trucks, and medium trucks at constant speeds. Described at the time, "the noise contour information prepared by the consultants and staff generally reflects conservative (worst case) assumptions, so significant noise exposure concerns are not likely to be omitted or understated."

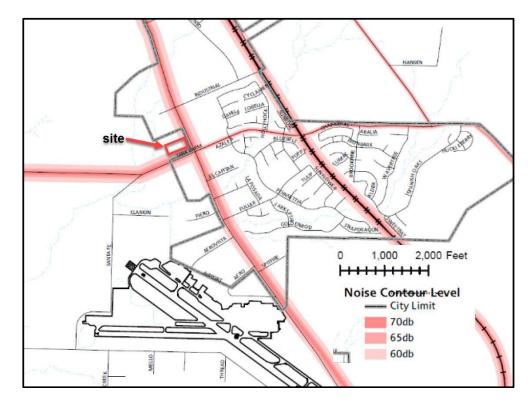


Figure 14: 1990 Noise Contours from City of San Luis Obispo Noise Element of the General Plan



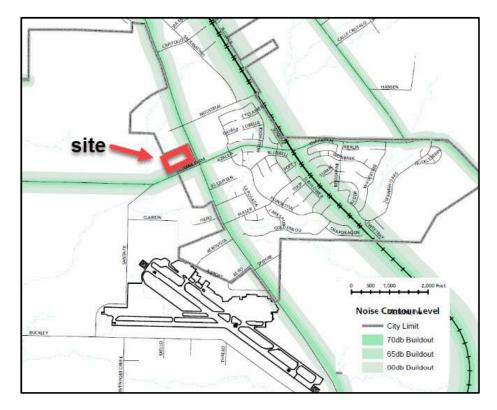


Figure 15: Buildout Noise Contours from City of San Luis Obispo Noise Element of the General Plan

In the present era, using contemporary sound level mapping techniques, there are measurable reflection and absorption effects and multiple variations due to terrain, ground absorption, reflection and blocking of sound by the built environment. Noise contours change as urban density and traffic patterns change. Contemporary sound level contours are an accurate and realistic representation of actual conditions.

7 Regulatory Setting

Noise is regulated at the federal, state and local levels through regulations, policies and/or local ordinances. Local policies are generally adaptations of federal and state guidelines, adjusted to prevailing local condition.

7.1 State Regulation

The State of California's *Guidelines for the Preparation and Content of Noise Element of the General Plan (1987)* makes reference to land use compatibility standards for community noise environments as developed by the California Department of Health Services, Office of Noise Control. Sound levels up to 65 Ldn or CNEL are determined to be normally acceptable for multi-family residential land uses. Sound levels up to 70 CNEL are normally acceptable for buildings containing professional offices or defined as business commercial.

All new Multi-Family housing must comply with California Code of Regulations (CCR)

Title 24. This is included in the California Building Code (CBC), Section 1207, "Sound Transmission" – which specifies the maximum level of interior noise due to exterior sources allowable for new residential developments.

7.2 Local Regulation

CCR Title 24 also defers to local requirements if applicable. The Noise Element of the City of San Luis Obispo General Plan specifies a maximum allowable interior noise level of 45 dBA Ldn for multi-family projects which is consistent with the above policies for interior noise, and also extends this requirement to new single-family dwellings. The City of San Luis Obispo Noise Element also states that 60 dBA Ldn or less is the exterior noise goal for outdoor common areas, defined as areas intended for the use and enjoyment of residents.

Guidelines for transportation noise exposure are contained in City of San Luis Obispo, General Plan Noise Element and Noise Guidebook (1996). The maximum noise exposure standards for noise-sensitive land uses are shown in Figure 16. The maximum noise exposure standards for noise-sensitive land uses due to traffic are shown in Figure 17.

LAND USE	LAND USE Community Noise Exposure Ldn or CNEL, Db		
Residences, Theatres, Auditoriums, Music Halls	55 60 65 70 75 80	? ₩ ₹]	
Schools, Libraries, Museums, Hospitals, Nursing Homes, Meeting Halls, Churches, Mortuaries			
Neighborhood Parks		311. 7 55	
K e Condition exposure s	e, Development may be permitted without specific noise studies or mitigati ally Acceptable, Development may be permitted if designed to meet noise standards; a specific noise studyt is usually required. ble, Development with acceptable noise exposure generally is not possible.		

Figure 16. Community Noise Exposure Ldn / CNEL

	Outdoor Activity Areas ¹		Indoor Spaces	
		L _{dn} or CNEL,		
Land Use	L _{dn} or CNEL, in dB	in dB	L _{eg} in db ²	L _{max} in db ³
Residences, hotels, motels, hospitals, nursing homes	60	45	-	60
Neighborhood parks	65	-	-	-
 If the location of outdoor activity areas is not show use. As determined for a typical worst-case hour during ³L_{max} indoor standard applies only to railroad noise at h 	g periods of use.		at the property line oj	f the receiving land

Figure 17. Maximum Exposure for Noise Sensitive Uses due to Traffic

8 Traffic Characteristics

This section examines the effects of traffic volume and traffic growth over the next 20 years and its effect on growth of sound level at the site.

8.1 Traffic Volume on Broad Street and on Tank Farm Road

The City of San Luis Obispo Transportation and Planning Engineering Division counts selected intersections and segments every two years, and performs speed surveys as required by state law. This data is used for signal timing and other engineering studies. See the maps below for current traffic count information, available in PDF format.

Interactive traffic volumes for each of the streets bounding the project are found in Figure 18, and Figure 19.

8.1 Traffic Growth

Federally funded projects and environmental reviews typically require the projection of traffic volumes 10–30 years in the future, typically assuming a 1%–2% annual growth in vehicle volume. In this report, we have assumed a 20-year period of growth to year 2037, at an annual growth rate of 1 percent (0.01) and an annual growth rate of 1.6 percent (0.016) for Tank Farm Road, as this street is closest to the proposed residential use, the Assisted Living Facility. The calculation in Figure 20 shows the result for Tank Farm Road at two different growth rates, 1% and 1.6%.

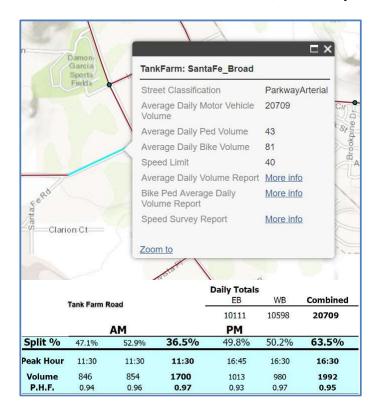


Figure 18: Traffic Volumes for Tank Farm Road, with 2-day average flow



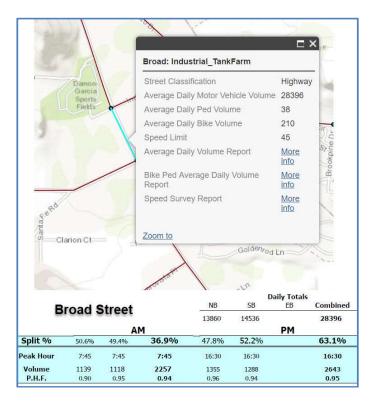


Figure 20. Growth of Noise from Average Daily Traffic, Tank Farm Road

101 0				
1% Grow	th of Noise fr	om Avera	age Daily	Traffic
45dB Acoustics C	onsulting, LLC	P.O.Box 1406	San Luis Obispo, C	A 93406-1406
NWC Broad	/ Tank Farm	Yea	rly Traffic Grow	wth
Scenario 2	Tank Farm Road	d		
Calculation of a	added noise source	s		
				((10^-16)*10^(D9/10))
Present N	loise Level (LDN)	65 dBA	intensity=	3.16E-10 W/cm2
p	resent traffic flow	20710 ADT		
	future traffic flow	25270 ADT		dBA additional
Future N	loise Level (LDN)	65.9 dBA	10*LOG10	(D13/D12)
sce	nario 2			
	sent traffic ADT			
	owth Rate / Year			
20 nun	nber of years			
25270 futu	re traffic ADT			
Future = prese	nt v (1+i)^n			
1.6% Growth		Average	Daily Tr	offic
5dB Acoustics Consultin				uis Obispo, CA 93406-1406
NWC Broad / Tan		2020		
Scenario 1 Tank	and the second	0		
Calculation of Future	Noise Level			
				((10^-16)*10^(D9/10))
Prese	ent Noise Level (LD	N) 65.0	dBA intens	ity= 3.16E-10 W/cm ²
	present traffic flo	ow 20710	ADT (avera	age daily traffic)
	future traffic flo	ow 28448	ADT 1.	4 dBA additional
Futu	ure Noise Level (LD	N) 66.4	dBA 10*LOG	510(D13/D12)
scenario	1			
enter>	20710 present	traffic ADT		
	0.016 Growth	Rate / Year		
	20 number	of years		
	Zumumber			
	28448 future tra	affic ADT		

8.2 Traffic Flow and Sound Level

Consulting the book, *A Policy on Geometric Design of Highways and Streets*, helps to understand the issues in measuring sound level resulting from traffic flow. There are several descriptors of traffic flow from Average Daily Traffic (ADT) to Design Hourly Volume (DHV) of traffic on a road or highway. DHV is sometimes used as a benchmark for sound level measurements. However, the DHV is defined as the 30th highest hourly volume in the "design" year, whereas the Peak Hour Volume (PHV) is defined as the highest hourly volume during an average day.

Depending on the type of roadway, the PHV may be from 5 to 45 percent lower than the DHV.

The definition infers that if a highway or street is to adequately serve throughout its life, its physical capacity will only be exceeded for about 30 hours out of the total 8,760 hours in the "design" year. The choice of the 30th highest hourly volume is a long-held concept which stems from research published in *A Policy on Geometric Design of Highways and Streets (reference 1.)*

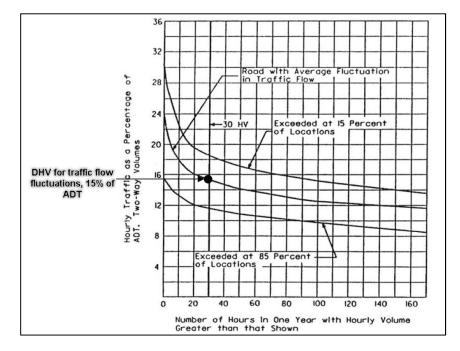


Figure 21. Relationship Between Peak-Hour and Average Daily Traffic Volumes.

Visually comparing the traffic flow trend lines above indicates that significant traffic flow changes occur at the inflection point of the 30th highest volume hour of the year. The difference in volume of traffic between the 1st highest hourly volume and the 30th increases rapidly. For the remainder of the hours between the 30th and the 170th, there is very little change in the slope of the curves. This indicates that *designing for that 30th hour* would cover the expected traffic volume at almost any given hour in a given day of a given week in a given month of a given year.

Noise impacts are measured during the one-hour period when the worst-case noise levels are expected to occur. This may or may not be the peak hour of traffic. That is, higher traffic volumes can lead to higher congestion and lower operating speeds. Since higher speeds lead to higher noise emissions from motor vehicles, the worst-case noise levels may occur in hours with lower volumes and higher speeds. In addition, vehicle mix may also change hourly. On many highways, the percentage of heavy trucks is reduced during peak hour. Since heavy trucks have greater sound emissions than passenger cars, vehicle mix is an important component in determining the peak hour of noise impact. shows Level of Service vs General Operating Conditions.

Level of Service	General Operating Conditions
A	Free flow
В	Reasonably free flow
С	Stable flow
D	Approaching unstable flow
E	Unstable flow
F	Forced or breakdown flow

Figure 22. Level of Service vs General Operating Conditions

During the sound level measurement for this project, Level of Service (LOS) was observable and gives us confidence that we are measuring during a busy-but-not-congested time period. The LOS during the measurements was generally Level B to Level C and at one time became Level of Service D.

9 Conclusion

The measured and predicted sound levels affecting the proposed NWC Tank Farm Road and Broad Street project are primarily a result of transportation noise along the two arterial transportation routes. Airport noise levels at the site are considerably lower than traffic noise levels and are mostly inaudible at the southern and western boundary of the site. Future additional noise level from transportation sources at buildout will be less than three decibels, which is a barely noticeable difference, subjectively.

The existing and future sound levels at the south elevation of the Assisted Living Facility will require noise mitigation to insure interior habitable spaces facing south do not exceed annual CNEL = 45 dBA. The mitigation will most likely be wall, window and door assemblies with an enhanced Sound Transmission Class rating to resist the street noise coming from Tank Farm Road.

for 45dB Acoustics, LLC David Lord, PhD

Navid Loral

10 Glossary

A-Weighted Sound Level (dBA)

The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made. A-weighting de-emphasizes the low and very high frequency components of the sound in a manner similar to the response of the average human ear. A-weighted sound levels correlate well with subjective reactions of people to noise and are universally used for community noise evaluations.

Air-borne Sound

Sound that travels through the air, differentiated from structure-borne sound.

Ambient Sound Level

The prevailing general sound level existing at a location or in a space, which usually consists of a composite of sounds from many sources near and far. The ambient level is typically defined by the Leq level.

Background Sound Level

The underlying, ever-present lower level noise that remains in the absence of intrusive or intermittent sounds. Distant sources, such as Traffic, typically make up the background. The background level is generally defined by the L90 percentile noise level.

Community Noise Equivalent Level (CNEL)

The Leq of the A-weighted noise level over a 24-hour period with a 5 dB penalty applied to noise levels between 7 p.m. and 10 p.m. and a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m. CNEL is similar to Ldn.

Day-Night Sound Level (Ldn)

The Leq of the A-weighted noise level over a 24-hour period with a 10 dB penalty applied to noise levels between 10 p.m. and 7 a.m. Ldn is similar to CNEL.

Decibel (dB)

The decibel is a measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

DBA or dB(A)

A-weighted sound level. The ear does not respond equally to all frequencies, but is less sensitive at low and high frequencies than it is at medium or speech range frequencies. Thus, to obtain a single number representing the sound level of a noise containing a wide range of frequencies in a manner representative of the ear's response, it is necessary to reduce the effects of the low and high frequencies with respect to the medium frequencies. The resultant sound level is said to be A-weighted, and the units are dBA. The A-weighted sound level is also called the noise level.

Energy Equivalent Level (Leq)

Because sound levels can vary markedly in intensity over a short period of time, some method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, one describes ambient sounds in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called Leq and the time period is specified, i.e., ten minutes, or one hour.

Field Sound Transmission Class (FSTC)

A single number rating similar to STC, except that the transmission loss values used to derive the FSTC are measured in the field. All sound transmitted from the source room to the receiving room is assumed to be through the separating wall or floor-ceiling assembly.

Outdoor-Indoor Transmission Class (OITC)

A single number classification, specified by the American Society for Testing and Materials (ASTM E 1332 issued 1994), that establishes the A-weighted sound level reduction provided by building facade components (walls, doors, windows, and combinations thereof), based upon a reference sound spectrum that is an average of typical air, road, and rail transportation sources. The OITC is the preferred rating when exterior façade components are exposed to a noise environment dominated by transportation sources.

Single Event Noise Exposure Level (SENEL)

The time-integrated A-weighted sound pressure level of a single aircraft flyover (which exceeds a threshold noise level) which is expressed by the level of an equivalent one-second duration reference signal.

Sound Transmission Class (STC)

STC is a single number rating, specified by the American Society for Testing and Materials, which can be used to measure the sound insulation properties for comparing the sound transmission capability, in decibels, of interior building partitions for noise sources such as speech, radio, and television. It is used extensively for rating sound insulation characteristics of building materials and products.

Structure-Borne Sound

Sound propagating through building structure. Rapidly fluctuating elastic waves in gypsum board, joists, studs, etc.

Subjective Loudness Level

In addition to precision measurement of sound level changes, there is a subjective characteristic which describes how most people respond to sound:

- A change in sound level of 3 dBA is *barely perceptible* by most listeners.
- A change in level of 6 dBA is *clearly perceptible*.
- A change of 10 dBA is perceived as being *twice* (or *half*) as loud.

11 Appendix

11.1 Sound level modeling

Sound level contours based on topographic data, reflection and absorption are generated for assessment using *SoundPLAN* noise simulation software. The software calculates sound attenuation of environmental noise around buildings. For this project, the land between the sources (road and airport operations) and receiver project boundary, is generally flat and partially paved. The modeling software calculates the sound field in accordance with ISO 9613-2 "Acoustics - Attenuation of sound during propagation outdoors, Part 2: General Method of Calculation." This standard states that "this part of ISO 9613 specifies an engineering method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound pressure level under meteorological conditions favorable to propagation from sources of known sound emissions."

11.2 Sound Level Measurement

The protocol used for the sound level measurements is prescribed in detail by the American Society for Testing and Materials (ASTM) in their E 1014 publication. The procedures and standards in that document were met or exceeded for sound level measurements shown in this report. The standards of ASTM E 1014 are exceeded by using Type 1 (Class 1) sound level meters for all measurements in this report instead of less accurate Type 2 meters. Therefore, the precision of the measurements in this report is likely to be better than +/- 1 dB. The sound level meters used for measurements shown in this report are Norsonic Nor140 Sound Analyzers. These sound level meters were calibrated before and after each sound level measurement. The measurement results from both sound level meters running simultaneously were compared and found to be in close agreement.

11.3 Wind Speed

Temperature, pressure and wind speed and direction data at San Luis Obispo County Regional Airport weather station are shown in Figure 23. During the measurement period from on September 30, 2017, the sky was essentially clear, and *at the measurement locations* the wind speed was generally less than 10 mph from the west and north. Wind speed above 12 mph has an increasing adverse effect on the accuracy of sound level measurements (reference: Federal Highway Administration, Noise Measurement).

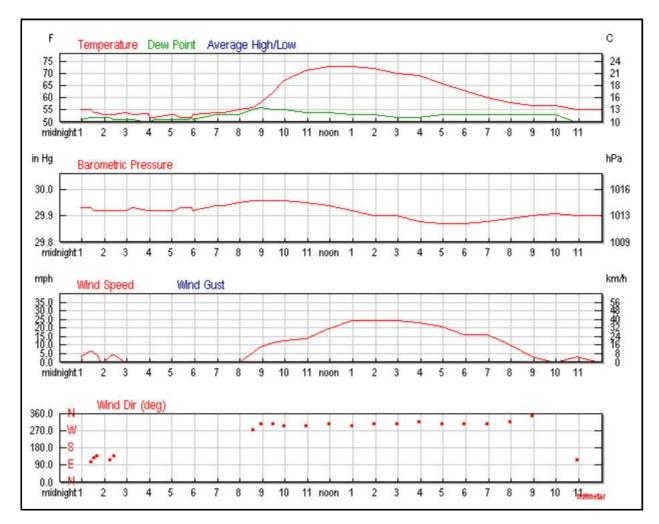


Figure 23: September 30, 2017 Climate Data

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Attachment 8

Technical Noise Analysis Report



Tank Farm Road Assisted Living Facility and Retail Project 3985 Broad Street and 660 Tank Farm Road, San

Technical Noise Analysis Report

prepared for

City of San Luis Obispo

Community Development 919 Palm Street San Luis Obispo, CA 93401-3218 Contact: Doug Davidson

prepared by

Rincon Consultants, Inc. 1530 Monterey Street, Suite D San Luis Obispo, California 93401

June 2019



Table of Contents

1	Projec	t Description and Impact Summary	1
	1.1	Introduction	1
	1.2	Project Summary	1
2	Backgr	ound	6
	2.1	Overview of Sound	6
	2.2	Sensitive Receivers	7
	2.3	Project Noise Setting	7
	2.4	Regulatory Setting	
3	Impact	t Analysis	15
	3.1	Significance Thresholds	15
	3.2	Methodology	15
	3.3	Impact Analysis	18
4	Conclu	isions	22
5	Refere	nces	23

Tables

Table 1	Summary of Impacts	1
Table 3	Project Vicinity Sound Level Monitoring Results	9
Table 4	Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due to Transportation Noise Sources	. 11
Table 5	City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due to Stationary Noise Sources	. 11
Table 6	Exterior Noise Limits	. 13
Table 7	Maximum Time Periods for Increased Noise Levels	. 13
Table 8	Summary of Compatibility of Land Uses with CNEL Contours	. 14
Table 9	Potential HVAC Models	. 16
Table 10	Noise Levels from On-site Operations	. 19

Figures

Figure 1	Regional Location	2
Figure 2	Project Site Location	4
Figure 3	Project Site Plan	5
Figure 4	Noise Measurement Location	10
Figure 5	Noise Sources and Receiver Locations	17

Figure 6	On-site Operational Noise Level Contours	20
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Appendices

- Appendix A Noise Measurement Data
- Appendix B HVAC Specifications
- Appendix C SoundPLAN Input and Output Data

1 Project Description and Impact Summary

1.1 Introduction

This study analyzes the potential noise impacts of the proposed Tank Farm Road Assisted Living Facility and Retail Project (project) at 660 Tank Farm Road, in San Luis Obispo, California. Rincon Consultants, Inc. (Rincon) prepared this study under contract to the City of San Luis Obispo (City) for use by the City in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). The purpose of this study is to analyze the project's noise impacts related to long-term operation of the project.

