

# Clearwater at Windsor Project

## Initial Study – Mitigated Negative Declaration

*prepared by*

**Town of Windsor**
Community Development Department
9291 Old Redwood Highway
Windsor, California 95492
Contact: Kimberly Jordan, Planner III

*prepared with the assistance of*

**Rincon Consultants, Inc.**
4825 J Street, Suite 200
Sacramento, California 95819

**September 2022**

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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# Initial Study

## 1. Project Title

Clearwater at Windsor Project

## 2. Lead Agency Name and Address

Town of Windsor
Community Development Department
9291 Old Redwood Highway, Building 400
Windsor, California 95492

## 3. Contact Person and Phone Number

Kimberly Jordan
Planner III
(707) 838-1201
kjordan@townofwindsor.com

## 4. Project Location

The project site is in the southern portion of the Town at 376 Shiloh Road in Windsor, Sonoma County, California. The approximately 24.8-acre vacant site comprises Assessor's Parcel Number 059-271-059 and is located south and adjacent to Shiloh Road and east and adjacent to Highway 101 (project site). The project site includes 4.95 acres of wetlands. The project would encompass approximately 12 acres on the northern and eastern portions of the site. Figure 1 shows the regional location of the project area, and Figure 2 shows the project location and surrounding uses.

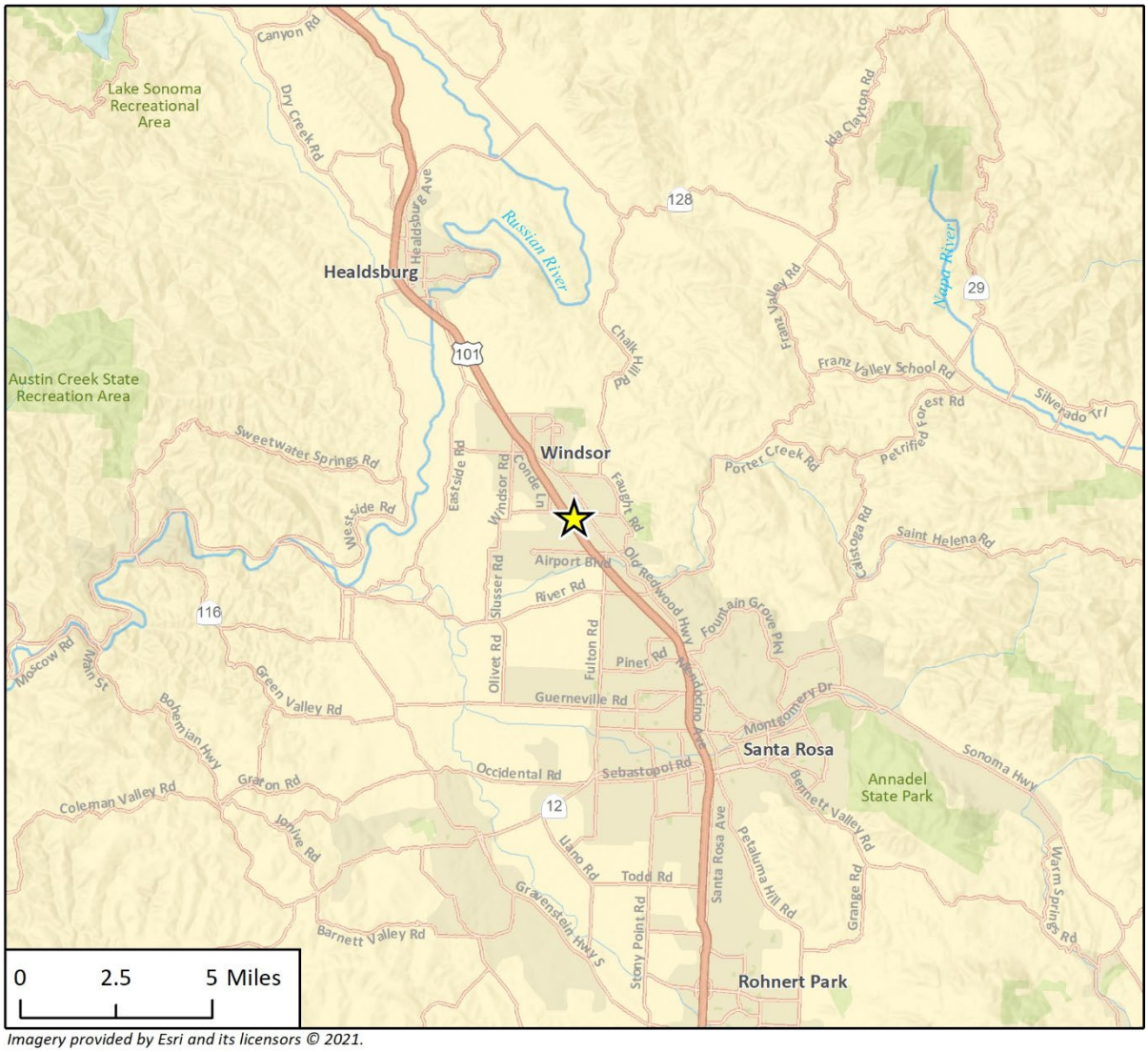
## 5. Project Sponsor's Name and Address

Tony Ferrero
Clearwater Living
5000 Birch Street, Suite 400
Newport Beach, California 92660

## 6. General Plan Designation

The project site is designated as Gateway Commercial (GC), Boulevard Mixed-Use (BMU), and Potential Wetlands in the 2040 General Plan and is located in the Shiloh Road East Community Place area.

## Figure 1 Regional Location




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Project Location

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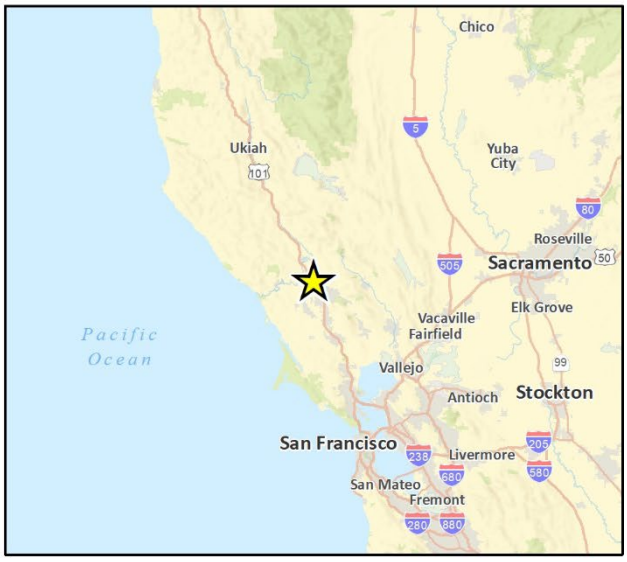


**Figure 2 Project Site**




*Imagery provided by Microsoft Bing and its licensors © 2021.*

# 7. Specific Plan Designation

The project site is designated as Regional Mixed-Use, Mixed-Use, and Oakhurst Neighborhood in the Shiloh Road Village Vision Plan ("Vision Plan").

# 8. Zoning

The project site is zoned Gateway Commercial, Boulevard Commercial, and Flood Hazard Overlay.

# 9. Description of Project

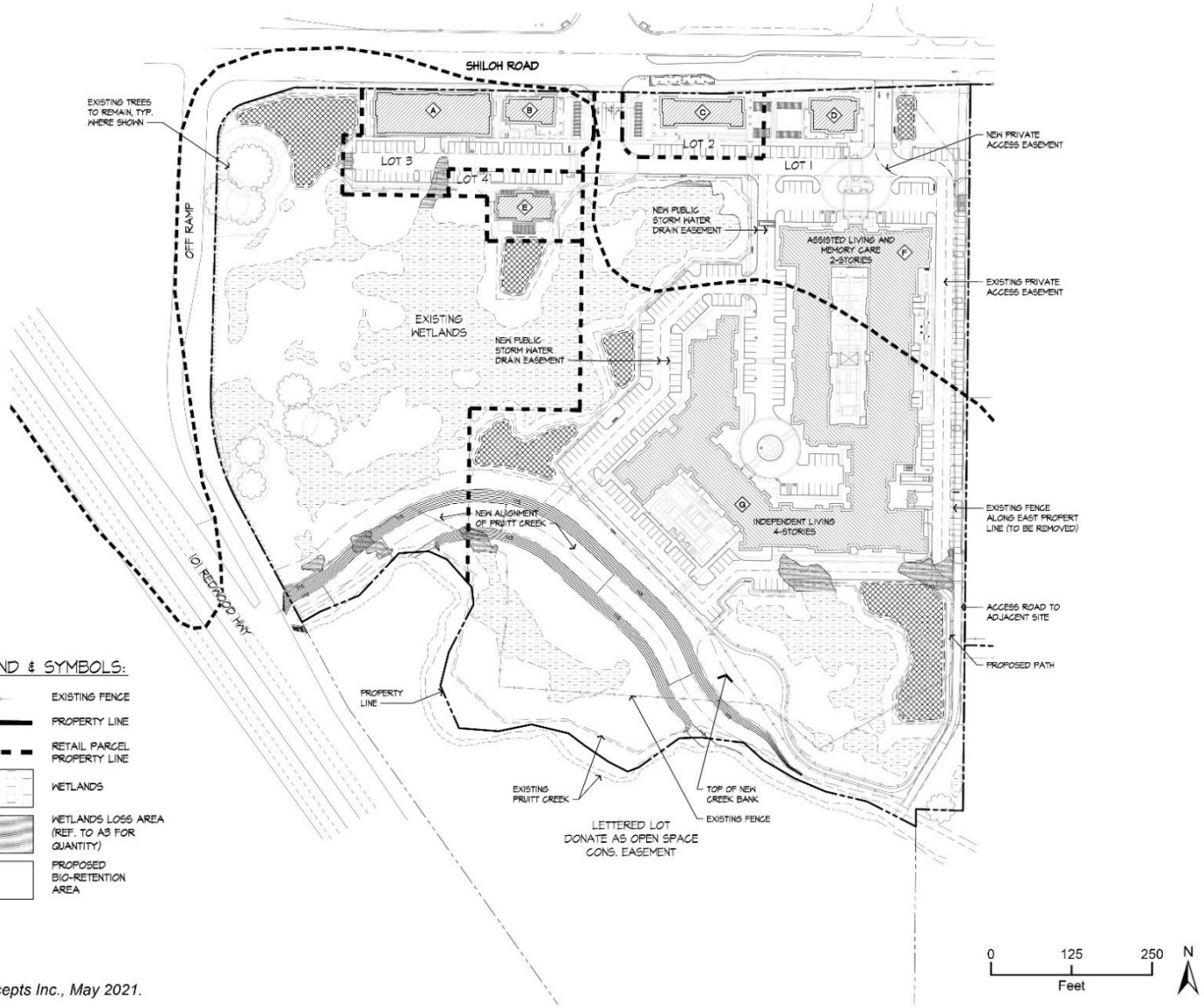
The project would involve the development of a continuum of care senior living community and commercial space, and 10 apartments. The Development Agreement for Clearwater is also part of the project, but is not discussed further in this IS-MND because the agreement would not result in any physical impacts on the environment.[1] The senior living community would be located on the southeastern portion of the property and commercial uses and apartments would front Shiloh Road to the north. The remainder of the property would be preserved as open space to protect existing wetlands and potential rare plant habitat. The senior living community would include 141 independent living units, 71 assisted living units, and 34 memory care units for a total of 246 units. The assisted living and memory care units would be two-stories with a central courtyard. The courtyard would include lounge seating, outdoor garden area, a barbeque counter, and outdoor dining space. The independent living units would be four-stories. Two rooftop decks would be located on the second floor of the buildings. Additionally, outdoor courtyards are and would include outdoor seating, a bocce ball court, putting green, bar seating, pool, and jacuzzi. Independent living units would include 18 studios, 76 one bedroom, and 47 two-bedroom units. A boardwalk with educational signage and a seating area would be located south of the senior living community. Project site plans are shown in Figure 3 and the conceptual design plans are show in Figure 4.

Commercial development on the site would include approximately 26,000 square feet in five buildings as well as outdoor dining and exercise areas. Building A would be a two-story building with 10 apartment units over a parking garage. The first floor would include restaurants, residential parking, and approximately 2,874 square feet of retail, residential parking, and restaurants and the second floor would include the apartments and one office space. Building B would also include two stories with 3,603 square feet of retail space on the first story and 5,146 square feet of office space on the second story. Buildings A and B would be connected on the second story by an enclosed bridge. The bridge would connect the office spaces in Buildings A and B. Buildings C and E would each include one story. Building C would include 5,986 square feet with retail and restaurant space and Building E would include 3,960 square feet with retail or restaurant space. Building D would include two stories and amenities for the senior living community. Amenities on the first floor include a gym and salon/spa and amenities on the second floor would include office space and two model units that could potentially be rentable.

Buildings would be constructed with a variation and articulation in building massing with Village Victorian-style, cottage farmhouse, and craftsman architecture, pursuant to the Design Guidelines of the Shiloh Road Village Vision Plan. Materials and finishes would convey a natural appearance as required by the Vision Plan.

[1] The terms of the Clearwater Development Agreement are based on the Development Agreement dated June 27, 2022.

**Figure 3 Project Site Plans**




*Source: Architectural Concepts Inc., May 2021.*

## Figure 4 Conceptual Site Plan




*Source: Architectural Concepts Inc., May 2021.*

The project would access Shiloh Road via a new drive aisle connection at the signalized intersection with Hembree Lane. A second access to the east would be constructed as a new driveway on the south side of the Business Park Court intersection. The Clearwater driveway would be restricted to right turns in and out, with a raised median on Shiloh Road and a raised right-turn channelization island on the driveway. Additionally, left turns into Business Park Court would be retained, with outbound left turns from Business Park Court prohibited. The eastern driveway would be a 20-foot wide driveway between Building C and the eastern property line.

The westbound Shiloh Road approach would include a new left-turn pocket served by a protected left-turn phase On site circulation would be provided by an east-west drive aisle with parking located south of the proposed commercial buildings, along Shiloh Road. A north-south drive aisle with parking would extend from Shiloh Road along the eastern property line to provide access to the senior living community. A second north-south drive aisle would be located west of the senior living building. A total of 361 parking spaces would be provided on the site. There would be 238 surface parking spaces, 92 carport spaces, 33 covered parking spaces in garages (18 spaces in private garages as part of the independent living community and 15 spaces in the common garage under the 10-residential units as part of the commercial buildings), seven accessible spaces, and one accessible van space. Additionally, the project would include 20 bicycle parking spaces.

Loading facilities would be included on the southeastern portion of the project site next to the Independent Living space. Unloading areas would be approximately 2,019 square feet. Deliveries would typically occur four to five times per week from 8:00 a.m. to 11 a.m. and from 2:00 p.m. to 4:00 p.m. It is anticipated that daily deliveries would include one food delivery truck, up to four vendor trucks, and one courier delivery services truck.

The project would include energy efficient features such as, meeting California Green Building Standards, incorporating LED lighting and solar panels on carports, providing Electric Vehicle (EV) parking spaces, and providing 20 bicycle parking spaces. The project would also comply with the California Building Code, which provides minimum standards to ensure that proposed structures are designed using sound engineering practices and appropriate engineering standards for the seismic area in which a Project site is located.

The project would have a 100-foot agricultural buffer to the south and east where the project site abuts agricultural land located in the unincorporated county. The Town of Windsor Zoning Ordinance requires an agricultural buffer of 200 feet but allows the width of the buffer to be reduced to a minimum of 100 feet in certain circumstances with Town Council approval. Project improvements, including living space that is part of the senior living facility, would be approximately 175 feet from the adjacent agricultural land and would provide full disclosure of agricultural operations to prospective residents of units within the agricultural buffer zone.

The project site has a land use designation of Gateway Commercial (GC) and Boulevard Mixed-Use (BMU). Therefore, the project requires a General Plan Amendment from GC and BMU to Retail Commercial (RC). The project also requires a rezone to Planned Development (PD), four-lot Tentative Parcel Map, Site Plan and Design Review approval, and approval of a reduced agricultural buffer.

## Pruitt Creek Redesign

Pruitt Creek forms the southern border of the project site, and the project includes creation of a new northern creek channel next to the existing Pruitt Creek channel that would impact approximately 460 linear feet of the existing channel below the top of banks to tie both channels

together. The new northern channel would tie into the existing creek channel and would increase the creek's hydraulic capacity to help prevent it from spilling over its banks and flooding the newly developed project site and Highway 101 and the upstream residential properties, as it does now on occasion. The northern creek alignment will be constructed at a slightly higher elevation than the existing creek. The elevation difference between the creek and northern creek alignment will, during low flow conditions, ensure that the water naturally flows towards the existing creek thalweg (i.e., line of lowest elevation in the creek). This new channel construction would remove and realign the creek bank, impacting the bed and bank of the creek and riparian vegetation along the creek's banks. The project would also include installation of two outfall structures along the northern bank of Pruitt Creek below the ordinary high-water mark. These outfalls would release into Pruitt Creek water that is captured and treated by a detention basin that would be built on the project site. The Initial Stormwater Low Impact Development Submittal (SWLID) contains Best Management Practices (BMPs) that would be implemented as part of the project, intended to minimize impacts to Pruitt Creek. BMPs would include Stormwater Pollution Prevention Measures, Stormwater Volume Control Measures, and Stormwater Treatment Control Measures. Temporary Treatment Control Measures would be implemented during construction to minimize impact to water quality. Specifically, a Sediment Control Plan would be prepared as part of the project, which would include the use filter fabric, gravel bags, straw wattles or similar measures to collect sediment and filter water before allowing its discharge to downstream facilities during construction. As part of Permanent Treatment Control Measures, a series of volume capture sections would be incorporated into the site to retain stormwater during light precipitation events and promote infiltration. The project would also use engineered soil, which is anticipated to encourage storage and filtration, reducing runoff.

## Outdoor and Open Space

Common use outdoor spaces would be provided throughout the site. Outdoor spaces include trellis-covered patios on both sides of the entry from Hembree Lane, a trail north of Pruitt Creek on the eastern side of the site. For compliance with the Shiloh Road Village Vision Plan Design Guidelines the project would include pedestrian walkways, buildings close to sidewalks, fountains, and outdoor eating space. A boardwalk with educational signage and a seating area would be located south of the senior living community. The western portion of the project site would remain undeveloped to preserve existing wetlands and potential rare plant habitat located on the site.

## Landscape Design

The project site would include landscaping with drought tolerant and low water use species designed to be compatible with the existing landscape and surrounding habitats. Bioretention basins would be provided at the northeast, northwest, and southeast corners of the site as well as southwest of the senior living community. The project would also include a well for landscape irrigation.

## Construction

Construction is anticipated to commence in May 2023. Project construction would last approximately 23 months. Phase 1 would include construction of required streets, drainage facilities, water and sewer systems, and all other utilities. All commercial development along Shiloh Road and the senior living and apartment buildings would be constructed as part of Phase 1. If any element is built out subsequent to Phase 1, it would be the build out of Building E. The remaining project development would be constructed as part of Phase 2.

Project construction would include approximately 18,000 cubic yards of excavated soil, which would remain on the site used as fill. In addition, 7,000 cubic yards of soil would be imported from off-site sources to be used as fill. Project construction is proposed to occur Monday through Saturday from 7:00 a.m. to 6:00 p.m.

### *Construction Best Management Practices*

The applicant would implement the following best management practices in order to control and reduce fugitive dust emissions resulting from construction activities:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

## 10. Surrounding Land Uses and Setting

The project site is vacant with several mature trees and wetlands and has been vacant since at least the early 1940s. As shown in Figure 2 the project site is bordered by Shiloh Road to the north, Pruitt Creek to the south, vacant land to the east, and Highway 101 northbound off ramp and Highway 101 to the west. The southern and eastern edges of the project site are coterminous with the Town limits. The southern edge of the site is also conterminous with the Town's Urban Growth Boundary. The project site is located in the south and westernmost portion of the Shiloh Road Village Vision Plan and 2040 General Plan Shiloh Road East Community Place area. Table 1 shows the existing land uses, 2040 General Plan designation, zoning of surrounding parcels, and Shiloh Road Village Vision Plan Designation.

**Table 1 Surrounding Land Uses**

| Direction | Existing Land Use Jurisdiction | 2040 General Plan Land Use Designation | Zoning | Shiloh Road Village Vision Plan Designation |
|---|---|---|---|---|
| North | Shiloh Road<br>Home Depot, vacant | Gateway Commercial<br>Boulevard Mixed-Use<br>High Density Residential | Planned Development (Shiloh Center)<br>Boulevard Commercial<br>Compact Residential | Regional Mixed-Use<br>Mixed-Use<br>Oakhurst Neighborhood |
| South | Vineyards | N/A<br>Outside of UGB | N/A<br>Outside of Town limits | N/A |
| East | Vacant agricultural building | Boulevard Mixed-Use | Boulevard Commercial | Mixed-Use<br>School site |
| West | Highway 101 and Highway 101 off-ramp | N/A | N/A | N/A |

UGB = Urban Growth Boundary

N/A = not applicable

# 11. Other Public Agencies Whose Approval is Required

The Town of Windsor is the lead agency with responsibility for approving the project.

The project would require the following discretionary approvals from the Town of Windsor:

- General Plan land use amendment from GC and BMU to RC
- Rezone to Planned Development
- Tentative Parcel Map
- Site Plan and Design Review
- Reduction in agricultural buffer
- Housing allocation
- Development agreement

The following regional, state, and federal agencies may require their own permits, inspections, reporting and/or certifications prior to construction and/or completion of the project:

- **Regional Water Quality Control Board.** Coverage under the NPDES Construction General Permit and Waste discharge requirement permit(s) may be required. If a Clean Water Act Section 404 permit is required (see below), the project would also require a Clean Water Act section 401 water quality certification from the Regional Water Quality Control Board. If a Clean Water Act Section 404 permit is not required, the project may also require Waste Discharge Requirements from the Regional Water Quality Control Board pursuant to the Porter-Cologne Water Quality Control Act.
- **California Department of Fish and Wildlife (CDFW)**. A Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement may be required.
- **United States Army Corps of Engineers**. A Section 404 of the Clean Water Act permit may be required for discharge of dredge and fill material into waters of the United States, including wetlands. The United States Army Corps of Engineers would likely be required to consult with the National Marine Fisheries Service and/or United States Fish and Wildlife Service under Section 7 of the federal Endangered Species Act and/or Magnuson-Stevens Fishery Conservation and Management Act, and could potentially be required to consult with the California State Historic Preservation Officer under Section 106 of the National Historic Preservation Act prior to issuing a section 404 permit for the project.
- **Sonoma County.** A well construction permit would be required for installation of a groundwater well to provide water for irrigation purposes.

# Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

# Determination

Based on 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 to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

□ 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" or "less than significant with mitigation incorporated" impact 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 potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) 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.

Kim Jordan
Signature

9.14.2022
Date

Kim Jordan
Printed Name

Planner III
Title

# Environmental Checklist

## 1 Aesthetics

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Except as provided in Public Resources Code Section 21099, would the project: | | | | |
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ■ | ☐ |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ■ |
| c. 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 a 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? | ☐ | ☐ | ■ | ☐ |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | ☐ | ■ | ☐ | ☐ |

*a. Would the project have a substantial adverse effect on a scenic vista?*

Windsor is located between the Mayacamas mountain range in the east and the Coastal Range ridgeline to the north, which forms a scenic backdrop for the Town. Highway 101 is a designated scenic corridor that traverses the Town roughly from north to south. The project site is situated east of US 101 and currently views across the project site from the highway are expansive and include wetlands in the foreground, low-rise development in the Town in the middle ground, and the mountain range in the background, as illustrated in Figure 5. The Windsor 2040 General Plan names view of these mountain ranges as a scenic resource as viewed from throughout the Town. A vineyard is under cultivation to the south of the site and is currently part of the view from US 101.

Applicable provisions in the Town of Windsor Municipal Code, the Town's design guidelines, and the policies in the Windsor 2040 General Plan are aimed at protecting scenic resources. Chapter 4 of the Town of Windsor Municipal Code monitors and regulates residential development to respect the Town's natural resources, including those that offer scenic views. Specifically, Section 2.2.8(c) of the Town's Design Guidelines states that "tree planting should respect view corridors at Windsor's

edge." Additionally, Section 4.1.3(f) of the Town's Design Guidelines states that parks should maintain and enhance views of distant ridge tops, significant public buildings, and monuments. Goal ER-9 of the 2040 General Plan in intended to recognize and preserve significant views and landforms along major corridors and surrounding community. Specifically, Policy ER-9.2 intends to ensure that development proposals along scenic corridors do not detract from public viewpoints by requiring design guidelines that would enhance and preserve vistas. The project has been designed in compliance with and is consistent with these requirements and policies.

People traveling east on Shiloh Road would have a view to the southeast of the open space and wetlands that currently comprise the project site, with the eastern mountains ridges visible in the distance (Figure 6). North of Shiloh Road and the project site one nearby site is developed with a single-story service station, beyond which is more commercial development. Mature trees screen much of this development from the roadway. East of the project site, one- and two-story residential development intermingles with small agricultural parcels where large oak trees and other species grow beside the road. Denser residential development closer to the mountains includes a mobile home park and small single-family neighborhoods that also occur beside small vineyards and other agricultural uses currently under cultivation. This commingling of residential, commercial, and agricultural development characterizes the edges of the Town.

**Figure 5 View Across Project Site from US 101 Looking East**




Source: Google Earth 2021

**Figure 6 View Across Project Site from Shiloh Road Looking Southeast**



Source: Google Earth 2021

The project would include development of a senior living facility in the southeast portion of the site with structures that would be two stories tall for the memory care and assisted living units and four-stories tall for the independent living units. North of these buildings, mixed-use development (commercial/service and residential) would be up to two stories tall. A conceptual illustration of how the project would appear from US 101 is provided in Figure 7.

The view of the mountains is limited by the taller clusters of the senior living facility but would be still available beyond the lower-rise mixed-use structures. Furthermore, the entire western portion of the project site would be preserved open space to conserve the existing wetlands that occur there. Finally, the project is designed to strike a balance between development the Windsor 2040 General Plan finds necessary to meet the needs of the Town's residents and the conservation of the visual resources, including scenic vistas.

**Figure 7 Conceptual Elevation of the Project when Developed Looking East**



Source: CSL Berkshire Acquisitions II 2021

People traveling on US 101 would be moderately sensitive to development through this corridor, as the current conditions include some residential, commercial, and service use development alongside agricultural development, across which scenic vistas are available. The sensitivity is not high as vehicles would be moving at high speeds on this roadway and drivers would be prioritizing attention on the traffic over leisurely views of the landscape. Furthermore, the mix of existing development with agricultural uses anticipates the type of development proposed by the project and viewers would likely not notice a substantial adverse change to the scenic vistas. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Although the Town of Windsor recognizes several scenic corridors, including Highway 101, there are no state-designated scenic highways within the Town of Windsor (California Department of Transportation [Caltrans] 2018). The nearest eligible state-designated scenic highway to the project site is State Route 12, located approximately nine miles south in Santa Rosa. Therefore, the project would not damage scenic resources within a state scenic highway. There would be no impact.

**NO IMPACT**

*c. Would the project 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 a 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?*

The project site is not located in an urbanized area. However, the project site is zoned Gateway Commercial and Boulevard Commercial in the 2040 General Plan. Additionally, the site is located within the Shiloh Road Village Vision Plan, which includes additional design guidelines such as consistency with regional architecture and locally used materials to preserve the sites existing visual character.

Shiloh Center is a shopping center located north of the project site across Shiloh Road, which consists of retail stores, gas stations, and restaurants. The design of the shopping center consists of wood structural elements, stone walls, and most prominently horizontal wall boards, as presented in Figure 8. Highway 101 is located west of the project site, agricultural lands are located to the south, and a vacant lot is located to the east.

**Figure 8 Design Features at Shiloh Shopping Center**




Source: Google Earth 2021

The project proposes senior living units, recreational facilities, restaurants, and office and commercial space, consistent with the Towns Gateway Commercial, Boulevard Commercial, and Retail Commercial land uses. The project design would be consistent with those at Shiloh Shopping Center and the Shiloh Road Village Vision Plan design guidelines. The project would include similar features as the Shiloh Shopping Center, such as stone walls and wood elements. Additionally, the project would be consistent with the Shiloh Road Village Plan design guidelines, which include design features such as heavy wood structural elements, vertical board walls, and stone walls, such as those displayed in the project rendering on Figure 9.

**Figure 9 Design Features of the Proposed Project**




Source: CSL Berkshire Acquisitions II 2021

The project proposes a maximum height of two stories along Shiloh Road, with a minimum first floor height of 12-feet, and two and four stories for the senior living facility. This height would be consistent with the Town of Windsor Code height requirements (Town of Windsor Zoning Code Section 27.10.040) and design guidelines Shiloh Road Village Vision Plan. The surrounding development consists of buildings varying from one to two stories in height, thus the project would be consistent with surrounding development. The addition of design features such as neutral tone colors, wood structural elements, streetscape furniture, and stone walls would allow the project to stay consistent with the surrounding natural land uses to the south and east. The project would also preserve open space consistent with the remaining natural surroundings to the east and south.