This analysis demonstrates that the project complies with all City noise standards. The conclusions of this study are summarized in Table 1.

Impact Statement	Proposed Project Level of Significance	Applicable Measures
Would the proposed project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than significant (operation)	None
For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed project expose people residing or working in the project area to excessive noise levels?	No Impact	None

Table 1 Summary of Impacts

1.2 Project Summary

Project Location and Background

The project is located at 660 Tank Farm Road in San Luis Obispo, California (Assessor's Parcel Numbers 053-421-003 and 053-421-004). The total development area is 10.24 acres (446,054 square feet) and is identified as Special Focus Area 12 in the San Luis Obispo General Plan (City of San Luis Obispo 2014). See Figure 1 for the regional location.

City of San Luis Obispo Tank Farm Road Assisted Living Facility and Retail Project



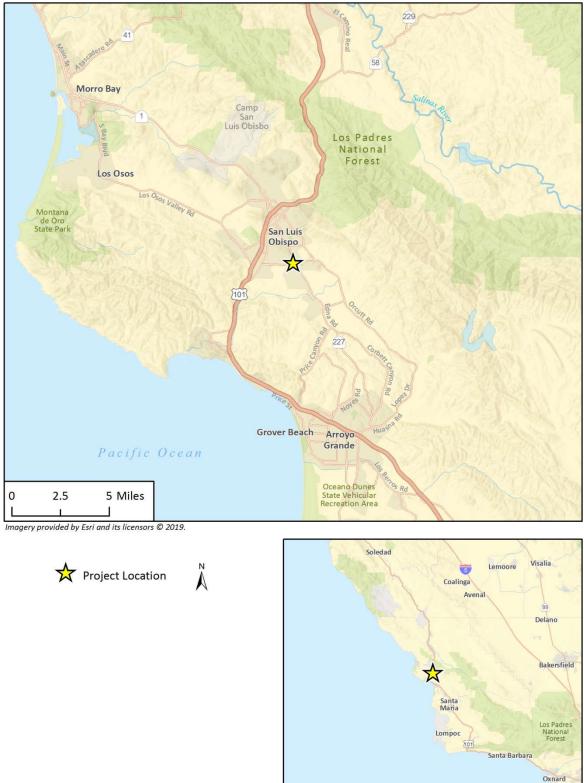


Fig.1 Regional location

The project site is bordered by a commercial development to the northwest, a mobile home park (Hidden Hills Mobilelodge) to the southwest, Broad Street (Highway 227) to the northeast, and Tank Farm Road to the southeast. A redevelopment project including a mixed-use development of 249 residential units and 17,500 square feet of commercial space is proposed for the mobile home park located at 650 Tank Farm. There are commercial developments to the northeast across Broad Street, and to the southeast across Tank Farm Road. See Figure 2 for the project site vicinity.

Proposed Project

The project would involve construction of an approximately 133,655-square foot assisted living facility with 111 suites and 28 memory care beds, and six retail buildings with a total floor area of 45,269 square feet. The project would also include a surface parking lot with approximately 288 vehicle spaces and 67 bicycle parking spaces. See Figure 3 for the project site plan.

Figure 2 Project Site Location



Imagery provided by Microsoft Bing and its licensors © 2019.

Figure 3 Project Site Plan



Source: McKently Malak Architects

2 Background

2.1 Overview of Sound

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted (dBA) sound pressure level (SPL). The A-weighting scale is an adjustment to the actual SPLs to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999).

Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease (Crocker 2007).

In technical terms, sound levels are described as either a "sound power level" or a "sound pressure level," which while easily confused are two distinct characteristics of sound. Both share the same unit of measure, the dB. However, the sound power level, expressed as L_w, is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave in the air that exerts pressure on receivers such as an eardrum or microphone, the SPL. Sound measurement instruments only measure SPL, and limits used in standards are generally SPL. Modeling uses the L_w of equipment to calculate the SPL at a distance.

Human perception of noise has no simple correlation with sound energy. The perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., 2x the sound energy); that a change of 5 dBA is readily perceptible (8x the sound energy); and that an increase (decrease) of 10 dBA sounds twice (half) as loud ((10.5x the sound energy) (Crocker 2007).

Sound changes both in level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner in which noise reduces with distance depends on the important factors, including the type of sources, i.e., point or line, the path the sound will travel, site conditions and obstructions. Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (6dBA/DD) (e.g., industrial machinery, ventilation units, etc.). Noise from a line source (e.g., roadway, pipeline, railroad, etc.) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dBA per doubling of

distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, as well as man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (FHWA 2011).

Buildings also can substantially reduce exposure to noise. Based on the Federal Highway Administration's (FHWA) modern building construction generally provides an exterior-to-interior noise level reduction of 20 – 35 dBA with closed windows (FHWA 2011).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. One of the most frequently used noise metrics that considers both duration and intensity is the equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, L_{eq} is equivalent to a one-hour period, even when measured for shorter durations as the noise level of a 10-30 minute period would be the same as the hour if the noise source is relatively steady. L_{max} is the highest root mean squared (rms) SPL within the sampling period, and L_{min} is the lowest rms SPL within the measuring period (Crocker 2007).

Since noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (L_{dn} or DNL), which is a 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by DNL and CNEL usually differ by about 0.5 dBA. The relationship between the peak hour L_{eq} value and the DNL/CNEL depends on the distribution of traffic during the daytime, evening, and nighttime. Quiet suburban areas typically have a CNEL in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 70+ CNEL range. Normal conversational levels at 3 feet are in the 60 to 65-dBA L_{eq} range, and ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (FTA 2018).

2.2 Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with users of these land uses. The following land uses are typically considered noise-sensitive: single-family and multiple-family residences, long-term care facilities (including convalescent and retirement facilities), dormitories, motels, hotels, transient lodgings and other residential uses, houses of worship, hospitals, libraries, schools, auditoriums, concert halls, outdoor theaters, nature and wildlife preserves, and parks. The nearest existing noise sensitive receivers to the project site are existing and future residential land uses southwest of the project site within a mobile home park. The existing mobile home park is located 110 feet from the project boundary.

2.3 Project Noise Setting

The most common source of noise in the project site vicinity is vehicular traffic on Broad Street and Tank Farm Road. Traffic noise on these roadways control noise levels throughout the project area.

To determine ambient sound levels at and near the project site, sound level measurements were collected by Rincon on May 22, 2019 between the hours of 1:30 p.m. and 3:11 p.m. using an ANSI Type 2 integrating sound level meter. The noise meter was placed five feet above ground level, the approximate height of the average human ear.

Noise Measurement (NM) 1 was taken within the Hidden Hills Motorlodge mobile home park to sample the typical daytime noise levels. NM 2 was taken 50 feet from Broad Street, southwest of the project site, and based on City traffic count data, is representative of the loudest traffic noise levels experienced by noise sensitive land uses along this roadway. NM 3 was taken 50 feet north of Tank Farm Road, east of the project site, and based on City traffic count data, is representative of the loudest traffic noise levels along Tank Farm Road.

Figure 4 shows the noise measurement locations, while Table 2 summarizes noise measurement. Noise levels are provided in L_{eq} for the measurement period; L_{max} is also provided.

Table 2 Project Vicinity Sound Level Monitoring Results

#	Measurement Location	Sample Times	dBA L _{eq}	dBA L _{max}	Dominant Noise Source
1	Hidden Hills Motorlodge	1:29 - 1:58 p.m.	52.2	70.7	Traffic
2	50 feet south of Broad Street	2:16 - 2:35 p.m.	69.2	87.2	Traffic
3	50 feet east of Tank Farm Road	2:52 - 3:11 p.m.	64.9	78.9	Traffic

2.4 Regulatory Setting

City of San Luis Obispo General Plan Noise Element and Noise Guidebook

The City of San Luis Obispo General Plan Noise Element includes land use compatibility standards. The City's maximum noise exposure standards for noise-sensitive land uses (specific to transportation noise sources) are shown in Table 3.

Figure 4 Noise Measurement Location



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	Outdoor Activity Areas ¹	Interior Spa	ices
Land Use	Ldn ² or CNEL	Ldn ² or CNEL	L _{eq} ³
Residences, hotels, motels, hospitals, nursing homes	60	45	
Theaters, auditoriums, music halls			35
Churches, meeting halls, office building, mortuaries	60		45
Schools, libraries, museums			45
Neighborhood parks	65		
Playgrounds	70		

Table 3Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due toTransportation Noise Sources

1. If the location of outdoor activity areas is not shown, the outdoor noise standard shall apply at the property line of the receiving land use.

2. Ldn (day-night average sound level) is the energy-averaged sound level measured over a 24-hour period, with a 10-dB penalty assigned to noise events occurring between 10:00 PM and 7:00 AM and a 5-dB penalty assigned to noise events occurring between 7:00 PM and 10 PM.

3. L_{eq} (equivalent sound level) is the constant or single sound level containing the same total energy as a time-varying sound, over a certain time. If the location of outdoor activity areas is not shown, the outdoor noise standard shall apply at the property line of the receiving land use.

Source: City of San Luis Obispo General Plan, Noise Element 1996.

The City requires that noise generated by new stationary sources be mitigated so as not to exceed the exposure standards shown in Table 4 for noise-sensitive uses, as measured at the property line of the receiver.

Table 4City Maximum Noise Exposure for Noise-Sensitive Land Use Areas Due toStationary Noise Sources

	Daytime (7:00 AM to 10:00 PM)	Nighttime (10:00 PM to 7:00 AM)
Hourly L_{eq} in dB 1, 2	50	45
Maximum level in dB 1, 2	70	65
Maximum impulsive noise in dB 1, 3	65	60

1. As determined at the property line of the receiver. When determining effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property-line noise mitigation measures.

2. Sound level measurements shall be made with slow meter response.

3. Sound level measurements shall be made with fast meter response.

Source: City of San Luis Obispo General Plan Noise Element, 1996.

The City's Noise Element lists mitigation strategies in a descending order of preference. If preferred strategies are not implemented, it is the responsibility of the project applicant to demonstrate through a detailed noise study that the preferred approaches are either not effective or not practical, before considering other design criteria described in the General Plan. The City considers the following mitigation measures appropriate where existing sound levels significantly impact

noise-sensitive land uses, or where cumulative increases in sound levels resulting from new development significantly impact existing noise-sensitive land uses:

- Rerouting traffic onto streets that can maintain desired levels of service, consistent with the Circulation Element, and which do not adjoin noise-sensitive land uses.
- Rerouting trucks onto streets that do not adjoin noise-sensitive land uses.
- Constructing noise barriers.
- Reducing traffic speeds through street or intersection design methods.
- Retrofitting buildings with noise-reducing features.
- Establishing financial programs, such as low-cost loans to owners of a noise-impacted property, or developer fees to fund noise-mitigation or trip-reduction programs.

The City's maximum noise exposure standards for noise-sensitive land uses (specific to stationary noise sources) are shown in Table 4.

The following Noise Element policies are applicable to the project and the local noise environment:

Policy 1.4. New Transportation Noise Sources. Noise created by new transportation noise sources, including road, railroad, and airport expansion projects, shall be mitigated to not exceed the levels specified in Table 4 for outdoor activity areas and indoor spaces of noise-sensitive land uses which were established before the new transportation noise source.

Policy 1.6. New Development and Stationary Noise Sources. New development of noisesensitive land uses may be permitted only where location or design allow the development to meet the standards of Table 4, for existing stationary noise sources.

City of San Luis Obispo Municipal Code, Title 9, Chapter 9.12 (Noise Control).

The San Luis Obispo Municipal Code (SLOMC) (§9.12.060) specifies noise standards for various categories of land use. These limits, shown in Table 5, would apply to long-term operation of the site. As shown in Table 6, these noise level standards are not to be exceeded more than 30 minutes in any one hour and noise levels are prohibited from exceeding the noise level standard plus 20 dBA for any period of time.

Zoning Designation	Time Period	Maximum Acceptable Noise Level (dBA)			
Low- and Medium-Density Residential (R-1	10:00 PM – 7:00 AM	50			
and R-2); Conservation/Open Space (C/OS)	7:00 AM – 10:00 PM	55			
Medium- and High-Density Residential (R-3	10:00 PM – 7:00 AM	50			
and R-4)	7:00 AM – 10:00 PM	55			
Office and Public Facility (O and PF)	10:00 PM – 7:00 AM	55			
Office and Public Facility (O and PF)	7:00 AM – 10:00 PM	60			
Neighborhood, Retail, Community,	10:00 PM – 7:00 AM	60			
Downtown and Tourist Commercial (C-N, C- R, C-C, C-D, C T)	7:00 AM – 10:00 PM	65			
Service Commercial (C-S)	Any Time	70			
Manufacturing (M)	Any Time	75			
Source: City of San Luis Obispo Municipal Code Section 9.12.060					

Table 5 Exterior Noise Limits

Table 6 Maximum Time Periods for Increased Noise Levels

Noise Standard for Existing Land Use	Maximum Time Period Allowed
+0 dBA	30 minutes/hour
+5 dBA	15 minutes/hour
+10 dBA	5 minutes/hour
+15 dBA	1 minute/hour
+20 dBA	Any time

Airport Land Use Plan for the San Luis Obispo County Regional Airport.

The San Luis Obispo County Regional ALUP details restrictions on development within the airport vicinity. As described in the ALUP, residential land uses, restaurants, and public assembly areas, among other items, exist as Extremely Noise Sensitive Land Uses. Applicable ALUP policies describe the noise conditions that may affect the project site. These conditions are shown below and described in Table 7.

Policy N-1. Would permit or fail to sufficiently prohibit establishment within the projected 60-dB CNEL contour of any extremely noise-sensitive land use.

Policy N-2. Would permit or fail to sufficiently prohibit any extremely noise-sensitive land use within the projected 55-dB CNEL contour, with the exception of developments which meet the criteria delineated in Section 4.3.2.3 for designation as infill.

Policy N-3. Would permit or fail to sufficiently prohibit any moderately noise-sensitive land use within the projected 55-dB CNEL contour, with the exception of developments which meet the requirements for mitigation of interior noise levels specified in Table 4 and in Section 4.3.3.

Policy N-4. Would permit or fail to sufficiently prohibit, in any location which is within or adjacent to an area of demonstrated noise incompatibility or in an acoustic environment substantially similar to an area of demonstrated noise incompatibility:

- 1. Any new residential or other extremely noise-sensitive development
- 2. Any new moderately noise-sensitive development, unless adequate, specific, and detailed provisions are set forth to mitigate noise incompatibility between allowable or proposed noise-sensitive uses (including foreseeable outdoor activities) and airport operations.

Table 7 Summary of Compatibility of Land Uses with CNEL Contours

Noise Environment	Extremely Noise-Sensitive Land Uses			
Inside 60 dB CNEL contour	Prohibited			
Between 55 and 60 dB CNEL contours	Allowable only within a Designated Residential Infill Area (with appropriate noise mitigation) or as a Small-Scale Residential Project			
Outside 55 CNEL dB contour	Allowed			
Source: Airport Land Use Commission, 2014.				

3 Impact Analysis

3.1 Significance Thresholds

To determine whether a project would have a significant noise impact, Appendix G of the *CEQA Guidelines* requires consideration of whether a project would result in:

- 1. A substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- 2. Be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?

Land Use Compatibility

The City has adopted noise guidelines that provide the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for different land uses. The proposed project would include multi-family residences. Based on the City's noise compatibility matrix shown in Table 3. The project's noise and land use compatibility was evaluated under separate cover in the *Acoustical Assessment of Proposed Residential & Commercial projects at Northwest Corner, Tank Farm and Broad Street San Luis Obispo, CA*, prepared by 45 dB and dated October 31, 2017. Therefore, the significance of the project's land use and noise compatibility are not addressed in the flowing analysis.

On-site Operational Noise

According to the SLOMC, Section 9.12.060, operational noise from on-site noise level source would result in a significant impact if the project would exceed the City noise levels limits at the property line of affected land use as defined in Table 5.

Off-site Traffic Noise

Off-site project noise (i.e., roadway noise) would result in a significant impact if the project would cause the traffic noise level measured at the property of affected uses to increase by 5 Ldn if the existing or future noise level would be below the "normally unacceptable" noise level for the affected land use category as identified in Table 3, or 3 Ldn if the existing or future noise level exceeds the "normally unacceptable" noise level for the affected land use category.

3.2 Methodology

Off-site Traffic Noise

The project would generate vehicle trips, thereby increasing traffic on area roadways. As discussed above, to determine ambient noise levels at the project site and at nearby sensitive receivers, Rincon collected a sound level measurement on May 22, 2019 (see Table 2 and Appendix A).

The trip generation rates for the project are based on the project traffic impact analysis, *660 Tank Farm Mixed Use Project, Multimodal Transportation Study*, prepared by Central Coat Transportation Consulting dated November 2018 (traffic study). According to the traffic study, the project would generate a net increase of 1,930 trips on the local transportation system.

Roadway noise impacts were assessed on Broad Street and Tank Farm Road as it is anticipated most project related traffic would access the site from Tank Farm Road via Broad Street. Existing average daily traffic (ADT) volume on Broad Street is approximately 28,396 and 20,709 on Tank Farm Road based on city traffic count data (City of San Luis Obispo 2019).

On-site Noise

On-site noise sources were modeled with Sound Plan. Propagation of modeled stationary noise sources was based on ISO Standard 9613-2, "Attenuation of Sound during Propagation Outdoors, Part 2: General Method of Calculation." The assessment methodology assumes that all receivers would be downwind of stationary sources. This is a worst-case assumption for total noise impacts, since, in reality, only some receivers will be downwind at any one time.

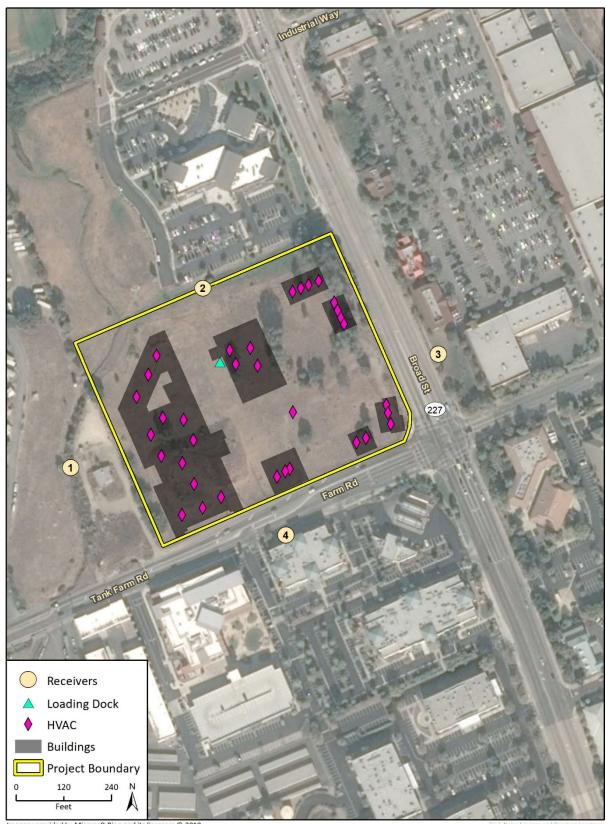
The project would include people gathering and conversing in outdoor recreation areas and heating, air conditioning, and ventilation (HVAC) units. Noise model receivers were located at each property line of the off-site land uses. Please see Figure 5 for noise source and receiver locations. All receivers were modeled 5 feet above ground level, which is the height of the average human ear (Caltrans 2013).

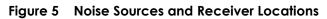
It is not known at this time which manufacturer, brand, or model of HVAC units will be selected for use in the project. However, based on the square footages of each structure it is estimated that the proposed buildings would require approximately 304 tons of HVAC. However, more than one size of HVAC unit may be used to provide the necessary space conditioning. Based on a review of published noise level data for Trane and Carrier HVAC Units, sound power levels could range between 68 and 88 dBA L_w for units of between 5 and 20 tons. For purposes of assessing noise levels at property lines, units similar to what would be required have been identified and are provided in Table 8 with the sound power level used in the modeling. It is anticipated the project would use a combination of similar units. To be conservative, the project was modeled using single Carrier 38AUD25, unit as it would represent the highest potential noise level. HVAC specification sheets are included in Appendix B.

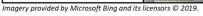
Manufacturer/Model	Nominal HVAC Tons	Sound Power Level per Unit
Reem RA1325AJ1NA	2	75.5
Reem RA1336AJ1NA	3	72.4
Reem RA1360AJ1NA	5	77.7
Carrier 38AUD16	10	83
Carrier 38AUD25	20	85
See Appendix B		

Table 8 Potential HVAC Models

All HVAC units were modeled as being three feet above the roof elevation. The HVAC units were assumed to operate at 100 percent of an hour.







The project includes loading docks in the rear of Buildings A–F. In order to evaluate noise from truck delivery, the analysis utilizes measurements of reference noise level taken at an Albertson's Shopping Center in San Diego, California, in 2011 (Ldn Consulting 2011). The measurements include truck drive-by noise, truck loading/unloading, and truck engine noise. The exterior noise levels for a single truck drive-by noise and a single truck's engine idling noise were measured at 66.5 dBA Leg at a distance of 25 feet from the loading dock. The on-site maneuvering associated with the delivery trucks consists of the truck entering the site and traveling toward and backing into the loading dock. A truck would take approximately 5 minutes to drive in the site and position itself into a bay, 30 to 45 minutes to be unloaded or loaded, and another 5 minutes to exit the bay secure doors, complete necessary paperwork, and drive out of the site. This equates to 40 to 55 minutes that it would take for one truck to complete a delivery or pickup, therefore each loading dock is only anticipated to accommodate only one truck per hour. During the loading/unloading of the truck, the engine can only idle for 5 minutes in compliance with state air quality requirements. It was assumed that each truck engine would be operating for up to 15 minutes of the total time required during the delivery process (5 minutes at arrival, 5 minutes of idling, and 5 minutes at departure). Accounting for the limited time of operation, average hourly noise levels would equate to 60.5 dBA Leq at a distance of 25 feet for each loading dock. The loading dock was modeled 1.5 meters above the ground.

Please see Figure 5 for locations of modeled sources.

3.3 Impact Analysis

CEQA Appendix G Noise Threshold 1

Would the proposed project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (*Less than Significant*)

On-site Operational Noise

The proposed residential project would require periodic trash hauling services. However, the project site is located in a developed area and would be surrounded by multi-family residential and commercial uses that require similar trash hauling services. Therefore, as trash trucks are already a common occurrence in the project vicinity, trash services would not result in a noticeable increase in ambient noise levels above levels existing without the project.

The project would include outdoor patio space for the private use residents. Operational noise associated with outdoor use area would generally be limited to conversations and would be shielded by the proposed buildings. These noise-generating activities would result in a negligible change to existing noise levels. Noise from conversation would also be an intermittent and temporary noise source. Therefore, noise impacts related to outdoor seating areas would be less than significant.

The project would include rooftop heating, ventilation, and air conditioning (HVAC) equipment. Typically, HVAC equipment is provided at a rate of 1-ton of nominal cooling/heating per 600 square feet. Various sizes of HVAC units would be required to meet the needs of the different proposed uses. Based on the type of development and density of development in the project area, it is anticipated the HVAC units would be roof mounted. The HVAC would be approximately three feet above the roof level. A loading dock would be located at the western side of Building 1. The loading dock would be screened with the solid barrier. The loading dock was modeled 1.5 meters above ground level.

All on-site noise sources were modeled as a cumulative operational scenario. Table 9 provides a summary of the noise levels at each receiver shown with the noise level contours in Figure 6. Detailed modeling inputs and out puts are included in Appendix C.

Receiver ID ¹	Location	Noise Level at Receiver ² (dbA L _{eq})	Noise Level Limit	Does the Project Exceed Standard?
1	Hidden Hills Motorlodge	43	50	No
2	SESLOC	47	55	No
3	Shopping Center	45	60	No
4	Medical Offices	46	60	No

Table 9 Noise Levels from On-site Operations

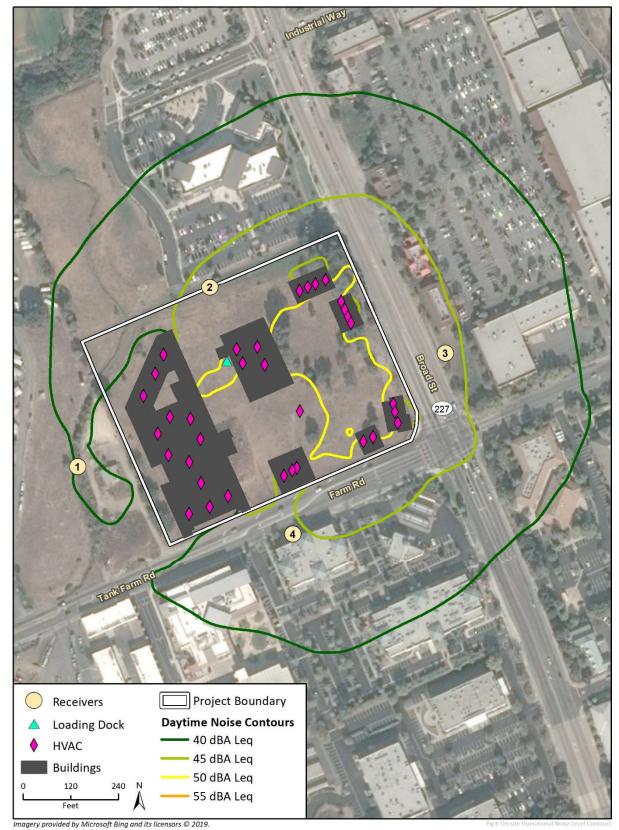
As shown in Table 9, project operations would not generate noise levels in excess of the City noise level limits. Additionally, noise levels generated by on-site noise levels would not substantially increase ambient noise levels at the surrounding properties. Therefore, on-site noise sources would result in less than significant noise impacts.

Off-site Traffic Noise Impacts

The proposed project would generate new vehicle trips and incrementally increase traffic on area roadways. A project would result in a significant off-site traffic noise impact if it would cause the ambient noise level measured at the property line of affected uses to increase by 3 CNEL to or within the "normally unacceptable" or "clearly unacceptable" category as identified in Table 4, or by 5 CNEL or more if existing or future noise levels are below the normally actable category. Based on trip generation estimates, the project would result in a maximum increase of 1,930 ADT on local roadways. Existing traffic on Tank Farm Road is approximately 20,709 ADT between Broad Street and Santa Fe Road. Existing traffic on Broad Street is 28,396 ADT between Tank Farm Road and Industrial Way and 22,944 between Tank Farm Road and Fuller Road. Adding the full 1,930 ADT to Tank Farm Road or Broad Street would result in a less than 1 CNEL increase in traffic noise levels along any affected roadway.

Based on the noise compatibility analysis, traffic volumes can be assumed to increase by 1 to 2 percent annually. Broad Street and Tank Farm Road were assumed to increase 1.5 percent annually. This would result in a 2040 ADT of 38,820 and 27,735 ADT, for Broad Street and Tank Farm Road, respectively. Adding the project's volumes to these volumes would result in less than 1 CNEL increases along all affected roadways and noise generation from the project would not be considered cumulatively considerable.

The project would increase existing traffic noise levels on Broad Street and Tank Farm Road by less than 1 CNEL. Therefore, off-site traffic noise would not exceed the City's thresholds and off-site traffic noise impacts would be less than significant.





CEQA Appendix G Noise Threshold 3

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed project expose people residing or working in the project area to excessive noise levels? (*No Impact*)

Airport Noise Impacts

The airport closest to the project site is the San Luis Obispo County Regional Airport, which is located approximately 0.4 mile south of the project site. The project site is within the City of San Luis Obispo Airport Area Specific Plan (AASP). As identified in the Airport Land Use Plan (ALUP) and in the San Luis Obispo General Plan Noise Element, the project site is outside the 60 dBA airport sound level contour, and within the 55 dBA airport sound level contour. Airport noise levels at the project site are lower than existing road traffic noise levels (refer to Table 2). In addition, the project site is not in close proximity to a private airport. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from aircraft noise and no impact would occur.

4 Conclusions

As discussed above, off-site traffic noise impacts would be less than significant, and on-site operational noise impacts would be less than significant. Therefore, the project would result in a less than significant permanent increase in ambient noise levels due to project operation.

In addition, the project was the subject of a noise and land use compatibility analysis prepared by 45 dB, which determined the project would be compatible with the existing and future noise environment.

The project site is not located in the airport's 60 dBA noise contour and airport noise levels at the project site are lower than existing road traffic noise levels. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from aircraft noise and no impact would occur.

5 References

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Appendix A

Noise Measurement Data

Time Level Max c		13: 37: 31		
No.s	Date Time	(dB)		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	$\begin{array}{c} 2019/05/22 & 13: 29: 04\\ 2019/05/22 & 13: 30: 04\\ 2019/05/22 & 13: 31: 04\\ 2019/05/22 & 13: 32: 04\\ 2019/05/22 & 13: 32: 04\\ 2019/05/22 & 13: 34: 04\\ 2019/05/22 & 13: 35: 04\\ 2019/05/22 & 13: 35: 04\\ 2019/05/22 & 13: 36: 04\\ 2019/05/22 & 13: 36: 04\\ 2019/05/22 & 13: 39: 04\\ 2019/05/22 & 13: 39: 04\\ 2019/05/22 & 13: 40: 04\\ 2019/05/22 & 13: 40: 04\\ 2019/05/22 & 13: 42: 04\\ 2019/05/22 & 13: 42: 04\\ 2019/05/22 & 13: 44: 04\\ 2019/05/22 & 13: 45: 04\\ 2019/05/22 & 13: 45: 04\\ 2019/05/22 & 13: 45: 04\\ 2019/05/22 & 13: 45: 04\\ 2019/05/22 & 13: 50: 04\\ 2019/05/22 & 13: 55: 04\\ 2019/05/22 & 13: 55: 04\\ 2019/05/22 & 13: 55: 04\\ 2019/05/22 & 13: 55: 04\\ 2019/05/22 & 13: 55: 04\\ 2019/05/22 & 13: 57: 04\\ 2019/05/22 & 13: 57: 04\\ 2019/05/22 & 13: 58: 04\\ \end{array}$	$\begin{array}{c} 47.5\\ 47.2\\ 50.4\\ 45.5\\ 45.3\\ 49.2\\ 47.8\\ 61.2\\ 48.3\\ 48.0\\ 47.1\\ 45.8\\ 45.6\\ 45.5\\ 51.3\\ 49.5\\ 45.8\\ 59.6\\ 51.3\\ 49.5\\ 45.8\\ 59.6\\ 51.9\\ 53.2\\ 48.8\\ 48.7\\ 48.3\\ 47.5\\ 48.3\\ 47.5\\ 48.1\\ 50.2\\ 47.3\\ 46.1\\ 59.2 \end{array}$		

Freq Weight : A Time Weight : F/ Level Range : 40 Max dB : 87.2 - Level Range : 40 SEL : 100.7 Leq : 70.0)-100 2019/05/22 14	: 23: 00	
No. s	Date Time	(dB)	
1 2019/05/22 2 2019/05/22 3 2019/05/22 4 2019/05/22 5 2019/05/22 6 2019/05/22 7 2019/05/22 9 2019/05/22 10 2019/05/22 11 2019/05/22 12 2019/05/22 13 2019/05/22 14 2019/05/22 15 2019/05/22 16 2019/05/22 18 2019/05/22 18 2019/05/22 20 20 20 20 20 20 20 20 20 20 20 20 20 2	2 14: 17: 26 2 14: 18: 26 2 14: 19: 26 2 14: 20: 26 2 14: 22: 26 2 14: 22: 26 2 14: 22: 26 2 14: 22: 26 2 14: 24: 26 2 14: 25: 26 2 14: 25: 26 2 14: 25: 26 2 14: 26: 26 2 14: 27: 26 2 14: 28: 26 2 14: 30: 26 2 14: 31: 26 2 14: 32: 26 2 14: 32: 26 2 14: 33: 26 2 14: 34: 26	69. 7 55. 6 64. 5 67. 8 64. 3 73. 2 59. 6 63. 0 74. 5 67. 9 66. 5 60. 7 63. 8 61. 7 59. 4 68. 7 63. 6 75. 9 65. 6 73. 9	

Max dB : 78.9 -	0-100	5: 11: 23	
No.s	Date Time	(dB)	
1 2019/05/22 2 2019/05/22 3 2019/05/22 4 2019/05/22 5 2019/05/22 6 2019/05/22 7 2019/05/22 9 2019/05/22 10 2019/05/22 11 2019/05/22 12 2019/05/22 13 2019/05/22 14 2019/05/22 15 2019/05/22 16 2019/05/22 18 2019/05/22 18 2019/05/22 20 20 20 20 20 20 20 20 20 20 20 20 20 2	2 14: 53: 18 2 14: 54: 18 2 14: 55: 18 2 14: 55: 18 2 14: 55: 18 2 14: 59: 18 2 14: 59: 18 2 14: 59: 18 2 15: 00: 18 2 15: 02: 18 2 15: 02: 18 2 15: 04: 18 2 15: 05: 18 2 15: 07: 18 2 15: 07: 18 2 15: 07: 18 2 15: 07: 18 2 15: 08: 18 2 15: 09: 18	$\begin{array}{c} 68.5\\ 64.9\\ 55.9\\ 63.4\\ 67.1\\ 65.6\\ 57.9\\ 64.6\\ 65.9\\ 64.8\\ 64.5\\ 68.7\\ 65.7\\ 65.7\\ 65.7\\ 60.7\\ 68.8\\ 63.0\\ 63.7\\ 59.4\\ 57.4\\ 60.6\end{array}$	

Appendix B

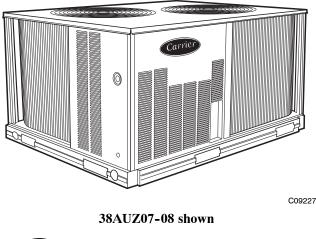
HVAC Specifications

38AUZ/D 50 Hz Commercial Split Systems Air Conditioning Condensing Units 18.3 kW to 59.2 kW



Product Data







Certified to ISO 9001

Carrier's air-cooled air conditioning split systems:

- provide a logical solution for commercial needs
- have a rugged, dependable construction
- are available in single and circuit scroll compressor capacity control
- have cooling capability up to 52°C (125°F) ambient and down to 2°C (35°F) ambient standard

FEATURES/BENEFITS

These dependable outdoor air cooled condensing units match Carrier's indoor-air handlers to meet a wide selection of cooling solutions.

Constructed for long life

The 38AUZ single circuit and 38AUD dual circuit, scroll compressor models are designed and built to last. The high efficient designed outdoor coil construction allows for a more efficient design in a smaller cabinet size that utilizes an overall reduction in refrigerant charge. Where conditions require, special coil coating coil protection option is available. Cabinets are constructed of prepainted galvanized steel, delivering unparalleled protection from the environment. Inside and outside surfaces are protected to ensure long life, good looks, and reliable operation. Safety controls are used for enhanced system protection and reliability.

Each unit utilizes the Comfort Alert diagnostic and troubleshoot control system. This protects the units operation and provides valuable diagnostic information when required.

Factory-installed options (FIOPs)

Certified and pre-engineered factory-installed options (FIOPs) allow units to be installed in less time, thereby reducing installed cost. FIOPs include:

- low ambient controls which provide cooling operation down to -29°C (-20°F) ambient temperatures
- non-fused disconnect
- special coil coating coil protection
- · louvered hail guard

MODEL NUMBER NOMENCLATURE

2 5 7 9 10 11 12 13 14 15 16 17 18 1 3 4 6 8 Α U Ζ Α 7 A 0 A 9 ---0 Α 0 A 0 3 8 0



Commercial Air Cooled Cond. Unit Puron® R-410A Refrigerant

Type of Coil

D = Dual Circuit

Z = Single Circuit

Refrigerant Options

A = Standard B = Low Ambient Controls

Nominal Tonnage

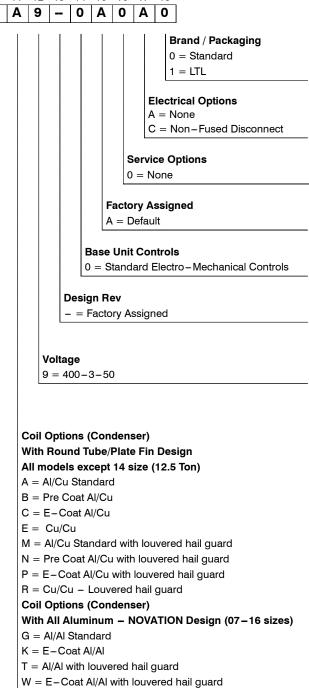
07 = 18.3 kW (5.2 Tons) 08 = 23.2 kW (6.6 Tons) 12 = 29.1 kW (8.3 Tons) 14 = 35.2 kW (10.0 Tons) 16 = 45.8 kW (13.0 Tons) 25 = 59.2 kW (16.8 Tons)

Factory Assigned

A = Default

Factory Assigned

0 = Default



AHRI CAPACITY RATINGS

UNIT	COOLING STAGES	NOM. CAPACITY (TONS)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	EER
38AUZ07/40RU07	1	5	62.7	5.1	12.2
38AUZ08/40RU08	1	6.3	79.3	6.9	11.5
38AUD12/40RU12	2	8.3	103.0	8.2	12.6
38AUD14/40RU14	2	10.4	125.0	10.9	11.5
38AUD16/40RU16	2	12.5	162.0	13.5	12.0
38AUD25/40RU25	2	16.7	202.2	16.6	12.2

LEGEND

AHRI	 Air Conditioning, Heating and Refrigeration Institute
	Institute

- ASHRAE American Society of Heating, Refrigerating and Air Conditioning, Inc.
- EER Energy Efficiency Ratio
- IEER Integrated Energy Efficiency Ratio

NOTES

- 1. Rated in accordance with AHRI Standard 340/360, as appropriate.
- Ratings are based on: Cooling Standard: 27°C (80°F) db, 19°C (67°F) wb indoor air temp and 35°C (95°F) db outdoor air temp.
- 3. All units comply with ASHRAE 90.1 Energy Standard for minimum EER and IEER requirements.

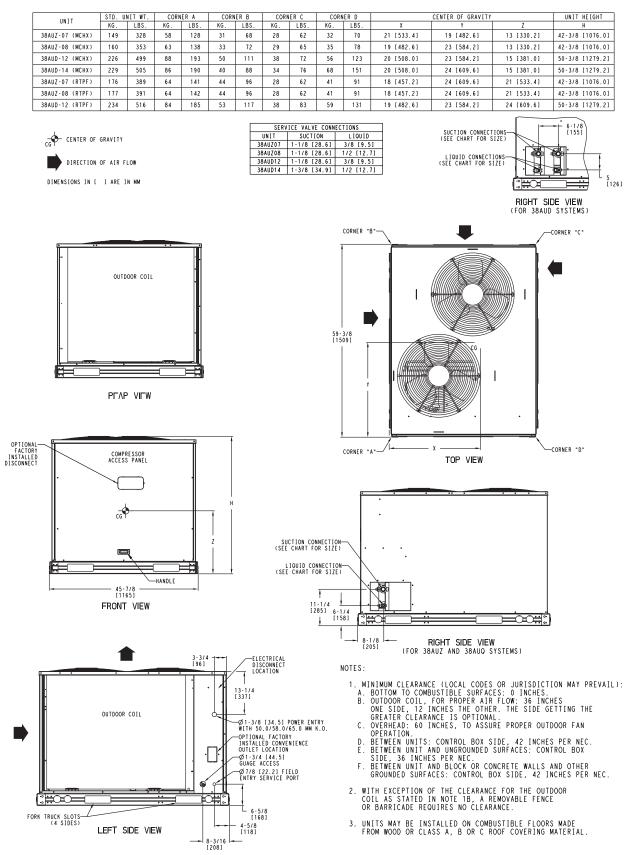
SOUND POWER LEVELS, dB

UNIT	COOLING				OUTDO	OR SOUND (dB)			
UNIT	STAGES	A-WEIGHTED	63	125	250	500	1000	2000	4000	8000
NOVATION – All Aluminum Coil Design										
38AUZ07	1	82	78.7	91.2	84.4	79.7	76.9	73.5	71.9	67.5
38AUZ08	1	81	81.7	89.7	82.6	77.6	74.4	70.3	68.0	64.2
38AUD12	2	78	79.2	81.1	78.4	75.0	72.9	68.2	66.4	68.2
38AUD14	2	79	76.2	78.6	78.1	75.1	75.2	71.4	67.9	65.1
38AUD16	2	80	90.3	81.8	78.0	76.7	75.2	70.5	66.4	61.9
			RTPF	- Round Tul	be/Plate Fin	Coil Design			•	
38AUZ07	1	83	81.7	88.2	84.0	79.7	78.1	74.0	71.4	68.0
38AUZ08	1	83	81.7	88.2	84.0	79.7	78.1	74.0	71.4	68.0
38AUD12	2	80	76.0	79.9	79.8	77.4	75.6	69.8	67.8	66.4
38AUD16	2	83	86.7	81.2	78.9	80.4	78.0	74.2	70.2	65.0
38AUD25	2	85	91.0	85.0	80.0	86.0	79.0	73.0	68.0	63.0

NOTE: Outdoor sound data is measure in accordance with AHRI standard 270–2008. **LEGEND**:

dB = Decibel

DIMENSIONS



C10590

DIMENSIONS (cont.)