Additionally, the project would preserve existing wetlands and potential rare plant habitat on the western portion of the site, which would maintain the existing visual character of the site. A boardwalk with educational signage and a seating area would be located south of the senior living community, which would allow an accessible vantage point for onsite users. The project would also maintain a minimum 100-foot buffer to the south and east where the project site abuts agricultural land. Living space within the senior living facility would be approximately 175-feet from the agricultural uses. The Town of Windsor Zoning Ordinance (27.24.020 [b]) requires an agricultural buffer of 200-feet but allows the width of the buffer to be reduced to a minimum of 100-feet in certain circumstances with Town Council approval. The project would provide full disclosure of agricultural operations to prospective residents of units within the agricultural buffer zone. This would further reduce impacts to the visual character and existing views.

The project would contain design features consistent with the surrounding land uses, such as heavy wood structural elements, vertical board walls, neutral tone colors, and stone walls. The project would also comply with applicable provisions of the Towns Zoning Ordinance aimed at minimizing the aesthetic impacts of new development, including Section 27.10.040 which establishes height requirements, Section 27.26.040(B) which suggest the use of stone or wood for fencing and walls, Section 27.24.020(b) requiring agricultural buffers, and Section 27.28.040 which regulates landscape area requirements, including landscaping materials. Additionally, the project would preserve existing visual character and the quality of public views through the implementation of agricultural buffer and the preservation of wetlands. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

For purposes of this analysis, light refers to light emissions (brightness) generated by a source of light. Stationary sources of light include exterior parking lot and building security lighting, and interior lights emanating through windows. Moving sources of light include the headlights of vehicles driving on roadways within the project site. Streetlights and other security lighting also serve as sources of light in the evening hours.

Glare is defined as focused, intense light emanated directly from a source or indirectly when light reflects from a surface. Daytime glare is caused in large part by sunlight shining on highly reflective surfaces at or above eye level. Reflective surfaces area associated with buildings that have expanses of polished or glass surfaces, light-colored pavement, and the windshields of parked cars.

Due to the undeveloped nature of the project site, existing sources of light and glare do not currently exist on-site. However, streetlights along Highway 101 and Shiloh Road, as well as headlights from oncoming traffic are a prominent source of light in the vicinity. Traffic along these roadways is also a source of glare.

The project would generate new sources of light from windows associated with the residences, commercial areas, exterior safety lighting, and parking area lights. Cars entering and exiting the site at night would temporarily increase light. When implemented, the project could generate glare from sunlight reflected on west-facing windows during certain times of the day. Light-colored or reflective exterior finishes could generate glare, as could the sun shining on the windshields of cars parked on site or windows of homes.

The project would be required to comply with the Town's Zoning Ordinance Section 27.20.030(D), which requires indirect lighting or lighting to be diffused and directed downward, away from adjacent properties and public rights of-way. Light fixtures would also be required to have "house side" reflectors to minimize glare (Section 27.20.030[D4]). Glare would be further prevented by the amount of eave overhang associated with the project's commercial uses, the variation in siting for buildings on the project site, and by the density of the vegetation that is proposed in the landscape design as shown in Figure 4. Headlights of vehicles entering and exiting the project site at night would be downcast and shielded by both existing and proposed buildings, fencing, and vegetation. However, despite compliance with the Town Zoning Ordinance regulating light and glare, the project would still generate more light and glare than on the undeveloped site. Impacts would be less than significant with implementation of Mitigation Measure AES-1 to reduce light and glare.

## Mitigation Measures

### *AES-1 Light and Glare*

Project design shall include LED, downcast, shielded lighting and lighting that would be directed towards building walls in order to limit overspill and glare from the project, without compromising the safety and security of the community, and protecting wildlife in the conservation area from spillover effects. The Town shall review and approve the lighting design prepared by the applicant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 2 Agriculture and Forestry Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ■ | ☐ |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | ☐ | ☐ | ■ | ☐ |
| 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))? | ☐ | ☐ | ☐ | ■ |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ■ |
| 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? | ☐ | ☐ | ■ | ☐ |

*a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

There is currently no agricultural production on the project site, and according to the California Department of Conservations (DOC) Important Farmland Map the site is designated farmland of local importance (DOC 2021a). Farmland of local importance is defined as land that is important to the local economy and has the capability of production, but does not meet the criteria of Prime, Statewide or Unique Farmland (DOC 2018). Thus, the project site does not fall under the "Farmland" designation of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

There are no Williamson Act contract lands located in the Town and the project site is not located under a Williamson Act contract (County of Sonoma 2021). No impact to Williamson Act contract lands would occur.

The project site is zoned Gateway Commercial, Boulevard Commercial, and Flood Hazard Overlay pursuant to the Town Zoning Ordinance and is adjacent to active agricultural land to the south and a small portion along the southernmost part of the east property line. Chapter 27.24, Agricultural Preservation, of the Town of Windsor Zoning Ordinance requires an agricultural buffer of 200-feet but allows the width of the buffer to be reduced to a minimum of 100-feet in certain circumstances with Town Council approval. The Town Council may adjust the size of buffers due to factors such as the type of agricultural activity occurring, agricultural practices, existing physical features, man-made features, and configuration, location and size of the properties. The project includes a request to reduce the Agricultural Buffer from 200-feet to 100 feet, in exchange for a Condition of Approval that the project would provide full disclosure of nearby agricultural operations to prospective residents of units within 100 feet of the agricultural buffer. Disclosure of agricultural uses is also required by Zoning Ordinance Section 27.24.030: Disclosure. Additionally, there is a distance of approximately 175-feet between the proposed living units and the agricultural uses to the south. Thus, the project would include a minimum of a 100-foot buffer along the southern and eastern project boundaries and would provide full disclosure of agricultural operations to prospective residents. The project would comply with existing zoning ordinances related to agricultural use. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project 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))?*

*d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

No areas in the Town of Windsor meet the definition of a forestry resource, as defined by California Public Resources Code Section 12220(g). The project site does not have a forest land designation. Therefore, the project would not conflict with existing zoning or cause rezoning of forest land, timberland, timberland zoned Timberland Production, or result in the loss or conversion of forest land. There would be no impact.

**NO IMPACT**

*e. Would the project 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?*

Although there is currently no agricultural activity on the site and the Town's 2040 General Plan concluded the site is not suited for agriculture, it is designated farmland of local importance (DOC 2021a). The Town's 2040 General Plan identifies farmland of local importance as valued farmland in the Town. The project site is designated Gateway Commercial, Boulevard Mixed-Use, and Potential Wetlands in the 2040 General Plan, and is zoned Gateway Commercial, Boulevard Commercial, and Flood Hazard Overlay in the Zoning Ordinance. Although the site is surrounded by agricultural land

to the south and a small part of the southernmost part of the east side of the site, land uses north of the project site include commercial and residential uses and vacant land. The Highway 101 northbound off-ramp to Shiloh Road and the northbound lanes of Highway 101 are located to the west of the site. Additionally, the project site contains both riparian and wetland habitat that are valuable for sensitive species and would conflict with agricultural land uses on the site. The Land Evaluation and Site Assessment (LESA) handbook contains guidelines for evaluating factors that would determine the productivity of agricultural farmland (United states Department of Agriculture's Natural Resources Conservation Service 2000). According to the LESA handbook guidelines, compatibility of a site with the surrounding land uses can impact agricultural productivity due to the inability to change crops and conduct agricultural production. Additionally, agricultural land should be consistent with the land use designations and zoning. Furthermore, wetlands and riparian values of a site should be considered when determining a sites value for agriculture. Agricultural production on wetlands or riparian habitat can introduce agricultural pollutants, such as sediments, pesticides, bacteria, into the watershed (Taylor 2015). The project site contains both riparian and wetland habitat, is surrounded by commercial and residential uses, and is not zoned for agricultural uses. Therefore, notwithstanding the site's designation as farmland of local importance, buildout of the project would not diminish agricultural production potential or otherwise contribute to impacts associated with the conversion of farmland to nonagricultural uses.

The project site is adjacent to agricultural lands at the southern and eastern boundaries. As described in *item (b)*, the project would be required to maintain 100 feet agricultural buffer along the southern and eastern boundaries per Chapter 27.24 Section 27.24.020 of the Town of Windsor Zoning Ordinance in order to preserve agricultural uses and support agricultural operations. The Town of Windsor ordinance requires a 200 feet buffer but can allow a reduction to a 100 feet buffer with Town Council approval. The project would be required provide full disclosure of agricultural operations to prospective residents. Additionally, there is a distance of approximately 175-feet between the proposed living units and the agricultural uses to the south and east. Furthermore, the southern portion of the project site will remain as undisturbed native landscape and riparian landscape.

With the site's overall low potential for agricultural production, the addition of an agricultural buffer as required by the Town's Zoning Ordinance, and the preservation of the natural state of the southern portion of the project site as set forth in the project description, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 3 Air Quality

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ☐ | ■ | ☐ |
| c. Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ■ | ☐ |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ■ | ☐ |

## Overview of Air Pollution

The Federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),[2] nitrogen oxides ($NO_X$), particulate matter with diameters of ten microns or less ($PM_{10}$) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and $NO_X$. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

[2] CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this IS-MND.

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

## Air Quality Standards and Attainment

The project site is located in the San Francisco Bay Area Air Basin, which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). BAAQMD has jurisdiction over much of the nine-county Bay Area, including some parts of Sonoma County. Sonoma County is served by two air quality districts, Northern Sonoma County Air Pollution Control District (NSCAPCD) and BAAQMD, but the Town of Windsor is under the jurisdiction of BAAQMD. As the local air quality management agency, the BAAQMD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the San Francisco Bay Area Air Basin is classified as being in “attainment” or “nonattainment.” In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 2, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The San Francisco Bay Area Air Basin is designated a nonattainment area for the federal 8-hour ozone standard, federal $PM_{2.5}$ 24-hour standard, state 8-hour and 1-hour ozone standards, state $PM_{10}$ annual and 24-hour standards, and the state $PM_{2.5}$ 24-hour standard. (BAAQMD 2017a). This nonattainment status is a result of several factors, such as mobile sources, wood burning, industrial combustion, and dust, in the San Francisco Bay Area Air Basin.

**Table 2 Health Effects Associated with Non-Attainment Criteria Pollutants**

| Pollutant | Adverse Effects |
|---|---|
| Ozone | (1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage. |
| Suspended particulate matter ($PM_{10}$) | (1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[1] |
| Suspended particulate matter ($PM_{2.5}$) | (1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma. |

Source: U.S. EPA 2016

## Air Quality Management

Because the San Francisco Bay Area Air Basin currently exceeds the federal ozone and $PM_{2.5}$ standards and the state ozone, $PM_{10}$, and $PM_{2.5}$ standards, the BAAQMD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS and CAAQS. BAAQMD adopted the 2017 Clean Air Plan (2017 Plan) as an update to the 2010 Clean Air Plan. The 2017 Plan provides a regional strategy to protect public health and the climate. Consistent with the greenhouse gas (GHG) reduction targets adopted by the state, the 2017 Plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors (ROG and $NO_X$) and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and toxic air contaminants (TAC) (BAAQMD 2017b).

## Air Pollutant Emission Thresholds

The BAAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions in its *California Environmental Quality Act Air Quality Guidelines* (BAAQMD 2017c). BAAQMD recommends that lead agencies determine appropriate air quality emissions thresholds of significance based on substantial evidence in the record. The BAAQMD's significance thresholds in the updated May 2017 *CEQA Air Quality Guidelines* for project operations within the San Francisco Bay Area Air Basin are the most appropriate thresholds for use in determining air quality impacts of the project. BAAQMD developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts.

Table 3 presents the significance thresholds for construction and operational-related criteria air pollutant and precursor emissions used for the purposes of this analysis. These represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a

cumulatively considerable contribution to the San Francisco Bay Area Air Basin's existing air quality conditions. For the purposes of this analysis, the project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 3.

**Table 3 BAAQMD Air Quality Thresholds of Significance**

| Pollutant/Precursor | Construction: Average Daily Emissions (lbs/day) | Operation: Average Daily Emissions (lbs/day) | Operation: Maximum Annual Emissions (tpy) |
|---|---|---|---|
| ROG | 54 | 54 | 10 |
| $NO_X$ | 54 | 54 | 10 |
| $PM_{10}$ | 82 (exhaust) | 82 | 15 |
| $PM_{2.5}$ | 54 (exhaust) | 54 | 10 |

lbs/day = pounds per day; tpy = tons per year; ROG = reactive organic gases; $NO_X$ = oxides of nitrogen; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less

Source: BAAQMD 2017c, Table 2-2 and Table 2-4.

In the absence of a qualified Community Risk Reduction Plan, BAAQMD has established the following *Thresholds of Significance* for local community risks and hazards associated with TACs and $PM_{2.5}$ for assessing individual source impacts at a local level. Impacts would be significant if:

- The project would result in an increased cancer risk of > 10 in one million
- The project would result in an increased non-cancer (i.e., Chronic or Acute) risk of > 1.0 Hazard Index
- The project would result in an ambient $PM_{2.5}$ concentration increase of > 0.3 $\mu g/m^3$ annual average

A project would be considered to have a cumulatively considerable impact if the aggregate total of current and proposed TAC sources within a 1,000 foot radius of the project property line in addition to the project would exceed the *Cumulative Thresholds of Significance*. Impacts would be significant if:

- The project would result in an increased cancer risk of > 100 in one million
- The project would result in an increased non-cancer (i.e., Chronic or Acute) risk of > 10 Hazard Index
- The project would result in an ambient $PM_{2.5}$ concentration increase of > 0.8 $\mu g/m^3$ annual average

Excess cancer risks are defined as those occurring in excess of or above and beyond those risks that would normally be associated with a location or activity if toxic pollutants were not present. Non-carcinogenic health effects are expressed as a hazard index, which is the ratio of expected exposure levels to an acceptable reference exposure level.

BAAQMD defines sensitive receptors as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and the chronically ill. These facilities include residences, hospitals, schools, child-care centers, and retirement homes.

## Methodology

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., congregate care, low-rise apartments, strip mall retail, and parking spaces), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the applicant-provided construction schedule and construction equipment list. Construction would occur over approximately 23 months from Quarter One of 2023 to Quarter Four of 2024, and approximately 18,000 cubic yards of soil would be used as fill and excavated from elsewhere on site, and 7,000 cubic yards of material would be imported from off-site sources. It is assumed that all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with BAAQMD Regulation 6 Rule 3 for wood burning devices and Regulation 8 Rule 3 for architectural coatings.

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. The daily trips provided in the Traffic Impact Study prepared by W-Trans in September 2021 were used to develop trip generation rates for the proposed developments (Appendix H). Emissions attributed to energy use include natural gas consumption by emergency generators and commercial kitchen equipment within the retail and senior living components of the project. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings.

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The California Clean Air Act requires that air districts create a Clean Air Plan that describes how the jurisdiction will meet air quality standards. The most recently adopted air quality plan is the BAAQMD 2017 Plan. The 2017 Plan updates the most recent Bay Area plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health and Safety Code. To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—ROG and $NO_X$—and reduce transport of ozone and its precursors to neighboring air basins. The Clean Air Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of fine particulate matter and TACs. The 2017 Plan does not include control measures that apply directly to individual development projects. Instead, the control strategy includes control measures related to stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants.

The 2017 CAP focuses on two paramount goals, both consistent with the mission of BAAQMD:

- Protect air quality and health at the regional and local scale by attaining all national and state air quality standards and eliminating disparities among Bay Area communities in cancer health risk from TACs

- Protect the climate by reducing Bay Area GHG emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050

Under BAAQMD's methodology, a determination of consistency with the 2017 Plan should demonstrate that a project:

- Supports the primary goals of the air quality plan
- Includes applicable control measures from the air quality plan
- Does not disrupt or hinder implementation of any air quality plan control measures

A project that would not support the 2017 Clean Air Plan's goals would not be considered consistent with the 2017 Plan. On an individual project basis, consistency with BAAQMD quantitative thresholds is interpreted as demonstrating support for the Clean Air Plan's goals. As discussed under criterion (b) below, the project would not exceed BAAQMD significance thresholds related to air quality emission), the project would not result in exceedances of BAAQMD thresholds for criteria air pollutants and thus would not conflict with the 2017 Plan's goal to attain air quality standards. The 2017 Clean Air Plan includes goals and measures to increase the use of electric vehicles, promote the use of on-site renewable energy, and encourage energy efficiency. The project includes features that are consistent with these goals and measures, including meeting California Green Building Standards, incorporating LED lighting and solar panels on carports, providing two Electric Vehicle (EV) parking spaces, and providing 20 bicycle parking spaces. Therefore, the project would not conflict with or obstruct the implementation of an applicable air quality plan and the project would have a less than significant impact.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project 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?*

The San Francisco Bay Area Air Basin is designated nonattainment for the NAAQS for ozone and $PM_{2.5}$ and the CAAQS for ozone, $PM_{2.5}$, and $PM_{10}$. The following subsections discuss emissions associated with construction and operation of the project.

## Construction Emissions

Project construction would generate temporary air pollutant emissions associated with fugitive dust ($PM_{10}$ and $PM_{2.5}$) and exhaust emissions from heavy construction equipment and construction vehicles in addition to ROG emissions that would be released during the drying phase of architectural coating. Table 4 shows and compares estimated construction emissions to BAAQMD significance thresholds. As shown therein, construction-related emissions would not exceed BAAQMD thresholds. Project construction would not 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. Impacts would be less than significant.

**Table 4 Construction Emissions (pounds/day)**

| Pollutant | Maximum Daily Emissions | Significance Threshold | Significant Impact? |
|---|---|---|---|
| ROG | 22 | 54 | No |
| $NO_x$ | 35 | 54 | No |
| CO | 29 | N/A | No |
| $SO_x$ | <1 | N/A | No |
| $PM_{10}$ | 1 | 82 (exhaust) | No |
| $PM_{2.5}$ | 1 | 54 (exhaust) | No |

N/A = not applicable; lbs/day = pounds per day; ROG = reactive organic gases; $NO_X$ = oxides of nitrogen; CO = carbon monoxide; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $SO_x$ = oxides of sulfur.

Notes: No BAAQMD threshold for CO or $SO_X$

See Appendix A for CalEEMod worksheets; emission data presented is the highest of winter or summer outputs

## Operational Emissions

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., architectural coatings, consumer products, and landscaping equipment), energy sources (i.e., use of natural gas for space and water heating and cooking), and mobile sources (i.e., vehicle trips to and from the project site). Table 5 and Table 6 compare estimated daily and annual operational emissions to BAAQMD significance thresholds. Operational emissions account for natural gas infrastructure, which would be included in the project in the form of emergency generators and commercial kitchen equipment within the retail and senior living components of the project. As shown therein, even with natural gas infrastructure, daily and annual operational emissions would not exceed BAAQMD regional thresholds for criteria pollutants. Project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment, and impacts would be less than significant.

## Table 5 Operational Emissions (pounds/day)

| Sources | Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ | $SO_X$ |
| Maximum Daily Operational Emissions | | | | | | |
| Area | 8 | <1 | 22 | <1 | <1 | <1 |
| Energy | <1 | 1 | <1 | <1 | <1 | <1 |
| Mobile | 3 | 3 | 26 | 6 | 2 | <1 |
| Total Maximum Daily Operational Emissions | 11 | 4 | 49 | 6 | 2 | <1 |
| BAAQMD Thresholds (average daily emissions) | 54 | 54 | N/A | 82 | 54 | N/A |
| Threshold Exceeded? | No | No | N/A | No | No | N/A |

N/A = not applicable; lbs/day = pounds per day; ROG = reactive organic gases; $NO_X$ = oxides of nitrogen; CO = carbon monoxide; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $SO_x$ = oxides of sulfur.

Notes: All numbers have been rounded to the nearest tenth.

See Appendix A for CalEEMod worksheets; emission data presented is the highest of winter or summer outputs

## Table 6 Operational Emissions (tons/year)

| Sources | Estimated Emissions (tpy) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ | $SO_X$ |
| Area | 1 | <1 | 2 | <1 | <1 | <1 |
| Energy | <1 | <1 | <1 | <1 | <1 | <1 |
| Mobile | <1 | 1 | 4 | 1 | <1 | <1 |
| Total Annual Emissions | 2 | 1 | 6 | 1 | <1 | <1 |
| BAAQMD Annual Thresholds | 10 | 10 | N/A | 15 | 10 | N/A |
| Threshold Exceeded? | No | No | No | No | No | No |

N/A = not applicable; tpy = tons per year; ROG = reactive organic gases; $NO_X$ = oxides of nitrogen; CO = Carbon Monoxide; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; $PM_{10}$ = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $SO_x$ = oxides of sulfur.

No BAAQMD threshold for CO or $SO_X$

Notes: All numbers have been rounded to the nearest tenth.

See Appendix A for CalEEMod worksheets

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

Certain population groups such as children, the elderly, and people with health issues are particularly sensitive to air pollution. The majority of sensitive receptor locations are schools, residences and hospitals. The closest sensitive receptors to the project site are single-family homes located along Shiloh Road to the north of the project site, approximately 500 feet away. The project also includes the siting of new sensitive receptors in the form of a senior living community. Localized

air quality impacts to sensitive receptors typically result from CO hotspots and TACs, which are discussed in the following subsections.

## Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at areas with high vehicle density, such as intersections with heavy peak hour traffic. A project's localized air quality impact is considered significant if CO concentrations exceed the federal one-hour standard of 35.0 ppm and state one-hour standard of 20 ppm, or the federal and state eight-hour standard of 9.0 ppm (California Air Resources Board [CARB] 2021a).

BAAQMD recommends comparing a project's attributes with the following screening criteria as a first step to evaluating whether the project would result in the generation of CO concentrations that would substantially contribute to an exceedance of the *Thresholds of Significance* (BAAQMD 2017c). The project would result in a less than significant impact to localized CO concentrations if:

1. The project is consistent with an applicable congestion management program for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project would not increase traffic volumes at affected intersections to more than 44, 000 vehicles per hour.
3. The project traffic would not increase traffic volumes at the affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage).

The project would include 246 units for the senior living community, 10 apartment units, and approximately 26,000 square feet of commercial development in five buildings. Based on the Traffic Study, the proposed project would generate an average of 2,147 trips per day, including 141 trips during AM peak hour and 198 trips during the PM peak hour (Appendix H). Since the project would involve senior residents, it would generate less traffic as compared to other residential land uses. The project trip generation would be far below the screening thresholds listed above, and the project would not conflict with the Sonoma County Congestion Management Plan. Therefore, impact of localized CO emissions would not be significant.

## Toxic Air Contaminants

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

### *Construction*

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998 (CARB 2021b).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 23 months. The dose to

which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 23 months) is approximately six percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2017).

The maximum $PM_{10}$ and $PM_{2.5}$ emissions would occur during demolition, site preparation and grading activities. These activities would last for approximately 51 days. PM emissions would decrease for the remaining construction period because construction activities such as building construction and architectural coating would require less intensive construction equipment. While the maximum DPM emissions associated with demolition, site preparation, and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than one percent of the total 30-year exposure period for health risk calculation. Given the aforementioned discussion, DPM generated by project construction would not create conditions where the probability is greater than one in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

### *Operation*

Sources of operational TACs include, but are not limited to, land uses such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities. The project does not include construction of new gas stations, dry cleaners, highways, roadways, or other sources that could be considered new permitted or non-permitted source of TAC or $PM_{2.5}$ in proximity to receivers. In addition, the project would not introduce a new stationary source of emissions and the mobile emissions generated from the project would be minimal and spread over a broad geographical area. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent, temporary and would cease upon completion and would be confined to the immediate vicinity of the construction site. Odors also disperse with distance. Overall, project construction would not

generate other emissions, such as those leading to odors, affecting a substantial number of people. Construction-related impacts would be less than significant.

Table 3-3 in the BAAQMD 2017 *CEQA Air Quality Guidelines* provides screening distances for land uses that have the potential to generate substantial odor complaints. The uses in the table include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, and chemical plants (BAAQMD 2017c). Residential and commercial development are not included in this list, but the restaurants proposed as part of the commercial development would have the potential to cause odor impacts. However, odors from restaurants would be similar to those already existing in the Town, specifically north of the project site. As a result, operation of the project would not generate other emissions, such as those leading to odors, that would affect a substantial number of people. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 4 Biological Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would 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 Wildlife or U.S. Fish and Wildlife Service? | ☐ | ■ | ☐ | ☐ |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | ☐ | ■ | ☐ | ☐ |
| 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? | ☐ | ■ | ☐ | ☐ |
| 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? | ☐ | ■ | ☐ | ☐ |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ■ | ☐ | ☐ |
| 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? | ☐ | ■ | ☐ | ☐ |

Information contained in this section comes from review of background literature, resource agency database reviews, and the Biological Resources Assessment (BRA; Monk & Associates 2021; Appendix B) and Arborist's Report (Balcerak Design 2021) prepared for the project.

## Existing Setting

The project site is located at 376 Shiloh Road in Windsor, CA, east of Highway 101's Shiloh Road offramp. Elevation of the site ranges from approximately 113 to 126 feet (34-38 meters) above mean sea level. The project site is undeveloped. Pruitt Creek occurs within the site, along its southern boundary. The site is surrounded by vineyards to the south, pasture and a small area of vineyard to the east, and a shopping center to the north, across Shiloh Road.

Most of the site consists of ruderal grassland, consisting mostly of introduced grasses and forbs, due to the site's previous use as both livestock pasture and a hay field. Mature valley oaks (*Quercus lobata*) occur within the project site at the western edge of the parcel. Seasonal wetlands are present throughout the site. Pruitt Creek, an intermittent drainage, contains emergent wetland vegetation and supports an open-canopied riparian woodland along its banks consisting of willows (*Salix* spp.), valley oaks, and California buckeye (*Aesculus californica*) with California rose (*Rosa californica*) and Himalayan blackberry (*Rubus armeniacus*) dominating the understory. Valley oak and California buckeye trees along the creek were planted as part of a riparian restoration project.

## Regulatory Setting

### *Federal and State*

Regulatory authority over biological resources is shared by federal, state, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the Town of Windsor).

The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and has direct jurisdiction under the California Fish and Game Code (CFGC). Under the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA), the CDFW and the U.S. Fish and Wildlife Service (USFWS), respectively, have direct regulatory authority over species formally listed as threatened or endangered (and listed as rare or candidates for CDFW) Native and/or migratory bird species may also be protected under the Migratory Bird Treaty Act and CFGC Sections 3503, 3503.5, and 3511, and the Bald and Golden Eagle Protection Act

Laws and regulations found within the Clean Water Act (CWA), CFGC, California Water Code, and California Code of Regulations (CCR) protect wetlands and riparian habitat. The U.S. Army Corps of Engineers (USACE) has regulatory authority over wetlands and other waters of the United States under Section 404 of the CWA. The State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs) ensure water quality protection in California pursuant to Section 401 of the CWA and Section 13263 of the Porter-Cologne Water Quality Control Act. The CDFW regulates certain water features, such as streams and lakes, under the CFGC Section 1600 et seq.

Special status species are those plants and animals: 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS and the National Marine Fisheries Service (NMFS) under the FESA; 2) listed or proposed for listing as Candidates, Rare, Threatened, or

Endangered by the CDFW under the CESA; 3) recognized as California Species of Special Concern (CSSC) by the CDFW; 4) afforded protection under the MBTA or CFGC; and 5) occurring on Lists 1 and 2 of the California Native Plant Society's California Rare Plant Ranking (CRPR) system.

### *Santa Rosa Plain Conservation Strategy*

The site is within the Santa Rosa Plain Conservation Strategy Area (USFWS 2005). The Conservation Strategy is a long-term agreement between USFWS, CDFW, and other federal and State agencies, and the County of Sonoma, the City of Santa Rosa and other local city governments. The USFWS issued a Programmatic Biological Opinion (PBO) for the Conservation Strategy in 1998, which was updated in 2007, and has since been superseded by the PBO issued in June 2020. The goal of the Conservation Strategy is to aid in the conservation of listed species and vernal pools by providing local governments and developers a way to obtain authorization for incidental take of federally listed species for development. Species covered under the BO include California tiger salamander (*Ambystoma californiense*), Burke's goldfields (*Lasthenia burkei*), Sonoma sunshine (*Blennosperma bakeri*), Sebastopol meadowfoam (*Limnanthes vinculans*), and many-flowered navarretia (*Navarretia leucocephala* ssp. *plieantha*). The Conservation Strategy has been finalized but is yet to be implemented in local area plans; however, the PBO is in effect and may be implemented.

### *USFWS Recovery Plan for the Santa Rosa Plain*

In 2016 USFWS issued the Santa Rosa Plain Recovery Plan to provide a framework for the recovery of California tiger salamander, Burke's goldfields, Sonoma sunshine, and Sebastopol meadowfoam (USFWS 2016). The Recovery Plan and its objectives are implemented through cooperative CEQA lead agencies, and through federal nexus agency consultations (e.g., USACE consultations) with the USFWS via Section 7 of the FESA.