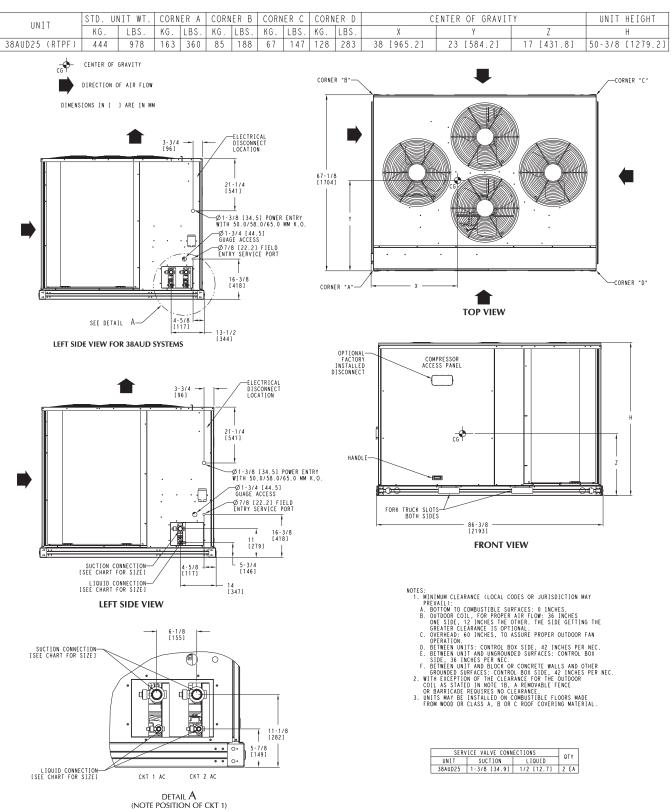
											,							
UNIT	STD. UNI KG.	LES.	CORN KG.	ER A LBS.	CORN KG.	ER B LBS.	CORN KG.		CORN KG.	LBS.		X	CENTE	R OF GRA' Y		Z	UNI	H HEIGHT
38AUD16 (MCHX)	288	633	100	220	61	134	61.5	135	65.5	144	-	[965.2]	-	[482.6]		15 [381]		8 [1279.2]
38AUD16 (RTPF)	332	731	107	237	78	172	61	135	84	186	38	[965.2]	19	[482.6]		17 [431.8]	50-3/	8 [1279.2]
								CORNER	"B"—									CORNER "C"
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cot (CENTER OF G	RAVITY							_									
	DIRECTION O	F AIR F	LOW						Ξ,	7								
DIMENS	IONS IN [] ARE I	N MM					45-1/8										
								[1148]							I.			-
SERVICE VAL	VE CONNECTI								Ŧ			-		CG				
UNIT SUCT		LIQUID		EA					ĺ	Į	•	•	•	•				
	104.03	2 112.1		<u>EN</u>				<u>.</u>							_			
								CORNER	"A"—⁄	/ +	-	X						CORNER "D"
												1	OP V	IEW				
				51.50							-			85 [2158]		-	
	3-3/4			DISC	TRICAL ONNECT TION													
			13-	1/4					TIONAL			COMPF	ESSOR					t
		.	[33					INS	CONNEC	D		ACCESS	PANEL		ľ.		÷	
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SEE DETAIL	A			4-5/8					1									<u> </u>
	-	- 13-1/2 [344]	-	[117]							-			86 - [21	3/8 — 931			
LEFT SIDE VIEW			EMS	—ELECT	RICAL									FRONT	r vie	W		
	3-3/4 [95]		-/	DISCO	NNECT									-	- 6-1/3	8 -		
	1.		13-	1/4						SU	CTION C	ONNECTIONS-	~		[155	$ \rightarrow $		
		·	[33							(SÉ)	É CHART	FOR SIZE)	\swarrow	\times		$() \circ$		
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			Ø GU	1-3/4 [∡ JAGE ACCI	14.51 ESS								/	I "Y	비미			1
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			1	11-1 [282	/8 [41 2]	81							\mid				0.	5-7/8 [149]
SUCTION CONNECTION-	7/			L 5-3/								NECTIONS	X	CKT 1 AC		CKT 2 AC	<u> </u>	+ +
(SEE CHART FOR SIZE) LIQUID CONNECTION- (SEE CHART FOR SIZE)		13-1/2-	- 4-5/; [117	0					(SEE C	HARIE	OR SIZE)			DETAI			
		[344]														ON OF CKT 1)		
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												D. B F. B	ETWEEN ETWEEN	UNITS: CON UNIT AND U S INCHES PE	ITROL E	BOX SIDE, 42 IN NDED SURFACES:	ICHES PER CONTROL	NEC. BOX
												F R	FTWFFN	UNIT AND B	NOCKO	OR CONCRETE WAL	LS AND O 2 INCHES	THER PER NEC.
												2. WIT COI OR	H EXCEP L AS SI BARRICA	PTION OF TH FATED IN NO ADE REQUIRE	HE CLEA DTE 1B, S NO C	ROL BOX SIDE, 4 ARANCE FOR THE , A REMOVABLE F CLEARANCE.	OUTDOOR	

- COIL AS STATED IN NOTE 1B. A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE. 3. UNITS MAY DE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B OR C ROOF COVERING MATERIAL.

C10591

8

DIMENSIONS (cont.)



38AU

C10592





The new degree of comfort.™

Rheem *Classic*[®] Series Air Conditioners



RA13 Series

Efficiencies 13-15.5 SEER/11.5-13 EER Nominal Sizes 1¹/₂ to 5 Ton [5.28 to 17.6 kW] Cooling Capacities 17.3 to 60.5 kBTU [5.7 to 17.7 kW]



"Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet Energy Star. Ask your Contractor for details or visit www.energystar.gov."

- New composite base pan dampens sound, captures louver panels, eliminates corrosion and reduces number of fasteners needed
- Powder coat paint system for a long lasting professional finish
- Scroll compressor uses 70% fewer moving parts for higher efficiency and increased reliability
- Modern cabinet aesthetics increased curb appeal with visually appealing design
- Curved louver panels provide ultimate coil protection, enhance cabinet strength, and increased cabinet rigidity
- Optimized fan orifice optimizes airflow and reduces unit sound
- Rust resistant screws confirmed through 1500-hour salt spray testing
- PlusOne[™] Expanded Valve Space 3"-4"-5" service valve space – provides a minimum working area of 27-square inches for easier access
- PlusOne[™] Triple Service Access 15" wide, industry leading corner service access – makes repairs easier and faster. The two fastener removable corner allows optimal access to internal unit components. Individual louver panels come out once fastener is removed, for faster coil cleaning and easier cabinet reassembly

- Diagnostic service window with two-fastener opening provides access to the high and low pressure.
- External gauge port access allows easy connection of "low-loss" gauge ports
- Single-row condenser coil makes unit lighter and allows thorough coil cleaning to maintain "out of the box" performance
- 35% fewer cabinet fasteners and fastener-free base allow for faster access to internal components and hassle-free panel removal
- Service trays hold fasteners or caps during service calls
- QR code provides technical information on demand for faster service calls
- Fan motor harness with extra long wires allows unit top to be removed without disconnecting fan wire.



Standard Feature Table

		STANDARD	FEATURES				
Feature	18	24	30	36	42	48	60
R-410a Refrigerant	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark
Maximum SEER	15.1	15.0	15.5	15.1	14.5	14.5	14.0
Maximum EER	12.5	12.5	13.0	12.5	12.0	12.0	11.5
Scroll Compressor	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark
Field Installed Filter Drier	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark
Front Seating Service Valves	\checkmark	√	\checkmark	√	\checkmark	√	\checkmark
Internal Pressure Relief Valve	\checkmark	\checkmark		√	\checkmark	√	\checkmark
Internal Thermal Overload	\checkmark	\checkmark	\checkmark	√	\checkmark	√	\checkmark
Long Line capability	\checkmark	√		√	\checkmark	√	\checkmark
Low Ambient capability with Kit	√	\checkmark	\checkmark	√	\checkmark	√	√
3-4-5 Expanded Valve Space	\checkmark	\checkmark	\checkmark	√	\checkmark	√	\checkmark
Composite Basepan	\checkmark						
2 Screw Control Box Access	\checkmark						
15" Access to Internal Components	\checkmark						
Quick release louver panel design	\checkmark						
No fasteners to remove along bottom	\checkmark						
Optimized Venturi Airflow	\checkmark						
Single row condenser coil	\checkmark						
Powder coated paint	\checkmark						
Rust resistant screws	\checkmark						
QR code	\checkmark	\checkmark	\checkmark	√	√	√	\checkmark
External gauge ports	\checkmark	\checkmark	\checkmark	√	\checkmark	√	\checkmark
Service trays	\checkmark						

 $\sqrt{}$ = Standard

Available SKUs

Available Models	Description
RA1318AJ1NA	Classic [®] Series 1 1/2 ton 13 SEER Single-Stage Air Conditioner-208/230/1/60
RA1324AJ1NA	Classic [®] Series 2 ton 13 SEER Single-Stage Air Conditioner-208/230/1/60
RA1330AJ1NA	Classic® Series 2 1/2 ton 13 SEER Single-Stage Air Conditioner-208/230/1/60
RA1336AJ1NA	Classic® Series 3 ton 13 SEER Single-Stage Air Conditioner-208/230/1/60
RA1342AJ1NA	Classic® Series 3 1/2 ton 13 SEER Single-Stage Air Conditioner-208/230/1/60
RA1348AJ1NA	Classic® Series 4 ton 13 SEER Single-Stage Air Conditioner-208/230/1/60
RA1360AJ1NA	Classic® Series 5 ton 13 SEER Single-Stage Air Conditioner-208/230/1/60
RA1318AJ1NB	Classic® Series 1 1/2 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA1324AJ1NB	Classic® Series 2 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA1330AJ1NB	Classic® Series 2 1/2 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA1336AJ1NB	Classic® Series 3 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA1342AJ1NB	Classic® Series 3 1/2 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA1348AJ1NB	Classic® Series 4 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA1360AJ1NB	Classic® Series 5 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/1/60
RA1336AC1NB	Classic® Series 3 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/3/60
RA1342AC1NB	Classic® Series 3 1/2 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/3/60
RA1348AC1NB	Classic® Series 4 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/3/60
RA1360AC1NB	Classic® Series 5 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-208/230/3/60
RA1336AD1NB	Classic® Series 3 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-460/3/60
RA1342AD1NB	Classic® Series 3 1/2 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-460/3/60
RA1348AD1NB	Classic® Series 4 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-460/3/60
RA1360AD1NB	Classic® Series 5 ton 13 SEER Single-Stage Air Conditioner w/ High/Low Pressure-460/3/60



Accessories

Model No).	RA1318	RA1324	RA1330	RA1336	RA1342	RA1348	RA1360
Compressor crankcase he	ater*	44-17402-44	44-17402-44	44-17402-44	44-17402-44	44-17402-45	44-17402-45	44-17402-45
Low ambient control		RXAD-A08						
Compressor sound cover		68-23427-26	68-23427-26	68-23427-26	68-23427-26	68-23427-25	68-23427-25	68-23427-25
Compressor hard start kit		SK-A1						
Compressor time delay		RXMD-B01						
Low pressure control		RXAC-A07						
High pressure control		RXAB-A07						
Liquid Line Solenoid	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
(24 VAC, 50/60 Hz)	Solenoid Coil	61-AMG24V						
Liquid Line Solenoid	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
(120/240 VAC, 50/60 Hz) Solenoid Co		61-AMG120/240V						
Top Cap w/Label	•	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21
Heat Pump Riser 6 in.		686020	686020	686020	686020	686020	686020	686020

*Crankcase Heater recommended with Low Ambient Kit.

Weighted Sound Power Level (dBA)

				RA13 Sound Pov	ver Level							
		Full Octave Linear Sound Power Level dB - Center Frequency - Hz										
Model	Sound Power Level [dB(A)]	125	250	500	1000	2000	4000	6300	8000			
RA1318	71.9	52.1	58.3	61.5	61.1	57.0	54.2	51.0	48.7			
RA1324	75.5	55.4	60.3	64.7	66.4	62.6	58.0	54.3	52.4			
RA1330	73.6	49.7	62.6	64.6	63.1	60.3	54.8	49.4	47.6			
RA1336	72.4	55.1	60.2	62.6	63.3	58.1	53.4	51.3	52.0			
RA1342	72.7	48.9	56.1	62.9	62.2	61.1	55.2	51.9	50.2			
RA1348	75.8	51.4	59.6	65.2	65.9	64.3	58.5	55.2	53.7			
RA1360	77.7	51.7	60.9	66.9	70.4	63.5	57.4	55.4	53.8			

NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI)

Thermostats



200-Series * Programmable







Brand		Descripter (3 Characters)	Series (3 Characters)	System (2 Characters)	Type (2 Characters)
RHC	-	TST	213	UN	MS
RHC=Rheem		TST=Thermostat	200=Programmable 300=Deluxe Programmable 400=Special Applications/ Programmable 500=Communicating/ Programmable	GE=Gas/Electric UN=Universal (AC/HP/GE) MD=Modulating Funace DF=Dual Fuel CM=Communicating	SS=Single-Stage MS=Multi-Stage

* Photos are representative. Actual models may vary.

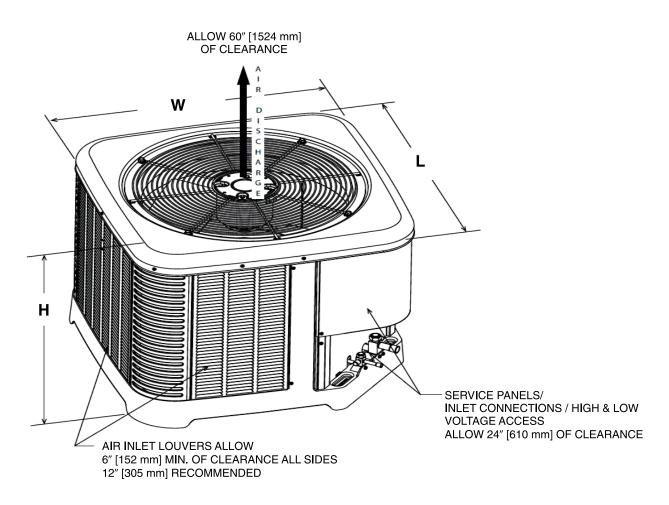
For detailed thermostat match-up information,

see specification sheet form number T11-001.



Unit Dimensions

			OPER	ATING			SHIPPING					
MODEL NO.	H (Holdhi)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)	
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
RA1318	27	685	29.75	755	29.75	755	28.75	730	32.38	822	32.38	822
RA1324	25	635	29.75	755	29.75	755	26.75	679	32.38	822	32.38	822
RA1330	25	635	29.75	755	29.75	755	26.75	679	32.38	822	32.38	822
RA1336	27	685	29.75	755	29.75	755	28.75	730	32.38	822	32.38	822
RA1342	31	787	29.75	755	29.75	755	32.75	831	32.38	822	32.38	822
RA1348	27	685	33.75	857	33.75	857	28.75	730	36.38	924	36.38	924
RA1360	31	787	35.75	908	35.75	908	32.75	831	38.38	974	38.38	974



[] Designates Metric Conversions

ST-A1226-02-00



SoundPLAN Input and Output Data

Tank Farm Road Mixed Use Run info Future on-site SPS

Project description			
Project title: Project No.: Project engineer: Customer:	Tank Farm Road Mixed U 19-07096 Maddux	se	
Description:			
Run description			
Calculation type: Title: Group:	Single Point Sound Future on-site SPS		
Run file: Result number: Local calculation (ThreadCoun Calculation start:	RunFile.runx 1 t=12) 5/28/2019 1:32:15 PM		
Calculation end: Calculation time: No. of points:	5.28.2019 1:32:16 PM 00:00:288 [m:s:ms] 4		
No. of calculated points: Kernel version:	4 SoundPLAN 8.1 (4/8/2019	9) - 32 bit	
Run parameters			
Reflection order: Maximum reflection distance to	o receiver	3	200 m
Maximum reflection distance to Search radius		5000 m	50 m
Weighting: Allowed tolerance (per individu	al source):	dB(A) 0.100 dB	
Create ground effect areas from			Yes
Standards: Industry: Air absorption:	ISO 9613-1	ISO 9613-2: 1996	
regular ground effect (cha Limitation of screening los	pter 7.3.1), for sources with s:	out a spectrum automatically	alternative ground effect
Use Eqn (Abar=Dz-Max(A	20.0 dB /25.0 dB method (side paths also arc gr,0)) instead of Eqn (12) (A	und terrain) ∖bar=Dz-Agr) for insertion los	SS
Environment: Air pressure	1013.3 mbar		
rel. humidity Temperature Meteo. corr. C0(7-22	70.0 % 10.0 °C h)[dB]=0.0; C0(22-7h)[dB]=	0.0.	
	x industry calculation: C2=20.0	No	
Dissection parameters:			

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Tank Farm Road Mixed Use Run info Future on-site SPS

Minimal distance		1 m					
Max. difference gr	ound effect + diffraction	1.0 dB					
Max. number of ite		4					
Attenuation							
Foliage:		ISO 9613-2					
Built-up area:		ISO 9613-2					
Industrial site:		ISO 9613-2					
Assessment: Reflection of "own" fac	ade is suppressed	Day Night Level LDN					
Geometry data							
Future.sit - contains:	5/28/2019 1:30:20 PM						
Building.geo	5/28/2019 11:28:06 AM						
	E/00/0040 44.00.04 AM						

Jinains.	
Building.geo	5/28/2019 11:28:06 AM
Geo-File1.geo	5/28/2019 11:03:34 AM
GNM.geo	5/28/2019 11:22:42 AM
HVAC.geo	5/28/2019 1:30:20 PM
Loading Dock.geo	5/28/2019 1:30:20 PM
Recivers.geo	5/28/2019 11:28:06 AM

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Tank Farm Road Mixed Use Assessed receiver levels Future on-site SPS

Receiver	Usage	FI	Dir		Leq,d	Leq,d,diff		
400040 2000054				dB(A)	dB(A)	dB		
168210,3906654	SCR	G G			42.5			
168313,3906791	SCR				46.8			
168375,3906601	SCR	G G			45.2			
168494,3906739	SCR	G			46.3			
	ultonto O	220 Chas	nnak	Drive S	uito 210	Son Dia	go, CA 92123	1

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Tank Farm Road Mixed Use Octave spectra of the sources in dB(A) - Future on-site SPS

3

Name Sour	Irce type	l or A	Li	R'w	L'w	Lw	KI	KT	LwMax	DO-Wall	Day histogram	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
		m,m²	dB(A)	dB	dB(A)	dB(A)	dB	dB	dB(A)	dB			dB(A)							
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Point	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				80.0	80.0	0.0	0.0		0	HVAC_50%_Night	Truck: loading general cargo	47.0	57.0	64.0	70.0	73.0	74.0	74.0	72.0
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				85.2	85.2	0.0	0.0		0	HVAC_50%_Night	20 Ton	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
Poin	nt				87.8	87.8	0.0	0.0		0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9

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Tank Farm Road Mixed Use Octave spectra of the sources in dB(A) - Future on-site SPS

3

Name	Source type	l or A	Li	R'w	L'w	Lw	KI	KT	LwMax	DO-Wall	Day histogram	Emission spectrum	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
		m,m²	dB(A)	dB	dB(A)	dB(A)	dB	dB	dB(A)	dB			dB(A)							
	Point	,				87.8				0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
	Point					87.8				0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
	Point					87.8				0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
	Point					87.8				0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9
	Point				87.8					0	HVAC_50%_Night	10 Ton	67.8	61.9	78.4	81.8	84.0	79.2	76.0	67.9

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SoundPLAN 8.1

Attachment 9

Multi-Modal Transportation Impact Study

660 Tank Farm Mixed Use Project

Draft Multimodal Transportation Impact Study

Prepared For: City of San Luis Obispo

Central Coast Transportation Consulting 895 Napa Avenue, Suite A-6 Morro Bay, CA 93442 (805) 316-0101

July 2020

Central Coast Transportation Consulting Traffic Engineering & Transportation Planning

Executive Summary

This study evaluates the potential transportation impacts of the 660 Tank Farm mixed-use project located on the north side of Tank Farm Road between Broad Street and Santa Fe Road in the City of San Luis Obispo. The project proposes 15,000 s.f. of retail/restaurant buildings, a 45,000 s.f. medical office building to be used as an integrated cancer center, and a 150-bed assisted living facility. Nine intersections were evaluated during the weekday morning (7-9 AM) and weekday evening (4-6 PM) time periods under Existing and Cumulative conditions. The 660 Tank Farm project is expected to generate a total of 1,416 new daily trips, 98 new AM peak hour trips, and 165 new PM peak hour trips. Impacts and mitigation measures are summarized below.

Existing Plus Project Recommendations

The following improvements circulation improvements are recommended:

- Widen Tank Farm Road along the project frontages to provide two westbound lanes, bike lanes, and sidewalks consistent with the parkway arterial designation in the Airport Area Specific Plan.
- Install single lane roundabout at the internal site intersection of the Mindbody road extension adjacent to SESLOC on the north property line to encourage smooth traffic flow between the sites.
- Eliminate the SESLOC right-in/right-out driveway on Broad Street.

In addition, the recommendation below would address Existing Plus Project intersection deficiencies:

• Tank Farm Road/Long Street (#2): Installation of a traffic signal would result in acceptable operations. A traffic signal has been designed for this location and is required as a condition of approval for a nearby project.

The project will also close the existing sidewalk gap on Broad Street between Industrial Way and Tank Farm Road.

Cumulative Recommendations

The recommendations below would address Cumulative intersection deficiencies:

- Tank Farm Road/S Higuera Street (#1): Installing a second southbound left turn lane and dedicated bicycle lane for the westbound approach would improve operations to at least no project conditions.
- Tank Farm Road/Santa Fe Road (#3): Installing a multi-lane roundabout would provide acceptable operations.
- Broad Street/Industrial Way (#6): Converting the east and west approaches from split phasing to permissive phasing and restriping both approaches to provide dedicated left turn lanes and shared through/right turn lanes would result in LOS C or better operations.
- Broad Street/Tank Farm Road (#7): Adding a second southbound left turn lane, adding a dedicated northbound right turn lane, and converting the westbound right turn lane to a shared through/right lane would improve conditions. However, while some queue lengths would be decreased, others would be increased. The City's Circulation Element EIR recommends establishing time-of-day timing plans at this intersection.

2 Executive Summary

Further details are provided in the body of this report.

Contents

Executive Summary	1
Contents	3
Introduction	4
Analysis Methods	6
Existing Conditions	8
Existing Plus Project Conditions	17
Cumulative Conditions	27
References	

Figure 1: Project and Study Locations	4
Figure 2: Project Site Plan	5
Figure 3: Existing Peak Hour Volumes and Lane Configurations	16
Figure 4: Project Trip Distribution and Assignment	19
Figure 5: Existing Plus Project Volumes	20
Figure 6: Cumulative Volumes and Cumulative Project Volumes	
Figure 7: Cumulative Plus Project Volumes	29

Appendix A: Traffic Counts

Appendix B: Intersection LOS Calculation Sheets Appendix C: Segment LOS Calculation Sheets Appendix D: Pedestrian and Bicycle Intersection LOS Tables

Introduction

This study evaluates the potential transportation impacts of the 660 Tank Farm mixed-use project located on the north side of Tank Farm Road between Broad Street and Santa Fe Road in the City of San Luis Obispo. The project proposes 15,000 s.f. of retail/restaurant buildings, a 45,000 s.f. medical office building to be used as an integrated cancer center, and a 150-bed assisted living facility. The project was formerly analyzed including the adjacent property (650 Tank Farm), which was subsequently analyzed as a stand-alone project.

The project's location and study intersections are shown on **Figure 1**, while **Figure 2** shows the project site plans. Study intersections were identified in consultation with City staff. The following intersections were analyzed during the weekday morning (7-9 AM) and evening (4-6 PM) time periods:

- 1. Tank Farm Road/South Higuera Street
- 2. Tank Farm Road/Long Street
- 3. Tank Farm Road/Santa Fe Road
- 4. Tank Farm Road/Mindbody Traffic Signal
- 5. Broad Street/Capitolio Way
- 6. Broad Street/Industrial Way
- 7. Broad Street/Tank Farm Road
- 8. Broad Street/Aero Vista Lane
- 9. Broad Street/Aero Drive

Vehicular, pedestrian, and bicycle levels of service are reported for each study intersection consistent with the City's Multimodal Transportation Impact Guidelines. The study segments were identified in consultation with City staff consistent with City policies. Four roadway segments were analyzed for bicycle, pedestrian, transit, and auto level of service during the AM and PM peak hours:

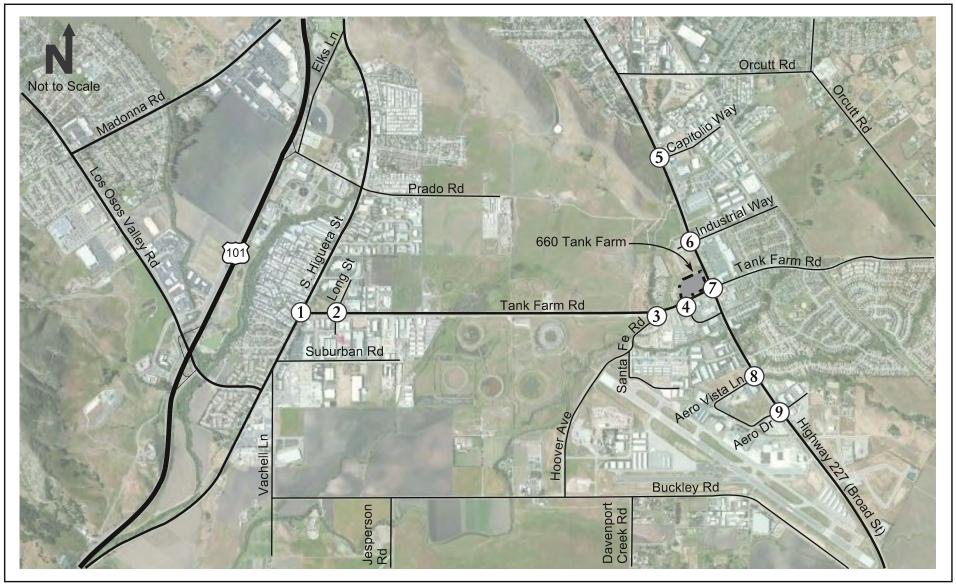
- 1. Tank Farm Road (Broad Street to Higuera Street)
- 2. Tank Farm Road (Broad Street to Orcutt Road)
- 3. Broad Street (Orcutt Road to Tank Farm Road)
- 4. Broad Street (Tank Farm Road to South City Limits)

The study locations were evaluated under these scenarios:

- Existing Conditions reflects 2018-2019 traffic counts and the existing transportation network.
- Existing Plus Project adds Project-generated traffic to Existing Conditions volumes.
- **Cumulative Conditions** represents future traffic conditions reflective of the buildout of land uses in the area, not including the proposed Project.
- **Cumulative Plus Project** represents future traffic conditions reflective of the buildout of land uses in the area, including the proposed Project.

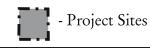
Each scenario is described in more detail in the appropriate chapter.

Figure 1: Project and Study Locations



Central Coast Transportation Consulting Traffic Engineering & Transportation Planning

Legend:

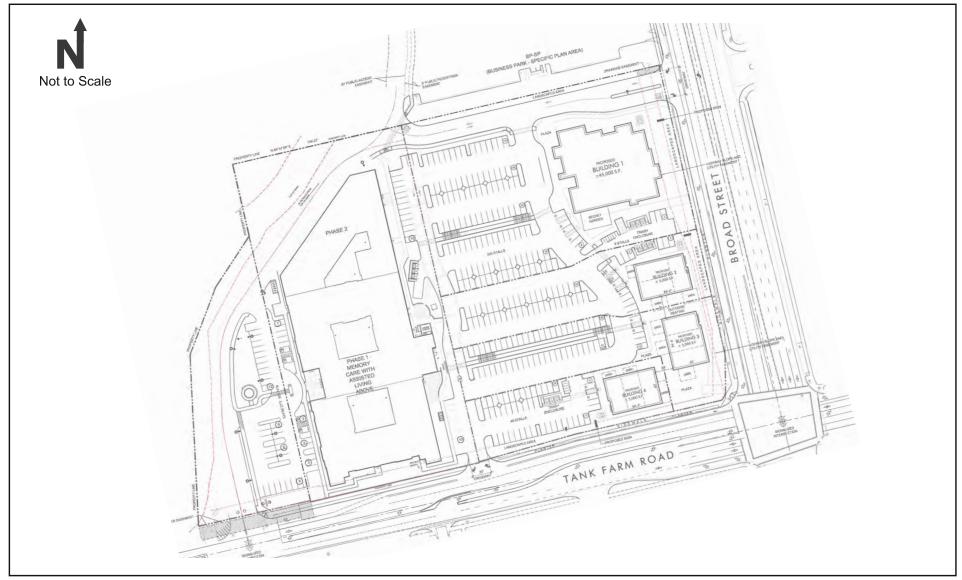


 \mathbf{x} - Study Intersection

June 2020

660 Tank Farm TIS

Figure 2: Project Site Plan



Source: McKently Malak Architects

Central Coast Transportation Consulting Traffic Engineering & Transportation Planning

June 2020

Analysis Methods

The analysis approach was developed based on the City of San Luis Obispo's standards and policies. Facilities operated by the City of San Luis Obispo were evaluated using thresholds identified in the 2014 Circulation Element. Table 2 of the Circulation Element specifies that level of service (LOS) D or better operations shall be maintained for bicycle, transit, and vehicle modes in the study area. The minimum LOS standard for pedestrians is LOS C. The Circulation Element establishes priorities of each mode as presented in **Table 1**. Project impacts are considered significant if the project degrades a higher priority mode.

Modal Priorities for Level of Service									
Residential Corridors Commercial Corridors Regional Arterial and									
Priority	and Neighborhoods	and Areas	Highway Corridors						
1	Pedestrians	Vehicles	Vehicles						
2	Bicycles	Bicycles	Transit						
3	Vehicle	Transit	Bicycles						
4	Transit	Pedestrians	Pedestrians						

INTERSECTION ANALYSIS

The level of service thresholds for intersections and the pedestrian, bicycle, and transit modes based on the 6th Edition Highway Capacity Manual (HCM) are presented in **Table 2**.

Table 2. Intersection Level of Service Thresholds									
	Intersection Level of Service Thresholds								
Signalized ¹		Two-Way Stop ControlledPedestrian and Bicycle(TWSC)2Modes, Signal3				Pedestrian Mode, TWSC ⁴			
Control Delay	LOS	Control Delay	LOS	LOS Score	LOS	Control Delay	LOS		
≤ 10	А	≤ 10	А	≤ 1.5	А	≤ 5	А		
> 10 - 20	В	> 10 - 15	В	>1.5 - 2.5	В	>5 - 10	В		
> 20 - 35	С	> 15 - 25	С	>2.5 - 3.5	С	>10 - 20	С		
> 35 - 55	D	> 25 - 35	D	>3.5 - 4.5	D	>20 - 30	D		
> 55 - 80	Е	> 35 - 50	Е	> 4.5 - 5.5	Е	>30 - 45	Е		
> 80	F	> 50 or v/c > 1	F	> 5.5	F	>45	F		
1. Source: Exhibit 19-8	of the 6th	edition Highway Capa	acity Manu	ial. Control delay ii	n seconds/	vehicle.			
2. Source: Exhibit 20-2	2. Source: Exhibit 20-2 of the 6 th Edition Highway Capacity Manual. Control delay in seconds/vehicle.								
3. Source: Exhibit 19-9	of the 6th	n Edition Highway Capa	acity Manu	al. Score is unitless	s.				
4. Source: Exhibit 20-3	of the 6th	n Edition Highway Capa	acity Manu	al. Control delay in	n seconds/	pedestrian.			

The study intersections were analyzed with the Synchro 10 software package applying the HCM 6th Edition methods.

SEGMENT ANALYSIS

The study roadway segments were evaluated for auto, transit, pedestrians, and bicycles using the LOS+ software, which applies the HCM 2010 methods. The LOS score thresholds are shown in **Table 3**.

	/		
А	nalysis	Methods	

Roadway Segment Lev	vel of Service Thresholds								
Pedestrian, Bicycle and Transit Modes ¹									
LOS Score Level of Service									
≤ 2.00	А								
> 2.00-2.75	В								
> 2.75-3.50	С								
> 3.50-4.25	D								
> 4.25-5.00	Е								
> 5.00	F								
1. Source: Exhibit 16-5 of the 6 Manual.	th Edition Highway Capacity								

Table 3: Roadway Segment Level of Service Thresholds

The segment of Tank Farm Road between Old Windmill Road and Santa Fe Road was also evaluated using generalized LOS thresholds applied in the City's Circulation Element Update.

THRESHOLDS OF SIGNIFICANCE

Significant impacts to transportation facilities are identified under the following circumstances:

Unsignalized Intersections

Project traffic causes an intersection operating at LOS A, B, C, or D to degrade to unacceptable traffic conditions of LOS E or F; and the volume-demand-to-capacity ratio (V/C), which compares roadway demand (vehicle volumes) with roadway supply (roadway capacity), is increased by 0.01 or more and signal warrants are met; or the project buildout causes or exacerbates 95th percentile turning movement queues exceeding available turn pocket capacity.

Signalized Intersections

Project traffic causes an intersection operating at an acceptable LOS D or better to degrade to unacceptable traffic conditions, and the V/C ratio is increased by 0.01 or more; or the project buildout causes or exacerbates 95th percentile turning movement queues exceeding available turn pocket capacity.

Segments

Project traffic causes segment operation level of service degradation as follows:

- For bicycles, a segment operating at LOS A, B, C, or D to degrade to LOS E or F.
- For pedestrians, a segment operating at LOS A, B, or C to degrade to LOS D, E, or F.
- For vehicles, segments operating at LOS A, B, C, or D to degrade to LOS E or F and an increase of the V/C ratio by .01 or more.
- For transit service, a segment operating at LOS A, B, C, or D to degrade to LOS E or F; or a segment with a baseline LOS E or F to degrade in a contextually significant way.

The City's Multimodal Transportation Impact Study Guidelines allow discretion when identifying impacts to non-auto modes based on whether the impacts are contextually significant.

Existing Conditions

This section describes the existing transportation system and current operating conditions in the study area.

EXISTING ROADWAY NETWORK

The following roadways are located in the vicinity of the project:

- **Broad Street** is a north-south, two-way road. North of its intersection with South Street and Santa Barbara Avenue, it is a 2-lane residential arterial street with a speed limit of 35 mph. This section of road functions as a main connection between residential areas and the downtown core. South of the Broad/South/Santa Barbara intersection, Broad Street is a 4-lane highway/regional route with a speed limit ranging from 40 mph at the north end of the segment to 45 mph at the southern end. This segment serves as a main route to and from the southern industrial and commercial centers to the downtown core and other regions.
- **Tank Farm Road** is an east-west, 2- lane arterial road with a speed limit of 45 mph in the study area. Tank Farm Road serves a major connection from South Higuera Street to Broad Street, connecting residential with commercial and industrial areas.
- Santa Fe Road is a two-lane, two-way commercial collector. Santa Fe Road connects Buckley Road and Hoover Ave to Tank Farm Road.
- Industrial Way is a two-lane commercial collector with a speed limit of 40 mph. Industrial Way connects the commercial properties of Broad Street to the rest of the region via Broad Street. West of Broad Street Industrial Way serves Damon Garcia Park and a commercial development.
- Aero Vista Lane is a two-lane, two-way highway/regional route with a speed limit of 25 mph. Aero Vista Lane links commercial properties to Broad street, which provides access to the airport region.
- Aero Drive is a two-lane, two-way local road with a speed limit of 25 mph. Aero Drive serves as the primary access point for the San Luis Obispo County Regional Airport.
- **Capitolio Way** is a two-lane, two-way commercial collector with a speed limit of 35 mph. It links commercial properties to Sacramento Drive and Broad Street.
- Long Street is a two-lane, two-way local road. Long street connects Hind Lane to Tank Farm Road.
- South Higuera Street is a north-south, 4-lane arterial with a speed limit of 45 mph in the study area. South Higuera Street serves as the primary north-south route on the east side of US 101 serving local traffic.
- Mindbody Driveway is the main entrance serving the main campus of Mindbody, Inc., along with other businesses in the same business park.

EXISTING PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals at signalized intersections. South of Rockview Place, Broad Street has a paved sidewalk only on the east side of the street. Broad Street between Tank Farm Road and Aero Vista Lane has a discontinuous sidewalk on the east side of the street. East of the Union Pacific Railroad overhead crossing, Tank Farm Road has a discontinuous sidewalk on its north side. West of Broad Street, Tank Farm Road has no sidewalks on the north side of the road, and between Santa Fe Road and Old Windmill Lane has no sidewalks on either side. All other study segments have paved sidewalks on both sides of the street.

The intersection of Tank Farm Road and Long Street, with stop control only on Long Street, does not have striped crosswalks for any pedestrian movements. The intersection of Tank Farm Road and Santa Fe Road, with stop control only on Santa Fe Road, does not have striped crosswalks for any pedestrian movements. The signalized intersection of Tank Farm Road and the Mindbody driveway has no pedestrian phases or striped crosswalks. The intersection of Broad Street and Capitolio Way, with stop control only on Capitolio Way, does not have any striped crosswalks. The intersection of Broad Street and Aero Vista Lane, with stop control only on Aero Vista Lane, does not have any striped crosswalks. The signalized intersection of Broad Street and Aero Drive only has pedestrian phases for the north, east, and west legs. All other intersections have crosswalks on all legs.

EXISTING BICYCLE FACILITIES

Bicycle facilities in the study area consist of Class II bike lanes. A Class II bike lane provides a striped lane for one-way bicycle travel on the side of a street. Broad Street and Tank Farm Road both have Class II bike lanes on both sides of the road throughout the study segments.

EXISTING TRANSIT SERVICE

The San Luis Obispo Regional Transit Authority (RTA) and the City of San Luis Obispo Transit Division (SLO Transit) provide transit service to the study area. SLO Transit Routes 1 and 3 provide fixed-route service to the study area. RTA offers Dial-A-Ride curb to curb services within the city limits.

An acceptable transit LOS is primarily predicated on the presence of shelters and benches at bus stops, as well as the frequency and on-time performance of each route. If there are no bus stops on a segment, transit LOS is marked as N/A.

SLO Transit Route 1A passes through the vicinity of the project as it travels north and southbound along Broad Street. Route 1A services the Downtown Transit Center, the Orcutt Road/Johnson Avenue area and the San Luis Obispo County Regional Airport. It enters the vicinity of the project traveling westbound on Tank Farm Road, before turning south to serve the airport and going north on Broad Street to serve the Downtown Transit Center. It has stops at the airport near Aero Drive, Aero Vista Lane, Broad and Tank Farm (Marigold Center), Broad and Industrial, and stops to the north and south of Capitolio Way. It is important to note that the stops along Broad Street north of Tank Farm Road are located on the east side of Broad Street. Route 1A runs daily with hourly headways. Buses typically run from 6:15 AM to 10:00 PM on weekdays and from 8:15 AM to 8:00 PM on weekends.

SLO Transit implemented their latest Short-Range Transit Plan (SRTP) in mid-2017, so long-term boarding data is not available. Before implementation of the SRTP, Route 3 served stops around the Marigold shopping center, which is located on the northeast corner of the Tank Farm Road and Broad Street intersection. The SRTP notes that the stop at the Marigold center served 37 boardings and 10 alightings per day. The stop nearer to Capitolio Way was served 24 boardings and alightings per day.

EXISTING TRANSPORTATION CONDITIONS

This section summarizes the existing intersection and roadway segment operations.

Intersection Operations

Traffic counts were collected in 2018 by the City of San Luis Obispo as a part of their biannual traffic count data collection program, with the exceptions of Tank Farm Road/Long Street, Tank Farm Road/Santa Fe Road, and Tank Farm Road/Mindbody Traffic Signal, which were collected independently in 2019 and were also provided by the City. Traffic count sheets are provided in **Appendix A**.

Figure 3 shows the Existing and Existing Plus Project peak hour traffic volumes. Table 4 shows the LOS for the study intersections and Table 5 summarizes the vehicular queuing, with detailed calculation sheets included in Appendix B.

Existing Intersection	on Auto Levels	of Servic	e	
Intersection	Peak Hour	V/C^1	Delay ²	LOS
1. Tank Farm Road/South Higuera Street	AM	0.86	26.7	С
1. Talik Falli Koad, bouti Filguera biteet	PM	0.85	25.4	С
2. Tank Farm Road/Long Street	AM	0.16	2.0 (23.2)	- (C)
2. Talik Falli Koad/ Long Street	PM	0.49	4.5 (47.7)	- (E)
2 Taul Eaux David (Santa E- David	AM	0.16	1.3 (17.5)	- (C)
3. Tank Farm Road/Santa Fe Road	PM	0.55	3.2 (30.8)	- (D)
	AM	0.69	7.4	А
4. Tank Farm Road/MindBody Traffic Signal	PM	0.85	10.5	В
	AM	0.19	1.1 (15.1)	- (C)
5. Broad Street/Capitolio Way	PM	0.37	1.4 (20.4)	- (C)
	AM	0.76	13.9	В
6. Broad Street/Industrial Way	PM	1.10	32.7	С
	AM	0.86	36.0	D
7. Broad Street/Tank Farm Road	PM	1.11	45.9	D
	AM	0.16	0.7 (19.5)	- (C)
8. Broad Street/Aero Vista Lane	PM	0.46	2.0 (25.7)	- (D)
	AM	0.68	9.4	A
9. Broad Street/Aero Drive	PM	0.64	11.5	В
1. Volume to capacity ratio reported for worst mover	nent.			