### *Town of Windsor*

The current Town of Windsor 2040 General Plan (2018) includes the following applicable open space policies to protect natural resources including sensitive habitats), and biological resources including oak groves and woodlands, riparian woodlands, and heritage trees.

**Policy ER-1.1** **Open Space Preservation.** The Town shall seek to preserve open space resources (i.e., productive farmlands, outdoor recreation areas, biological habitats, visually prominent landforms, Alquist-Priolo Special Study Zones, and flood hazard areas) through avoidance of development in these areas.

**Policy ER-1.2** **Sensitive Habitat Preservation.** The Town shall encourage the preservation of sensitive environmental habitat areas, such as oak woodlands, productive farmlands, riparian (creekside) corridors, and important wildlife movement corridors through measures such as clustering development and conservation easements.

**Policy ER-6.1** **Protection of Biological and Ecological Resources.** The Town shall protect significant biological and ecological resources in Windsor, including:

a. Wetlands, in particular, high value wetlands

b. Rare, threatened, or endangered species

c. Vulnerable habitats

d. Vernal pools

e. Oak groves and woodlands

f. Riparian woodlands

g. Heritage trees

Chapter 27.36 of the Town of Windsor's Zoning Ordinance, the Tree Preservation and Protection Ordinance (the Ordinance), regulates protection, preservation, maintenance, and removal of protected trees. The intent of the Ordinance is to avoid a reduction in tree canopy cover by requiring replacement trees for all protected trees that are approved for removal. Protected trees under the Ordinance include: trees with a diameter at breast height (dbh) of six inches or more of the species black oak (*Quercus kelloggii*), blue oak (*Quercus douglasii*), coast live oak, interior live oak (*Quercus wislizenii*), oracle oak (*Quercus morehus*), Oregon oak (*Quercus garryana*), valley oak, chase oak (*Quercus chaseii*); and trees with a dbh of 12 inches or more of the species California buckeye and California bay (*Umbellularia californica*); heritage or landmark trees as identified by Council resolution; significant groves or stands of trees; mature trees located on a parcel of one acre or more; and any tree required, to be planted or preserved, as environmental mitigation for a discretionary permit. Section 27.36.061 of the Ordinance will "generally replace a smaller quantity of larger trees by replanting a larger quantity of smaller trees, with the goal of restoring the original canopy area and volume after ten years." The Ordinance also states that to obtain a tree removal permit, an arborist report is required for all development projects with protected trees. The arborist will make recommendations on the removal as well as on the mitigation to offset the loss of the tree(s).

## Methods

### *Literature Review and Desktop Biological Evaluation*

Rincon Consultants, Inc. (Rincon) biologists reviewed the BRA prepared by Monk & Associates in 2021 along with agency databases, relevant literature, and aerial photos, for baseline information on special status species and other sensitive biological resources occurring or potentially occurring at the project site and in the immediate surrounding area. Analysis in the BRA is based in part on numerous field surveys conducted between 2008 and 2021 to conduct baseline surveys, a wetland delineation, special-status plant surveys, and monitoring of riparian restoration plantings. The following sources were reviewed for background information:

- CDFW California Natural Diversity Data Base (CNDDB) (CDFW 2021a) and Biogeographic Information and Observation System (BIOS) (CDFW 2021b)
- CDFW Special Animals List (CDFW 2021c) and Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2021d)
- CNPS Online Inventory of Rare and Endangered Plants of California (CNPS 2021)
- USFWS Information for Planning and Consultation (IPaC; USFWS 2021a)
- USFWS Critical Habitat Portal (USFWS 2021b)
- USFWS National Wetlands Inventory (NWI; USFWS 2021c)

Rincon biologists conducted a review of the CNDDB (CDFW 2021a) for recorded occurrences of special status plant and wildlife taxa in the region. For this review, the search included all occurrences within the United States Geological Survey (USGS) 7.5-minute topographic quadrangle encompassing the project site (*Healdsburg*), and the eight surrounding quadrangles (*Geyserville, Jimtown, Mount St. Helena, Mark West Springs, Santa Rosa, Sebastopol, Camp Meeker,* and

*Guerneville*). Rincon compared the results of the background literature review to the analysis presented in the BRA prepared by Monk and Associates (2021) to confirm that all impacts to biological resources were adequately addressed.

The arborist report evaluated 28 trees, representing six species: Oregon white oak (*Quercus garryana*), valley oak, California buckeye, Oregon ash (*Fraxinus latifolia*), California black walnut (*Juglans hindsii*), and arroyo willow (*S. lasiolepis*) (Balcerak Design 2021).

## Impact Analysis

*a. Would the project 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 Wildlife or U.S. Fish and Wildlife Service?*

### *Special Status Plants*

Of the 71 special-status plant species known to occur in the region of the project site, all but five can be excluded from further analysis due to their specific habitat requirements which are not present on the project site (Monk and Associates 2021). One species has moderate potential to occur and has been detected within the project site: congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta;* CRPR 1B.2), referred to in the BRA as "pale-yellow hayfield tarplant." Four species have low potential to occur within the project site: Sonoma sunshine (*Blennosperma bakeri;* federally and state-endangered, CRPR 1B.1), Burke's goldfields (*Lasthenia burkei;* federally and state-endangered, CRPR 1B.1) and Sebastopol meadowfoam (*Limnanthes vinculans;* federally and state-endangered, CRPR 1B.1), and Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*, CRPR 1B.1).

Based on the nine special-status protocol plant surveys conducted at the site from 1989 to 2016, only one of the five species with potential to occur has been detected on site (congested-headed hayfield tarplant). The other four species are not expected to be present on the project site because no individuals were observed during five years of protocol surveys conducted between 1995 and 2016 (Monk and Associates 2021).

Congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*) is a CNPS Rank 1B.2 species (rare, threatened, or endangered in California and elsewhere, fairly endangered in California). This species is found in valley and foothill grassland and sometimes roadsides and flowers between April and November. The plant has been observed on the project site in grassland habitat during field surveys in 1996 and 2008. Project development may impact congested-headed hayfield tarplant if it is present in grasslands planned for development; however, Mitigation Measure BIO-1 would require the applicant to either ensure the preservation and protection of congested-headed hayfield tarplant by the proposed preservation of 12.55 acres of seasonal wetlands and upland grassland habitats on the project site, or conduct habitat restoration and enhancement within the upland portions of the conservation area to expand the existing on-site population at a minimum 1:1 ratio, thus ensuring impacts would be reduced to a less than significant level.

### *Special Status Wildlife*

Of the 25 special-status wildlife species known to occur in the region of the project site (CDFW 2021a), all but three can be excluded from further analysis due to absence of suitable habitat (Monk and Associates 2021). No special status species occurrences have been recorded in Pruitt Creek;

however, federally-designated critical habitat for the Central California Coast (CCC) Distinct Population Segment (DPS) of steelhead (*Oncorhynchus mykiss irideus*) occurs in Pruitt Creek within the project site. Three species have a low to moderate potential to occur on the project site: western burrowing owl (*Athene cunicularia hypugaea*), the CCC steelhead DPS, and western pond turtle (*Emys marmorata*) are discussed further below.

Western burrowing owl is a State species of special concern with low potential to occur within the project site. Burrowing owls are found in grasslands with low-growing vegetation and utilize rodent burrows, typically those made by California ground squirrels (*Otospermophilus beechyi*) for cover and nesting. California ground squirrels are not found on the Santa Rosa Plain, where the project site is located, and no burrowing owls or their sign were observed on the project site in multiple years of baseline surveys (Monk and Associates 2021). Thus, this species is not expected to occur on the project site and project impacts to this species are not expected to occur.

The CCC DPS of steelhead is federally listed as threatened and has a low potential to occur within the project site. Steelhead are an anadromous species, meaning they are born in a freshwater stream, migrate to the ocean once they mature, and then return to their native stream to spawn. Although Pruitt Creek on the project site is federally designated critical habitat for this steelhead DPS, there are no known occurrences of steelhead in Pruitt Creek. Pruitt Creek is intermittent, and dries seasonally, and does not have appropriate substrate within the project site for egg laying and fry rearing. Due to lack of suitable habitat, this species is not expected to occur within the project site and project impacts to this species are not expected.

The western pond turtle is a State species of special concern with moderate potential to occur on the project site. This species is found in ponds, marshes, ditches, streams, and rivers that have rocky or muddy bottoms. This turtle is most often found in aquatic environments with plant communities dominated by watercress, cattail, and other aquatic vegetation. Eggs are typically laid from March to August, with most eggs laid in May and June. Hatchlings will stay in the nest until the following April. The most recent observation of the species was 0.8-miles west of the project site in spring and summer of 2010. Pruitt Creek provides suitable habitat for basking western pond turtles on rocky substrate and shelves on the creek banks. Construction planned to connect a new reach of Pruitt Creek to the existing reach and to install outfall structures conveying treated stormwater to the creek may result in impacts to western pond turtle habitat and could potentially impact turtles that may be in the creek at the time of construction. Mitigation Measure BIO-2 would require preconstruction surveys for turtles and their nests, establishment of 50-foot construction buffers around any nests located during surveys, and maintenance of those buffers until young turtles leave the nest or as otherwise directed by a qualified biologist to ensure the avoidance of impacts to the species. With implementation of Mitigation Measure BIO-2, impacts to western pond turtle would be less than significant.

The site could be used by numerous species of migratory birds as nesting habitat. Migratory birds are protected under state law and the MBTA. The nesting season generally extends from February 1 through August 31 in California but can vary based upon species and annual climatic conditions. Thus, construction activities could result in direct impacts to active nests during vegetation removal, or disturbance-related nest abandonment. Therefore, impacts to nesting birds would be potentially significant and Mitigation Measure BIO-3 would be required to mitigate impacts to less than significant levels. Mitigation Measure BIO-3 would require completion of a nesting survey by a qualified biologist within seven days prior to the commencement or construction or tree removal work slated to begin between February 1 and September 15. If nesting birds are found on or within

the zone of influence of the project, temporary protective nest buffers must be established by a qualified biologist and observed throughout the nesting season.

New lighting introduced on the project site could have an adverse effect on wildlife species if not properly limited and controlled. However, implementation of Mitigation Measure AES-1 would ensure that wildlife in the conservation area would be protected from lighting spillover effects and associated impacts would be avoided.

## Mitigation Measures

### *BIO-1 Special-Status Plant Species*

Prior to issuance of a grading permit, a qualified biologist shall conduct floristic pre-construction surveys of the project site in the appropriate blooming season to determine the presence of congested-headed hayfield tarplant, and shall provide the Town with documentation of the surveys, including the acreage or number of individuals of the species present within the project's development envelope and 12.55-acre conservation area. If congested-headed hayfield tarplant is documented in areas to be impacted, the applicant shall provide compensatory mitigation at a 1:1 ratio. This shall be accomplished through establishment within the 12.55 acre preserve created pursuant to Mitigation Measure BIO-5 of an equivalent number of individual congested-headed hayfield tarplant as will be impacted in the project's development envelope.

### *BIO-2 Western Pond Turtle*

Preconstruction upland surveys and aquatic surveys for turtles and their nests shall be conducted by a qualified biologist 30 days prior to construction regardless of the time of year because young turtles (hatchlings) over-winter in the nest. If nests are located during surveys, the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fencing installed by the contractor prior to the start of construction under the direction of a qualified biologist to avoid impacts to the eggs or hatchlings overwintering at the nest site. Construction at the nest site and within the 50-foot buffer area shall be delayed until the young leave the nest (this could be a period of many months) or as otherwise advised and directed by a qualified western pond turtle biologist (that is, a biologist who has identified pond turtles before). If no nests are found, no further consideration for western pond turtle nests is warranted. The biologist shall submit a report of the preconstruction western pond turtle surveys to the Town to document compliance within 30 days of completion of the survey. If nests are found and buffer fencing is installed, a summary of installation and photographic documentation will be provided to the City following fence installation.

### *BIO-3 Nesting Birds*

To avoid impacts to nesting birds, a nesting survey shall be conducted by a qualified biologist within 15 days prior to commencing construction or tree removal if this work would commence between February 1st and September 15$^{th}$. The nesting survey shall include an examination of all trees on site and within 200 feet of the entire project site if possible (i.e., within a zone of influence of nesting birds). The survey shall not be limited to trees slated for removal. The zone of influence includes those areas outside the project site where birds could be disturbed by earthmoving vibrations and/or other construction-related noise. The biologist shall submit a report of the preconstruction nesting bird survey to the Town to document compliance within 30 days of its completion.

If birds are identified nesting on or within the zone of influence of the construction project, a qualified biologist shall establish a temporary protective nest buffer around the nest(s). The nest

buffer shall be staked with orange construction fencing. The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and shall be established by a qualified ornithologist or biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 50 feet from the nest site or nest tree dripline for songbirds and up to 300 feet for other sensitive nesting birds. Upon completion of nesting surveys, if nesting birds are identified on or within a zone of influence of the project site, a qualified ornithologist/biologist that frequently works with nesting birds shall prescribe adequate nesting buffers to protect the nesting birds from harm while the project is constructed.

No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise completed, as determined by the qualified biologist. At the end of the nesting cycle, and fledging from the nest by its occupants, as determined by the qualified biologist, temporary nesting buffers may be removed, and construction may commence in established nesting buffers,

## Significance After Mitigation

Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 would ensure impacts on special status species and nesting birds would be reduced to a less than significant level. Implementation of Mitigation Measure AES-1 would reduce lighting impacts to wildlife species to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Critical habitat is designated for the CCC steelhead DPS in Pruitt Creek within the project site; however, no occurrences of this species have been recorded in Pruitt Creek as described above in the analysis of impacts to this listed species. The creek dries seasonally, and work within the creek will be confined to summer months when the creek is dry, thus impacts to steelhead CCC DPS are not anticipated and impacts to this species and its critical habitat would be less than significant.

CDFW provides protection for sensitive vegetation and aquatic natural communities. Any impacts to CDFW-defined sensitive natural communities or communities identified in local or regional plans must be evaluated. Pruitt Creek is a channel with a bed and a bank, and as such is within the CDFW's jurisdiction pursuant to Section 1602 of the California Fish and Game Code. A riparian vegetation community grows along Pruitt Creek and includes both volunteer, naturalized trees such as willows (*Salix exigua, S. laevigata, S. lasiolepis*) as well as planted trees as part of a riparian planting plan that was completed a decade ago. This riparian habitat would be considered sensitive by CDFW. Riparian trees growing along Pruitt Creek include 15 sapling valley oaks and California buckeye that were planted as part of the riparian planting plan. Native California rose (*Rosa californica*) was also planted along this creek channel and is well-represented at the shrub layer. Overall tree canopy is approximately 30 percent cover, leaving an open, sunny channel.

The dense patches of Himalayan blackberry within Pruitt Creek provide cover for a variety of wildlife species including California Quail (*Callipepla californica*), migratory birds, and locally abundant birds.

The sapling oak trees and the willow trees provide habitat for insects which in turn provide a food source for birds such as migrating warblers and flycatchers moving through the area.

The seasonal wetlands that occur on the project site are considered a sensitive natural community by CDFW. Although impacts to protected vernal pool plant species such as Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam are not expected, the USFWS regulates impacts to suitable habitats of listed vernal pool plants in the Santa Rosa Plain. Seasonal wetlands on the project site would be considered suitable habitat for these listed plant species, and, as confirmed during meeting in 2019 with the project applicant and USFWS, mitigation would be required as specified in the Santa Rosa Plain Recovery Plan for all impacts to suitable vernal pool plant species habitat (Monk and Associates 2021). Thus, the proposed project would result in potentially significant impacts to potential habitat for these three plant species. Approximately 4.59 acres of "suitable vernal pool habitat" is present on the site. A 12.55-acre conservation easement area/wetland preserve will be established on-site as part of the project pursuant to Mitigation Measure BIO-5; however, the project as proposed will still impact approximately 0.19-acre of seasonal wetlands regarded as suitable habitat for Sonoma sunshine, Burke's goldfields, and Sebastopol meadowfoam. The applicant shall mitigate impacts to these "suitable habitats" in accordance with the Programmatic BO (USFWS 2020) as specified in Mitigation Measure BIO-4. Implementation of Mitigation Measure BIO-4 would reduce these impacts to a less than significant level.

The proposed creation of a new, realigned channel next to the existing Pruitt Creek channel would impact approximately 460 linear feet of the existing channel below the top of banks to tie both channels together. This new channel construction would remove and realign the creek bank, impacting the bed and bank of the creek and riparian vegetation along the creek banks and thus would be subject to CDFW regulation and would result in potentially significant impacts (Monk & Associates 2021). Therefore, as described in Mitigation Measure BIO-5, the project would be required to apply for a Lake or Streambed Alteration Agreement pursuant to CFGC Section 1600 et. Seq. Implementation of Mitigation Measures BIO-4 and BIO-5 would be required to reduce impacts to riparian and other sensitive aquatic habitats to a less than significant level.

## Mitigation Measure

### *BIO-4 Suitable Habitat for Listed Plant Species*

In coordination with USFWS, the applicant shall mitigate for impacts to "suitable habitat" for listed plant species in accordance with the *Santa Rosa Plain Programmatic Biological Opinion* (USFWS 2020), and as specified by USFWS. To mitigate impacts to approximately 0.19-acre of seasonal wetlands regarded as suitable habitat for Burke's goldfields, the applicant shall purchase Burke's goldfields mitigation credits at a minimum ratio of 1.5:1, amounting to 0.29-acre of mitigation credits from an agency-approved mitigation bank. Prior to the issuance of grading permits, the applicant shall provide the Town with documentation showing that such credits have been purchased.

### *BIO-5 Jurisdictional Waters Avoidance, Minimization, and Monitoring*

Based on the Corps-confirmed delineation, jurisdictional waters within the project area shall be avoided by the Project to the extent feasible.

*Compensatory Mitigation* - Where avoidance of jurisdictional waters is not practicable, compensatory mitigation to reduce the project's impacts to waters of the U.S./State to a less than significant level shall be implemented as follows:

1. A Conservation Easement (i.e., wetland preserve) encumbering a total of 12.55 acres and protecting in perpetuity approximately 4.2 acres of seasonal wetland and the newly aligned Pruitt Creek shall be established as part of the project, recorded and granted to a conservation-oriented entity qualified to hold conservation easements. The preserve protected by the Conservation Easement shall be managed pursuant to a long-term management plan approved by USACE, USFWS, RWQCB or CDFW, as applicable, and using a "non-wasting" endowment funding source.
2. Wetlands outside the preserve that will be impacted by the project will be mitigated for at a minimum 1:1 ratio by (1) preservation of wetlands in the onsite wetland preserve; and (2) purchase of wetland mitigation credits at a 1:1 ratio from a qualified wetland mitigation bank.
3. Impacts to areas of existing Pruitt Creek below the ordinary high water marks will be mitigated by USACE, USFWS, RWQCB and/or CDFW-approved reconstruction and widening of this creek which will create greater jurisdictional acreage (i.e., waters) and channel capacity than currently exists on site. In addition, a USACE, USFWS, RWQCB and/or CDFW-approved riparian enhancement planting plan will be implemented along Pruitt Creek which will enhance the existing habitat.
4. For any area of the project site where any required buffers around the wetlands to be preserved are reduced to 20 feet or less, impacts to the buffers shall be mitigated for at a minimum 1:1 ratio by preservation of existing wetlands with the 12.55-acre wetland preserve.

As required, mitigation credits shall be purchased and management plans approved by USACE, USFWS, RWQCB or CDFW, as applicable, prior to any grading or other ground-disturbing activities on the project site.

For those jurisdictional areas that cannot be avoided and must be filled, applicant shall apply for a Section 404 permit from the Corps and a Section 401 water quality certification (permit) from the RWQCB and shall comply with any conditions or stipulations included in any Section 404 and 401 permits issued for the project.

*Avoidance and Minimization* - During project construction, a biological monitor shall be on site during installation of all construction/silt fencing and initial site grading within 25 feet of riparian or jurisdictional habitat to monitor the integrity of preserved wetlands and other waters, and to ensure that there are no impacts to Pruitt Creek except where authorized by permits issued by the USACE, USFWS, CDFW, and RWQCB. The biological monitor will assist the contractor by monitoring implementation of the following best management practices with the goal to minimize impacts to wetlands and other jurisdictional waters:

- Orange construction fencing backed by silt fencing, hay or gravel wattles, and other protective measures shall be installed to prevent equipment from entering protected areas and to prevent fuels, lubricants, soils, *de minimus* fill, and other pollutants from impacting the preserved wetlands or Pruitt Creek.
- Wildlife friendly hay wattles (that is, no mono-filament netting) and silt fencing shall be installed at the top of bank at Pruitt Creek. The use of mulch or any other substitute that may enter into the creek shall be prohibited.

- Staging, operation and maintenance of heavy-duty construction equipment shall be located away from Pruitt Creek at all times and well outside of the riparian corridor unless the equipment is needed to specifically work on the realignment of Pruitt Creek or the outfalls for the project.
- To avoid debris from entering Pruitt Creek, the final roadway design shall provide for enclosed and accessible trash receptacles (located outside of the riparian corridor).
- To avoid fuels, lubricants, soils and other pollutants from entering Pruitt Creek, wildlife friendly hay wattles (that is, no mono-filament netting) and silt fending shall be installed at the top of bank. The use of mulch or any other substitute that may enter into the creek shall be prohibited.
- To mitigate for any impacts to the riparian corridor of Pruitt Creek, disturbed areas shall be revegetated with native riparian plant species. Replacement of riparian trees to be removed shall be planted near the creek as feasible and/or adjacent to the existing limits of the riparian corridor to contribute to the existing riparian canopy. Riparian plantings shall be maintained for a minimum of 5 years to ensure that the canopy is enhanced and the understory restored.
- Non-native and invasive ornamental landscaping shall be precluded from use proximate to Pruitt Creek.
- New lighting introduced by the project shall be downcast and precluded from spilling over to the riparian corridor as direct lighting along creek corridors has a negative impact on nocturnal wildlife.

Applicant shall comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB by preparing and implementing a *Stormwater Pollution Prevention Plan* (SWPPP) in compliance with the requirements of the General Permit. The SWPPP must include BMPs specific to project construction and is subject to inspections by a Qualified Stormwater Professional. BMPs aim to control degradation of surface water by preventing soil erosion or pollution discharge from the project area. Applicant shall also prepare and implement an erosion and sediment control plan during project construction meeting the requirements of the Town of Windsor Municipal Code.

To address post-construction impacts, applicant shall prepare and incorporate into project plans a RWQCB-approved Stormwater Management Plan to ensure that the project does not impact downstream receiving waters.

*Pruitt Creek Realignment Impacts* - The applicant shall apply for a Streambed Alteration Agreement from the CDFW and implement all measures identified in any SAA approved for the project.

## Significance After Mitigation

Implementation of Mitigation Measures BIO-4 and BIO-5 would reduce impacts to riparian habitat and other sensitive natural communities to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Would the project 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?*

Wetlands are sensitive environmental resources that are protected at federal, state, and local levels. The USACE, State Water Resources Control Board (SWRCB) and RWQCB issue permits for the discharge of fill material into surface waters. A wetland delineation was conducted in January 2008 and the Corps issued an Approved Jurisdictional Determination (AJD) in December 2008. A re-verified Preliminary Jurisdictional Determination (PJD) was issued in January 2013 confirming 4.59 acres of seasonal wetlands on site, as well as 0.56 acres of other waters of the United States/State (Pruitt Creek). In total, there are 5.15 acres of waters of the United States on the project site. Thus, Pruitt Creek and the seasonal wetlands identified on the project site fall under the USACE's jurisdiction as waters of the United States pursuant to Section 404 of the CWA. Any proposal to fill these waters of the United States would require prior authorization from USACE (Monk & Associates 2021; Appendix B).

Under the currently proposed project, approximately 0.29-acre of waters of the United States/State would be impacted (filled). This 0.29-acre of impact is broken down into:

1. 0.19-acre of seasonal wetlands filled to accommodate the housing development and associated infrastructure;
2. 0.10-acre of impact to Pruitt Creek (other waters of the United States/State) from:
    a. Construction of realigned Pruitt Creek which will require tying the new creek alignment into the upstream and downstream ends of the existing creek which will result in impacts to approximately 375 linear feet of Pruitt Creek below the ordinary high water marks in these up and downstream locations.
    b. Installation of two outfall structures along the northern bank of Pruitt Creek below the ordinary high water marks.

The proposed project's total impacts to waters of the United States/State would be less than 0.5-acre and would qualify for use of a Nationwide Permit pursuant to Section 404 of the CWA. In accordance with any Nationwide Permit issued by USACE for the proposed project, measures would be required to mitigate impacts to waters of the United States/State.

To obtain a Section 404 permit authorized by USACE, the project would also be required to obtain a water quality certification from the RWQCB pursuant to Section 401 of CWA. The RWQCB requirements for issuance of a Section 401 certification typically parallel the USACE requirements for permitting impacts to USACE regulated waters pursuant to Section 404 of the CWA. These permits issued by USACE and the RWQCB may require the mitigation of any project impacts within 20 feet of the project site's seasonal wetland at a 1:1 ratio for the loss of/impact to the wetland's watershed. In addition, these permits may require mitigation for impacts to waters of the United States/State at a 1:1 ratio for permanent impacts if mitigation credits are purchased at a qualified wetland mitigation bank. These permits would also consider as mitigation the applicant's preservation of the majority of the project site's seasonal wetlands in a 12.55-acre preserve (Monk & Associates 2021).

Construction immediately adjacent to waters of the U.S. and waters of the State has the potential to significantly impact jurisdictional waters through discharge of sediment. Due to the proposed impacts to riparian habitat, streambed, and wetlands, project impacts would be potentially significant. However, development of the required Stormwater Pollution Prevention Plan (SWPPP)

and the Stormwater Management Plan (SWMP) shall be incorporated into the project plans to ensure that there are no impacts to downstream receiving waters, as discussed in Section 10, *Hydrology and Water Quality*.

Implementation of the SWPPP and the SWMP, as well as compliance with Mitigation Measures BIO-4 and BIO-5, would reduce impacts to state and federally protected wetlands to less than significant levels.

## Significance After Mitigation

Implementation of Mitigation Measures BIO-4 and BIO-5 would ensure that impacts to State and federal jurisdictional waters are avoided or mitigated. This measure would reduce impacts to State or federally protected wetlands to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*d. Would the project 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?*

Wildlife movement includes migration (i.e., usually one way per season), inter-population movement (i.e., long-term genetic flow) and small travel pathways (i.e., daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities such as foraging or escape from predators, they also provide connection between outlying populations and the main corridor, permitting an increase in gene flow among populations.

Pruitt Creek functions as a local wildlife movement corridor on this project site. Pruitt Creek's capacity to function as a wildlife corridor would be impacted by construction activities temporarily, for the duration of construction, as the proposed project includes shifting the flowline and flood storage capacity of this creek at the western reach of this drainage on the project site. The operational phase of the proposed project would not adversely impact wildlife movement corridors. Best Management Practices as outlined in Mitigation Measures BIO-2, BIO-3, and BIO-5 would be established and would remain throughout the duration of the construction to ensure that there are no significant impacts to wildlife resulting from proposed project activities. Due to the relatively small size of the project footprint, the absence of significant wildlife movement corridors within the project limits, and its location adjacent to developed and disturbed areas such as Highway 101, the project would not interfere substantially with the movement of wildlife species. Impacts to wildlife movement would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The Town of Windsor 2040 General Plan contains goals and policies applicable to sites containing wetlands, waterways, riparian habitats, plants, and animals. With implementation of Mitigation Measures BIO 1 through BIO-5, the proposed project would not conflict with local policies and ordinances. Impacts would be less than significant.

Pursuant to the Town of Windsor Tree Preservation Ordinance Section 27.36.040, the Valley Oak (*Quercus lobata*) is considered a protected tree if the trunk diameter at breast height (4.5 feet

above the surrounding grade) is greater than six inches. Under item E of the ordinance, a protected tree is also any tree required to be planted or preserved as environmental mitigation for a discretionary permit (Town of Windsor 2007). According to the revised Arborist Report provided by Balcerak Design in October 2021, three Valley Oak trees (Trees #1, #2, and #3) at the northeast corner of the site would be close to the proposed development (see Appendix B, Tree Exhibit site plans included at the end of the Arborist Report). The diameters for all three trees were also measured at 54 inches (dbh), which satisfies the category of a protected tree under the Tree Preservation Ordinance. For Trees #1, #2, and #3, impacts would only result from excavation to create the bioretention area, since it could result in root loss and adversely impact the trees. However, by ensuring adequate protection of their roots, implementation of Mitigation Measure BIO-6 would reduce impacts to protected trees not slated for removal to a less than significant level.

Additionally, 15 valley oak trees (12 on the north side of Pruitt Creek and three at the northwest corner of the project site) were planted along Pruitt Creek over a decade ago as part of a mitigation planting plan that was implemented on the project site. According to the revised Arborist Report, only two young valley oak trees would be impacted by the grading for the proposed Pruitt Creek channel. Mitigation Measures BIO-5 and BIO-6 would ensure the protection of tree roots and replacement of trees, mitigating impacts to a less than significant level.