Table 4: Existing Intersection Auto LOS

2. HCM 6th average control delay in seconds per vehicle. For side-street-stop controlled intersections the worst approach's delay is reported in parentheses next to the overall intersection delay. Note: Unacceptable operations shown in **bold** text.

The following intersection operates below the LOS D threshold for vehicles:

• Tank Farm Road/Long Street (#2): The southbound approach operates at LOS E during the PM peak hour due to long delays experienced by left-turning traffic.

	Existing Inters			
Intersection	Movement	Storage Length (ft)	Peak Hour	95 th Percentile Queue (ft) ¹
	WBR	250	AM	61
	WDR	250	PM	74
1. Tank Farm Road/South	NBR	140	AM	75
Higuera Street			PM	44
	SBL	165	AM	#295
			PM	#304
3. Tank Farm Road/Santa Fe	NBR	25	AM	15
Road			PM	78
4. Tank Farm Road/MindBody	WBL	210	AM	32
Traffic Signal			PM	18
5. Broad Street/Capitolio Way	WBL	-	AM	5
or broad barber, suprishe way			PM	5
	NBL	150	AM	#75
6. Broad Street/Industrial Way	1121	100	PM	#220
or broad buced, madelina way	SBL	150	AM	66
	0		PM	#305
	EBL	300	AM	126
		5000	PM	#294
	EBR	90	AM	209
	LDK	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	PM	77
	WBL	150	AM	#291
7. Broad Street/Tank Farm Road		150	PM	227
	NBL	290	AM	125
	TIDE .	250	PM	#233
	SBL	250	AM	90
	ODL	250	PM	#372
	SBR	300	AM	61
	obr	500	PM	252
8. Broad Street/Aero Vista Lane	EBL	75	AM	15
		, 0	PM	55
9. Broad Street / Aero Drive	SBL	200	AM	#55
			PM	10
 Queue length that would not be ex # indicates that 95th percentile volum Bold indicates queue length longe Detailed queues provided in Append 	ne exceeds capa r than storage	city, queue may		

Table 5: Existing Intersection Queues

The following instances of queue spillback or overcapacity movements are noted:

• Tank Farm Road/South Higuera Street (#1): The westbound left turning movement is over capacity and occasionally does not clear in a single cycle during the PM peak hour. The southbound left turning movement queues sometimes require more than one cycle to clear. The reported queues are longer than field-observed conditions due to the high vehicular volumes and the minimum green times required to serve pedestrians. There are relatively few pedestrian calls, so the intersection operates with shorter queues than shown in Table 5. However, some of the observed queues still exceeded the turn pocket lengths and did not clear

within a cycle. Additionally, vehicles making a southbound left turning movement can utilize the two-way left turn lane to effectively extend the turn pocket without blocking through movements.

- Tank Farm Road/Santa Fe Road (#3): The northbound right queue exceeds the turn pocket in the PM peak hour. The northbound approach is flared, without a marked turn pocket, so a pocket length of 25 feet was assumed for this analysis. However, the wide flare at this intersection generally prevents the right-turning queue from blocking left-turning traffic, even if queues exceed 25 feet.
- Broad Street/Industrial Way (#6): In the PM peak hour, the northbound and southbound left turning movements are over capacity and the queue lengths exceed the turn pocket lengths. At this location, the pedestrian walk and flashing don't walk times and split phasing dictate long cycle lengths on the east and westbound approaches, resulting in green times longer than are needed to serve the vehicular volumes. Traffic counts and field observations indicate that there are relatively few pedestrian crossings and the reported overcapacity queue operates acceptably in the field.
- Broad Street/Tank Farm Road (#7): In the PM peak hour, the eastbound left movement is over capacity. The eastbound right movement exceeds the turn pocket length during the AM peak hour. The westbound left movement is over capacity during the AM peak hour and exceeds the turn pocket length for both peak hours. The northbound left movement is over capacity during the PM peak hour. The southbound left movement is over capacity and exceeds the turn pocket length during the PM peak hour. This intersection experiences high turning volumes, which results in queues for many turning movements.

Table 6 summarizes the existing intersection pedestrian levels of service of LOS D and below at the study intersections. All bicycle intersection levels of service operated acceptably at LOS D or better under existing conditions. Detailed pedestrian and bicycle intersection level of service tables are provided in **Appendix D**.

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Table 0. Existin	is intersee	tion i cacotin		
Existing Intersec	ction Pedes	trian Levels of	Service	
	Peak		Existi	ng
Intersection	Hour	Direction	Score ^{1,2}	LOS^1
	AM	EB	>200	F
Tank Form Bood /Long Street	AM	WB	>200	F
Tank Farm Road/Long Street	PM	EB	>200	F
	PIM	WB	>200	F
	AM	EB	16.20	С
Taul Faux Dard / Sauta Fa Dard		WB	>200	F
Tank Farm Road/Santa Fe Road	PM	EB	27.20	D
	PIM	WB	>200	F
	AM	NB	>200	F
Bung d Stragt / Constalling Wiss		SB	>200	F
Broad Street/Capitolio Way	PM	NB	>200	F
	PIVI	SB	>200	F
	AM	NB	>200	F
Broad Street/Aero Vista Lane	AM	SB	>200	F
broad Street/ Aero vista Lane	PM	NB	>200	F
	PIVI	SB	>200	F
HCM 6th pedestrian score and LOS.				
HCM 6th reports pedestrian LOS at two-v	way stop contro	olled intersections	in delay (seconds).	
			· · · /	

Table 6: Existing Intersection Pedestrian LOS

Pedestrian service levels exceed the acceptable levels at intersections 2, 3, 5, and 8 due to the presence of side-street stop-controlled intersections. There are signalized intersections providing pedestrian signals near all of the deficient locations. No other pedestrian deficiencies are reported.

No bicycle intersection LOS deficiencies are reported.

Segment Operations

Tables 7 and 8 show the existing segment operations during the AM and PM peak hours.

	Existing	AM Seg	gment I	MMLO	S^1				
	Ŭ	Au			Pedestrian ²		Bicycle		nsit ³
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS
1a. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.76	С	N/A	N/A
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	2.66	В	N/A	N/A
1b. Tank Farm Road - Santa Fe Road	EB	2.75	В	2.81	С	2.06	В	N/A	N/A
to Broad Street	WB	2.75	В	N/A	N/A	2.40	В	N/A	N/A
2a. Tank Farm Road - Broad Street to	EB	2.47	В	2.85	С	2.18	В	N/A	N/A
UPRR	WB	2.47	В	3.18	С	2.41	В	3.33	С
2b. Tank Farm Road - UPRR to Orcutt	EB	3.13	С	1.27	А	0.42	А	N/A	N/A
Road	WB	3.13	С	N/A	N/A	0.49	А	4.17	D
3a. Broad Street - Orcutt Road to	NB	2.14	В	3.10	С	2.19	В	4.65	Ε
Industrial Way	SB	2.14	В	N/A	N/A	2.07	В	N/A	N/A
3b. Broad Street - Industrial Way to	NB	2.14	В	2.76	С	2.05	В	5.54	F
Tank Farm Road	SB	2.14	В	N/A	N/A	2.02	В	N/A	N/A
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.07	В	N/A	N/A
Aero Vista Lane	SB	2.52	В	3.33	С	1.03	А	4.71	Ε
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	2.86	С	1.23	А	N/A	N/A
Aero Drive	SB	2.14	В	2.25	В	0.96	А	N/A	N/A
4c. Broad Street - Aero Drive to South	NB	2.93	F	N/A	N/A	2.08	В	N/A	N/A
City Limits	SB	2.93	С	N/A	N/A	1.23	А	5.71	F
1. HCM 2010 LOS score and LOS.									
2. LOS is not established for segments without a sidewalk.									

Table 7: Existing AM Roadway Segment LOS

2. LOS is not established for segments without a sidewalk.

3. LOS is not established for segments without a directional transit route.

Table 8: Existing PM Roadway Segment LUS									
	Existing	PM Seg	gment I	MMLOS	\mathbf{S}^{1}				
		Au	ito	Pedestrian ²		Bicycle		Transit ³	
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS
1a. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.75	С	N/A	N/A
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	2.89	С	N/A	N/A
1b. Tank Farm Road - Santa Fe Road	EB	2.75	В	3.14	С	2.22	В	N/A	N/A
to Broad Street	WB	2.75	В	N/A	N/A	2.57	В	N/A	N/A
2a. Tank Farm Road - Broad Street to	EB	2.47	В	3.40	С	2.65	В	N/A	N/A
UPRR	WB	2.47	В	3.03	С	2.29	В	3.31	С
2b. Tank Farm Road - UPRR to Orcutt	EB	3.13	С	1.85	А	0.71	А	N/A	N/A
Road	WB	3.13	С	N/A	N/A	0.21	А	4.12	D
3a. Broad Street - Orcutt Road to	NB	2.14	F	3.60	D	2.38	В	4.71	Ε
Industrial Way	SB	2.14	В	N/A	N/A	2.13	В	N/A	N/A
3b. Broad Street - Industrial Way to	NB	2.14	В	2.77	С	2.10	В	5.53	F
Tank Farm Road	SB	2.14	F	N/A	N/A	2.09	В	N/A	N/A
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.04	В	N/A	N/A
Aero Vista Lane	SB	2.52	В	3.33	С	1.03	А	4.71	Ε
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	2.39	В	0.86	А	N/A	N/A
Aero Drive	SB	2.14	В	2.55	В	1.12	А	N/A	N/A
4c. Broad Street - Aero Drive to South	NB	2.93	F	N/A	N/A	1.84	А	N/A	N/A
City Limits	SB	2.93	С	N/A	N/A	1.44	А	5.65	F
 HCM 2010 LOS score and LOS. LOS is not established for segments with 	1	11							

Table 8: Existing PM Roadway Segment LOS

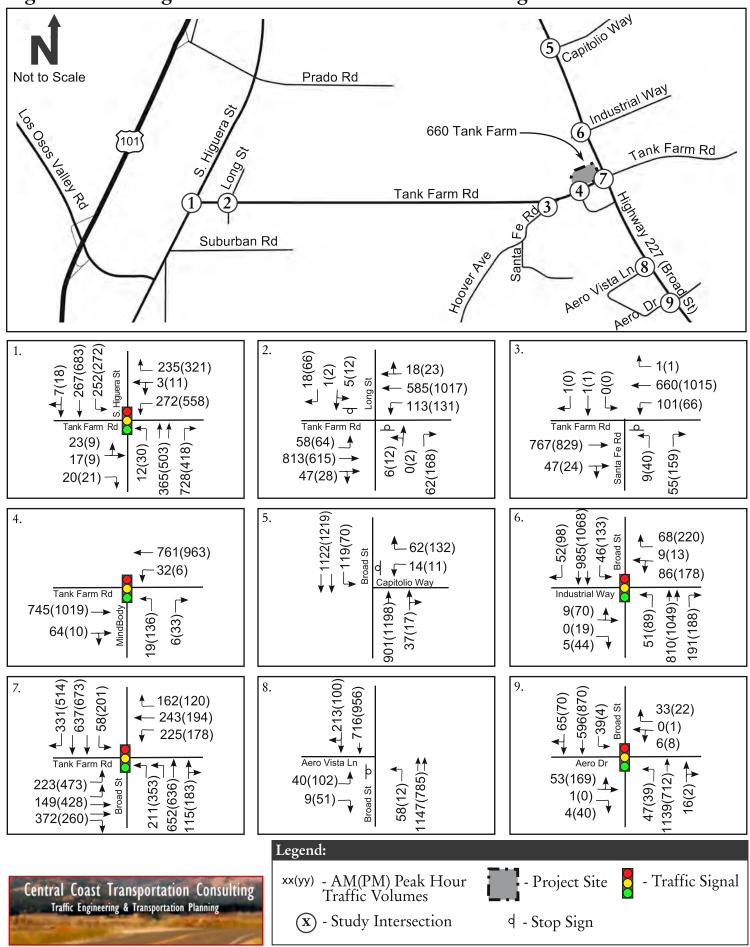
2. LOS is not established for segments without a sidewalk.

3. LOS is not established for segments without a directional transit route.

The following deficiencies are reported:

- Auto: Multiple segments of Broad Street operate deficiently because their volume to capacity ratios are greater than one, which results in an automatic LOS F. The remaining segments operate acceptably.
- **Pedestrian:** Multiple segments do not have a pedestrian LOS reported due to the absence of pedestrian facilities, or discontinuous pedestrian facilities. The segment of northbound Broad Street from Orcutt Road to Industrial Way (#3a) operates unacceptably at LOS D during the PM peak hour. This segment has a relatively wide sidewalk (over eight feet in most places) with narrower sections separated from the travel lanes by a landscaped buffer. This buffer was not included in the MMLOS analysis because it is discontinuous; however, coding even a one foot buffer improves this segment to LOS C. The remaining segments operate acceptably. The remaining segments with pedestrian facilities operate acceptably.
- **Bicycle:** All bicycle segments operate acceptably at LOS D or better.
- **Transit:** Multiple study segments operate below the desired transit service level due to relatively infrequent service or the lack of bus stops on a specific segment.

Figure 3: Existing Peak Hour Volumes and Lane Configurations



June 2020

Existing Plus Project Conditions

This section evaluates the impacts of the proposed project on the surrounding transportation network.

PROJECT TRAFFIC ESTIMATES

The amount of project traffic affecting the study locations is estimated in three steps: trip generation, trip distribution, and trip assignment. Trip generation refers to the total number of trips generated by the site. Trip distribution identifies the general origins and destination of these trips, and trip assignment specifies the routes taken to reach these origins and destinations.

Trip Generation

The project's trip generation estimate was developed using weekday daily, AM peak hour, and PM peak hour data provided in the Institute of Transportation Engineers' (ITE) Trip Generation Manual. **Table 9** shows the estimated trip generation from the proposed project.

Weekday Vehicle Trip Generation										
				AM	Peak I	Iour	PM	PM Peak Hour		
Land Use	Size	Unit ¹	Daily	In	Out	Total	In	Out	Total	
Assisted Living ²	150	beds	390	18	11	29	15	24	39	
Cancer Center ³	114	employees	830	49	14	63	38	75	113	
Shopping Center ⁴	15	KSF	566	9	5	14	27	30	57	
		Gross Trips:	1,786	76	30	106	80	129	209	
		Internal Trips ⁵	300	4	4	8	15	15	30	
		Pass-By Trips ⁶	70	0	0	0	7	7	14	
	Ne	et New Trips:	1,416	72	26	98	58	107	165	
1. KSF = thousand squar	e feet									
2. ITE Land Use Code #	254, Assiste	ed Living. Aver	age rates us	ed.						
3. ITE Land Use Code #	720, Medic	al-Dental Office	e Building. F	Fitted cu	rve equa	tions used	d.			
4. ITE Land Use Code #	820, Shopp	ing Center. Ave	erage rates u	ised.						
5. PM Peak Hour trips multiplied by a factor of 10 to determine daily trips.										
6. PM Peak Hour trips m	ultiplied by	y a factor of 5 to	determine	daily tri	ps.					
					-					

Гable 9: Trip (Generation
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Source: ITE *Trip Generation Manual*, 10th Edition, and *Trip Generation Handbook*, 3rd Edition, 2017; CCTC, 2020. The 660 Tank Farm project is expected to generate a total of 1,416 new daily trips, 98 new AM peak hour trips, and 165 new DM peak hour trips. Not new trips were found by taking the total daily. AM

The 660 Tank Farm project is expected to generate a total of 1,416 new daily trips, 98 new AM peak hour trips, and 165 new PM peak hour trips. Net new trips were found by taking the total daily, AM, and PM project generated trip totals and subtracting internal capture trips, and pass-by trips.

Trip Distribution and Assignment

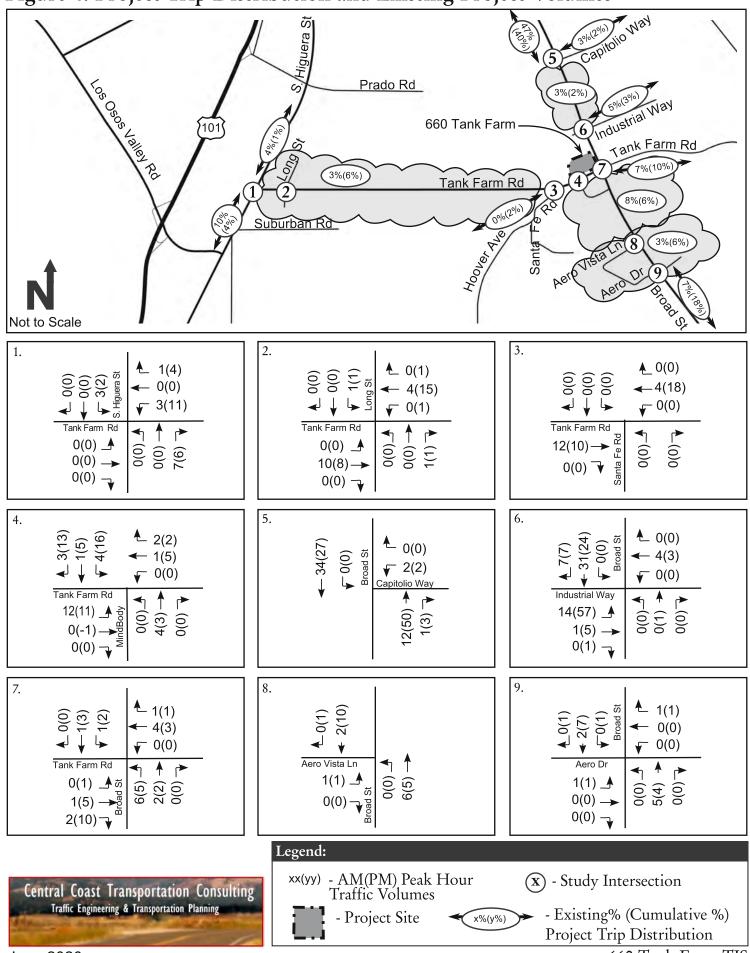
Trip distribution and assignment for the project trips were estimated using a select zone procedure in the City's Travel Demand Model, refined based on the site plan and local knowledge. **Figure 4** shows the trip distribution percentages and project traffic assignment. **Figure 5** shows the Existing Plus Project volumes.

Planned Improvements

The current site plans do not show detailed dimensions of all frontage improvements. Consistent with the Airport Area Specific Plan (AASP), 6-foot sidewalks with a 5-foot landscaped buffer were assumed along the west side Broad Street and north side of Tank Farm Road adjacent to the project site.

Site access is proposed via one full access driveway on the north leg of the Mindbody signal, one rightin right-out left-in driveway on Broad Street, and one right-in right-out driveway on Tank Farm Road. These improvements and recommended access changes are discussed in detail in the Site Access and Circulation section of this report.

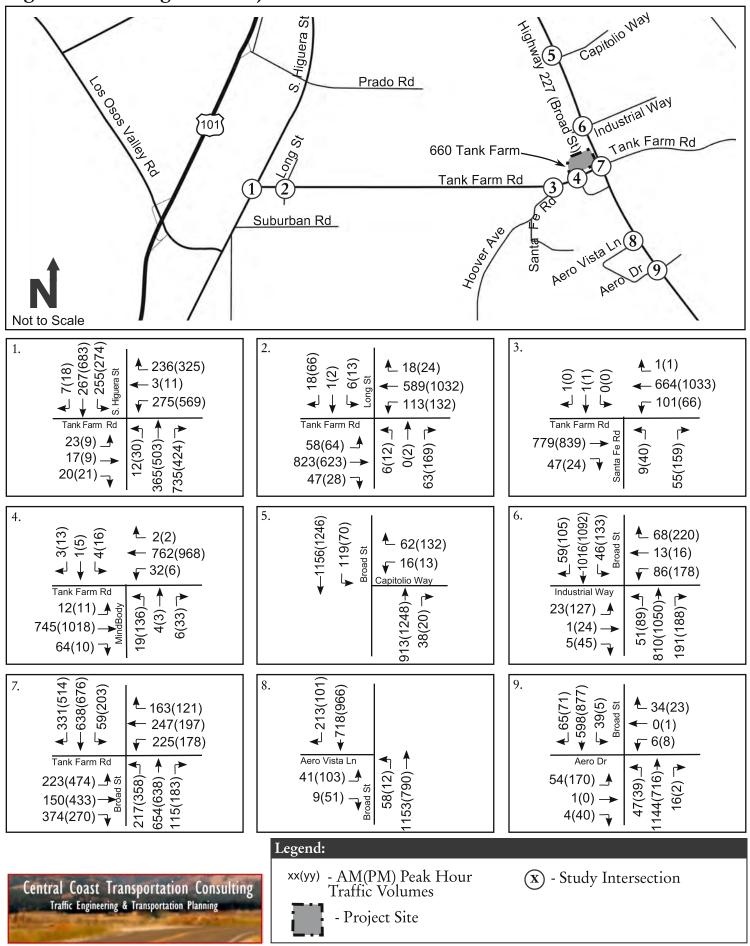
Figure 4: Project Trip Distribution and Existing Project Volumes



June 2020

660 Tank Farm TIS

Figure 5: Existing Plus Project Volumes



June 2020

EXISTING PLUS PROJECT IMPACT ANALYSIS

Intersection Operations

Figure 5 shows the Existing and Existing Plus Project peak hour traffic volumes. **Table 10** shows the LOS for the study intersections and **Table 12** summarizes the vehicular queuing under Existing Plus Project conditions, with detailed calculation sheets included in Appendix B.

Existing and Ex	xisting	Plus Pro	oject Interse	ction Au	ito Lev	els of Sei	rvice			
	Peak		Existing			Existing + Project				
Intersection	Hour	V/C^1	Delay ²	LOS	V/C^1	$\Delta V/C$	Delay ²	LOS		
1. Tank Farm Road/South Higuera	AM	0.86	26.7	С	0.87	0.01	27.2	С		
Street	PM	0.85	25.4	С	0.85	0.00	25.7	С		
2 Tank Farm Boad /Long Street	AM	0.16	2.0 (23.2)	- (C)	0.16	0.00	2.1 (25.0)	- (D)		
2. Tank Farm Road/Long Street	PM	0.49	4.5 (47.7)	- (E)	0.56	0.07	4.8 (55.6)	- (F)		
2 Tank Form Boad /Santa Fo Boad	AM	0.16	1.3 (17.5)	- (C)	0.16	0.00	1.3 (17.7)	- (C)		
3. Tank Farm Road/Santa Fe Road	PM	0.55	3.2 (30.8)	- (D)	0.56	0.01	3.2 (31.7)	- (D)		
4. Tank Farm Road/MindBody	AM	0.69	7.4	А	0.82	0.13	12.4	В		
Traffic Signal	PM	0.85	10.5	В	0.94	0.09	22.1	С		
5 Pread Street /Capitalia Way	AM	0.19	1.1 (15.1)	- (C)	0.19	0.00	1.1 (15.5)	- (C)		
5. Broad Street/Capitolio Way	PM	0.37	1.4 (20.4)	- (C)	0.39	0.02	1.5 (21.6)	- (C)		
(Due of Star at /La doctain) Wise	AM	0.76	13.9	В	0.77	0.01	14.7	В		
6. Broad Street/Industrial Way	PM	1.10	32.7	С	1.19	0.09	39.8	D		
7 Due of Star at /Touls France De of	AM	0.86	36.0	D	0.86	0.00	36.2	D		
7. Broad Street/Tank Farm Road	PM	1.11	45.9	D	1.13	0.02	46.7	D		
Prood Street / Acre Vista Lane	AM	0.16	0.7 (19.5)	- (C)	0.17	0.01	0.7 (19.7)	- (C)		
8. Broad Street/Aero Vista Lane	PM	0.46	2.0 (25.7)	- (D)	0.47	0.01	2.1 (26.3)	- (D)		
0 Burned Stars at / A and Daires	AM	0.68	9.4	А	0.68	0.00	9.4	А		
9. Broad Street/Aero Drive	PM	0.64	11.5	В	0.65	0.01	11.5	В		

Table 10: Existing and Existing Plus Project Intersection Auto LOS

1. Volume to capacity ratio reported for worst movement.

2. HCM 6th average control delay in seconds per vehicle. For side-street-stop controlled intersections the worst approach's delay is reported in parentheses next to the overall intersection delay.

Note: Unacceptable operations shown in **bold** text.

The following intersection operates below the LOS D threshold for vehicles:

• Tank Farm Road/Long Street (#2): the southbound side street approach to this intersection operates unacceptably both with and without the project during the PM peak hour. A traffic signal has been designed for this location and is required as a condition of approval for a nearby project. Installation of a traffic signal would result in acceptable operations.

The remaining intersections operate at an acceptable service level.

Table 11 presents the key queues for the study intersections. Detailed queue and LOS results are provided in Appendix B.

Existing and	l Existing P	lus Project l	ntersect	tion Queues	
Intersection	Movement	Storage	Peak	Existing	Ex.+Project
Intersection	Movement	Length (ft)	Hour	95 th Percenti	le Queue (ft) ¹
	WBR	250	AM	61	61
	WDK	230	\mathbf{PM}	74	74
. Tank Farm Road/South	NBR	140	AM	75	80
liguera Street	INDIC	140	\mathbf{PM}	44	44
	SBL	165	AM	#295	#299
	SDL		\mathbf{PM}	#304	#306
. Tank Farm Road/Santa Fe	NBR	25	AM	15	15
oad	INDK	23	\mathbf{PM}	78	80
. Tank Farm Road/MindBody	WDI	210	AM	32	45
raffic Signal	WBL	210	PM	18	20
	WDI		AM	5	8
. Broad Street/Capitolio Way	WBL	-	PM	5	8
	NIDI	150	AM	#75	#77
	NBL	150	PM	#220	#220
. Broad Street/Industrial Way	CDI	150	AM	66	67
	SBL	150	PM	#305	#305
	EBL	200	AM	126	126
		300	PM	#294	#296
	EDD	90	AM	209	211
	EBR		PM	77	88
	WDI	150	AM	#291	#291
	WBL	150	PM	227	227
Broad Street/Tank Farm Road	NIDI	200	AM	125	129
	NBL	290	PM	#233	#239
	0.DX	250	AM	90	93
	SBL	250	\mathbf{PM}	#372	#380
	CDD	200	AM	61	64
	SBR	300	\mathbf{PM}	252	256
	EDI	75	AM	15	15
Broad Street/Aero Vista Lane	EBL	75	\mathbf{PM}	55	58
	CDI	200	AM	#55	#55
. Broad Street / Aero Drive	SBL	200	PM	10	12

able 11: Existing and Existing Pl	lus Project Intersection Queues
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indicates that 95th percentile volume exceeds capacity, queue may be longer.

Bold indicates queue length longer than storage length.

Detailed queues provided in Appendix B.

The addition of project traffic increases critical queues by less than one vehicle length. No mitigations are recommended.

Table 12 and summarizes the Existing and Existing Plus Project intersection pedestrian levels of service of LOS D and below at the study intersections. All bicycle intersection levels of service operated acceptably at LOS D or better under Existing Plus Project conditions. Detailed pedestrian and bicycle intersection level of service tables are provided in Appendix D.

Existing Plus Project Conditions

Existing and Existing	ng Plus	Project Inte	rsection Ped	lestrian Lev	vels of Servic	2	
	Peak		Exis	ting	Existing + Project		
Intersection	Hour	Direction	Score ^{1,2}	LOS^1	Score ^{1,2}	LOS^1	
	AM	EB	>200	F	>200	F	
2. Tank Farm Road/Long Street	AM	WB	>200	F	>200	F	
2. Talik Falli Koad/ Long Street	PM	EB	>200	F	>200	F	
		WB	>200	F	>200	F	
3. Tank Farm Road/Santa Fe Road	AM	EB	16.20	С	16.40	С	
		WB	>200	F	>200	F	
	PM	EB	27.20	D	28.00	D	
		WB	>200	F	>200	F	
	AM	NB	>200	F	>200	F	
E Presed Street / Capitalia Way		SB	>200	F	>200	F	
5. Broad Street/Capitolio Way	PM	NB	>200	F	>200	F	
	PIM	SB	>200	F	>200	F	
	AM	NB	>200	F	>200	F	
Dural Street / Arma Winte Land	AM	SB	>200	F	>200	F	
8. Broad Street/Aero Vista Lane	PM	NB	>200	F	>200	F	
	PM	SB	>200	F	>200	F	
I. HCM 6th pedestrian score and LOS	-						
2. HCM 6th reports pedestrian LOS at		stop controlled	intersections in	n delay (secon	(af		

Table 12: Existing and Existing Plus Project Intersection Pedestrian LOS

No new deficiencies are reported from Existing to Existing Plus Project conditions.

No bicycle deficiencies are reported under Existing Plus Project conditions.

Segment Operations

Tables 13 and 14 show the Existing Plus Project segment operations during the AM and PM peak hours.

Existing Plus Project Conditions

Existi	ng Plus Pr	oiect A	M Seg	ment M	MLOS ¹				
	0	Au		Pedestrian ²		Bicycle		Transit ³	
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS
1a. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.77	С	N/A	N/A
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	2.66	В	N/A	N/A
1b. Tank Farm Road - Santa Fe Road	EB	2.75	В	2.82	С	2.06	В	N/A	N/A
to Broad Street	WB	2.75	В	N/A	N/A	2.06	В	N/A	N/A
2a. Tank Farm Road - Broad Street to	EB	2.47	В	2.85	С	2.18	В	N/A	N/A
UPRR	WB	2.47	В	3.19	С	2.42	В	3.33	С
2b. Tank Farm Road - UPRR to Orcutt	EB	3.13	С	1.27	А	0.42	А	N/A	N/A
Road	WB	3.13	С	N/A	N/A	0.50	А	4.17	D
3a. Broad Street - Orcutt Road to	NB	2.14	В	3.12	С	2.20	В	4.65	Ε
Industrial Way	SB	2.14	В	N/A	N/A	2.09	В	N/A	N/A
3b. Broad Street - Industrial Way to	NB	2.14	В	2.76	С	2.05	В	5.54	F
Tank Farm Road	SB	2.14	В	N/A	N/A	2.03	В	N/A	N/A
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.07	В	N/A	N/A
Aero Vista Lane	SB	2.52	В	3.33	С	1.03	А	4.71	Ε
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	2.87	С	1.24	А	N/A	N/A
Aero Drive	SB	2.14	В	2.25	В	0.97	А	N/A	N/A
4c. Broad Street - Aero Drive to South	NB	2.93	F	N/A	N/A	2.08	В	N/A	N/A
City Limits	SB	2.93	С	N/A	N/A	1.23	А	5.71	F
 HCM 2010 LOS score and LOS. LOS is not established for segments without a sidewalk. 									
3. LOS is not established for segments without a sidewark.									

Table 13: Existing Plus Project AM Roadway Segment LOS

3. LOS is not established for segments without a directional transit route.

Table 14: Exist	Table 14: Existing Plus Project PM Roadway Segment LOS								
Existi	ng Plus Pi	roject P	M Seg	ment M	MLOS ¹				
		Au			strian	Bicycle		Transit	
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS
1a. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.76	С	N/A	N/A
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	2.90	С	N/A	N/A
1b. Tank Farm Road - Santa Fe Road	EB	2.75	В	3.16	С	2.22	В	N/A	N/A
to Broad Street	WB	2.75	В	N/A	N/A	2.22	В	N/A	N/A
2a. Tank Farm Road - Broad Street to	EB	2.47	В	3.41	С	2.65	В	N/A	N/A
UPRR	WB	2.47	В	3.03	С	2.29	В	3.31	С
2b. Tank Farm Road - UPRR to Orcutt	EB	3.13	С	1.86	А	0.72	А	N/A	N/A
Road	WB	3.13	С	N/A	N/A	0.22	А	4.12	D
3a. Broad Street - Orcutt Road to	NB	2.14	F	3.66	D	2.40	В	4.72	Ε
Industrial Way	SB	2.14	В	N/A	N/A	2.14	В	N/A	N/A
3b. Broad Street - Industrial Way to	NB	2.14	В	2.77	С	2.10	В	5.53	F
Tank Farm Road	SB	2.14	F	N/A	N/A	2.10	В	N/A	N/A
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.04	В	N/A	N/A
Aero Vista Lane	SB	2.52	В	3.34	С	1.03	А	4.71	Ε
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	2.40	В	0.87	А	N/A	N/A
Aero Drive	SB	2.14	В	2.56	В	1.13	А	N/A	N/A
4c. Broad Street - Aero Drive to South	NB	2.93	F	N/A	N/A	1.85	А	N/A	N/A
City Limits	SB	2.93	С	N/A	N/A	1.45	А	5.65	F
1. HCM 2010 LOS score and LOS.									
2. LOS is not established for segments with	hout a sidewa	ılk.							

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not established for segments without a sidewalk.

3. LOS is not established for segments without a directional transit route.

The following deficiencies are reported:

- Auto: No new deficiencies were noted with the addition of project traffic. Operations on the Broad Street corridor are dependent on intersection operations and no improvements are recommended.
- **Pedestrian:** The northbound segment of Broad Street from Orcutt Road to Industrial Way operates at LOS D during the PM peak hour both with and without the project due to the high vehicular volumes and percentage of vehicles turning at the downstream intersection. The addition of project traffic increases the LOS score by less than two percent and increases vehicular volumes by less than five percent. This project will construct curb gutter and sidewalk fronting the property and close the exsting sidewalk gap between Industrial Way and Tank Farm Road.
- **Bicycle:** No new bicycle deficiencies are reported.
- **Transit:** Multiple study segments operate below the desired transit service level due to relatively infrequent service or the lack of bus stops on a specific segment. The addition of project traffic would not overburden or otherwise impact the transit network.

VEHICLE MILES TRAVELED

This section is provided for informational purposes in response to recent transportation deficiency analysis guidance that emerged after this project's environmental review was underway. The City of San Luis Obispo recently published updated Transportation Impact Study Guidelines (TISG) that include methods for estimating Vehicle Miles Traveled (VMT) for projects consistent with recent State requirements. The proposed project consists of a mix of land uses, which are evaluated independently below.

The project is located in an area of the City where residential VMT per capita is below the City's impact threshold of 14.25 per the TISG screening map. In addition, assisted living facilities generate fewer vehicle trips per resident when compared to typical residential uses. Relatively few residents drive cars (the applicant estimates 25%) and dining and social activities are provided on site, reducing the need for off-site travel. The assisted living component of the project will have a less-than-significant impact to VMT.

The 15,000 s.f. of retail uses will be split among three buildings. The TISG note that local-serving retail development projects with less than 50,000 s.f. of gross floor area can be assumed to cause a less-than-significant impact to VMT. Accordingly, this project component will have a less-than-significant impact to VMT.

The cancer center portion of the project is a relatively unique use without specified standards or thresholds. It would serve local patients who currently travel out of San Luis Obispo County to receive treatment, and would therefore shorten their trips.

The project's site location, design, and proximity to/accommodation of non-auto travel options all serve to minimize VMT.

SITE ACCESS AND ON-SITE CIRCULATION

This section discusses issues related to site access and on-site circulation. On-site circulation deficiencies would occur if project designs fail to meet appropriate standards, fail to provide adequate truck access, or would result in hazardous conditions.

The site plan is shown on Figure 2.

The project would have full access to Broad Street (via Industrial Way) and Tank Farm Road (via Mindbody traffic signal). New limited access driveways are proposed on Broad Street (right-in/right-out/left-in only) and Tank Farm Road (right-in/right-out only).

Recommendations

The following improvements circulation improvements are recommended:

- Widen Tank Farm Road along the project frontages to provide two westbound lanes, bike lanes, and sidewalks consistent with the parkway arterial designation in the Airport Area Specific Plan.
- Install single lane roundabout at the internal site intersection of the Mindbody road extension adjacent to SESLOC on the north property line to encourage smooth traffic flow between the sites.
- Eliminate the SESLOC right-in/right-out driveway on Broad Street.

Cumulative Conditions

Cumulative Conditions represent build-out of the land uses in the region.

CUMULATIVE VOLUME FORECASTS

Cumulative, Cumulative Project, and Cumulative Plus Project traffic volume forecasts, shown on **Figures 6 and 7**, were developed using the City's Travel Demand Model, which includes planned network and land use changes expected upon buildout of the City's General Plan. The following key network changes will shift travel patterns in the study area:

- Prado Road would extend as a four-lane regional route arterial from S Higuera Street to Broad Street with a new intersection between Capitolio Way and Industrial Way.
- A full interchange would be constructed at Prado Road and US 101.
- Victoria Avenue would be extended from Woodbridge Street to High Street.
- Orcutt Road would be widened as a four-lane arterial from the railroad tracks to Johnson Avenue.
- Tank Farm Road would be widened to four lanes west of 250 Tank Farm Road and east of Santa Fe Road.
- The intersection of Tank Farm Road/Long Street would be signalized.
- Transit conditions were assumed to remain the same as existing conditions.

Figures 6 and 7 show the Cumulative, Cumulative Project and Cumulative Plus Project traffic volumes.

Figure 6: Cumulative Volumes and Cumulative Project Volumes

	1. $(0700) \times 10^{-10}$ $(0700) \times 10^{-10}$ ($\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3. 0 0 0 0 0 0 - 1211(1217) -1211(1217) -1211(1217) -1211(1217) -232(251) Tank Farm Rd 1143(1131) 47(30) -1211(1217)
4. (0) (0) (0) (0) (0) (0) $(1294)(100)$ (0)	$\begin{array}{c c} & -1692(1542) \\ & -1692(1542) \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & &$	6. $(962)^{10}(1100)^{10}(100)^{10}$	7. $(665)^{+}190(170)$ $(067)^{-}190(170)$ (067
Broad St 90(90) ▲ 1527(1423) ↓ 1527(1423) ↓ 8. 8. 8. 8. 90(90) ▲ 1527(1423) ↓ 1527(1423) ↓	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Cumulative Project Volumes	1. $(0)00 \downarrow 1 \downarrow 1(4)$ Tank Farm Rd $0(0) \uparrow 0(0) \downarrow 1(4)$ $0(0) \uparrow 0(0) \downarrow 1(4)$ $0(0) \uparrow 0(0) 0(0) 0(0) 0(0) 0(0)$
2. (0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	3. $ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$	4. (0) $(0) = 0$ $(0) = $	2. $\begin{array}{c c} 10(43) & & & \\ 11(2) & & & \\ 11$
6. (L) L	7. $ \begin{array}{c} & (0)$	8. 16(13) → 16(13) → 17(1) → 17(1	9. $(1)_{0} \xrightarrow{15} 0(0)$ $(1)_{1} \xrightarrow{15} 0($

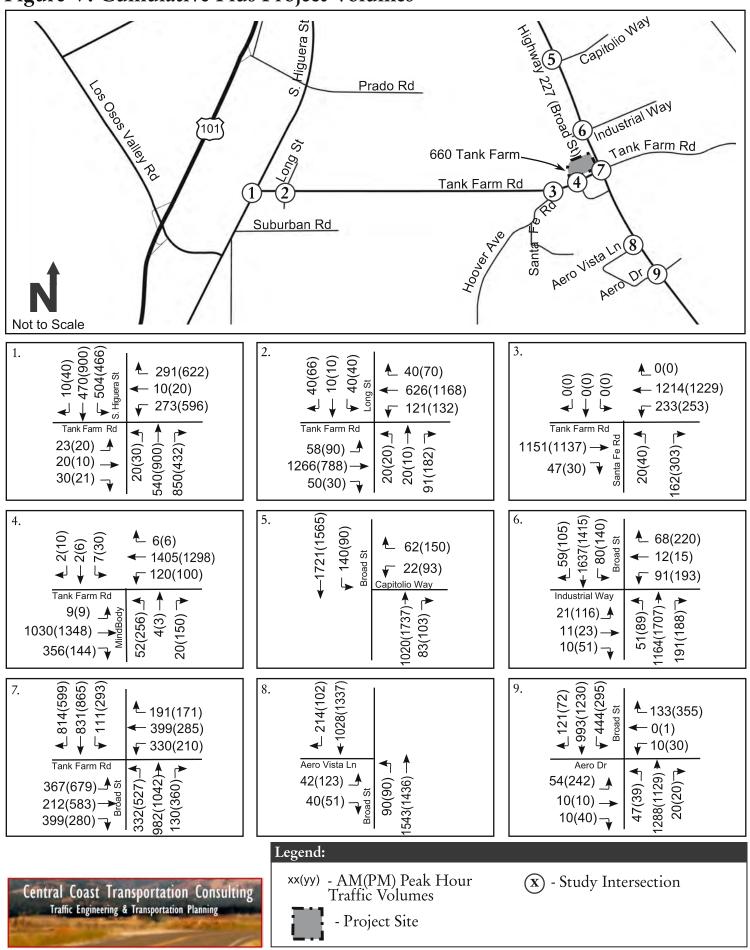
Central Coast Transportation Consulting Traffic Engineering & Transportation Planning

Legend:	
xx(yy)	- AM(PM) Peak Hour Traffic Volumes

June 2020

660 Tank Farm TIS

Figure 7: Cumulative Plus Project Volumes



June 2020

CUMULATIVE TRANSPORTATION CONDITIONS

This section describes intersection operations and roadway segment operations under Cumulative and Cumulative Plus Project conditions.

Intersection Operations

Table 15 shows the LOS for the study intersections and Table 16 summarizes the vehicular queuing under Cumulative and Cumulative Plus Project conditions, with detailed calculation sheets included in Appendix B.