## Mitigation Measure

### *BIO-6 Tree Protection*

Consistent with recommendations from the Arborist's Report (Balcerak Design 2021), the following tree protection measures will be implemented by the contractor under the direction of a qualified arborist:

- Prior to the initiation of any construction activity, temporary fencing shall be erected around protected trees in the construction area. Fencing shall be a minimum of five feet high and shall form a continuous barrier around the trees to be protected. Fencing shall be 2" chain link fabric. The fencing installation shall be performed by qualified personnel with all necessary supports and braces to provide a secure fence throughout the construction process. The fence shall not be removed during the construction process, without written authorization from the project arborist. All equipment and personnel shall remain outside the fenced area at all times. The storage of materials (of any kind) is prohibited within the tree protection area as described further in Town Standard Drawing Number 004. A warning sign shall be prominently displayed on each fence. The minimum size of the sign shall be 8.5"x11". The wording shall be as follows: "WARNING – Tree Protection Zone – DO NOT ENTER – This fence shall not be removed. Unauthorized removal is subject to a penalty."
- During project design, the applicant shall establish a permanent tree protection zone (TPZ) extending a minimum of 20 feet from the dripline around Tree #1, Tree #2, and Tree #3 (per map in Arborist's Report prepared by Balcerak Design, Appendix B). The TPZ shall establish an exclusion zone to protect tree roots and prevent a target from being present if additional limb failures occur.
- For young trees planted for a previous restoration near Pruitt Creek, A TPZ shall be established at the dripline of Tree #10. The dripline for Tree #23 shall be extended 25 feet from the trunk. As grading occurs, any root over 1 inch in diameter shall be exposed back to sound tissue and then hand pruned by a qualified arborist using a sharp blade. Roots shall not be exposed to the air any longer than necessary.

## Significance After Mitigation

Implementation of Mitigation Measures BIO-4 through BIO-6 would ensure that the project does not conflict with the Town's 2040 General Plan Policies or Tree Ordinance. These measures would reduce impacts to wetlands, waterways, riparian habitats, plants, animals, and protected trees to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project site is located within the planning area for the Santa Rosa Plain Conservation Strategy (Conservation Strategy), which is overseen by the USFWS. The Conservation Strategy creates a long-term conservation program sufficient to mitigate potential adverse effects on listed species due to future development on the Santa Rosa Plain. Since the project site is not located in an area of the Santa Rosa Plain that is designated as California Tiger Salamander habitat, the project would not conflict with the Conservation Strategy. In addition, the Conservation Strategy recommends that projects filling wetlands should mitigate these impacts via the preservation of wetlands at a minimum of a 1:1 replacement ratio. Implementation of Mitigation Measures BIO-4 and BIO-5 would reduce impacts to wetlands to a less than significant level, and thus the project would not conflict with the Conservation Strategy.

## Significance After Mitigation

Implementation of Mitigation Measures BIO-1, BIO-4, and BIO-5 would ensure that the project does not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and would reduce impacts to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 5 Cultural Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? | ☐ | ■ | ☐ | ☐ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ■ | ☐ | ☐ |
| c. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ■ | ☐ | ☐ |

CEQA requires that a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1) and tribal cultural resources (PRC Section 21074 [a][1][A]-[B]). A historical resource is a resource listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (*CEQA Guidelines* Section 15064.5[a][1-3]).

A resource is considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A Cultural Resources Study (Appendix C) was competed for the project by Evans in July 2021 and peer reviewed by Rincon Consultants, Inc. (Rincon). This study includes the results of a California Historical Resource Information System (CHRIS) records search, a Sacred Lands File (SLF) search, a review of the Built-Environment Resource Directory (BERD) for Sonoma County, a historic-period map review, Native American outreach, and a pedestrian field survey.

The CHRIS records search for the project site was conducted in February 2021. The search was performed to identify previously conducted cultural resources studies, as well as previously recorded cultural resources within the project site and a 0.25-mile radius. According to the results, no previously documented cultural resources were identified within the project site or the 0.25-mile radius. Similarly, no cultural resources were listed on the BERD or in the California Register of Historic Resources (CRHR), National Register of Historic Places (NRHP), California Historical Landmarks, or the California Points of Historical Interest.

The pedestrian field survey did not identify cultural resources meeting the definition of a historic property or historical resource. The survey did identify historic-period material including four fragments of aggregate concrete and a metal 50-gallon drum lid. However, the items do not represent a historic property or historical resource because there is a lack of correlation to historic-period use of the area, and the aggregate concrete fragments most likely originated from the remains of an agricultural building on a neighboring parcel. It was concluded by both Evans and Rincon that these items are not historically significant and not eligible for the NRHP or CRHR (Appendix C).

The SLF search for the project site completed by the Native American Heritage Commission (NAHC) showed positive results for the presence of a Native American sacred site near the area, since a local Native American tribe submitted sacred lands information for the section on which the project falls. However, it does not indicate that a sacred land is located within the project site. The Tribe's main concern was for the potential for tribal cultural resources to occur in the area.

*a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

*b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Based on the results of the cultural resources records search, Native American scoping, and pedestrian field survey, no cultural resources were identified within the project site. Although the Sacred Lands File search returned with positive results, it does not indicate that a sacred land is located within the project site.

The project would involve construction and ground disturbing activities that could potentially lead to the unanticipated discovery of archaeological resources, that may also be considered historical resources, and result in potentially significant impacts to such resources. The following mitigation measures would reduce archaeological impacts to less than significant levels by requiring Pre-Construction Cultural Awareness Training as well as halting construction in the vicinity of any

cultural resources found during construction and requiring evaluation and treatment of resources determined to be significant.

## Mitigation Measure

### *CUL-1 Pre-Construction Cultural Awareness Training*

Prior to construction, a qualified archaeological monitor shall be present to provide Cultural Awareness Training for all supervisors, contractors, and equipment operators in order to familiarize them with the types of artifacts that could be encountered and the procedures to follow if subsurface cultural resources are unearthed during construction. Refer to Mitigation Measure CUL-3 for procedures to follow in the event of unanticipated discovery of archaeological resources.

### *CUL-2 Archaeological Monitoring*

A qualified archaeological monitor shall be retained by the Project Applicant to observe all project-related ground disturbing activities. Ground disturbing activities include, but are not limited to, asphalt removal, hand excavation, clearing, grubbing, and removing and/or recompacting unconsolidated soils near the ground surface. Archaeological monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service n.d.). Monitoring shall occur within limits of the grading and project footprint.

If suspected archaeological resources are encountered at any point during project construction on the project site, work within a minimum of 60 feet of the suspected resource must halt and the find evaluated for listing in the CRHR. If a resource is determined to be a tribal cultural resource, then the provisions of Mitigation Measure CUL-3 shall control. The 60-foot radius may be reduced or expanded at the discretion of the qualified archaeologist if the potential resource is not determined to be a tribal cultural resource pursuant to Mitigation Measure CUL-3. Archaeological monitoring may be reduced to spot-checking or eliminated at the discretion of the monitor, in consultation with the qualified archaeologist and Native American monitor required pursuant to Mitigation Measure CUL-3, and lead agency, as warranted by conditions such as encountering bedrock, sediments being excavated are fill, or negative findings during the first 60 percent of rough grading. If monitoring is reduced to spot-checking, spot-checking shall occur when ground-disturbance moves to a new location within the project site and when ground disturbance will extend to depths not previously reached (unless those depths are within bedrock).

### *CUL-3 Unanticipated Discovery of Archaeological Resources*

If archaeological resources are encountered during ground-disturbing activities, work within a minimum of 60 feet shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service n.d.) shall be contacted immediately to evaluate the find. If the resource is of Native American origin, an appropriate Native American monitor, based on the nature of the find, shall also be consulted.

If the find is determined to be human remains, the qualified archaeologists shall notify the County Coroner in accordance with California Health and Safety Code section 7050.5. If the coroner determines that the remains are those of a Native American, the coroner will contact the Native American Heritage Commission by phone within 24 hours of making that determination, and work in the vicinity of the discovery will stop until applicable requirements of Health and Safety Code section 7050.5 and Public Resources Code sections 5097.9 et seq. have been met.

If the resource is determined not to be significant, no further archaeological investigation or mitigation shall be required. If the find is determined to be a potentially significant archeological resource or tribal cultural resource (TCR), a qualified archaeologist, in consultation with the Town, the project proponent, and the Native American monitor, where a potential TCR, shall determine whether preservation in place is feasible. If preservation in place is infeasible in light of project design or layout, or is unnecessary to avoid significant effects, a Cultural Resources Data Recovery Plan (CRDRP) shall be developed by the qualified archaeologist and, if the find is a TCR, the tribal monitor, to outline excavation and laboratory procedures, and if appropriate, curation at a university depository or other treatment (if a TCR) considered appropriate by the tribe. The plan shall be submitted to the Town for review and approval prior to proceeding with grading and construction activities in the area around the find.

The CRDRP shall be developed by the qualified archaeologist and shall outline excavation and laboratory procedures, and if appropriate, curation at a university depository or other appropriate facility. The plan shall be submitted to the Town for review and approval prior to proceeding with grading and construction activities in the area around the find. The data recovery plan shall identify a proposed data recovery program, and how the data recovery program would preserve the significant information the archaeological resource is expected to contain. Treatment of unique archaeological resources shall follow the applicable requirements of Public Resources Code Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim of targeting the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project.

The data recovery plan shall include provisions for analysis of data in a regional context; reporting of results within a timely manner and subject to review and comments by the appropriate Native American representative, where applicable, before being finalized; curation of artifacts and data at a local facility acceptable to the Town and appropriate Native American representative, if applicable; and dissemination of final confidential reports to the appropriate Native American representative, if applicable, the Northwest Information Center of the California Historical Resources Information System and the Town.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Would the project disturb any human remains, including those interred outside of formal cemeteries?*

No human remains have been identified within the project site; however, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states no further disturbance shall occur on the site of the discovery or nearby areas where adjacent remains are reasonably suspected to occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to State law and incorporation of

Mitigation Measure CUL-2 and CUL-3, impacts related to the discovery of human remains would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 6 Energy

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ■ | ☐ |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ■ | ☐ |

## Overview of Energy

As a state, California is one of the lowest per capita energy users in the United States, ranked 50th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. Most of California's electricity is generated in state with approximately 30 percent imported from the Northwest and Southwest in 2020; however, the state relies on out-of-state natural gas imports for nearly 90 percent of its supply (California Energy Commission [CEC] 2021a and 2021b). In addition, approximately 33 percent of California's electricity supply in 2020 came from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill 100 accelerated the state's Renewable Portfolio Standards Program (SB 350), codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Electricity and natural gas service in the Town of Windsor is provided by Pacific Gas & Electric (PG&E). PG&E provides natural gas and electric service to approximately 16 million people throughout a 70,000-square mile service area in northern and central California (PG&E 2021). Table 7 shows total electricity and natural gas consumption for Sonoma County, PG&E and California in 2020 as well as the percentage proportion consumption of Sonoma County compared to PG&E and California.

**Table 7 2020 Electricity and Natural Gas Consumption**

| Energy Type | Sonoma County | PG&E | California | Proportion of PG&E Consumption | Proportion of Statewide Consumption[1] |
|---|---|---|---|---|---|
| Electricity (GWh) | 2,868 | 102,868 | 272,576 | 3% | 1% |
| Natural Gas (millions of therms) | 105 | 4,534 | 21,328[2] | 2% | <1% |

GWh = gigawatt-hours

[1] For reference, the population of Sonoma County (484,207 persons) is approximately 1.2 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).

Source: CEC 2021b, [2] U.S. Energy Information Administration (EIA) 2021

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC 2021c). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 12.6 billion gallons sold in 2020 (CEC 2021d). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.7 billion gallons sold in 2021 (CEC 2021d). Table 8 summarizes the petroleum fuel consumption for Sonoma County, in which the project site would be located, as compared to statewide consumption.

**Table 8 2020 Annual Gasoline and Diesel Consumption**

| Fuel Type | Sonoma County (millions of gallons) | California (millions of gallons) | Proportion of Statewide Consumption[1] |
|---|---|---|---|
| Gasoline | 167 | 11,173 | 1% |
| Diesel | 30 | 1,626 | 2% |

[1] For reference, the population of Sonoma County (484,207 persons) is approximately 1.2 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).

Source: CEC 2021d

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Section 3, *Air Quality*, and Section 8, Greenhouse Gas Emissions, respectively.

*a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Applicant-provided information and CalEEMod outputs for air pollutant and GHG emissions modeling (Appendix A) were used to estimate energy consumption associated with the project.

## Construction Energy Demand

The project would require site preparation and grading, including hauling material on-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and

hardscaping. During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. As shown in Table 9, project construction would require approximately 49,563 gallons of gasoline and approximately 90,352 gallons of diesel fuel.

**Table 9 Estimated Fuel Consumption during Construction**

| | Fuel Consumption (gallons) | |
|---|---|---|
| **Source** | **Gasoline** | **Diesel** |
| Construction Equipment & Hauling Trips | N/A | 90,352 |
| Construction Worker Vehicle Trips | 49,563 | N/A |

N/A = not applicable

See Appendix D for energy calculation sheets.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the U.S. EPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, pursuant to applicable regulatory requirements such as 2019 CALGreen, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Overall, project construction would be temporary and typical of similar types of projects. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

## Operational Energy Demand

Operation of the project would contribute to regional energy demand by consuming electricity, and gasoline and diesel fuels. The proposed development would use natural gas to power emergency generators and commercial kitchen equipment within the retail and senior living components of the project. Electricity would be used for heating and cooling systems, lighting, appliances, and water and wastewater conveyance, among other purposes. Gasoline and diesel consumption would be associated with vehicle trips generated by residents and employees. Note that the CalEEMod output in Appendix A assumed natural gas usage in the model. Therefore, the natural gas consumption in the CalEEMod output was converted into electricity consumption to account for the increased electricity use. Table 10 summarizes estimated operational energy consumption for the project. As shown therein, project operation would require approximately 111,225 gallons of gasoline and 21,966 gallons of diesel for transportation fuels, and 2.3 GWh of electricity. Vehicle trips associated with future residents and employees would represent the greatest operational use of energy associated with the project.

**Table 10 Estimated Project Annual Operational Energy Consumption**

| Source | Energy Consumption[1] | |
|---|---|---|
| Transportation Fuels | | |
| Gasoline | 111,225 gallons | 12,211 MMBtu |
| Diesel | 21,966 gallons | 2,800 MMBtu |
| Electricity | 2.3 GWh | 7,770 MMBtu |

MMBtu = million metric British thermal units; GWh = gigawatt-hours

[1] Energy consumption is converted to MMBtu for each source, see Appendix D for energy calculation sheets for CalEEMod output results for electricity usage.

The project would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations Title 24), which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California's CALGreen standards (California Code of Regulations Title 24, Part 11) require implementation of energy-efficient light fixtures and building materials into the design of new construction projects. The Town currently requires CalGreen Tier 1. Furthermore, the 2019 Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. In addition, pursuant to CALGreen, all plumbing fixtures used for the project would be high-efficiency fixtures, which would minimize the potential the inefficient or wasteful consumption of energy related to water and wastewater.

Furthermore, most of the residents in the senior living community generally do not drive or possess personal vehicles, and would rely on the shuttle service as their main form of transportation. Therefore, project operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Table 11 lists applicable energy efficiency goals and policies from the Town's 2040 General Plan and summarizes the project's compliance with these policies.

## Table 11 Project Compliance with Energy Efficiency Goals and Policies

| Energy Efficiency Goal or Policy | Project Consistency |
|---|---|
| **Policy PFS-1.6: Energy Efficient Buildings and Infrastructure.** The Town shall continue to improve energy efficiency of Town buildings and infrastructure through efficiency improvements, equipment upgrades, and installation of clean, renewable energy systems to achieve climate action goals and reduce operating costs. | **Consistent.** The project would be served by PG&E which is subject to requirements pursuant to SB 100 and required to procure more electricity from renewable energy sources over time. The project would also utilize LED lighting and include solar panels on carports. |
| **Policy ER-5.9: Energy Conservation through Land Use.** The Town shall promote the creation of a land use pattern that reduces operational energy requirements, especially for transportation purposes, by:<br>a. Avoiding land use configurations and siting decisions that result in single-purpose automobile trips, and instead encouraging patterns that result in multi-purpose trips.<br>b. Promoting land use patterns that may be easily served by local transit and linked with regional transit.<br>c. Promoting land use patterns that provide employment opportunities for Windsor residents. | **Consistent.** The project would include pedestrian friendly walkways and rest areas with buildings close to sidewalks. Shuttle service would also be provided to residents of the senior living community for convenient access to offsite services, improving accessibility and reducing the need for single-use occupancy vehicles. Furthermore, the project would be required as a condition of approval to add a bus stop on Shiloh Road which would improve transit in the area.<br>Office spaces, retail and restaurants would help provide employment opportunities for Windsor residents. Since the project is a mixed-use project, residents of the senior living community would be able to frequent shops and restaurants on site. |
| **Policy ER-5.14: Compliance with Energy Regulations.** The Town shall continue to enforce State energy regulations governing energy consumption and use of solar and other renewable energy resources in existing and new development. | **Consistent.** The project would meet the 2019 California's Building Energy Efficiency Standards under Title 24 and would include green building features such as LED lighting, solar panels on carports, low flow plumbing and energy efficient appliances. |
| **Policy ER-5.15: Title 24 Application.** The Town shall require energy conservation standards for new residential construction, commercial construction, and within Town facilities, as contained in Title 24 of the California Code of Regulations, to be periodically reviewed to identify opportunities for adopting standards that more closely respond to local conditions, especially in the area of passive design, to reduce cooling loads. | **Consistent.** As discussed under Policy ER-5.14, the project would meet the 2019 California's Building Energy Efficiency Standards under Title 24 and would include green building features such as LED lighting, solar panels on carports, low flow plumbing and energy efficient appliances. |

Source: Town of Windsor 2018

As shown in Table 11, the project would be compliant with applicable energy efficiency goals and policies from the Town of Windsor 2040 General Plan. Therefore, potential impacts associated with renewable energy and energy efficiency would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 7 Geology and Soils

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| 1. 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? | ☐ | ■ | ☐ | ☐ |
| 2. Strong seismic ground shaking? | ☐ | ■ | ☐ | ☐ |
| 3. Seismic-related ground failure, including liquefaction? | ☐ | ■ | ☐ | ☐ |
| 4. Landslides? | ☐ | ■ | ☐ | ☐ |
| b. Result in substantial soil erosion or the loss of topsoil? | ☐ | ■ | ☐ | ☐ |
| 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? | ☐ | ■ | ☐ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ■ | ☐ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ■ |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ■ | ☐ | ☐ |

*a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?*

*a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

*a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

The project site is not located within a designated Alquist-Priolo Earthquake fault zone. The closest Alquist-Priolo earthquake faults to the project site are the Rodgers Creek Fault located approximately 1.5 miles east, the Maacama fault is located approximately four miles northeast, and the San Andreas Fault located 25 miles west (DOC 2021b). The project site is located in an area with low liquefaction susceptibility (Windsor 2018).

While the risk is low, there is a possibility for future seismic related effects at the project site due to the nature of the Northern California region, although faulting is unlikely because historically faulting follows the trace of recently active faults. All development within the Town is required to comply with the CBC, which provides minimum standards to ensure that proposed structures are designed using sound engineering practices and appropriate engineering standards for the seismic area in which a project site is located. Projects designed in accordance with the CBC would be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural, damage. Although conformance with the CBC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance with the CBC can reasonably be assumed to ensure that the proposed structures would be survivable, allowing occupants to safely evacuate in the event of a major earthquake. Impacts related to seismic ground shaking and liquefaction would be less than significant with compliance with CBC as well as Mitigation Measure GEO-1.

## Mitigation Measure

### *GEO-1 Soils Report*

The project applicant shall prepare a soils report for the project as part of the building permit. The soils report shall analyze soil conditions on the site prior to buildout of the project. The soils report may contain design recommendations, such as foundation design related to seismic events, to address the project site's soil conditions. The project shall implement recommendations in the soils report.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

*c. Would the project 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?*

There are no mapped Earthquake Zones of Required Investigation, which are areas of identified seismic hazard, associated with landslides within or near Windsor (DOC 2021b). Windsor is generally flat and is not subject to substantial risk from landslides. The greatest potential for a landslide within the Town is in the northeast where the topography becomes steeper along the edge of the foothills to the east (United States Geological Survey 1997). The project site is located in the southeastern portion of the Town. The property north of the project site is designated planned development and contains commercial uses. Parcels east and south of the project site are unincorporated Sonoma County. According to the Sonoma County General Plan, the area to the east is vacant and designated rural residential, and the property to the south is designated diverse agricultural land. The project site is not located near steep hills and is not subject to risk from landslides. Additionally, the projects site is in an area that has low susceptibility to liquefaction (Windsor 2018). The project is not located in an area of known land subsidence (USGS 2018). The project is likely not susceptible to collapse because it is not in a location of subsidence or liquefaction. However, there still remains a possibility of impacts from landslides, lateral spreading, subsidence, liquefaction, or collapse. Implementation of Mitigation Measure GEO-1 would be required to reduce impacts to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

The project site consists of Clear Lake clay and Huichica loam (USDA 2021). Clear Lake clay and Huichica loam have low potential for erosion (Windsor 2018). Project development would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities. Loose and disturbed soils during these activities are more prone to erosion and loss of topsoil by wind and water.

Construction activities that disturb one or more acres of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). The project would be required to comply with the NPDES General Permit pursuant to Mitigation Measure BIO-5. The project site is approximately 24.8 acres and thus would be required to comply with the NPDES general permit. In compliance with the permit, the project would file a Notice of Intent with the SWRCB. The project would develop a storm water pollution prevention plan (SWPPP), describing the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. The project may also be subject to inspection before and after storms in order to identify storm water discharge from the construction activity and to identify and implement erosion controls. Compliance with the Construction General Permit is reinforced through the Town of Windsor Municipal Code (Title 9, Chapter 4, Article 3), which requires the development of an erosion and sediment control plan that is equivalent to the required SWPPP. As part of this plan Construction Best Management Practices (BMP) would be implemented for soil stability and erosion control. Soil stabilization techniques may

include preservation of existing vegetation, silt fencing, fiber rolls, sandbag barriers, gravel bag berms and stabilized construction site driveways. Compliance with the NPDES General Permit for Stormwater Discharges and Town Code erosion and sediment control requirements in addition to adherence to Mitigation Measure GEO-1 would ensure impacts are reduced to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

As mentioned in *item (b)*, the site consists of Clear Lake clay and Huichica loam. Clear Lake clay and Huichica loam contain moderate to high clay content making them susceptible to expansion (Windsor 2018).

Expansive soils are soils that due to their composition and moisture content have a potential to undergo significant changes in volume, in the form of either shrinking or swelling (Windsor 2018). While the project site contains soils susceptible to expansion, the project would comply with the CBC requirements to address soil-related hazards including, removal, proper fill selection, and compaction. In cases where soil remediation is not feasible, the CBC requires structural reinforcement of foundations to resist the forces of expansive soils. Compliance with the requirements of the CBC would ensure impacts related to expansive soils are less-than-significant.

**LESS THAN SIGNIFICANT IMPACT**

*e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project site is located in an area with existing commercial development, low density residential development, and agricultural uses and would be required to connect to existing Town sewer services. Thus, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project. Therefore, no impacts from septic systems or alternative wastewater disposal systems would occur.

**NO IMPACT**

*f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The project site is located in the Coast Ranges geomorphic province, which extends approximately 600 miles from the Oregon border south to the Santa Ynez River in Santa Barbara County (Norris and Webb 1990; California Geological Society 2002). The project site is located within the Town of Windsor in Sonoma County which lies on the Santa Rosa Plain approximately 4 miles east of the Russian River (Delattre 2011).

To assess potential impacts to paleontological resources, the project's potential to disturb paleontologically sensitive geologic units was evaluated. The analysis involved a review of pertinent geologic maps and geologic literature, and a paleontological locality search to identify any known fossil localities from geologic units mapped at the project site. Fossil collections records from the University of California Museum of Paleontology (UCMP) online database and Paleobiology Database (PBDB) were reviewed to identify known fossil localities in Sonoma County (PBDB 2021; UCMP 2021). Based on the results of literature review and locality search, a paleontological

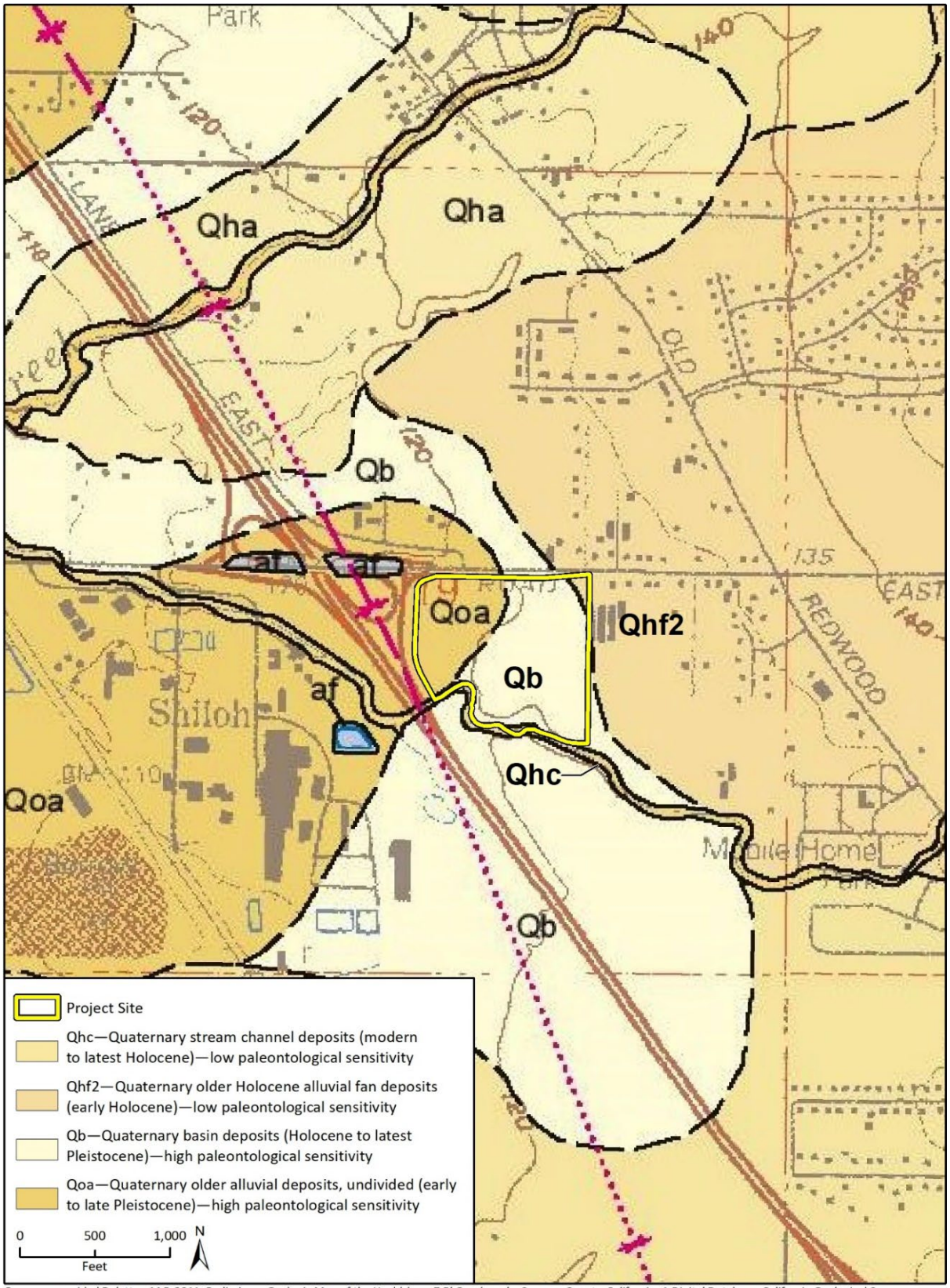
sensitivity was assigned to each geologic unit mapped within the project site. Paleontological sensitivity was assigned based on Society of Vertebrate Paleontology (SVP) guidelines (SVP 2010). The SVP has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources (SVP 2010). This system is based on rock units within which vertebrate or scientifically significant invertebrate fossils have been determined by previous studies to be present or likely to be present.