Cumulative and Co	umulati	ive Plus	Project Inter	section	Auto]	Levels of	Service	
	Peak		Cumulative					
Intersection	Hour	V/C^1	Delay ²	LOS	V/C^1	$\Delta V/C$	Delay ²	LOS
1. Tank Farm Road/South Higuera	AM	1.22	66.7	Е	1.22	0.00	67.3	Ε
Street	PM	1.53	69.1	Ε	1.53	0.00	69.5	Ε
2 Tank Farm Boad /Long Streat	AM	0.83	15.0	В	0.82	-0.01	14.7	В
2. Tank Farm Road/Long Street	PM	0.77	12.5	В	0.77	0.00	12.5	В
3. Tank Farm Road/Santa Fe Road	AM	0.44	2.9 (22.9)	- (C)	0.45	0.01	2.9 (23.2)	- (C)
5. Talik Farili Koad/ Santa Fe Koad	PM	0.77	6.6 (44.0)	- (E)	0.78	0.01	6.7 (45.4)	- (E)
4. Tank Farm Road/MindBody	AM	0.77	9.6	А	0.80	0.03	15.9	В
Traffic Signal	PM	0.84	19.8	В	0.91	0.07	31.3	С
5. Broad Street/Capitolio Way	AM	0.26	1.2 (19.6)	- (C)	0.26	0.00	1.2 (20.1)	- (C)
5. Broad Street/Capitolio way	PM	1.19	8.7 (122.6)	- (F)	1.28	0.09	9.8 (140.5)	- (F)
6. Broad Street/Industrial Way	AM	0.89	19.3	В	0.90	0.01	20.4	С
6. Broad Street/ Industrial way	PM	1.39	126.9	F	1.46	0.07	149.8	F
7. Broad Street/Tank Farm Road	AM	1.25	84.7	F	1.25	0.00	86.2	F
7. Broad Street/ Tank Farm Road	PM	1.79	140.6	F	1.80	0.01	142.0	F
8. Broad Street/Aero Vista Lane	AM	0.27	1.1 (25.2)	- (D)	0.28	0.01	1.1 (25.7)	- (D)
o. Dioad Street/ Acto vista Lane	PM	1.12	8.2 (139.6)	- (F)	1.18	0.06	9.2 (157.0)	- (F)
9. Broad Street/Aero Drive	AM	0.94	31.3	С	0.95	0.01	32.2	С
5. Dioad Succi/ Meio Diive	PM	0.90	30.3	С	0.91	0.01	31.0	С

Table 15: Cumulative and Cumulative Plus Project Intersection Auto LOS

1. Volume to capacity ratio reported for worst movement.

2. HCM 6th average control delay in seconds per vehicle. For side-street-stop controlled intersections the worst approach's delay is reported in parentheses next to the overall intersection delay. Note: Unacceptable operations shown in **bold** text.

The following intersections operate below the LOS D threshold for vehicles under Cumulative Plus Project conditions:

- Tank Farm Road/South Higuera Street (#1) operates at LOS E during the AM and PM peak hour with and without the project.
- Tank Farm Road/Santa Fe Road (#3) operates at LOS E during the PM peak hour with and without the project.
- Broad Street/Capitolio Way (#5) operates at LOS F during the PM peak hour with and without the project. The westbound approach has a large delay due to the side street stop-controlled intersection and the high volume of traffic along Broad Street.
- Broad Street/Industrial Way (#6) operates at LOS F during the PM peak hour with and without the project due to the presence of long pedestrian crossing times across the north and south approaches.

- Broad Street/Tank Farm Road (#7) operates at LOS F during the AM and PM peak hours with and without the project.
- Broad Street/Aero Vista Lane (#8) operates at LOS F during the PM peak hour with and without the project. The eastbound approach has high delays due to the side street stop-controlled intersection and the high volume of traffic on Broad Street.

Movement	Storage Length (ft)	Peak	Cumulative	Cum.+Project	
	Length (ft)			,	
	Lungin (III)	Hour	95 th Percentile Queue (ft)		
WBR	250	AM	72	72	
n bit	200	\mathbf{PM}	#278	#281	
NBR	140	AM	#355	#358	
TUDIC	110	\mathbf{PM}	76	77	
SBL	165	AM	#717	#718	
0011	105	PM	#685	#686	
NBR	25	AM	48	48	
INDIX	2.5	PM	165	170	
WDI	210	AM	106	#164	
WDL	210	PM	#152	#200	
W/DT		AM	13	15	
WBL	-	PM	180	193	
NBL	450	AM	#92	#94	
	150	PM	#220	#220	
SBL	150	AM	#144	#146	
	150	PM	#321	#321	
EBL	300	AM	#204	#204	
		PM	#593	#595	
EBR		AM	294	302	
	90			82	
WBL				#510	
	150			#439	
				#245	
NBL	290			#373	
				#220	
SBL	250			#577	
				#757	
SBR	300			#620	
				28	
EBL	75			213	
				#554	
SBL	200			#364	
	SBL EBR WBL NBL SBL SBR EBL SBL	NBR 25 WBL 210 WBL - NBL 150 SBL 150 EBR 90 WBL 150 SBL 150 EBR 90 SBL 290 SBL 250 SBR 300 EBR 300	SBL165AM PM PMNBR25AM PMWBL210AM PMWBL-AM PMWBL150AM PMSBL300AM PMEBR90AM PMWBL150AM PMSBL290AM PMSBL250AM PMSBR300AM PMSBR250AM PMSBR300AM PMSBR250AM PMSBL75AM PMSBL200AM PM	SBL 165 AM PM #717 #685 NBR 25 AM 48 PM NBR 25 AM 48 PM WBL 210 AM 106 PM WBL 210 AM 106 WBL 210 AM 106 WBL 210 AM #152 WBL $-$ AM #152 WBL $-$ AM #200 NBL 150 AM #220 SBL 150 AM #210 EBR 300 AM #204 PM 450 90 4AM EBR 90 AM 294 PM 4510 94 94 PM 433 94 94 PM 4438 94 94 PM 4438 94 94 PM 4438 94 94 PM	

Table 16: Cumulative and Cumulative Plus Project Intersection Queues

Bold indicates queue length longer than storage length.

Detailed queues provided in Appendix B.

The following queue deficiencies are noted:

• Tank Farm Road/S Higuera Street (#1): Queues exceed storage length during at least one peak hour on the westbound right, northbound right and southbound left turning movements.

- Tank Farm Road/Santa Fe Road (#3): The northbound right turn queue length exceeds storage length during the AM and PM peak hours.
- Broad Street/Industrial Way (#6): The northbound and southbound left turn queue exceeds storage length during the PM peak hour.
- Broad Street/Tank Farm Road (#7): During at least one peak hour, queues exceed storage on the eastbound, westbound, northbound and southbound left turn movements as well as the eastbound and southbound right movements.
- Broad Street/Aero Vista Lane (#8): The eastbound left movement exceeds storage during the PM peak hour.
- Broad Street/Aero Drive (#9): The southbound left movement exceeds storage during the PM peak hour.

Table 17 summarizes the Cumulative and Cumulative Plus Project intersection pedestrian levels of service of LOS D and below at the study intersections. **Table 18** summarizes the Cumulative and Cumulative Plus Project intersection bicycle levels of service of LOS E and below at the study intersections. Detailed pedestrian and bicycle intersection level of service tables are provided in **Appendix D**.

	Peak		Cumu	lative	Cumulative + Proje		
Intersection	Hour	Direction	Score ^{1,2}	LOS^1	Score ^{1,2}	LOS^1	
	AM	EB	121.00	F	122.00	F	
3. Tank Farm Road/Santa Fe Road	AN	WB	>200	F	>200	F	
). Tank Farm Road/Santa Fe Road	DM	EB	122.30	F	125.80	F	
	PM	WB	>200	F	>200	F	
	АМ	NB	>200	F	>200	F	
		SB	>200	F	>200	F	
5. Broad Street/Capitolio Way	PM	NB	>200	F	>200	F	
		SB	>200	F	>200	F	
	43.5	NB	>200	F	>200	F	
Durad Streat (Asua Wata Lana	AM	SB	>200	F	>200	F	
3. Broad Street/Aero Vista Lane	PM	NB	>200	F	>200	F	
	PM	SB	>200	F	>200	F	
. HCM 6th pedestrian score and LOS							
. HCM 6th pedestrian score and LOS 2. HCM 6th reports pedestrian LOS at		stop controlled	l intersections in	n delay (secon	ds).		

Table 17: Cumulative and Cumulative Plus Project Intersection Pedestrian LOS

The following intersections operate below the LOS C threshold for pedestrians:

- Tank Farm Road/Santa Fe Road (#3) operates at LOS F during the AM and PM peak hours due to the presence of side street stop-controlled intersections and high volumes and speeds along Tank Farm Road.
- Broad Street/Capitolio Way (#5) operates at LOS F during the AM and PM peak hours due to the presence of side street stop-controlled intersections and high volumes and speeds along Broad Street. Pedestrians seeking to cross Broad Street would use one of the nearby signalized intersections with dedicated pedestrian phases.

• Broad Street/Aero Vista Lane (#8) operates at LOS F during the AM and PM peak hours due to the presence of side street stop-controlled intersections and high volumes and speeds along Broad Street. Pedestrians seeking to cross Broad Street would use one of the nearby signalized intersections with dedicated pedestrian phases.

Cumulative Plus Project Intersection Bicycle Levels of Service										
	Peak		Cumu	lative	Cumulative + Proje					
Intersection	Hour	Direction	Score ^{1,2}	LOS^1	Score ^{1,2}	LOS^1				
		NB	3.93	D	3.93	D				
	AM	SB	3.43	С	3.43	С				
		EB	3.16	С	3.16	С				
1. Tank Farm Road/South Higuera		WB	3.64	D	3.64	D				
Street	РМ	NB	3.86	D	3.86	D				
		SB	3.78	D	3.78	D				
		EB	3.11	С	3.11	С				
		WB	4.77	Ε	4.78	Ε				
1. HCM 6th bicycle score and LOS.										
2 The HCM 6th does not establish LC)S standar	ds for bicycles	at stop-control	ed intersection	ne					

Table 18: Cumulative and Cumulative Plus Project Intersection Bicycle LOS

2. The HCM 6th does not establish LOS standards for bicycles at stop-controlled intersections. Detailed tables provided in Appendix D.

The following intersection operates below the LOS D threshold for bicycles:

• Tank Farm Road/South Higuera Street (#1) operates at LOS E in the westbound direction during the PM peak hour.

Intersection Recommendations

The recommendations below would address Cumulative LOS and queueing deficiencies.

- Tank Farm Road/S Higuera Street (#1): Installing a second southbound left turn lane and dedicated bicycle lane for the westbound approach would improve operations to at least no project conditions.
- Tank Farm Road/Santa Fe Road (#3): Installing a multi-lane roundabout would provide acceptable operations.
- Broad Street/Capitolio Way (#5): No improvements are recommended. The planned future intersection of Prado Road/Broad Street would be signalized, making signalization of the nearby Broad Street/Capitolio Way intersection undesirable. Capitolio Way is connected to both Orcutt Road and Industrial Way by Sacramento Drive, thereby providing an alternative access point for drivers seeking signalized access to Broad Street.
- Broad Street/Industrial Way (#6): Converting the east and west approaches from split phasing to permissive phasing and restriping both approaches to provide dedicated left turn lanes and shared through/right turn lanes would result in LOS C or better operations.
- Broad Street/Tank Farm Road (#7): Adding a second southbound left turn lane, adding a dedicated northbound right turn lane, and converting the westbound right turn lane to a shared through/right lane would improve conditions. However, while some queue lengths would be decreased, others would be increased. The City's Circulation Element EIR recommends establishing time-of-day timing plans at this intersection.

• Broad Street/Aero Vista Lane (#8): An additional signalized intersection on the corridor is undesirable and no improvements are recommended. The signalized intersection of Broad Street/Aero Drive provides a viable alternative route for drivers in this area. However, additional vehicle at the Broad Street/Aero Drive would further increase the southbound left turn queue length.

Segment Operations

Tables 19 through 22 summarize the segment operations during the AM and PM peak hours under Cumulative and Cumulative Plus Project conditions.

	umulative			• •					
			Auto		Pedestrian ²		/cle	Trar	nsit ³
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS
1a. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.98	С	N/A	N/A
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	2.88	С	N/A	N/A
1b. Tank Farm Road - Santa Fe Road	EB	2.75	В	3.22	С	2.25	В	N/A	N/A
to Broad Street	WB	2.75	В	3.12	С	2.38	В	N/A	N/A
2a. Tank Farm Road - Broad Street to	EB	2.47	В	2.99	С	2.35	В	N/A	N/A
UPRR	WB	2.47	В	3.51	D	2.60	В	3.38	С
2b. Tank Farm Road - UPRR to Orcutt	EB	3.13	С	1.05	А	0.23	А	N/A	N/A
Road	WB	3.13	С	N/A	N/A	0.33	А	4.14	D
3a. Broad Street - Orcutt Road to	NB	2.14	В	3.36	С	2.30	В	4.69	Ε
Industrial Way	SB	2.14	F	N/A	N/A	2.29	В	N/A	N/A
3b. Broad Street - Industrial Way to	NB	2.14	В	3.09	С	2.22	В	5.59	F
Tank Farm Road	SB	2.14	F	N/A	N/A	2.27	В	N/A	N/A
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.23	В	N/A	N/A
Aero Vista Lane	SB	2.52	В	3.68	D	1.15	А	4.76	\mathbf{E}
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	3.23	С	1.35	А	N/A	N/A
Aero Drive	SB	2.14	F	2.93	С	1.27	А	N/A	N/A
4c. Broad Street - Aero Drive to South	NB	2.93	F	N/A	N/A	2.14	В	N/A	N/A
City Limits	SB	2.93	С	N/A	N/A	1.49	А	5.85	F
1. HCM 2010 LOS score and LOS.									
2. LOS is not established for segments with	nout a sidewa	lk.							
3. LOS is not established for segments with	nout a directi	onal trans	sit route.						

Cumulative PM Segment MMLOS ¹											
		Auto		Pedestrian ²		Bicycle		Transit ³			
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS		
la. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.89	С	N/A	N/A		
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	3.00	С	N/A	N/A		
lb. Tank Farm Road - Santa Fe Road	EB	2.75	В	3.60	D	2.38	В	N/A	N/A		
to Broad Street	WB	2.75	В	3.06	С	2.36	В	N/A	N/A		
2a. Tank Farm Road - Broad Street to	EB	2.47	В	3.87	D	2.86	С	N/A	N/A		
UPRR	WB	2.47	В	3.22	С	2.44	В	3.34	С		
2b. Tank Farm Road - UPRR to Orcutt	EB	3.13	С	1.53	А	0.57	А	N/A	N/A		
Road	WB	3.13	С	N/A	N/A	0.00	А	4.09	D		
3a. Broad Street - Orcutt Road to	NB	2.14	F	4.26	Ε	2.56	В	4.81	Ε		
Industrial Way	SB	2.14	F	N/A	N/A	2.24	В	N/A	N/A		
3b. Broad Street - Industrial Way to	NB	2.14	F	3.27	С	2.31	В	5.60	F		
Гапk Farm Road	SB	2.14	F	N/A	N/A	2.21	В	N/A	N/A		
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.30	В	N/A	N/A		
Aero Vista Lane	SB	2.52	В	3.66	D	1.15	А	4.76	Ε		
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	3.26	С	1.19	А	N/A	N/A		
Aero Drive	SB	2.14	F	3.11	С	1.33	А	N/A	N/A		
4c. Broad Street - Aero Drive to South	NB	2.93	F	N/A	N/A	2.07	В	N/A	N/A		
City Limits	SB	2.93	С	N/A	N/A	1.61	А	5.77	F		

Table 20: Cumulative PM Roadway Segment LOS

2. LOS is not established for segments without a sidewalk.

3. LOS is not established for segments without a directional transit route.

Cumulative Plus Project AM Segment MMLOS ¹											
		Auto		Pedestrian ²		Bicycle		Transit ³			
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS		
1a. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.98	С	N/A	N/A		
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	2.88	С	N/A	N/A		
1b. Tank Farm Road - Santa Fe Road	EB	2.75	В	3.23	С	2.25	В	N/A	N/A		
to Broad Street	WB	2.75	В	3.14	С	2.38	В	N/A	N/A		
2a. Tank Farm Road - Broad Street to	EB	2.47	В	2.99	С	2.35	В	N/A	N/A		
UPRR	WB	2.47	В	3.51	D	2.61	В	3.38	С		
2b. Tank Farm Road - UPRR to	EB	3.13	С	1.05	А	0.24	А	N/A	N/A		
Orcutt Road	WB	3.13	С	N/A	N/A	0.34	А	4.14	D		
3a. Broad Street - Orcutt Road to	NB	2.14	В	3.38	С	2.31	В	4.69	Ε		
Industrial Way	SB	2.14	F	N/A	N/A	2.30	В	N/A	N/A		
3b. Broad Street - Industrial Way to	NB	2.14	В	3.09	С	2.22	В	5.59	F		
Tank Farm Road	SB	2.14	F	3.58	D	2.28	В	N/A	N/A		
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.24	В	N/A	N/A		
Aero Vista Lane	SB	2.52	В	3.69	D	1.16	А	4.77	Е		
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	3.25	С	1.36	А	N/A	N/A		
Aero Drive	SB	2.14	F	2.94	С	1.27	А	N/A	N/A		
4c. Broad Street - Aero Drive to	NB	2.93	F	N/A	N/A	2.14	В	N/A	N/A		
South City Limits	SB	2.93	С	N/A	N/A	1.49	А	5.85	F		

Table 21: Cumulative Plus Project AM Roadway Segment LOS

2. LOS is not established for segments without a sidewalk.

3. LOS is not established for segments without a directional transit route.

Cumul	Cumulative Plus Project PM Segment MMLOS ¹											
Cultur		Auto		3		Bicycle		Trar	nsit ³			
Segment	Direction	Score	LOS ¹	Score	LOS	Score	LOS	Score	LOS			
1a. Tank Farm Road - Old Windmill	EB	2.34	В	N/A	N/A	2.89	С	N/A	N/A			
Lane to Santa Fe Road	WB	2.34	В	N/A	N/A	3.01	С	N/A	N/A			
1b. Tank Farm Road - Santa Fe Road	EB	2.75	В	3.62	D	2.38	В	N/A	N/A			
to Broad Street	WB	2.75	В	3.08	С	2.37	В	N/A	N/A			
2a. Tank Farm Road - Broad Street to	EB	2.47	В	3.89	D	2.86	С	N/A	N/A			
UPRR	WB	2.47	В	3.23	С	2.44	В	3.34	С			
2b. Tank Farm Road - UPRR to	EB	3.13	С	1.54	А	0.58	А	N/A	N/A			
Orcutt Road	WB	3.13	С	N/A	N/A	0.01	А	4.09	D			
3a. Broad Street - Orcutt Road to	NB	2.14	F	4.31	Ε	2.57	В	4.82	Ε			
Industrial Way	SB	2.14	F	N/A	N/A	2.25	В	N/A	N/A			
3b. Broad Street - Industrial Way to	NB	2.14	F	3.27	С	2.31	В	5.60	F			
Tank Farm Road	SB	2.14	F	3.36	С	2.22	В	N/A	N/A			
4a. Broad Street - Tank Farm Road to	NB	2.52	F	N/A	N/A	2.31	В	N/A	N/A			
Aero Vista Lane	SB	2.52	В	3.69	D	1.16	А	4.76	Ε			
4b. Broad Street - Aero Vista Lane to	NB	2.14	В	3.27	С	1.19	А	N/A	N/A			
Aero Drive	SB	2.14	F	3.14	С	1.34	А	N/A	N/A			
4c. Broad Street - Aero Drive to	NB	2.93	F	N/A	N/A	2.07	В	N/A	N/A			
South City Limits	SB	2.93	С	N/A	N/A	1.62	А	5.78	F			
1. HCM 2010 LOS score and LOS.				-		-						
2. LOS is not established for segments wi	thout a sidew:	alk.										

Table 22: Cumulative Plus Project PM Roadway Segment LOS

3. LOS is not established for segments without a directional transit route.

The following deficiencies are reported:

- Auto: Segment on Broad Street have a V/C ratio that is greater than one, resulting in LOS F, • even though the LOS scores are acceptable. The addition of project traffic does not change the auto LOS, and the nearby intersections would constrain flow before the segments did, so the project would have an insignificant effect on these segments.
- Pedestrian: Multiple segments do not have a pedestrian LOS reported due to the absence of • pedestrian facilities, or the presence of discontinuous pedestrian facilities. Multpile segment on Tank Farm and Broad operate at LOS D or E due to high vehicular volumes and speeds. The project increases the LOS Scores by one persent or less an insignificant amount.
- Bicycle: No bicycle deficiencies are reported.
- Transit: Several segments operate below the transit LOS threshold due to infrequent service • to the study segments. Given the relatively low boardings on stops in the area, the addition of project traffic would not overburden or otherwise impact the transit network.

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