The project site is underlain by four geologic units as mapped by Delattre (2011) and shown in Figure 10:

- **Quaternary stream channel deposits (modern to latest Holocene) (Qhc):** Qhc underlies Pruitt Creek which runs along the southern edge of the project site (Figure 10). These areas actively receive sediment and are composed of loose silt, sand, and gravel (Delattre 2011). Late Holocene to modern sediments are considered too young to preserve scientifically significant paleontological resources (SVP 2010). Therefore, Qhc is assigned a **low paleontological sensitivity**.
- **Quaternary alluvial fan deposits (Holocene) (Qhf2):** Qhf2 underlies the northeastern corner of the project site (Figure 10). Qhf2 deposits consist of moderately to poorly sorted silt, sand, gravel, and occasionally clay. Holocene sediments are generally considered too young to preserve scientifically significant paleontological resources (SVP 2010). Therefore, Qhf2 is assigned a **low paleontological sensitivity**.
- **Quaternary basin deposits (Holocene to latest Pleistocene) (Qb):** Qb underlies the eastern half of the project site (Figure 10). These sediments consist of stratified sand, silt, and clay with occasional coarser alluvial interbeds that represent deposition by slow-moving or standing water in topographic lows (Delattre 2011). These sediments range in age from Holocene, which is generally considered too young to preserve paleontological resources, to late Pleistocene, which is of an appropriate age to preserve such resources (SVP 2010). Within Sonoma County, undivided Pleistocene sediments similar to those represented by Qb have produced fossils including mastodon (*Mammut*), ground sloths (*Paramylodon*), bison (*Bison*), and horse (*Equus*) (PBDB 2021; UCMP 2021). Quaternary basin deposits in the project area lie close to an inferred contact with Pleistocene sediments that underlie the western part of the project site. As such, it is likely that Qb units in this area are of similar Pleistocene age, either at the surface or at shallow depths. Given that the Qb sediments underlying the project site have a high likelihood of a latest Pleistocene age, Qb units at this project site are assigned a **high paleontological sensitivity**.
- **Quaternary older alluvial deposits, undivided (Qoa) (early to late Pleistocene):** Qoa underlies the western half of the project site (Figure 10). Qoa consists of unstratified sand, gravel, silt, and clay representing alluvium, fan, and stream terrace deposition (Delattre 2011). Within Sonoma County, undivided Pleistocene sediments similar to those represented by Qoa have produced fossils including mastodon (*Mammut*), ground sloths (*Paramylodon*), bison (*Bison*), and horse (*Equus*) (PBDB 2021; UCMP 2021). Given their fossil-bearing history elsewhere, Qoa is assigned a **high paleontological sensitivity**.

Because the project site is located in an area with high paleontological sensitivity there is potential to disturb paleontological resources. With implementation of Mitigation Measure GEO-2 to provide paleontological mitigation and monitoring, potential impacts of the proposed project associated with paleontological resources would be less than significant.

**Figure 10 Geology and Paleontological Sensitivity of the Project Site**




*Basemap provided Delattre, M.P. 2011. Preliminary Geologic Map of the Healdsburg 7.5' Quadrangle, Sonoma County, California: A Digital Database. California Geological Survey, Preliminary Geologic Maps, scale 1:24,000.*

## Mitigation Measure

### *GEO-2 Paleontological Resources Mitigation and Monitoring*

Prior to the commencement of ground disturbing activities under the project a qualified professional paleontologist shall provide training for all supervisors, contractors, and equipment operators in order to familiarize them with the types of paleontological resources that could be encountered and the procedures to follow if such resources are unearthed during construction. The qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program which shall outline the procedures for construction staff Worker Environmental Awareness Program (WEAP_ training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications. The Qualified Paleontologist (Principal Paleontologist) shall have at least a master's degree or equivalent work experience in paleontology, shall have knowledge of the local paleontology, and shall be familiar with paleontological procedures and techniques. A qualified paleontological monitor is defined as an individual who meets the minimum qualifications per standards set forth by the SVP (2010), including a B.S. or B.A. degree in geology or paleontology with one year of monitoring experience and knowledge of collection and salvage of paleontological resources.

If a potential paleontological resource is discovered during project construction, work in the immediate vicinity of the resource shall be stopped until a qualified paleontologist assesses the find for scientific significance. Work may continue outside of a buffer zone around the fossil, usually 50 to 100 feet (specific distance may be determined by the qualified paleontologist). Once salvaged, significant fossils shall be identified to the lowest possible taxonomic level, and shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology). Curation fees are the responsibility of the project owner.

If significant paleontological resources are discovered during construction, a final report prepared by a Qualified Paleontologist shall be submitted to the Town describing those resources and the steps taken to curate any such find. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered, an analysis of fossils recovered (if any) and their scientific significance. A copy of the report shall also be submitted to the designated museum repository.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 8 Greenhouse Gas Emissions

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ■ | ☐ | ☐ |
| b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ■ | ☐ |

## Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide ($CO_2$), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). 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 ($CO_2$) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" ($CO_2e$), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than $CO_2$ on a molecule per molecule basis (Intergovernmental Panel on Climate Change 2021).[3]

Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since the late 1700s, estimated concentrations of $CO_2$, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent,

[3] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

respectively, primarily due to human activity (U.S. EPA 2020). Emissions resulting from human activities are thereby contributing to an increase in Earth's average temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

## Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill (SB) 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of carbon dioxide equivalents ($CO_2e$) by 2030 and two MT of $CO_2e$ by 2050 (CARB 2017). The Town of Windsor 2040 General Plan includes more rigorous reduction targets than what was recommended in the 2017 Scoping Plan (see Town of Windsor 2040 General Plan section below).

Other relevant state laws and regulations include but are not limited to the following:

- **SB 375:** The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. Metropolitan Planning Organizations are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the Metropolitan Planning Organization's Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Metropolitan Transportation Commission (MTC)/Association of Bay Area Governments (ABAG) was assigned targets of a 10 percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2020 and a 19 percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2035. MTC/ABAG adopted Plan Bay Area 2050 in October 21, which meets the requirements of SB 375 (MTC/ABAG 2021).
- **SB 100:** Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

- **California Building Standards Code (California Code of Regulations Title 24):** The California Building Standards Code consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. Part 6 is the Building Energy Efficiency Standards, which establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. Part 12 is the California Green Building Standards Code (CALGreen), which includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. As mentioned above in Section 6, *Energy*, the Town currently requires CalGreen Tier 1 and anticipates adopting an all-electric code for the next code cycle, effective January 1st, 2023.
- **BAAQMD GHG Thresholds:** BAAQMD adopted new GHG thresholds of significance on April 20, 2022 to encourage projects to meet the State's goals to achieve 40 percent reduction in GHG emissions below 1990 levels by 2030 and carbon neutrality by 2045. The new thresholds for land use projects are as follows (must include either A or B) (BAAQMD 2022):
  A. Projects must include, at a minimum, the following project design elements:
     1. Buildings
        a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
        b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the CEQA Guidelines.
     2. Transportation
        a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
           i. Residential projects: 15 percent below the existing VMT per capita
           ii. Office projects: 15 percent below the existing VMT per employee
           iii. Retail projects: no net increase in existing VMT
        b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
  B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b).

### *Sonoma County Regional Climate Action Plan (CAP) 2020 and Beyond*

The Sonoma County Regional Climate Action Plan is a community-wide CAP that provides a framework to address climate change and allow local governments to adopt locally appropriate measures to reduce GHG emissions. The CAP presents a countywide goal for GHG emissions of 25 percent below 1990 levels by 2020, and 80 percent below 1990 levels by 2050 (Sonoma County Regional Climate Protection Authority 2016).

*Town of Windsor 2040 General Plan*

The Town of Windsor does not have a Climate Action Plan, but the 2040 General Plan includes the following applicable policies that detail specific GHG reduction measures in the sectors of land use, population growth, transportation, air quality and climate change adaptation.

**Policy ER-5.1** **Community Greenhouse Gas Reduction.** The Town shall strive to reduce emissions by 25 percent below the 1990 community emissions level by 2020, and further reduce community emissions by:

- 40 percent below the 1990 level by 2030;
- 60 percent below the 1990 level by 2040; and
- 80 percent below the 1990 level by 2050 (New Policy, Town Staff and Consultants)

**Policy ER-5.2** Municipal Services Greenhouse Gas Reduction. The Town shall strive to reduce municipal emissions by 26.2 percent below the 2000 municipal emissions level by 2020, and further reduce municipal emissions by:

- 40 percent below the 1990 level by 2030
- 60 percent below the 1990 level by 2040
- 80 percent below the 1990 level by 2050 (New Policy, Town Staff and Consultants)

**Policy ER-5.3** **Greenhouse Gas Efficiency Target.** The Town shall ensure that all new development Projects and Public Works Improvement Projects would result in less than (*) metric tons CO2e per capita (including residents and employees) per year in order to ensure that the emissions targets for the years 2030 and 2050 in ER-5.1 and ER-5.2 would be achieved. *Note: Policy ER-5.3 is a placeholder "emissions threshold" policy that will be used to satisfy 5.1 and 5.2. The actual target will be set once the land use diagram has been confirmed and the associated impacts analyzed.[4]

**Policy ER-5.5** **AB 32 and SB 32 Greenhouse Gas Assessment and Monitoring.** The Town shall continue to assess and monitor performance of greenhouse gas emissions (GHG) reduction efforts beyond the AB 32 designated 2020 goal, including progress towards meeting long-term GHG emissions reduction goals for 2030 (consistent with SB 32) and 2050, as well as the effects of climate change and associated levels of risk, in order to plan a community that is resilient and can adapt to changing climate conditions and its negative impacts.

**Policy ER-5.11** **Zero Net Energy Goals.** The Town shall strive to implement the State goal of zero net energy (ZNE) in all new residential construction by 2020 and ZNE in all new commercial construction by 2030.

**Policy ER-5.14** **Compliance with Energy Regulations.** The Town shall continue to enforce State energy regulations governing energy consumption and use of solar and other renewable energy resources in existing and new development.

**Policy ER-5.15** **Title 24 Application.** The Town shall require energy conservation standards for new residential construction, commercial construction, and within Town facilities, as contained in Title 24 of the California Code of Regulations, to be periodically

[4] As discussed below under Significance Thresholds, the project level threshold for 2030 is 1.91 MT $CO_2e$ per service population per year (Town of Windsor 2018b).

reviewed to identify opportunities for adopting standards that more closely respond to local conditions, especially in the area of passive design, to reduce cooling loads.

The GHG reduction policies align with reduction targets in AB 32 and SB 32 and encourages smart growth development practices in accordance with SB 375 (Town of Windsor 2018).

### *Town of Windsor Biennial Municipal Greenhouse Gas Emissions Reduction Action Plan Update*

The Town of Windsor adopted a Greenhouse Gas Emissions Reduction Action Plan (RAP) in 2008 and updated it in 2012. The RAP contains 11 mitigation measures implemented from 2012 to 2015 that aim to reduce GHG emissions 26% below the emission levels in 2000 by 2020 (The Energy Alliance Association [TEAA] 2012).

## Methodology

GHG emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., congregate care, low-rise apartments, strip mall retail, and parking spaces), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors.

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. The daily trips provided in a GHG memorandum prepared by W-Trans in May 2022 were used to develop trip generation rates for the proposed developments (Appendix H). Emissions attributed to energy use include natural gas consumption by commercial kitchens, and emergency generator(s) only and electricity for all other proposed development. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings.

The project's per person GHG emissions were calculated by dividing total GHG emissions by the project's service population (residents plus employees). The service population attributed to this project is based on average household size data specific to the Town of Windsor, as well as the data from the project applicant. It was assumed that the project would potentially add an estimated 188 residents from Independent Living units and apartments, and an estimated 85 residents from Assisted Living and Memory Care units. The projects would also provide new employment opportunities. As shown in Table 12, the project would generate approximately 97 employees. Therefore, the project's service population would be 422 persons. Operational emissions estimates also included Mitigation Measure GHG-1 in the emissions modeling.

**Table 12 Proposed Service Population**

| Use | Area | Square Feet (sf) per Employee[1] | Total Persons |
|---|---|---|---|
| Congregate Care and Apartments | 141 units | 1.3 persons per household | 188 |
| Assisted Living | 71 beds | – | 85 |
| Nursing Home | 34 | – | 34 |
| Apartments | 10 | – | 18 |
| Senior Housing Employees | – | – | 48 |
| Restaurant Employees | – | – | 34 |
| Office Space | 4,500 Sq. Ft. | 304 sf per employee | 15 |
| **Total** | **–** | **–** | **422** |

Source: service population numbers provided by project applicant

## Significance Thresholds for GHG Emissions

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to *CEQA Guidelines* Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. The Town of Windsor does not have a qualified climate action plan. However, the Town of Windsor 2040 General Plan Policy ER-5.3 (see Town of Windsor 2040 General Plan above) does establish GHG thresholds to ensure projects in Windsor meet the GHG reduction targets through 2050. The project level threshold for 2030 is 1.91 MT $CO_2$e per service population per year; the threshold for 2040 is 1.12 MT $CO_2$e per service population per year; and the threshold for 2050 is 0.49 MT $CO_2$e per service population per year (Town of Windsor 2018). As described in the Town's 2040 General Plan EIR, these thresholds were calculated in light of the trajectory of state climate change legislation and represent the rate of emissions reduction necessary for individual projects under the 2040 General Plan to achieve their fair share of statewide GHG reduction necessary to meet GHG reduction targets enacted by the Legislature. As such, the Town has chosen to apply its own GHG significance thresholds to analysis of the project's potential GHG impacts, rather than utilizing BAAQMD's recently adopted thresholds.

*a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Project construction would generate GHG emissions from the operation of heavy equipment, motor vehicles, and worker trips to and from the site. In addition to construction emissions, project operation would generate GHG emissions from new vehicle trips, electricity usage and area sources. Calculations of $CO_2$, $CH_4$, and $N_2O$ emissions are provided to identify the magnitude of potential project effects. The analysis focuses on $CO_2$, $CH_4$, and $N_2O$ because these make up 98.9 percent of all GHG emissions by volume and are the GHG emissions that the project would emit in the largest quantities (Intergovernmental Panel on Climate Change 2007).

Without implementation of Mitigation Measure GHG-1, the project's GHG emissions would exceed the Town's 2030 project level threshold of 1.91 MT $CO_2e$ per service population per year. However, as described in more detail below, implementation of Mitigation Measure GHG-1 would reduce the project's GHG emissions to 1.90 MT $CO_2e$ per service population per year. Mitigation Measure GHG-1 would require electrification for the project, except for the commercial kitchen, to reduce emissions associated with natural gas; require carbon free electricity; require diversion of organic waste to reduce $CO_2e$, require EV charging stations for electric vehicles to reduce emissions associated with gasoline powered vehicles; and require water conservation.

### *Construction Emissions*

According to BAAQMD, GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions, and therefore there are no proposed construction-related GHG impact thresholds at this time (BAAQMD 2022). However, construction emissions are still included in this analysis for informational purposes and to provide a conservative GHG estimate. Emissions generated by construction of the project are an estimated at 676 MT $CO_2e$ which is amortized over 30 years to equal 23 MT of $CO_2e$. These emissions are conservatively included in Table 13 and compared to the Town's 2030 GHG thresholds.

### *Operational Emissions*

Long-term emissions relate to area sources, energy use, solid waste, water use, and transportation. Emissions generated by buildout under the proposed project would be approximately 781 MT $CO_2e$. Table 13 summarizes the annual GHG emissions generated by project construction and operation ( including implementation of Mitigation Measure GHG-1), based on CalEEMod output files in Appendix E.

**Table 13 Annual Operational Emissions of Greenhouse Gases**

| Emission Source | Annual 2030 Emissions (MT of $CO_2e$) |
|---|---|
| Construction | 23 |
| Operational | |
| Area | 3 |
| Energy | 3 |
| Mobile | 734 |
| Solid Waste | 25 |
| Water | 17 |
| Total Operational Emissions | 781 |
| **Total Emissions (Construction and Operation)** | **804** |
| Service Population | 422 |
| **Service Population Emissions** | **1.90** |
| Town of Windsor 2030 Service Population Threshold (MT $CO_2e$ per service population per year) | 1.91 |
| **Exceed Town of Windsor 2030 Threshold?** | **No** |

MT = Metric Tons, $CO_2e$ = carbon dioxide equivalent
See Appendix E for CalEEMod Worksheet

As shown in Table 13, with implementation of Mitigation Measure GHG-1, in the year 2030 the project would generate approximately 804 MT $CO_2e$ per year. or 1.90 MT $CO_2e$ per service population. The service population emissions would not exceed the Town of Windsor 2030 threshold of 1.91 MT $CO_2e$ per service population. Impacts related to GHG emissions would be less than significant with implementation of Mitigation Measure GHG-1.

## Mitigation Measures

The following mitigation measure would be required to avoid or reduce the project's potentially significant impacts to GHG emissions.

### *GHG-1 Emissions Reduction Measures*

In order to achieve the Town's threshold of 1.91 MT $CO_2e$, the following project characteristics shall be implemented to reduce GHG emissions:

**Electrification:** All buildings constructed as part of the project will be constructed without the use of natural gas. Heat pump water heaters and HVAC units used throughout the project will be electric. The only exceptions for all-electric construction will be for the commercial kitchen process loads such as stoves and other restaurant equipment, emergency generator(s). However, these spaces will be heated and cooled via electric heat pumps.

**Carbon Free Electricity:** The project will purchase 100 percent carbon free electricity through Sonoma Clean Power to meet 100 percent of the development's electricity load.

**SB1383 Compliance:** The building will meet the requirements of SB 1383 and divert at least 75 percent of its organic waste by providing composting services and signage to all building types.

**EV Charging:** The project will provide EV capable conduit and electric panel capacity for 25 percent of parking spaces and 10 percent of the EV spaces shall have installed EV chargers. This allows for at least 25 percent of vehicles to be all-electric by 2030.

**Water Conservation:** The project will install water saving devices and/or water efficient landscaping and irrigation equipment sufficient to demonstrate a reduction in water use equivalent to a 20 percent reduction in the project's indoor water use, relative to the project's estimated indoor water use under current plumbing code requirements.

## Significance After Mitigation

Implementation of Mitigation Measure GHG-1 would ensure that GHG emissions would remain below the Town's threshold of 1. 91 MT $CO_2e$ as shown in Table 13.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Several plans and policies have been adopted to reduce GHG emissions in the northern California region, including California's 2017 Scoping Plan, Plan Bay Area 2050, and local policies contained in the 2040 General Plan.

## 2017 Scoping Plan

The California 2017 Scoping Plan provides strategies to reduce GHG emissions consistent with state plans and policies of AB 32 and SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030. The 2017 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use, energy demand, and vehicle miles traveled (VMT); maximizing recycling and diversion from landfills; and increasing water conservation. The project would be consistent with these goals through project design, which includes complying with the 2019 Title 24 Green Building Code and Building Efficiency Energy Standards and installing energy-efficient LED lighting, water-efficient faucets and toilets, water efficient landscaping and irrigation and environmentally friendly parking design features per building codes. The project would be served by PG&E, which is required to increase its renewable energy procurement in accordance with SB 100 targets. The project would be required to provide a bus stop along Shiloh Road on the eastern portion of the site and would be located in an area served by transit and within walking and biking distance of several commercial and recreational destinations, which would reduce future residents' VMT and associated fossil fuel usage.

## Plan Bay Area 2050

Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC) Plan Bay Area 2050 is a long-range, integrated transportation and land-use plan for the nine-county San Francisco Bay Area. The Plan is the combined Regional Transportation Plan and Sustainable Communities Strategy (also referred to as the RTP/SCS) and was jointly adopted by the ABAG and the MTC in October 2021. The Plan describes where and how the region can accommodate two million new people and one million new jobs from 2021 to 2050 and details the regional transportation investment strategy over the next 30 years. Growth in the plan area is promoted in Priority Development Areas and limited in Priority Conservation Areas to promote preservation of

key resources. The RTP/SCS consists of 35 strategies and over 80 individual implementation actions, as well as an Implementation Plan that builds upon the Plan Bay Area 2040 Action Plan, which identifies specific actions that focuses and improves upon the categories of housing, economy, transportation, and environment. ABAG and MTC developed land use and transportation scenarios in the Plan known as Horizon that distribute the total amount of anticipated growth across the region and measure how well each scenario measures against the Plan goals. Based upon performance, the preferred scenario provides a regional pattern of household and employment growth and a corresponding transportation investment strategy (ABAG/MTC 2021).

Table 14 summarizes the project's consistency with applicable Plan Bay Area 2050 strategies.

### Table 14 Plan Bay Area 2050 Consistency for GHG

| Policies | Consistency |
|---|---|
| **Transportation Strategies** | |
| **T8: Build a Complete Streets network.** Enhance streets to promote walking, biking and other micro-mobility through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multi-use paths. | **Consistent**. The project would include an enclosed bridge that connects buildings A and B. Pedestrian connections would be provided onsite and there would be sidewalks along Shiloh Road, which would allow access to retail and commercial centers north of the site. The project would also include 20 bicycle parking spaces, 25 percent EV parking spaces, and a shuttle service for residents of the senior living facility to access offsite services. |
| **Environmental Strategies** | |
| **EN4: Maintain urban growth boundaries.** Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions. | **Consistent**. As described in the *Project Description*, the southern edges of the site are coterminous with the Town's Urban Growth Boundary. The proposed project would be within the Town's existing urban footprint and would promote mixed-use and pedestrian-oriented development. |
| **EN5: Protect and manage high-value conservation lands.** Provide strategic matching funds to help conserve and maintain high-priority natural and agricultural lands, including but not limited to, Priority Conservation Areas and wildland-urban interface areas. | **Consistent**. The proposed project would encompass 12 acres on the northern and eastern portion of the 24.8-acre site, while the remainder would be preserved as open space to protect existing wetlands. The project would also have a 100-foot agricultural buffer on the southern and eastern portion where the project site abuts agricultural land. |
| **EN6: Modernize and expand parks, trails and recreation facilities.** Invest in quality parks, trails and open spaces that provide inclusive recreation opportunities for people of all backgrounds, abilities and ages to enjoy | **Consistent**. The proposed project would include common use outdoor spaces such as patios on both sides of the entry from Hembree Lane as well as a trail north of Pruitt Creek on the eastern portion of the site. The location of the trail would also be limited to outside of where conservation of wetland areas and habitats are required. The proposed project would also include pedestrian walkways, buildings close to sidewalks, and outdoor eating spaces. |
| **EN8: Expand clean vehicle initiatives.** Expand investments in clean vehicles, including more fuel-efficient vehicles and electric vehicle subsidies and chargers. | **Consistent**. The proposed project would include 25 percent EV parking spaces. |

| Policies | Consistency |
|---|---|
| **EN9: Expand transportation demand management initiatives.** Expand investments in programs like vanpools, bikeshare, carshare and parking fees to discourage solo driving. | **Consistent**. The project would include 20 bicycle parking spots and shuttle service for residents of the senior living facility access offsite services, reducing VMTs and GHGs from single-occupancy vehicles. The project would also be required to provide a bus stop along Shiloh Road on the eastern portion of the site. |

Source: ABAG/MTC 2021

As discussed in the Table 14, the proposed project would not conflict with strategies aimed at reducing GHG emissions as well as transportation and environmental impacts. Impacts would be less than significant.

## Town of Windsor 2040 General Plan

The Town of Windsor 2040 General Plan includes measures that would reduce GHG emissions by reducing energy use from buildings and equipment, encouraging sustainable landscaping, and promoting alternative modes of transportation. Table 15 summarizes the project's consistency with applicable 2040 General Plan measures.

### Table 15 2040 General Plan Consistency for GHG Emissions

| Policies | Consistency |
|---|---|
| **Policy ER-5.3: Greenhouse Gas Efficiency Target.** The Town shall ensure that all new development Projects and Public Works Improvement Projects would result in less than (*) metric tons CO2e per capita (including residents and employees) per year in order to ensure that the emissions targets for the years 2030 and 2050 in ER-5.1 and ER-5.2 would be achieved. *Note: Policy ER-5.3 is a placeholder "emissions threshold" policy that will be used to satisfy 5.1 and 5.2. The actual target will be set once the land use diagram has been confirmed and the associated impacts analyzed. | **Consistent.** As shown in Table 13, in the year 2030 the project would generate approximately 1.90 MT $CO_2e$ per service population, which would not exceed the Town's 2030 GHG service population threshold of 1.91 MT $CO_2e$ per service population. |
| **Policy ER-5.4: Encourage Development Patterns that Reduce Greenhouse Gas Emissions.** The Town shall strive to reduce greenhouse gas emissions by encouraging compact, mixed-use, pedestrian/bicycle friendly, transit oriented development that reduces vehicle miles traveled (VMT); promoting energy efficient building enhancements, construction practices, design, and site planning; improving the job-to-housing ratio; and other methods of reducing greenhouse gas emissions while maintaining a balance of housing types. | **Consistent**. The project would include an enclosed bridge that connects Buildings A and B. Pedestrian connections would be provided onsite and there would be sidewalks along Shiloh Road, which would allow access to other retail and commercial centers north of the site. The project would also include 20 bicycle parking spaces, 25 percent EV parking spaces, and a shuttle service for residents to access offsite services, reducing VMTs and GHGs from single-occupancy vehicles. |
| **Policy ER-5.6: Coordinate with BAAQMD and NSCAPCD.** The Town shall coordinate with BAAQMD and NSCAPCD to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution, if not already provided for through project design. | C**onsistent**. The project would be consistent with the BAAQMD 2017 Clean Air Plan and would include features that are consistent with goals and measures described in the Clean Air Plan, including meeting California Green Building Standards, incorporating LED lighting and solar panels on carports, and providing 20 spaces of bicycle parking. |

| Policies | Consistency |
|---|---|
| **Policy ER-5.9: Energy Conservation through Land Use.** The Town shall promote the creation of a land use pattern that reduces operational energy requirements, especially for transportation purposes, by:<br>a. Avoiding land use configurations and siting decisions that result in single-purpose automobile trips, and instead encouraging patterns that result in multi-purpose trips.<br>b. Promoting land use patterns that may be easily served by local transit and linked with regional transit.<br>c. Promoting land use patterns that provide employment opportunities for Windsor residents. | **Consistent**. The project would be a mixed-use project and would involve construction of retail and amenities on site. The project site would be in proximity to public transportation, with the closest bus stop approximately 0.1 miles north of the site. |
| **Policy ER-5.10: Energy Performance Standards.** The Town shall require new construction to meet targeted energy performance standards to advance Town greenhouse gas reduction and other sustainability goals and policies identified in the 2040 General Plan. The Town will allow new development to select from a range of options to achieve a minimum energy performance standard, including but not limited to:<br>▪ Solar easements to guarantee access to increased renewable energy generation;<br>▪ Installation of EV charging stations in homes and in commercial development to increase the ability for the public to use zero-emission vehicles;<br>▪ Passive heating and cooling building design;<br>▪ Solar roof and carport panels;<br>▪ Cool roofs;<br>▪ SMART appliances;<br>▪ Wind generation;<br>▪ Installation of energy efficient appliances and fixtures; and<br>▪ Other emerging technologies as they become available. The Town shall work with affordable housing | **Consistent.** The project would be utilize 100 percent carbon free electricity through Sonoma Clean Power, except for the commercial kitchens, emergency generator(s),. The project would also include green building features such as LED lighting, solar panels on carports, low flow plumbing and energy efficient appliances. In addition, the project would be required to comply with the Town's CalGreen Tier 1 requirements. |
| **Policy ER-5.11: Zero Net Energy Goals.** The Town shall strive to implement the State goal of zero net energy (ZNE) in all new residential construction by 2020 and ZNE in all new commercial construction by 2030. | **Consistent.** The project would be utilize 100 percent carbon free electricity through Sonoma Clean Power. The project would also include green building features such as LED lighting, solar panels on carports, low flow plumbing and energy efficient appliances. In addition, the project would be required to comply with the Town's CalGreen Tier 1 requirements. |
| **Policy ER-5.15: Title 24 Application.** The Town shall require energy conservation standards for new residential construction, commercial construction, and within Town facilities, as contained in Title 24 of the California Code of Regulations, to be periodically reviewed to identify opportunities for adopting standards that more closely respond to local conditions, especially in the area of passive design, to reduce cooling loads. | **Consistent.** The project would meet the 2019 California's Building Energy Efficiency Standards under Title 24, and would include green building features such as LED lighting, solar panels on carports, low flow plumbing and energy efficient appliances. |
| **Policy ER-5.16: Address Heat Island Effect in Parking Lots.** The Town shall require the planting of shade trees in parking lots to reduce the heat island effect. | **Consistent.** The project would involve the planting of more than 300 trees on site which would reduce the heat island effect in parking lots. |

| Policies | Consistency |
|---|---|
| **Policy ER-5.17: Urban Shade Tree Planting.** The Town should expand urban shade tree planting by 500 trees to provide shade in both the public right-of-way and as part of development proposals. | **Consistent.** The project would involve the planting of more than 300 trees on site which would include olive trees, columnar accent trees, native evergreen trees, flowering accent trees, and street trees. |
| **Policy ER-5.18: Preservation of Trees.** The Town shall require the preservation of trees in parking lots and in the public right-of-way per development standards. | **Consistent.** The project would comply with Town of Windsor Tree Preservation Ordinance Section 27.36.040 as well as Mitigation Measure BIO-6 which would ensure the protection and preservation of trees. |

Source: Town of Windsor 2018

As discussed in Table 15, the proposed project would not conflict with plans and policies aimed at reducing GHG emissions. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 9 Hazards and Hazardous Materials

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ■ | ☐ | ☐ |
| 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? | ☐ | ■ | ☐ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school? | ☐ | ☐ | ☐ | ■ |
| d. Be located on a site that is included on a list of hazardous material 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? | ☐ | ☐ | ☐ | ■ |
| e. For a project located in 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? | ☐ | ☐ | ■ | ☐ |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ■ | ☐ |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? | ☐ | ■ | ☐ | ☐ |

*a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

*b. Would the project 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?*

Construction activities associated with the project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete. Small quantities of potentially toxic substances (e.g., petroleum and other chemicals used to operate and maintain construction equipment) would be used at the project site and transported to and from the site during construction.

To reduce the risk of releasing hazardous materials, the project contractor would be required to comply with the California Health and Safety Code Chapter 6.95. The California Health and Safety Code is implemented through the Hazardous Materials Management Ordinance (HMMO) of the Town of Windsor and would ensure that risks from routine use, transport, handling, storage, disposal, and release of hazardous materials would be minimized. In compliance with the HMMO the project would be required to obtain an operational permit to store or handle hazardous materials, if any hazardous materials were to be required during construction of the project. Under the operational permit the operator may be required to provide an inventory of hazardous material and hazardous waste, provide any analytical results, geotechnical data and site assessment information to the Administrative Authority, and the project site would be subject to inspection by the Administrative Authority in order to ensure proper handling of hazardous material and hazardous waste. However, impacts would be potentially significant. As described in Mitigation Measure HAZ-1, the project's construction contractor would also be required to prepare and implement a hazardous materials business plan (HMBP) specifying hazardous materials on site, emergency response procedures, training information, and hazardous waste disposal procedures. Thus, construction of the project would not be likely create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Impacts related to the release of hazardous material from construction would be less than significant with mitigation.

Residential and commercial uses proposed as part of the project, typically do not use or store large quantities of hazardous materials other than those typically used for household cleaning, maintenance, and landscaping. Maintenance and operation of the project may use common cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount anticipated to be used on the site, routine use of such products would not represent a substantial risk to public health or the environment. Therefore, impacts related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would be considered less than significant.

## Mitigation Measure

### *HAZ-1 Hazardous Materials Business Plan*

The project's construction contractor shall prepare and implement a hazardous materials business plan (HMBP). The HMBP shall include a hazardous material inventory, emergency response

procedures, training program information, and basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of at the proposed project site, and procedures for handling and disposing of unanticipated hazardous materials encountered during construction. The HMBP shall include an inventory of the hazardous waste generated on-site and specify procedures for proper disposal. As required, hazardous waste will be transported by a licensed hauler and disposed of at a licensed facility. According to the HMBP reporting requirements, workers must be trained to respond to releases of hazardous materials in accordance with State and federal laws and regulations governing hazardous materials and hazardous waste (e.g., HAZWOPER training required by OSHA). Any accidental release of small quantities of hazardous materials shall be promptly contained and abated in accordance with applicable regulatory requirements.

## Significance After Mitigation

With implementation of Mitigation Measure HAZ-1, impacts related to the creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

There are no schools located within 0.25 miles from the project site. The closest school to the project site is Sonoma Country Day School, located at 4400 Day School Place, approximately 0.4 miles southwest of the project site. There would be no impact.

**NO IMPACT**

*d. Would the project be located on a site that is included on a list of hazardous material 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?*

The following databases were checked, pursuant to Government Code Section 65962.5, on October 25, 2021 for known hazardous materials contamination in the project area.

- State Water Resources Control Board Geotracker
- USEPA's RCRA Info site
- USESPA's Permit Compliance System (PCS) and Integrated Compliance Information System (ICIS) databases in Envirofacts regarding facilities registered with the federal enforcement and compliance (FE&C) and holding National Pollutant Discharge Elimination System (NPDES) permits
- DTSC EnviroStor Database
- USEPA CERCLIS (Superfund site) database

The project site is not located on a leaking underground storage tanks (LUST) cleanup site. The closest LUST site is located approximately 0.36 miles northwest of the project site, which case was closed in 2013 (SWRCB 2021a). The nearest Resource Conservation and Recovery Act (RCRA) site to the project site is located at 295 Shiloh Road approximately 50 feet north (USEPA 2021). However, the enforcement and compliance summary for the site concluded that there was no violation identified. The project site does not contain any cleanup sites or superfund sites (SWRCB 2021b). The project site did not appear on a search of USEPA CERCLIS database (USEPA 2021). The project site is not included on a list compiled pursuant to Section 65962.5 of the Government Code; thus, no impact would occur.

**NO IMPACT**

*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?*

The nearest airport to the project site is the Charles M. Schulz Sonoma County Airport, located approximately two miles southwest of the project site. However, pursuant to Exhibit C4, Safety Zones, of the Sonoma County Airport Comprehensive Airport Land Use Plan, the project site is located outside of all identified Safety Zones and the Primary Referral Area Boundary (Sonoma County Airport Land Use Commission 2016). Therefore, the project site would not result in significant impacts related to hazards associated with airport operations. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The western boarder of the project site is located adjacent to Highway 101, which is the primary evacuation route in Windsor. However, the project would not result in closure, rerouting or substantial alteration of streets or property access points during or after construction. Additionally, the project would not require the closure of Highway 101 during construction or operation. Emergency vehicle access would be provided via two driveways along Shiloh Road. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As discussed in Section 20, *Wildfire*, the project site is adjacent to commercial development to the north, open land to the east, vineyards to the south, and Highway 101 to the west. The Town is adjacent to SRA lands classified as Moderate Fire Hazard Severity Zone, but the project site is not in an SRA or lands classified as Very High Fire Hazard Severity Zone. The nearest Very High Fire Hazard Severity Zone (VHFHSZ) is approximately 10 miles east of the project site. The project would implement fire protection design and fire suppression and management, such as fire hydrants. Additionally, as mentioned in Section 20, *Wildfire,* the project would not interfere with emergency access. Furthermore, as discussed in Section 20, *Wildfire*, the project would be required to implement Mitigation Measure WF-2 which would ensure compliance with CBC Chapter 7A, which contains requirements for construction materials and methods for exterior wildfire exposure. The

intent of the measures is to reduce the spread of wildfire by ensuring construction material used have a low susceptibility to catching fire. The project is not located in an SRA and would be required to comply with the CBC requirements in order to reduce wildfire spread, thus, impacts would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 10 Hydrology and Water Quality

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ■ | ☐ | ☐ |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ■ | ☐ |
| 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; | ☐ | ■ | ☐ | ☐ |
| (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; | ☐ | ■ | ☐ | ☐ |
| (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 | ☐ | ■ | ☐ | ☐ |
| (iv) Impede or redirect flood flows? | ☐ | ■ | ☐ | ☐ |
| d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ■ | ☐ |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ■ | ☐ |

*a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The project would involve grading over the eastern portion of the site. Grading would not occur in the area proposed to be preserved as a conservation area. Although grading would occur on the eastern portion of the site only the project would disturb more than 1.0 acre of land. Therefore, the project would be required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. The Town of Windsor Municipal Code also requires an erosion and sediment control plan for construction sites that is equivalent to the required SWPPP. Under the conditions of the General Construction Permit and in compliance with Mitigation Measure BIO-5, the applicant would be required to develop and implement a SWPPP for construction activities. The SWPPP must include BMPs specific to project construction and is subject to inspections by a Qualified Stormwater Professional. BMPs aim to control degradation of surface water by preventing soil erosion or pollution discharge from the project area. However, construction activities could still potentially impact ground water quality and Mitigation Measure HYD-1 would be required.

The project would include creation of a new, realigned channel next to the existing Pruitt Creek channel that would impact approximately 460 linear feet of the existing channel below the top of banks to tie both channels together. This new channel construction would remove and realign the creek bank, impacting the bed and bank of the creek and riparian vegetation along the creek banks. However, realignment of Pruitt Creek and the addition of a new stream channel is expected increase the creeks hydrologic capacity to prevent it from spilling over its banks and to prevent flooding on Highway 101 and upstream residences. Therefore, proposed changes to Pruitt Creek would improve the creeks' ability to manage flooding and runoff when compared to the current hydrological conditions. Additionally, the project would include BMPs, including Permanent Treatment Control Measures such as a series of volume capture sections that would be incorporated into the site to retain stormwater during light precipitation events and promote infiltration. Furthermore, the project would also use engineered soil, which is anticipated to encourage storage and filtration, reducing runoff. Implementation of BMPs would reduce impacts to Pruitt Creek by providing water treatment and reducing runoff into the creek.

The project would also be required to adhere to the Town of Windsor Municipal Code requirements for new development, including BMPs, such as erosion control, revegetation, stream setbacks, and parking lot cleaning, detailed in the Town's Phase II NPDES Stormwater Management Plan. The Town of Windsor Municipal Code storm water discharge requirements are designed to achieve compliance with the NCRWQCB's NPDES permit and Waste Discharge Requirements for MS4 Discharges (Order No. R1-2015-0030; NPDES No. CA0025054). Finally, the project would be required to comply with the Town of Windsor Municipal Code Article 3, Section 9-4-300, which includes requirements for reducing pollutants into stormwater, and maintenance of parking lots, sidewalks, and watercourses in order to reduce runoff of pollutants. These requirements would ensure that construction and operational stormwater runoff does not degrade surface or groundwater quality in the vicinity of the site. Therefore, impacts would be less than significant with implementation of Mitigation Measure BIO-5 and Mitigation Measure HYD-1.

## Mitigation Measure

### *HYD-1 Compliance with NPDES Permit*

Should groundwater dewatering be required during construction, the project shall be required to comply with Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the North Coast Region (Order No. R1-2009-0045; General NPDES Permit No. CA0024902), which requires the treatment of contaminated groundwater prior to discharge or disposal of contaminated groundwater at an appropriate disposal facility or wastewater treatment plant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

*e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project would be served by the Windsor Water District, to which groundwater only accounts for less than one percent of the Towns water supply (Windsor 2021). The project would include an on site well to provide water for irrigation purposes, which uses groundwater from the Santa Rosa Plain Subbasin. The Santa Rosa Plain Groundwater Sustainability Agency (GSA) is a public agency formed to sustainably manage groundwater in the Santa Rosa Plain groundwater basin. The GSA has prepared a Groundwater Sustainability Plan which establishes a standard for sustainability of groundwater management and use and determines how the basin will achieve this standard by 2042. The project would be compliant with goals within the Groundwater Sustainability Plan in that it would preserve 4.95 acres of wetland of the 5.15 acres of wetland on the site as part of a 12.55 acre conservation area, which would allow for infiltration and groundwater recharge, and would also include bioretention basins at the northeast, northwest, and southeast corners of the site as well as southwest of the senior living community to capture runoff from the site and permit groundwater recharge. As discussed under Impact a, the proposed project would be required to comply with BMPs that would be incorporated into the site to retain stormwater during light precipitation events and promote infiltration, as well as Sustainable Groundwater Management Act requirements and General Plan Policies PHS-7.6 (Groundwater Sustainability) and PHS-7.8 (Preserve Groundwater Recharge Areas) which would minimize groundwater infiltration and increase water use efficiency within the Town to the maximum extent practicable. Therefore, impacts on groundwater would be less than significant.

Water quality in the Town is governed by the North Coast Regional Water Quality Control Board (NCRWQCB), which sets water quality standards in the Water Quality Control Plan for the North Coast Region (Basin Plan). As discussed under Impact *a,* the project would be required to comply with NPDES requirements, and the Town of Windsor Municipal Code which requires an erosion and sediment control plan for construction sites that is equivalent to a SWPPP. The project would not violate water quality standards or degrade water quality during construction or operation. Additionally, adherence to state and local policies would further maintain water quality. Therefore, the proposed project would not interfere with water quality control plans or sustainable groundwater management plans. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c.(i) Would the project 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 result in substantial erosion or siltation on- or off-site?*

*c.(ii) Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

*c.(iii) Would the project 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 that would 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?*

*c.(iv) Would the project 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 impede or redirect flood flows?*

The project proposes the integration of bioretention areas in order to capture site runoff during light precipitation events (Appendix F). During larger events, stormwater would be directed to the storm drain system and southernly to Pruitt Creek. The project site has also been designed to shift positive gradients away from structures with overland relief draining to storm water capture areas during light precipitation events. Additionally, as required by Mitigation Measure BIO-5, the project would preserve 4.95 acres of wetland as part of the 12.55 acre conservation area on the western portion of the site that would allow infiltration and reduce the potential for flooding and runoff. Furthermore, the floor of the lowest building proposed by the Project would be nearly a foot above street elevation, further reducing the probability of inundation. The Initial Stormwater Low Impact Development Submittal developed by BFK engineers in August 2021 stated that treatment measures designed for the site have achieved the 100% volume capture for the 85$^{th}$ percentile precipitation event (Appendix F). Therefore, runoff resulting from the buildout of the project would be minimal and would not substantially impact runoff to Pruitt Creek in a manner that would impede or redirect flood flows. Additionally, full volume capture would ensure that runoff does not exceed the existing capacity of stormwater drainage systems.

The project would include creation of a new, realigned channel next to the existing Pruitt Creek channel that would impact approximately 460 linear feet of the existing channel below the top of banks to tie both channels together. This new channel construction would remove and realign the creek bank, impacting the bed and bank of the creek and riparian vegetation along the creek banks. Realignment of a portion of Pruitt Creek and the addition of a new stream channel would increase the creeks hydrologic capacity to prevent it from spilling over its banks and flooding on Highway 101 and upstream residences. Therefore, proposed changes to Pruitt Creek would improve the creeks' ability to manage flooding and runoff when compared to the current hydrological conditions. Additionally, the project would include the implementation of BMPs in order to reduce runoff and increase water treatment, such as a series of volume capture sections and the use of use engineered soil.

The improvement of Pruitt Creek and compliance with the NPDES General Construction Permit, preparation of a SWPPP, and compliance with the Town of Windsor Municipal Code requiring an

erosion and sediment control plan, as required by Mitigation Measure BIO-5. Therefore, impacts would be less than significant with implementation of Mitigation Measure BIO-5.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project area is not located in a tsunami inundation area, nor is there a water body near the project area capable of seiche (DOC 2009). The southwestern portion of the project site is located on a Federal Emergency Management Agency (FEMA) flood plain and the western portion of the site is in a flood hazard overlay zone. However, the project would not include any structures within the FEMA floodplain or the flood overlay zone, and would preserve 12.55 acres of conservation land of which includes 4.95 acres of wetlands, which would allow infiltration and reduce the potential for flooding and runoff. The project would also involve changes to Pruitt Creek that would improve the creeks' ability to manage flooding. Furthermore, the floor of the lowest building proposed by the project would be nearly a foot above street elevation which would reduce the probability of inundation. Additionally, the project will include the addition of bioretention to treat and slow on-site runoff. Therefore, there would be a less than significant impact.

**LESS THAN SIGNIFICANT IMPACT**

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# 11 Land Use and Planning

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☐ | ■ |
| 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? | ☐ | ☐ | ■ | ☐ |

*a. Would the project physically divide an established community?*

The project site is located on a vacant site. The project site is bordered by commercial development and Shiloh Road to the north, vacant open land is located to the east, there are vineyards as well as Pruitt Creek to the south, and Highway 101 northbound off ramp and Highway 101 to the west. The project site is bordered by the Town limit line and urban growth boundary to the south. The eastern boundary is adjacent to the Town limit line and at close proximity to the urban growth boundary. The area to the east and south of the project site are also located in unincorporated Sonoma County, with the exception of APN 059-310-051 and APN 059-310-052, which were recently annexed to the Town. The project site is located in the south and westernmost portion of the Shiloh Road Village Vision Plan and 2040 General Plan Shiloh Road East Community Place area. The project would not involve constructing bridges, roadways, or other linear features that would divide an established community. The project would not result in the removal of existing roadways that could prevent access within an established community. Therefore, development of the site would not physically divide an established community and no impact would occur.

**NO IMPACT**

*b. Would the project 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?*

The project site has a 2040 General Plan designation of Gateway Commercial (GC) and Boulevard Mixed-Use (BMU); a Specific Plan (Shiloh Road Village Vision Plan) Designation of Regional Mixed-Use, Mixed-Use, Oakhurst Neighborhood; a Zoning designation of Gateway Commercial, Boulevard Commercial, and Flood Hazard Overlay; and also has a Potential Wetlands designation in the 2040 General Plan. The project requires a General Plan Amendment from GC to Retail Commercial (RC). The project also includes a rezone to Planned Development (PD), Tentative Parcel Map, Site Plan and Design Review approval, and approval of a reduced agricultural buffer from 200 to 100 feet.

The project would be consistent with the BMU land use designation, which would allow for mixed-use development that includes retail, residential, office, hotel, or entertainment uses with extensive pedestrian-oriented frontage on a boulevard street (Windsor 2018). The project would include a

shopping center, retail and service activities, restaurants, offices, open space, and residential uses consistent with the RC designation and PD zoning. The project would also be include a condition of approval to provide a bus stop along Shiloh Road on the eastern portion of the site and would be located in an area served by transit and within walking and biking distance of several commercial and recreational destinations. The project would also comply with 2040 General Plan policies LU-13.1, LU-13.5, LU-13.6, and LU-13.8 and the Shiloh Road Village Plan, which would ensure the project's consistency with design guidelines envisioned for the specific land use designations. Moreover, the project would be consistent with 2040 General Plan Policy H-6.2, which encourages the development of senior housing in areas that are accessible to public transit, commercial services, and health and community facilities (Windsor 2018). The project would include 141 senior apartments, 71 assisted living units, and 34 memory care units, and would be located in close proximity to public transportation such as bus stops along Shiloh Road and Hembree Lane. Table 16 below details the projects consistency with the 2040 General Plan polices.

### Table 16 Project Consistency with 2040 General Plan Policies

| Policy | Consistency |
|---|---|
| **Shiloh Road East** | |
| **Policy LU-13.1 Review Shiloh Village Vision Plan.** The Town shall review and update the Shiloh Village Vision Plan to develop a feasible development plan that can achieve the community's vision for the Shiloh Road area. | **Consistent.** The project would be consistent with guiding principles included in the Shiloh Village Vision Plan. The project would include mixed uses including housing and commercial uses. Additionally, the project would include open space in the form of a walking trail and wetlands. Furthermore, the project would include the use low water use plants designed to be compatible with the existing landscape and surrounding habitats. The project would also be consistent with the Shiloh Village Vision Plan design guidelines as it would include exposed heavy wood structural elements, post and beams, decorative awnings, stone walls, and horizontal boards. Therefore, the project would be consistent with this policy. |
| **Policy LU-13.5 Shiloh Road East Pedestrian-Friendly Design.** The Town shall encourage buildings and sites within the Shiloh Road East area that is designated mixed use to integrate design features that create a pedestrian-friendly environment, including small blocks, siting buildings close to the sidewalks, providing small plazas, providing outdoor eating areas, and including public art. | **Consistent.** The project would integrate a pedestrian friendly design. The Project would introduce new sidewalks, a walking path, and modifications to the Shiloh Road and Hembree Lane traffic signal to include new pedestrian crossings on the east, west, and south intersection legs. Pedestrian connectivity within the site would consist of sidewalks along one or both sides of drive aisles, with decorative pavement treatments used to distinguish pedestrian crossing areas. Additionally, the project would include development of a courtyard with seating, which can be utilized for outdoor eating. Therefore, the project would be consistent with this policy. |
| **Policy LU-13.6. Shiloh Road East Road Design.** The Town shall encourage roads within the Shiloh Road East area to be designed to:<br>a. minimize street widths to the extent possible;<br>b. follow a grid pattern;<br>c. accommodate bicycles;<br>d. include wide attached sidewalks with street trees and street furniture along the boulevard;<br>e. provide for bus stops in appropriate locations; | **Consistent.** As part of its frontage improvements the project would include reconstruction of eastbound bike lanes on Shiloh Road to provide a full six-foot width, consistent with the Complete Street Design Guidelines. Bicyclists would be able to access the surrounding bike network via existing bike lanes on Hembree Lane, Shiloh Road to the east of the project site, and Old Redwood Highway. The project would introduce new sidewalks with street trees between the sidewalk and the road. The project would include streetscape furniture, such as benches and tables, consistent with the policy. Additionally, the project would include a shuttle service for residents to access public transit and other facilities. The project would also be required as a condition of approval to provide a SCT bus stop along Shiloh Road on the eastern portion of the site and would be located in an area served by transit and within walking |

| Policy | Consistency |
|---|---|
| f. include planted parkways between the sidewalk and street whenever possible in residential areas;<br>g. avoid cul-de-sacs;<br>h. include bulb-outs at corners;<br>i. use loop roads; and<br>j. provide on-street parking. | and biking distance of several commercial and recreational destinations. The project would be consistent with this policy. |
| **Policy LU-13.8 Neighborhood Compatibility.** The Town shall ensure that development of the mixed-use parcels on the south side of Shiloh Road considers the interface with the lower-density parcels to the south. The mixed-use area shall be connected, and not walled off from, the lower-density residential area, but still designed in a way that reduces conflict and promotes compatibility between uses. | **Consistent.** The project would incorporate design features consistent with the surrounding development as well as the natural features of the Town, including exposed heavy wood, stone walls, and neutral tone colors. The project would not be walled off from surrounding land uses, rater the project would include an agricultural buffer for consistency with surrounding land uses. Therefore, the project would be consistent with this policy. |
| **Housing** | |
| **Policy H-1.2.** The Town shall encourage development of a range of housing types affordable to various income groups, including single family and multifamily dwellings, "move-up" housing, senior housing, secondary and other smaller units, and special needs housing.<br>**Policy H-1.4.** The Town shall strive to ensure new housing is provided to meet the needs of the local workforce that work and serve the community (e.g., teachers, police officers, fire fighters, nurses and hospital workers, retail and service workers.<br>**Policy H-6.2.** The Town shall encourage the development, rehabilitation, and preservation of senior housing, particularly in areas that are accessible to public transit, commercial services, and health and community facilities. | **Consistent.** The project would include 141 senior apartments, 71 assisted living units, and 34 memory care units, and would be located in close proximity to public transportation such as bus stops along Shiloh Road and Hembree Lane. The project would also include 10 apartments which could be used as housing for the local workforce to serve the community. Additionally, the project would include a condition of approval to provide a SCT bus stop along Shiloh Road on the eastern portion of the site and would be located in an area served by transit and within walking and biking distance of several commercial and recreational destinations. Shuttle services for residents to access public transit and other facilities would also be provided. The project would be consistent with this policy. |
| **Environmental Resources** | |
| **Policy ER-1.1. Open Space Preservation.** The Town shall seek to preserve open space resources (i.e., productive farmlands, outdoor recreation areas, biological habitats, visually prominent landforms, Alquist-Priolo Special Study Zones, and flood hazard areas) through avoidance of development in these areas. | **Consistent.** The project would provide a walking trail for pedestrians. Additionally, the project would include a 12.55-acre conservation area that includes approximately 4.95 acres of wetlands. The project would also include agricultural buffer along areas adjacent to agricultural uses. The project would also require the implementation of Mitigation Measure BIO-5 which includes avoidance, minimization, and monitoring of jurisdictional waters. Therefore, the project would be consistent with this policy. |

| Policy | Consistency |
|---|---|
| **Policy ER-1.2. Sensitive Habitat Preservation.** The Town shall encourage the preservation of sensitive environmental habitat areas, such as oak woodlands, productive farmlands, riparian (creekside) corridors, and important wildlife movement corridors through measures such as clustering development and conservation easements. | **Consistent. T**he project would include a 12.55-acre conservation area that includes approximately 4.95 acres of wetlands. Additionally, the project would be required to consult with USFWS and would mitigate for impacts to "suitable habitat" in accordance with Mitigation Measure BIO-4. Furthermore, the project would be required to apply for a Lake or Streambed Alteration Agreement pursuant to CFGC Section 1600 et. in order to minimize impacts to riparian habitats in accordance with Mitigation Measure BIO-5. With the implementation of Mitigation Measures BIO-4 and BIO-5 the project would be consistent with this policy. |
| **Policy ER-6.1. Protection of Biological and Ecological Resources.** The Town shall protect significant biological and ecological resources in Windsor, including:<br>a. Wetlands, in particular, high value wetlands<br>b. Rare, threatened, or endangered species<br>c. Vulnerable habitats<br>d. Vernal pools<br>e. Oak groves and woodlands<br>f. Riparian woodlands<br>**g.** Heritage trees | **Consistent.** The project would include a 12.55-acre conservation area that includes approximately 4.95 acres of wetlands. The implementation of Mitigation Measures BIO-4 and BIO-5 would reduce impact to vulnerable habitats to less than significant. Additionally, tree protection measures would be implemented by the contractor under the direction of a qualified arborist in accordance with Mitigation Measure BIO-6. Mitigation Measures BIO-1, BIO-2, and BIO-3 would ensure impacts on special status species and nesting birds would be reduced to a less than significant level. The project would be consistent with this policy. |
| **Policy ER-9.2. Development Guidelines along Scenic Corridors.** The Town shall ensure that development proposals along scenic corridors do not detract from public viewpoints, are protected, and are harmonious and subordinate to the natural features that comprise the scenic viewshed. The Town shall require developers include components of project design that shall be considered in making this assessment include building height, massing, orientation, color, building materials, rooftop appurtenances, storage areas, signage, lighting, and low-water landscaping. The purpose of detailed development review along these corridors is to ensure that development within the viewshed preserves and enhances attractive natural and man-made vistas. | **Consistent.** As discussed in Section 1, *Aesthetics*, the project is designed to have a balance between development the Windsor 2040 General Plan finds necessary to meet the needs of the Town's residents and the conservation of the visual resources, including scenic vistas. |

Source: Town of Windsor 2018

Additionally, as described in Section 8, *Greenhouse Gas Emissions*, the project would be consistent with ABAG/MTC's Plan Bay Area 2050, which includes the goals of climate protection, healthy and safe communities, open space and agricultural preservation, and transportation. the project would meet California Green Building Standards, include 20 bicycle parking spots and a shuttle service for residents to access offsite services, and a 12.55 acre conservation area that includes approximately 4.95 acres of wetlands.

As described in Section 2, *Agriculture and Forestry*, Chapter 27.24, Agricultural Preservation, of the Town of Windsor Zoning Ordinance requires an agricultural buffer of 200-feet but allows the width of the buffer to be reduced to a minimum of 100-feet in certain circumstances with Town Council approval. The Town Council may adjust the size of buffers due to factors such as the type of agricultural activity occurring, agricultural practices, existing physical features, man-made features, and configuration, location and size of the properties. The project includes a request to reduce the Agricultural Buffer from 200-feet to 100 feet, in exchange for a Condition of Approval that the project would provide full disclosure of nearby agricultural operations to prospective residents of units within 100 feet of the agricultural buffer. Table 17 analyzes consistency with the Town of Windsor Zoning Ordinances related to land use mentioned throughout this IS-MND.

### Table 17 Project Consistency with the Town of Windsor Zoning Ordinances

| Town Zoning Ordinance | Consistency |
|---|---|
| **Chapter 27.20. Section 27.20.030(D4). Glare control.** All outdoor illumination, including security lighting, shall be indirect or diffused and directed downward, away from adjacent properties and public rights-of-way. Light fixtures shall have "house side" reflectors to minimize glare. | **Consistent.** The project would contain light fixtures that would direct light downwards, such as those shown in Figure 9 of Section 1, *Aesthetics*. Additionally, fixtures would also contain "house side" reflectors to minimize glare. Glare would be further prevented by the eave overhang associated with the project's commercial uses, the variation in siting for buildings on the project site, and by the density of the vegetation that is proposed in the landscape design. Furthermore, headlights of vehicles entering and exiting the project site at night would be downcast and shielded by both existing and proposed buildings, fencing, and vegetation. |
| **Chapter 27.24. Section 27.24.020(A). Buffering required.** At the time of the subdivision or development of any parcel that adjoins lands zoned for and/or currently in agricultural use, an appropriate buffer shall be established on the parcel where the subdivision or development is proposed, between the urban development and existing agricultural operations. | **Consistent.** The project would maintain a 100 foot agricultural buffer to the south and east where agricultural lands are adjacent to the project site. The Town of Windsor Zoning Ordinance (27.24.020 [B]) requires an agricultural buffer of 200-feet but allows the width of the buffer to be reduced to a minimum of 100-feet in certain circumstances with Town Council approval. |
| **Chapter 27.26. Section 27.26.040(B). Allowable fence and wall materials.** Fences and walls shall be constructed of attractive, long-lasting materials (e.g., masonry, wood, or stone). Masonry walls should not consist exclusively of smooth-surfaced concrete masonry units (CMUs); the use of textured or split-face CMUs is strongly encouraged. Walls shall be of a solid masonry construction and be of a decorative design when visible from public rights-of-way. The use of chain link fencing is discouraged. | **Consistent.** The project would include stone walls with smooth concrete surfaces. The project does not propose the permanent use of chain link fencing. |

| Town Zoning Ordinance | Consistency |
|---|---|
| **Chapter 27.36. Section 27.36.040(E).** A protected tree is any tree required, to be planted or preserved, as environmental mitigation for a discretionary permit. | **Consistent.** The Valley Oak (*Quercus lobata*) is considered a protected tree if the trunk diameter at breast height (4.5 feet above the surrounding grade) is greater than six inches. According to the revised Arborist Report provided by Balcerak Design in October 2021, three Valley Oak trees (Trees #1, #2, and #3) were identified at the northeast corner of the site (see Appendix B, Tree Exhibit site plans included at the end of the Arborist Report). The diameters for all three trees were measured at 54 inches (dbh), which satisfies the category of a protected tree under the Tree Preservation Ordinance. These trees would not be removed as part of the project. The project would implement Mitigation Measure BIO-6 to reduce impacts to protected trees not slated for removal by requiring temporary fencing around protected trees and establishing a permanent tree protection zone (TPZ) extending a minimum of 20 feet from the dripline around Tree #1, Tree #2, and Tree #3. |

Source: Town of Windsor 2000

Because the project aligns with these policies and programs, assuming approval of the requested General Plan Amendment, Rezoning, and the reduction of the agricultural buffer, the project would be consistent with applicable land use plans, policies, and regulations. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 12 Mineral Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would 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? | ☐ | ☐ | ☐ | ■ |
| 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? | ☐ | ☐ | ☐ | ■ |

*a. Would the project 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?*

*b. Would the project 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?*

The project site is not zoned or designated for mining uses and no active mining operations are in the project area or vicinity. The project site is not classified as a Mineral Resource Zone (MRZ) and would not result in the loss of availability of a known mineral resource that would be of value to the residents of the state and the region, nor would it result in loss of a locally important mineral resource recovery site (USGS 2021). There would be no impact.

**NO IMPACT**

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# 13 Noise

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would 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? | ☐ | ■ | ☐ | ☐ |
| b. Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ☐ | ■ | ☐ |

## Overview of Noise and Vibration

*Noise*

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 (California Department of Transportation [Caltrans] 2013).

### HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

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., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

### SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a "sound power level" or a "sound pressure level," which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as $L_{pw}$) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 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, and 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 (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

### DESCRIPTORS

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 factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level ($L_{eq}$) and Day-Night Average Level (DNL; may also be symbolized as $L_{dn}$).

The $L_{eq}$ is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The $L_{max}$ is the highest noise level within the sampling period, and the $L_{min}$ is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA $L_{eq}$ range; ambient noise levels greater than 65 dBA $L_{eq}$ can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (DNL or $L_{DN}$), which is the

24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL or $L_{DEN}$), 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).[5] The relationship between the peak-hour $L_{eq}$ value and the $L_{DN}$/CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by $L_{DN}$ and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

### *Groundborne Vibration*

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 18.

**Table 18 AASHTO Maximum Vibration Levels for Preventing Damage**

| Type of Situation | Limiting Velocity (in/sec) |
|---|---|
| Historic sites or other critical locations | 0.1 |
| Residential buildings, plastered walls | 0.2–0.3 |
| Residential buildings in good repair with gypsum board walls | 0.4–0.5 |
| Engineered structures, without plaster | 1.0–1.5 |

Source: Caltrans 2020

[5] Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the general human response to different levels of groundborne vibration velocity levels, are described in Table 19.

**Table 19 Vibration Annoyance Potential Criteria**

| | Vibration Level (in/sec PPV) | |
|---|---|---|
| Human Response | Transient Sources | Continuous/ Frequent Intermittent Sources[1] |
| Severe | 2.0 | 0.4 |
| Strongly perceptible | 0.9 | 0.10 |
| Distinctly perceptible | 0.25 | 0.04 |
| Barely perceptible | 0.04 | 0.01 |

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

[1] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

## Project Noise Setting

### *Sensitive Receivers*

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise-sensitive land uses typically include residences, schools, libraries, places of worship, and long-term care facilities such as hospitals and nursing homes. The nearest noise-sensitive receivers are single-family residences located approximately 65 feet north of the project site across Shiloh Road at the intersection of Shiloh Road and Business Park Court. Additional sensitive receivers include single-family residences approximately 280 feet east of the project site along Shiloh Road. Although not required to be analyzed as part of CEQA, it should be noted for the sake of compliance with the Town's General Plan and zoning requirements that the project would add sensitive receivers to the project site in the form of senior residents in the senior living facility and persons living in the apartments along Shiloh Road.

### *Noise Measurements*

The most prevalent source of noise in the project site vicinity is vehicular traffic on Shiloh Road to the north and Highway 101 to the west. To characterize ambient sound levels at and near the project site, four 15-minute sound level measurements were conducted on Tuesday, August 31, 2021, from 10:53 a.m. through 2:46 p.m. as shown in Figure 11. An Extech, Model 407780A, ANSI Type 2 integrating sound level meter was used to conduct the measurements. Figure 11 shows the noise measurement locations, and Table 20 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix G.

**Table 20 Project Site Vicinity Sound Level Monitoring Results- Short-Term**

| Measurement Location | | Sample Times | Approximate Distance to Primary Noise Source (feet) | $L_{eq}$ (dBA) | $L_{min}$ (dBA) | $L_{max}$ (dBA) |
|---|---|---|---|---|---|---|
| NM-1 | 55 feet from the centerline of Shiloh Road on the north end of the project site | 1:16 – 1:31 p.m. | 55 | 70 | 55 | 84 |
| NM-2 | Vacant lot across the project site and 60 feet from the centerline of Shiloh Road | 2:21 – 2:46 p.m. | 60 | 64 | 51 | 75 |
| NM-3 | 270 feet from the centerline of Shiloh Road on the northeast end of the project site | 10:53 – 11:08 a.m. | 270 | 48 | 43 | 58 |
| NM-4 | 575 feet from the centerline of U.S. 101 on the south end of the project site just north of the creek | 11:37 – 11:52 a.m. | 575 | 57 | 48 | 75 |

NM = noise measurement; $L_{eq}$ = average noise level equivalent; dBA = A-weighted decibel; $L_{min}$ = minimum instantaneous noise level; $L_{max}$ = maximum instantaneous noise level

Primary Noise Source for NM -1, NM -2 and NM -3 is Shiloh Road.

Primary Noise Source for NM-4 is Highway 101

Detailed sound level measurement data are included in Appendix G

## Figure 11 Noise Measurement Locations




*Imagery provided by Microsoft Bing and its licensors © 2021.*

Fig X Noise Measurement Locations

## Regulatory Setting

### *Town of Windsor 2040 General Plan*

The Town of Windsor 2040 General Plan's Public Health and Safety Element contains goals and policies that are designed to include noise control in the planning process in order to maintain compatible land uses with acceptable environmental noise levels and protect Windsor residents from excessive noise. The 2040 General Plan Public Health and Safety Element establishes goals and policies that would apply to the project. Specifically, Goal PHS-8 is to "minimize, control, and abate noise interference from indoor and outdoor noise sources and activities that exceed desirable sound levels."

The 2040 General Plan's Public Health and Safety Element also contains Noise and Land Use Compatibility Guidelines which dictates noise exposure levels from normally acceptable to clearly unacceptable for different land uses. The Noise Land Use Compatibility Guidelines are show in Table 21.

**Table 21 Acceptable Exposure Levels for Community Noise Environments**

| | Noise Exposure Levels (Ldn or CNEL, dBA) | | | |
|---|---|---|---|---|
| **Land Use Category** | **Normally Acceptable** | **Conditionally Acceptable** | **Normally Unacceptable** | **Clearly Unacceptable** |
| Residential-Single family, Duplex, Mobile Home | 50-55 | 55-70 | 70-75 | 75-85 |
| Residential- Multi-family, Residential Mixed-use | 50-60 | 60-70 | 70-75 | 75-85 |
| Transient Lodging, Motel, Hotel | 50-60 | 60-70 | 70-80 | 80-85 |
| School, Library, Church, Hospital, Nursing Home | 50-60 | 60-70 | 70-80 | 80-85 |
| Auditorium, Concert Hall, Amphitheater | NA | 50-65 | NA | 65-85 |
| Sports Arena, Outdoor Spectator Sports | NA | 50-70 | NA | 70-85 |
| Playground, Park | 50-70 | NA | 70-80 | 80-85 |
| Golf Course, Riding Stable, Water Recreation, Cemetery | 50-75 | NA | 70-85 | NA |
| Office Buildings, Business Commercial and Professional | 50-65 | 65-75 | 75-85 | NA |
| Industrial, Manufacturing, Utilities, Agriculture | 50-70 | 70-75 | 75-85 | NA |

Land Use Acceptability Interpretation/Conditions:

1. Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involve are of normal conventional construction, without any special noise insulation requirements.

2. Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems, will normally suffice.

3. Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

4. Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Town of Windsor 2040 General Plan Public Health and Safety Chapter, 2018

### *Town of Windsor Zoning Ordinance and Municipal Code*

Chapter 27.20 of the Zoning Ordinance sets maximum allowable exterior and interior noise levels at receiving land uses subject noise generated by operational noise activities on nearby properties. These allowable noise levels, shown in Table 22, vary by land use and time of day.

**Table 22 Town of Windsor Maximum Noise Levels by Receiving Land Use**

| Zone | Time | Exterior Maximum Allowable Noise Level (dBA) | Interior Maximum Allowable Noise Level (dBA) |
|---|---|---|---|
| Single- or Multi-Family Residential | 7 a.m.to 10 p.m.<br>10 p.m. to 7 a.m. | 55<br>50 | 35<br>45 |
| Commercial | 7 a.m. to 10 a.m.<br>10 p.m. to 7 a.m. | 65<br>55 | 50 |
| Industrial or Manufacturing | Anytime | 70 | 55 |
| Public Parks, Public Open Space, Civic Centers | 7 a.m. to 10 p.m.<br>10 p.m. to 7 a.m. | 55<br>50 | NA |

Notes:

1. Each of the noise limits specified above shall be reduced by 5 dBA for impulse or simple tone noises, or for noise consisting of speech or music. If the ambient noise level exceeds the resulting standard, the ambient noise level shall be the standard.

2. It shall be unlawful for any person within a residentially zoned area of the town to operate any noise amplified device (e.g., bull horns, microphones, musical instruments, speakers, etc.), that exceeds a noise level of 45 dBA measured at the property line or cause loud excessive noise which disturbs the peace of the neighborhood.

Source: Town of Windsor Zoning Ordinance, Chapter 27.20, Table 3-1.

Exterior noise levels, when measured at any receiving property, must conform to the noise level standards identified in Table 22, except as follows:

a. If the measured ambient noise level exceeds the applicable noise level standard in any category above, the applicable standards shall be adjusted to equal the ambient noise level.
b. If the intruding noise source is continuous and cannot reasonably be discontinued or stopped to allow measurement of the ambient noise level, the noise level measured while the source is in operation shall be compared directly to the applicable noise level standards identified in Table 22.

In addition, the Town of Windsor Municipal Code Section 7-1-1018 states that construction, alteration or repair activities which are authorized by a valid Town permit may be conducted between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between the hours of 8:00 a.m. and 7:00 p.m. on Saturday. No construction, alteration or repair activities are permitted on Sunday unless expressly authorized by the Building Official; but in no event shall construction activity be permitted on Sunday before 9:00 a.m. or after 5:00 p.m. The Town of Windsor does not have a quantitative construction noise threshold. Therefore, the FTA construction noise criteria is utilized for this analysis. For residential uses, the daytime noise threshold is 80 dBA $L_{eq}$ for an 8-hour period. For commercial uses, the daytime noise threshold is 85 dBA $L_{eq}$ for an 8-hour period.

Table 23 shows FTA construction noise criteria for various land uses.

**Table 23 Construction Noise Criteria**

| Land Use | $L_{eq.equip(8hr)}$ Day | dBA Night | $L_{dn\ equip\ (30day)}$ dBA 30-day Average |
|---|---|---|---|
| Residential | 80 | 70 | 75 |
| Commercial | 85 | 85 | 80[1] |
| Industrial | 90 | 90 | 85[1] |

[1] Use a 24-hour $L_{eq(24hr)}$ instead of $L_{dn.equip(30day)}$.

Source: FTA 2018

*Noise Level Increases Over Ambient Noise Levels*

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise limits are lower than construction noise limits to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise limits are tailored to specific land uses; for example, the noise limits for residential land uses are lower than those for commercial land uses. The difference in noise limits for each land use indicates that the noise limits inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds these absolute limits would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and therefore is not included in this analysis. FTA construction noise standards and Town of Windsor Zoning Ordinance for exterior outdoor use areas were used to assess the operational and construction noise limits.

*a. Would the project result in 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?*

## Construction Noise

Construction activity would generate temporary noise in the project site vicinity, exposing nearby sensitive receivers to increased noise levels. Project construction noise would be generated by heavy-duty diesel construction equipment used for site preparation, grading, building construction, paving activities, and architectural coating. Each phase of construction has a specific equipment mix and associated noise characteristics, depending on the equipment used during that phase. Construction noise would typically be higher during the more equipment-intensive phases of initial construction (i.e., site preparation and grading work) and would be lower during the later construction phases (i.e., building construction, paving, and architectural coating). Construction noise was estimated using reference noise levels and equipment use factors from the FHWA Roadway Construction Noise Model (RCNM; 2006).

Pursuant Town of Windsor Municipal Code, noise generated by construction activities is exempt from the noise level limits contained in Chapter 27.20 if construction occurs between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and between the hours of 8:00 a.m. and 7:00

p.m. on Saturday. No construction, alteration or repair activities are permitted on Sunday unless expressly authorized by the Building Official; but in no event shall construction activity be permitted on Sunday before 9:00 a.m. or after 5:00 p.m. However, the applicant-proposed hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday would not comply with the Town's allowed construction hours and therefore Mitigation NOI-1 would be required to reduce impacts to a less than significant level. For purposes of analyzing impacts from this project, the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) criteria were used. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential and commercial uses, the daytime noise threshold is 80 and 85 dBA $L_{eq}$, respectively for an 8-hour period (FTA 2018).

Noise impacts from construction equipment are typically assessed from the center of the equipment activity area over the time period of a construction day (e.g., construction site, grading area, etc.). The closest sensitive receivers to project construction would be residences approximately 65 feet northeast of the project site. The closest commercial buildings are the Shell and Burger King across Shiloh Road approximately 110 feet north. Due to the size of the project site, modeling conservatively assumes operation of an excavator, grader, and a scraper operating simultaneously during the grading phase. Over the course of a typical construction day, the construction equipment would be mobile and is estimated to operate at an average distance of 280 feet from the nearest sensitive receivers and 240 feet away from the nearest commercial building. Construction noise modeling based on these distances indicates that construction noise levels would be approximately 69 dBA $L_{eq}$ at the nearest sensitive receivers and 71 dBA at the nearest commercial building and would not exceed the daytime construction noise threshold of 80 and 85 dBA $L_{eq}$ for residential and commercial uses, respectively (RCNM calculations are included in Appendix G). Construction noise levels at other nearby sensitive receivers and commercial uses would be less than the noise levels at the modeled land uses due to additional distance attenuation. Construction noise impacts would be less than significant.

## On-site Operational Noise

The primary source of on-site operational noise from the project would be heating, ventilation, and air conditioning equipment (HVAC) equipment. Noise levels generated by a five-ton HVAC equipment system can reach up to 70 dBA $L_{eq}$ at a distance of five feet from the source (Illingworth & Rodkin, Inc. 2009). Assuming that approximately one ton of cooling capacity would be required for every 600 square feet of buildings, the project would require approximately 109 five-ton units.[6] HVAC equipment would be located on the rooftop of the proposed buildings.

Table 24 shows the distribution of square footage between Building A, B, C, D, E, F, and G shown on the project site plans (Appendix G). These assumptions were used to evaluate the project's potential to result in on-site operational noise impacts. To account for the varying distance of HVAC units from the nearest sensitive receiver, HVAC unit noise was modeled from the center of each building to the nearest sensitive receiver. The nearest sensitive receiver (i.e., the residence immediately to the northeast of the project site) is located approximately 215 feet from the center of proposed Building D and approximately 380 feet from the center of proposed Building C. The calculation assumes two HVAC units on Building D and two HVAC units on Building C. At these distances, each HVAC unit on Building D and C would generate a noise level of approximately 42 dBA $L_{eq}$ at the nearest sensitive receivers. The second nearest sensitive receiver (i.e., the residence to the east of the project site) is located approximately 555 feet from the center of proposed Building F and

[6] ([326,783 square feet / 600 square feet] / 5 tons per HVAC unit).

approximately 445 feet from the center of proposed Building D. The calculation assumes six HVAC units on Building F and two HVAC units on Building D (Appendix G). At these distances, HVAC units on Building D and C would generate a combined noise level of approximately 41 dBA $L_{eq}$ at the nearest noise sensitive receivers. Therefore, operational noise impacts would not exceed the Town's 50 dBA nighttime exterior limit or 55 dBA daytime exterior limit for residential uses. New buildings provide approximately 20 dBA noise reduction from exterior noise sources (FTA 2018). Interior noise levels for residents would range from 21 to 22 dBA assuming a 20 dBA reduction due to building attenuation. Therefore, operational noise impacts would not exceed the Town's 45 dBA daytime interior noise limit or 35 dBA nighttime interior noise limit for residential uses. Impacts would be less than significant.

**Table 24 Operational HVAC Noise**

| Receiver Group | Operational Noise Source | Number of HVAC Units (5 Ton) | Distance (feet) | Exterior Noise Levels (dBA $L_{eq}$) | Interior Noise Levels (dBA $L_{eq}$) | Exterior Combined Noise Levels (dBA $L_{eq}$) | Interior Combined Noise Levels (dBA $L_{eq}$) | Exceed Threshold?[1] |
|---|---|---|---|---|---|---|---|---|
| Resident to the northwest of the project site | Building C<br>Building D | 2<br>2 | 380<br>215 | 36<br>41 | 16<br>21 | 42 | 22 | No |
| Resident to the west of the project site | Building D<br>Building F | 2<br>36 | 445<br>555 | 36<br>39 | 16<br>19 | 41 | 21 | No |

dBA=A-weighted decibels; $L_{eq}$=equivalent continuous noise level over a stated period of time

[1] In accordance with Town of Windsor Zoning Ordinance, Chapter 27.20, the operational noise level limits for commercial noise sources impacting residential uses are 55 dBA $L_{eq}$ during the daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA $L_{eq}$ during the nighttime hours (10:00 p.m. to 7:00 a.m.)

## Off-site Roadway Noise

The project would generate new vehicle trips that would increase noise levels on nearby roadways. As discussed in the project Traffic Impact Study (TIS), the project is anticipated to generate 2,147 daily vehicle trips. The TIA study area includes roadway segments of Shiloh Road, Old Redwood Highway, Highway 101 North and South Ramps, Hembree Lane, and Business Park Court (W-Trans 2021). Roadway segment volumes with and without project-generated traffic are shown in Table 25.

### Table 25 Off-Site Traffic Volume Increases

| Roadway | Segment | Existing Traffic Volumes (ADT) | Existing Plus project Traffic Volumes (ADT) | Traffic Volumes Change (ADT) | Future Traffic Volumes (ADT) | Future Plus project Traffic Volumes (ADT) | Traffic Level Change (ADT) |
|---|---|---|---|---|---|---|---|
| Shiloh Road | Highway 101 South Ramp to Highway 101 North Ramp | 21,260 | 21,460 | 200 | 24,990 | 25,190 | 200 |
| | Highway 101 North Ramp to Hembree Lane | 22,350 | 23,630 | 1,280 | 29,000 | 30,280 | 1,280 |
| | Hembree Lane to Business Park Court | 11,820 | 12,410 | 590 | 19,210 | 19,800 | 590 |
| | Business Park Court to Old Redwood Highway | 10,720 | 11,200 | 480 | 18,490 | 18,970 | 480 |

The project would not result in alterations to roadway alignments or substantially change the vehicle classifications mix on local roadways. Therefore, the primary factor affecting off-site noise levels would be increased traffic volumes. Noise levels with and without project generated traffic were developed based on algorithms and reference levels from the FHWA's Traffic Noise Model. Noise levels with and without project-generated traffic are shown in Table 26. As shown in the table, traffic noise increases would be less than 1 dBA, which would not exceed the 3 dBA criterion for offsite traffic noise impacts. Impacts would be less than significant.

### Table 26 Off- Site Traffic Noise Increase

| Roadway | Segment | Existing Noise Level (dBA) | Existing Plus Project Noise Level (dBA) | Noise Level Change (dBA) | Future Noise Level (dBA) | Future Plus Project Noise Level (dBA) | Noise Level Change (dBA) |
|---|---|---|---|---|---|---|---|
| Shiloh Road | Highway 101 South Ramp to Highway 101 North Ramp | 68 | 68 | <1 | 69 | 69 | <1 |
| | Highway 101 North Ramp to Hembree Lane | 69 | 69 | <1 | 70 | 70 | <1 |
| | Hembree Lane to Business Park Court | 66 | 66 | <1 | 68 | 68 | <1 |
| | Business Park Court to Old Redwood Highway | 65 | 65 | <1 | 68 | 68 | <1 |

## Land Use Compatibility

The predominant source of noise on and around the project site is vehicular traffic on Highway 101. According to the 2040 General Plan land use noise compatibility guidelines, ambient noise levels up to 60 dBA $L_{dn}$/CNEL are normally acceptable for residential mixed-use while ambient noise levels up to 70 dBA $L_{dn}$/CNEL are conditionally acceptable. The existing average annual daily traffic (AADT) volumes for Highway 101 along Shiloh Road are 91,000 AADT, according to CalTrans (CalTrans 2021). The nearest proposed sensitive receiver within the project site from Highway 101 is the southwestern corner of Building G façade approximately 640 feet from the centerline of Highway 101. Using the Traffic Noise Prediction model and the information regarding existing traffic volumes and distance above, the ambient noise level at the southwestern corner of Building G façade is approximately 62 dBA $L_{dn}$ (Appendix G).

Structures can substantially reduce occupants' exposure to noise. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011). Based on a noise exposure level of up to 62 dBA $L_{dn}$ and a noise attenuation of at least 20 dBA, the interior noise level within the nearest living unit facing Highway 101 (640 feet from the centerline) would be approximately 42 dBA $L_{dn}$. Therefore, interior noise levels for the nearest independent living units with direct line-of-sight to Highway 101 would not exceed the Town's interior noise standard of 45 dBA $L_{dn}$.

Exterior noise levels were estimated at the project's independent living, assisted living, and memory care courtyards. The independent living courtyard is located on the southwest side of Building G and would be shielded from traffic noise on Shiloh Road. Therefore, only noise from Highway 101 was considered at the independent living courtyard. The Traffic Noise Prediction Model estimated the project's exterior noise levels from Highway 101 at the courtyard area would be approximately 62 dBA $L_{dn}$. 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). The adjacent building façade northwest of the courtyard would partially shield the courtyard outdoor area and would reduce the noise exposure from northbound Highway 101 by approximately 3 dBA (CalTrans 2013). Exterior noise levels at the courtyard would be reduced to approximately 59 dBA $L_{dn}$. The assisted living and memory care courtyards are located at the center and east side of Building F, respectively. Building G shields traffic noise from Highway 101, therefore only traffic noise from Shiloh Road was considered at the assisted living and memory care courtyards. Traffic noise at the assisted living courtyard would be shielded from Shiloh Road by Building F. Building F would partially shield traffic noise from Shiloh Road at the memory care courtyard. Based on the Traffic Noise Prediction Model, the exterior noise levels from Shiloh Road at the assisted living and memory care courtyards would be approximately 51 dBA $L_{dn}$. The shielding from Building F would provide a 5 dBA traffic noise reduction at the assisted living courtyard, and the partial shielding from Building F would provide a 3 dBA noise reduction at the memory care courtyard (CalTrans, 2013; FHWA, 2011). The exterior noise levels at the assisted living and memory care courtyards would be reduced to approximately 46 dBA $L_{dn}$ and 48 dBA $L_{dn}$, respectively. Therefore, the project's noise levels at exterior use areas would be normally acceptable.

Shiloh Road provides a secondary source of vehicular traffic noise at the project site. Based on the TIS and using the Traffic Noise Prediction Model and existing traffic volumes, the project's north Building F façade facing Shiloh Road would be exposed to an ambient noise level of approximately 55 dBA $L_{dn}$ at a distance of 280 feet. Based on a noise exposure level of up to 55 dBA $L_{dn}$ and a noise attenuation of at least 20 dBA, the interior noise level within the nearest Building F unit facing Shiloh Road would be approximately 35 dBA $L_{dn}$. Therefore, interior noise levels for Building F

northern units with direct line-of-sight to Shiloh Road would not exceed the Town's interior noise standard of 45 dBA $L_{dn}$ for residential mixed-uses.

To determine exterior noise exposure from Shiloh Road noise levels were estimated at the project's rooftop deck exterior use area on the east side Building F. The rooftop deck would be shielded from potential noise levels from Highway 101 by the height of Building F. Therefore, only noise from Shiloh Road, approximately 460 feet north, was considered at the rooftop deck. Using the Traffic Noise Prediction Model exterior noise levels at the rooftop deck would be approximately 51 dBA $L_{dn}$. Therefore, exterior noise levels at the rooftop deck would be considered normally acceptable. Impacts from roadway noise levels would be less than significant.

## Mitigation Measures

### *NOI-1 Construction Hours*

Prior to issuance of building permit, the applicant shall comply with the Town's allowed construction hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and 8:00 a.m. and 7:00 p.m. on Saturday. No construction, alteration or repair activities are permitted on Sunday unless expressly authorized by the Building Official; but in no event shall construction activity be permitted on Sunday before 9:00 a.m. or after 5:00 p.m.

## Significance After Mitigation

Impacts to noise would be less than significant with implementation of Mitigation Measure NOI-1.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

## Construction

Project construction would not involve activities typically associated with excessive groundborne vibration such as pile driving or blasting. Equipment utilized during project construction that would generate the highest levels of vibration would include rollers, loaded trucks, and bulldozers. The Town of Windsor has not adopted standards to assess vibration impacts. However, Caltrans has developed limits for the assessment of vibrations from construction. The thresholds of significance used in this analysis to evaluate vibration impacts are based on the impact criteria summarized in Table 18 and Table 19.

Project construction would occur within 205 feet from the nearest off-site structure during the grading phase for Building D. As shown in Table 27, vibration levels from individual pieces of construction equipment would not exceed the threshold at which damage can occur to residential structures, 0.20 in/sec PPV, or the threshold at which transient vibration sources would be distinctly perceptible, 0.25 in/sec PPV. Construction vibration levels at all other buildings in the immediate vicinity, including residences to the northeast, would be less than the levels shown in Table 27 because vibration levels would attenuate with distance. Furthermore, in accordance with Town of Windsor Municipal Code Section 7-1-1018, project construction would be required to occur during daytime hours and would not disturb off-site residences during sensitive hours of sleep. Construction vibration impacts would be less than significant.

**Table 27 Vibration Levels at Sensitive Receivers**

| Equipment | Estimated PPV (inch/sec) at Nearest Building (205 feet) |
|---|---|
| Vibratory Roller | 0.021 |
| Large Bulldozer | 0.01 |
| Loaded Truck | 0.01 |
| **Threshold** | **0.20** |
| **Threshold Exceeded?** | **No** |

See NOI for vibration analysis worksheets.

## Operation

As a mixed-use development with residential and commercial uses, the project would not generate significant sources of vibration, such as manufacturing or heavy equipment operations. There would be no impact.

**LESS THAN SIGNIFICANT IMPACT**

*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?*

As discussed under Section 9, Hazards and Hazardous Materials, the nearest airport to the project site is the Charles M. Schulz Sonoma County Airport, located approximately two miles southwest of the project site. According to the 2040 General Plan, the Town shall not permit residential development within the 2030 projected 60 dB noise contour of the Sonoma County Airport. The project site is located outside the 60 dBA noise contours shown in Figure PHS-6 of the 2040 General Plan (Town of Windsor 2018). Therefore, project construction and operation would not expose workers or residents to excessive noise levels, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 14 Population and Housing

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | ☐ | ☐ | ■ | ☐ |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ■ |

*a. Would the project 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)?*

The project would potentially add an estimated 325 residents.[7] Windsor's current population is approximately 27,855 persons (DOF 2021). Plan Bay Area anticipates that the population of Windsor will grow to 32,805 by 2040 (Association of Bay Area Governments 2020). The 2040 General Plan anticipates that the population of Windsor will grow to 38,028 by 2040. The population increase that the project would generate, therefore, falls within the growth projected by Plan Bay Area and the 2040 General Plan. Accordingly, it would not induce substantial population growth directly or indirectly because the project is part of planned growth in the region. The project would have a less than significant impact on population growth.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

There are no existing residences on the project site. Therefore, construction and development of the site would not displace people or residences. Furthermore, the project would add housing stock to the Town. The project would have no impact related to displacement of housing or people.

**NO IMPACT**

[7] Assumes 188 persons in independent living, 85 persons in assisted living, 34 persons in nursing home, and 18 persons in the 10 apartment units, for a total of 325 new residents. See Section 8, Greenhouse Gas Emissions, for population assumptions.

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# 15 Public Services

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| a. | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, 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: | | | | |
| | 1 Fire protection? | ☐ | ☐ | ■ | ☐ |
| | 2 Police protection? | ☐ | ☐ | ■ | ☐ |
| | 3 Schools? | ☐ | ☐ | ■ | ☐ |
| | 4 Parks? | ☐ | ☐ | ■ | ☐ |
| | 5 Other public facilities? | ☐ | ☐ | ■ | ☐ |

*a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The Sonoma County Fire District (SCFD) works to administer fire protection in the Windsor region. The SCFD provides full-service delivery for fire protection, emergency medical response and hazardous spills. The SCFD employs a captain and an engineer on duty each day at each of the Towns three fire stations. Fire Station No. 1 is located at 8200 Old Redwood Highway, Fire Station No. 2 is located at 45 Lark Center Drive, and Fire Station No. 3 is located at 8600 Windsor Road.

The project is located within the current SCFD service area and is located within 1.6 of the closest fire station, or a four-minute drive, which is lower than the average response time of five minutes and 46 second. Therefore, the SCFD would respond to demands associated with the project. Additionally, as mentioned in Section 14, *Population and Housing*, the 2040 General Plan anticipates that the population of Windsor would grow to 38,028 by 2040. The population increase generated by the project, therefore, falls within the growth projected by the 2040 General Plan. Accordingly, the anticipated growth from the project and services needed to support the project has already been planned. Therefore, the project would be adequately serviced would not require the construction of new fire protection facilities. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The Police Department's policing and services programs are divided into four divisions: Police Administration and Support Services; Police Patrol and Traffic Enforcement; Police Investigations; and Community Services. There are 24 staff assigned to the Windsor Police Department consisting of 17 sworn deputies, three sergeants, one chief, and three civilians. The Windsor Police Department has 0.74 sworn officers per 1,000 residents (Windsor 2018). This is somewhat lower than the League of California Cities recommended standard of 1.4 to 1.6 sworn officers per 1,000 residents. The project would decrease the current number of officers per 1,000 residents to 0.7 sworn officers per 1,000 residents. The Sheriff Department augments the Windsor Police Department for investigative services and additional patrol resources when needed. Windsor also has an average response time of five minutes and 46 seconds, which is faster than the standard acceptable response rate of 6-8 minutes. Additionally, as mentioned in Section 14, *Population and Housing*, the 2040 General Plan anticipates that the population of Windsor would grow to 38,028 by 2040. The population increase generated by the project, therefore, falls within the growth projected by the 2040 General Plan. Accordingly, the anticipated growth resulting from the project and services needed has already been planned for. Additionally, according to the Administrative Sergeant, James Percy, the stand-alone project would not require new police facilities (Percy 2021).

The project would be adequately serviced and would not require the construction of new police facilities. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The project is a senior living facility with commercial uses and 10 apartments and would not impact the population of school aged children in the area. Additionally, the project would be required to pay Development Impact Fees for Town infrastructure to provide for needs generated by new development and an Impact Development Fee for schools paid to the Windsor United School District, which would mitigate potential school impacts. Therefore, impacts on local school services would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, public facilities, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

There are currently five community parks and 14 neighborhood parks totaling to 110 acres in the Town (Windsor 2017). Esposti Park is located .5 miles east of the project site, Shiloh Ranch Regional Park is located 1.2 miles east of the project site, and Robbins Park is located 1.4 miles north of the project site. The project includes the incorporation of open space, including patios, a trail, and a

boardwalk, which would reduce the stress on local parks. Additionally, the project may be required pay impact fees pursuant to the Quimby Act for the purpose of developing and rehabilitating community parks or recreational facilities that will serve the project, including park development, recreational activities, open space, trail development, and public facilities. Therefore, the project would not result in significant impacts to public facilities within the Town of Windsor.

**LESS THAN SIGNIFICANT IMPACT**

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The project does not include and would not require new or physically altered governmental facilities. Population growth facilitated by the proposed residential units included in the project would generate additional demand for library services. The project would add 325 new residents to Windsor[8], increasing the population of Windsor by less than two percent to a population of 28,180, which would not result in a substantial increase in library demand. Additionally, the Town has already projected that a new library would be required to serve the projected population increase up to 2040. The project would not exceed the population projections of 32,805 for 2040, therefore with the addition of the proposed new library, the Town would have adequate public facilities to serve the project. Therefore, the impact related to the provision of library services or other public facilities under the proposed project would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

[8] See Section 8, *Greenhouse Gas Emissions*, for explanation of population assumptions.

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# 16 Recreation

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ☐ | ■ | ☐ |

*a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

As discussed in Section 15, *Public Services*, there are currently five community parks and 14 neighborhood parks totaling 110 acres in the Town (Windsor 2017). Esposti Park is located 0.5 miles east of the project site, RT Mitchell Park is located 2.3 miles northwest of the project site, Shiloh Ranch Regional Park is located 1.2 miles east of the project site, and Robbins Park is located 1.4 miles north of the project site. The project includes the incorporation of open space, including patios, a trail, and a boardwalk for onsite users, which would reduce the stress on local parks. Additionally, the project would be required pay impacts fees pursuant to the Quimby Act for the purpose of developing and rehabilitating community parks or recreational facilities that will serve the project. The fees may include park development, recreational activities, open space, trail development, and public facilities fees. Therefore, the project would not result in significant impacts to recreation facilities within the Town of Windsor.

**LESS THAN SIGNIFICANT 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?*

The project would incorporate passive recreation and open space areas including a trail, patios, restaurants, and a gym, that have been analyzed throughout this IS-MND. However, no additional environmental impacts would occur beyond those that have been identified as part of this analysis. The project would not require the expansion of existing recreational facilities. Thus, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 17 Transportation

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ■ | ☐ |
| b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ■ | ☐ |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)? | ☐ | ☐ | ■ | ☐ |
| d. Result in inadequate emergency access? | ☐ | ☐ | ■ | ☐ |

A traffic impact study (TIS) for the project was prepared by W-Trans on September 24, 2021 (Appendix H). The traffic study analyzed potential mobility impacts associated with the build out of the senior living and care facility as well as commercial development as part of the project. The traffic study was completed in accordance with the criteria established by the Town of Windsor and is consistent with standard traffic engineering techniques.

*a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

## Pedestrian Facilities

Pedestrian facilities are generally limited on Shiloh Road in the vicinity of the project. To the east of the project site, pedestrians currently walk along paved shoulders between the site and the signalized intersection at Old Redwood Highway, where crosswalks are provided, and pedestrians can access pedestrian facilities within Esposti Park and along the north side of Shiloh Road further to the east. To the west of the project site on Shiloh Road, there are intermittent sidewalks on the north side of Shiloh Road. A continuous pedestrian network exists to the north of the project site on Hembree Lane, which provides walking access to the shopping center as well as the neighborhoods to the north. There are currently no crosswalks at the Shiloh Road and Hembree Lane signalized intersection.

Pedestrian facilities at the project site would generally be limited to developed areas due to wetland and rare plant habitat areas to the south. The project would introduce new sidewalks, a walking path, and modifications to the Shiloh Road and Hembree Lane traffic signal to include new pedestrian crossings on the east, west, and south intersection legs. Pedestrian connectivity within the site would consist of sidewalks along one or both sides of drive aisles, with decorative pavement

treatments used to distinguish pedestrian crossing areas. The TIS prepared by W-Trans (Appendix H) concluded that pedestrian connectivity to and from the project site would be adequate. Connectivity between the onsite residents and the proposed onsite commercial and support services along the south side of Shiloh Road would be adequate. Pedestrian connectivity between the Clearwater residential building and the western portion of the site would generally be adequate, though circuitous for pedestrians walking to the commercial building (Lot 4). The TIS recommended a more direct walking route to be added along the south side of the primary east-west internal drive aisle. However, the recommended route would encroach into the 20-foot buffer of the wetland to the south and thus implementation of this recommendation would not be feasible as it may result in environmental impacts to biological resources including wetlands. As an alternative to enhance connectivity and as recommended in the TIS, by improving pedestrian facilities, but in a manner that avoids impacts to biological resources, a condition of approval for the project is recommended that would include pedestrian improvements outside of the 20-foot buffer, which would benefit the elderly community travelling between the senior living facility and Lot 4. Potential improvements may include adding a crosswalk on the eastern leg of the interior intersection (i.e., the interior drive aisle intersection just south of the Shiloh Road/Hembree Lane signalized intersection) along with short sidewalk segments connecting the crosswalk to surrounding sidewalks. Adding a crosswalk in this location would help to improve onsite pedestrian circulation and does not present any significant safety concerns and would avoid impacts to wetlands. While this condition of approval would further enhance pedestrian connectivity, as noted in the TIS (Appendix H), pedestrian facilities would be adequate to serve the project as proposed, and thus impacts would be less than significant. The condition of approval would help to improve connectivity and further reduce impacts.

## Bicycle Facilities

Currently bike lanes are located on Shiloh Road along the project frontage as well as on Hembree Lane from Shiloh Road to Arata Lane-Foothill Drive near the Town limits. Bike lanes are located on Old Redwood Highway to the north of Shiloh Road, with paved shoulders existing along Old Redwood Highway to the south beyond the Town limits. To the west of the project site, bike lanes are discontinuous on Shiloh Road through the Highway 101 interchange area. On the west side of the freeway interchange, on-street bike lanes resume along the Shiloh Road corridor.

As part of its frontage improvements the project would include reconstruction of eastbound bike lanes on Shiloh Road to provide a full six-foot width, consistent with the Complete Street Design Guidelines. Bicyclists would be able to access the surrounding bike network via existing bike lanes on Hembree Lane, Shiloh Road to the east of the project site, and Old Redwood Highway. Bicyclists traveling to and from the west on Shiloh Road would be able to traverse the existing Highway 101 overpass and interchange by riding on existing shoulders and within travel lanes. Existing and planned bicycle facilities would provide adequate access for bicyclists (Appendix H). The project would also include bicycle racks to provide secure parking for employees and visitors that travel to the facility by bike. Impacts would be less than significant.

## Transit Facilities

Sonoma County Transit (SCT) provides fixed-route bus service in the Town of Windsor and within the County of Sonoma and provides service to the project site with stops on both sides of Hembree Lane at Shiloh Center Drive. Two bicycles can be carried on most SCT buses. Additional bicycles are allowed on SCT buses at the discretion of the driver. Dial-a-ride, also known as paratransit, or door-

to-door service, is available for those who are unable to independently use the transit system due to a disability. SCT Paratransit is designed to serve the needs of individuals with disabilities within the Town of Windsor and the greater Sonoma County area. The SCT bus stops nearest to the project site are located on both sides of Hembree Lane at Shiloh Center Drive, which is located within one-quarter mile of the project site (Appendix H).

The project includes a senior living facility that would provide housing for a population of senior residents that may not be able to walk an extended distance. The project would include a shuttle service for residents to access public transit and other facilities. The shuttle service would improve accessibility and reduce the need for single-use occupancy vehicles. Additionally, the Project would also be required as a condition of approval to provide a SCT bus stop along Shiloh Road on the eastern portion of the site and would be located in an area served by transit and within walking and biking distance of several commercial and recreational destinations. Impacts to transit would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The Town of Windsor has not yet adopted thresholds of significance related for vehicle miles traveled (VMT). However, the California Governor's Office of Planning and Research (OPR) has published the *Transportation Impacts* (State Bill 743), *CEQA Guidelines Update*, and *Technical Advisory*, which was used to determine if the project would have a VMT impact. The OPR Technical Advisory provides Vehicle Miles Traveled (VMT) threshold guidance for several land use types. Residential uses are assessed using a home-based VMT per capita metric, while office or employment-based uses are assessed using a home-based commute VMT per worker metric. For both types of uses, VMT significance thresholds are set at a level of 15 percent below the existing countywide average VMT per capita or VMT per employee. Based on output from the SCTA model, the existing residential VMT per capita in the County of Sonoma is 16.53 miles and the existing home-based employment VMT per employee is 12.53. Thus, the significance threshold for residential VMT per capita is 14.05, and the significance threshold for existing home-based employment VMT per employee is 10.65 (Appendix H).

Table 28 summarizes the VMT findings in the TIS. As shown in Table 28 the project's residents are anticipated to generate 2,197 daily VMT, or a per capita VMT of 5.59. This is below the applied significance threshold of 14.05 VMT per capita. With regards to employee VMT, the proposed project is projected to produce an average VMT per employee of 9.90 miles, which multiplied by the 53 total daily employees equates to 515 daily vehicle miles of travel. The 9.90 VMT per employee is below the significance threshold of 10.65 VMT per employee, resulting in a less than significant impact.

**Table 28 VMT Traffic Study Findings**

| VMT Metric | Countywide Baseline VMT Rate | Significance Threshold | Project VMT Rate | Resulting Significance |
|---|---|---|---|---|
| Residential VMT per Capita | 16.53 | 14.05 | 5.59 | Less than Significant |
| Employment VMT per Employee | 12.53 | 10.65 | 9.90 | Less than Significant |

Source: Appendix H

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

*d. Would the project result in inadequate emergency access?*

The project would access Shiloh Road via a new private street connection at the signalized intersection with Hembree Lane. A second access to the east would be constructed as a new driveway on the south side of the Business Park Court intersection. The Clearwater driveway would be restricted to right turns in and out, with a raised median on Shiloh Road and a raised right-turn channelization island on the driveway. Additionally, left turns into Business Park Court would be retained, with outbound left turns from Business Park Court prohibited. The Shiloh Road and Hembree Lane intersection would also be modified by the project. The westbound Shiloh Road approach would include a new left-turn pocket served by a protected left-turn phase. The new left-turn lane would also accommodate U-turn movements created by the newly restricted southbound left-turn prohibitions at the Business Park Court intersection. A new eastbound right-turn lane at the Shiloh Road and Hembree Lane intersection would also be constructed along the project frontage.

Garbage trucks would enter the project site along Shiloh Road and make a right turn into the Project site. This would require garbage trucks to utilize the bike lane for a brief moment while completing turning maneuvers. However, typical garbage collection would be done off- peak hours early in the morning. Therefore, it is unlikely that the garbage trucks would obstruct the bike lane for cyclists. In the event that garbage collection does occur during peak morning or afternoon hours, garbage trucks could utilize the driveway further east to prevent conflicts with bicycle traffic.

The collision history around the project site was reviewed to determine any trends or patterns that may indicate a safety issue. The calculated collision rates for nearby intersections were compared to average collision rates for similar facilities statewide and it was found that collision rates for all study intersections were below statewide averages. Based on the review of historical collision trends and consideration of modifications to be implemented as part of its frontage improvements, the project would not create adverse safety impacts (Appendix H). Collision rates at the study intersections are below statewide averages, and the project would not create intersection safety concerns due to geometric design features such as sharp turns or addition of a dangerous intersection. Thus, the project would not substantially increase hazards due to design features and impacts would be less than significant.

Emergency access would be available via two driveways on Shiloh Road. Emergency vehicles would be able to access all lots on the project site, including lots one, two, and three. Impacts related to emergency services would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 18 Tribal Cultural Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a 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)? | ☐ | ■ | ☐ | ☐ |
| 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. | ☐ | ■ | ☐ | ☐ |

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

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

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

California Government Code Section 65352.3 (adopted pursuant to the requirements of SB 18) also requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan and prior to making any decisions on zoning changes related to open space. The tribal organizations eligible to consult have traditional lands in a local government's jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research's Tribal Consultation Guidelines (2005), "The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places."

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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?*

A Tribal Cultural Resources Study was competed for the project by Evans in July 2021 and peer reviewed by Rincon Consultants, Inc. This study includes the results of a Sacred Lands File and tribal outreach (Appendix C).

A Sacred Lands File search was conducted by the NAHC on January 20, 2021, showing positive for the presence of a Native American Sacred Site near the project area. The NAHC recommended contacting the Mishewal-Wappo Tribe of Alexander Valley. Combined SB 18 and AB 52 consultation letters were sent to the NAHC and the following tribes on June 2, 2021:

- Federated Indians Graton Rancheria
- Lytton Rancheria of CA
- Dry Creek Rancheria Band of Pomo Indians
- Cloverdale Rancheria of Pomo Indians
- Kashia Band of Stewart's Point
- Mishewal-Wappo Tribe of Alexander Valley.

Only Lytton Rancheria of CA responded to the consultation letters, expressing support for the proposed recommendations in the cultural reports. No other Tribes have responded at this time. The Native American outreach conducted is sufficient for the identification of potential cultural resource issues of concern to tribal organizations. No known tribal cultural resources with the potential to be impacted by the project have been identified.

However, because the project involves ground disturbance, there is the possibility of encountering undisturbed subsurface tribal cultural resources during construction of the project. Therefore, the project could result in potentially significant impacts to tribal cultural resources. Mitigation Measures CUL-1 through CUL-3 are required to reduce impacts to a less than significant level.

## Mitigation Measure

Please refer to Mitigation Measures CUL-1 through CUL-3 in Section 5, *Cultural Resources*.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 19 Utilities and Service Systems

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ■ | ☐ |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ☐ | ■ | ☐ |
| e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ■ | ☐ |

*a. Would the project 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?*

*b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

*c. Would the project 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?*

## Wastewater

The Windsor Water District (WWD) owns, operates, and maintains the wastewater collection system that includes approximately 94 miles of public sewer lines, 1,728 manholes, 525 cleanouts, and approximately 6,100 private sewer laterals throughout the Town (Windsor 2020). Existing pipelines range in diameter from 4-inches to 42-inches and include two siphons located at Los Amigos Road and Rio Russo Drive. The Town collects its wastewater and treats it to disinfected tertiary levels at its water reclamation plant, the Windsor Wastewater Treatment Reclamation and Disposal Facility (WWTRDF). The WWTRDF is designed with a capacity of 2.25 million gallons per day (MGD) average dry weather flow, and 7.2 MGD, peak weekly wet weather flow. The current Average Dry Weather Flow (ADWF) seen at the water reclamation facility is 1.4 MGD (Windsor 2020). The Water Reclamation Division is responsible for the treatment, storage, and disposal of the Town's Wastewater.

Sanitary sewers would be incorporated throughout the project site and would connect to existing sanitary sewer facilities in Shiloh Road. As shown in Table 29, the project's estimated wastewater generation would be approximately 32,913 gallons per day. The project would use approximately four percent of the available unused capacity. This increase would be within the WWTRDF's capacity for collection and treatment. Therefore, wastewater capacity would be sufficient to serve the project and the project would not require the construction of wastewater infrastructure.

**Table 29 Estimated Wastewater Generation**

| Land Use | Size | Generation Rate* | Total (gallons/year) | Total (gallon/day) |
|---|---|---|---|---|
| Apartments | 258 units | 120 gallons/day/unit | 11,300,400 | 30,960 |
| Commercial | 24,410 sq-ft | 80 gallons/day/1000 sq-ft. | 712,772 | 1,953 |
| **Total** | | | **12,013,172** | **32,913** |

Notes: sf = square feet

* Generation rates are from the 2006 L.A. CEQA Thresholds Guide

## Water

According to the Town's 2020 Urban Water Management Plan, based on the 2040 population projection that includes the proposed project, the Town is expected to have adequate water supplies to 2040 for normal years (Windsor 2020). The 2020 UWMP concluded that there would be a shortage in water supply under single-dry year conditions and multiple dry year conditions. However, according to the 2020 UWMP, anticipated dry year water supply shortages can be adequately addressed through implementation of the Town's Water Shortage Contingency Plan.

Water for the project would be provided by the Windsor Water District (WWD) via existing utilities adjacent to the project site. The Town's potable water supply is primarily provided from its wells in the Russian River Well Field into the water distribution system. Water is also purchased from the Sonoma County Water Agency's Santa Rosa aqueduct. Other sources of water supply include tertiary-treated recycled water from the local Town wastewater treatment plant and applied to specific landscape and agricultural parcels and groundwater from the Esposti Well that provides raw water to irrigate Esposti Park. (Windsor 2020). The project is proposing to install a new well on the site for irrigation purposes only.

The project therefore would not require the relocation or construction of new or expanded water facilities.

The Town's 2020 UWMP includes a list of development projects, in which the project site is listed as Vicini/Clearwater. According to the Appendix D of the 2019 Windsor Water Master Plan, the Vicini/Clearwater site has an estimated water consumption value of 27,137 gallons per day, which equates to 9,905,005 gallons per year or 30.4 AFY (Town of Windsor 2019).

According to the Town's Water Use Evaluation Memorandum attached as Appendix I of this IS-MND, water demand for the senior living community is calculated using a water demand generation rate of 50 gallons per unit per day, which is the generation rate used for an existing similar type of facility, Brookdale, located in the Town of Windsor. A generally accepted water demand generation rate for apartments is 64 gallons per person per day for indoor or domestic water use. This analysis assumes two people per apartment, which would amount to a water demand generation rate of 128 gallons per unit per day (Appendix I). Table 30 shows estimated water consumption for the project using the abovementioned water demand generation rates.

### Table 30 Estimated Water Consumption

| Generation Source | Unit | Amount | Water Demand Generation Rate | Total (gallons/day) | Total (gallons/year) |
|---|---|---|---|---|---|
| Memory Care | each | 34 | 50 gallons/unit/day | 1,700 | 620,500 |
| Assisted Living | each | 71 | 50 gallons/unit/day | 3,550 | 1,295,750 |
| Independent Living | each | 141 | 50 gallons/unit/day | 7,050 | 2,573,250 |
| Apartments | each | 12 | 128 gallons/unit/day | 1,536 | 560,640 |
| Retail/Restaurant | square feet | 16,423 | 80 gallons/unit/ 1,000 square feet | 1,314 | 429,552 |
| Office | square feet | 5,164 | 80 gallons/unit/ 1,000 square feet | 413 | 150,789 |
| **Total Waste Generation** | | | | **15,563** | **5,680,480** |

Notes:

1. The applicant is proposing to construct a new well to provide irrigation water.

2. There are a total of 10 apartments proposed as part of the project. However, there are 2 commercial units which will be used as models for the main facility, and it is possible that these two model units could become apartments in the future. Therefore, there are 12 apartments shown in the table.

Source: Appendix I

As shown on Table 30, the project's water demand is 15,563 gallons per day, which equates to 5,680,495 gallons per year or 17.4 AFY. Therefore, the projected demand for the project would be 57 percent of the Vicini/Clearwater site's water consumption of 27,137 gallons per day or 9,905,005 gallons per year (30.4 AFY) assumed in the 2020 UWMP. Projected water demand for the project was therefore accounted for and would be well within the projected demand of the 2020 UWMP. Additionally, the project would be required to comply with Town Ordinance No. 2015-73, the Water Efficient Landscape Ordinance, which contains requirements for landscape design plans for efficient water use. In compliance with the Water Efficient Landscape Ordinance, compacted soil would be transformed into friable form, mulch would be applied to exposed soil, low to moderate water use plants would be used, plants of similar water use would be grouped together, and the use of high-water use lawn would be limited. The project would also be required to comply with the Town's Water Shortage Contingency Plan during times of drought. Impacts would be less than significant.

## Stormwater

The project would be designed and engineered with drainage features appropriate to accommodate the needs of the project and mimic the historical flow patterns. The project proposes the integration of bioretention areas in order to capture site runoff. Additionally, stormwater would be directed to the storm drain system and southernly to Pruitt Creek. As previously mentioned, the project would preserve a 12.55 conservation area containing 4.95 acres of wetland, which would allow infiltration and reduce the potential for flooding and runoff. Furthermore, the Initial Stormwater Low Impact Development Submittal developed by BFK engineers in August 2021 stated that treatment measures designed for the site have achieved the 100 percent volume capture for the 85th percentile precipitation event. Thus, the volume of stormwater runoff would not exceed the capacity of the storm drain system serving the site. The project site is vacant and thus would require connection to off-site stormwater drainage facilities along Shiloh Road, but would not require the relocation or construction of new or expanded stormwater drainage facilities.

## Electricity, Natural Gas, and Telecommunications

Electricity and natural gas service in the Town of Windsor is provided by PG&E (Windsor 2018). Long-term operation of development projects would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. As described in Section 6, *Energy*, the project would require approximately 1.44 gigawatt hours (GWh). The 2040 General Plan EIR concluded that the Town buildout would require 396.76 gigawatt hours. Thus, the project would only account for 0.36 percent of the projected energy use in the Town. Additionally, the project would have to comply with the California Building Standards Code, California's CALGreen standards, and the 2019 Building Energy Efficiency Standards to minimize wasteful, inefficient, or unnecessary consumption of energy resources and meet energy performance standards. Accordingly, the project would be accommodated adequately by existing electricity, natural gas, and telecommunication facilities and would not require improvements to existing facilities, or the provision of new facilities, that would cause significant environmental effects. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project 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?*

*e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The Town, through Sonoma County Resource Recovery, provides solid waste, recycling, and composting services for residential, commercial, and industrial areas, with weekly curbside pickup. Hazardous waste collection and disposal are provided by the Sonoma County Waste Management Agency. All waste is disposed at the Healdsburg Transfer Station before processing. The Central Landfill's solid waste capacity is 2,500 tons per day and has an average daily load of 1,461 tons per day (Sonoma 2003). Therefore, the landfill has a remaining capacity of 1,039 tons per day.

As shown in Table 31, the proposed project would generate approximately 0.97 tons of solid waste per day. Estimated solid waste generated by this project would account for 0.07 percent of the remaining landfill capacity. The project's generated waste could be accommodated at the Central Landfill.

**Table 31 Estimated Solid Waste Generation**

| Generation Source | Quantity | Generation Rate* | Total (lbs/day) | Total (tons/day) |
|---|---|---|---|---|
| Multifamily | 258 units | 5.31 lbs/du/day | 1,370 | 0.68 |
| Commercial | 55 employees | 10.53 lbs/employee/day | 580 | 0.29 |
| **Total Waste Generation** | | | **1,950** | **0.97** |

Notes: lbs = pounds, numbers may not add up due to rounding

* CalRecycle 2018

Policies in the Sonoma Countywide Integrated Waste Management Plan (ColWMP) address solid waste generation and disposal for residential and commercial waste generators (Sonoma County Waste Management Agency 2003). The project would be required to comply with these policies, including paying a fair share for solid waste services and achieving greater diversion rates than required by AB 939. Additionally, the County, per the CoIWMP, is required to provide access to residential and commercial recycling programs, composting opportunities, and other waste reduction programs for all residential and commercial uses in the county. AB 939 requires the County to divert 50 percent of solid waste from landfills. In 2011, approximately 74 percent of the waste stream was diverted from landfilling and recycled (County of Sonoma 2020). The project would be required to demonstrate compliance with all applicable regulations. Thus, the project would not violate any statute or regulation regarding solid waste capacity or impede with the implementation of county solid waste reduction goals. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 20 Wildfire

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ■ | ☐ | ☐ |
| 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? | ☐ | ☐ | ■ | ☐ |
| d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ■ | ☐ |

*a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

The project site is adjacent to commercial development to the north, open land to the east, vineyards to the south, and Highway 101 to the west. The site is classified as a Local Responsibility Area, where responsibility for fire protection falls on the Sonoma County Fire District, rather than the state or federal government. The Town of Windsor abuts Moderate Wildland Fire Hazard Zones on the northeastern and western corners, designated as a State Responsibility Area (SRA) (CalFire 2007). The nearest Very High Fire Hazard Severity Zone (VHFHSZ) is approximately 10 miles east of the project site. The project plans include a detailed fire truck turning exhibit reflecting radius requirements from the Sonoma County Fire District. The plans also identify emergency access routes to ensure that a fire on the site would be effectively managed, and include a ground floor fire corridor plan for the memory care and assisted living detailing 2-hour fire rated tunnels and fire hydrants (Appendix J). Furthermore, as discussed in Section 17, *Transportation*, emergency access would be available via two driveways on Shiloh Road and emergency vehicles would be able to

access all lots and buildings on the project site. In addition, according to the Windsor Evacuation Zone map provided by the Town (Appendix K), the project site would be located adjacent to an evacuation route and therefore would not interfere with emergency access. Thus, the project would neither impair an adopted emergency response plan or an evacuation plan within a VHFHSZ, nor expose people or structures to a significant risk involving wildfire and exacerbate the risk of wildfire. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

The Town is adjacent to SRA lands classified as Moderate Fire Hazard Severity Zone, but the project site is not in an SRA or located in or near lands classified as Very High Fire Hazard Severity Zone. The 2019 Kincade Fire resulted in the evacuation of the Town and large parts of the County. The Kincade Fire resulted in spot fires from ember cast on properties within the Town limits on the north and northeastern edges of Town. Project design features must comply with 2040 General Plan policies below which would require fire protection design in new developments and fire suppression and management (Town of Windsor 2018).

- **PHS-4.3 Fire Suppression Requirements.** The Town shall require additional mitigation for development projects unable to satisfy minimum fire flow requirements.
- **PHS-4.9 Priority Undergrounding.** Prioritize undergrounding of utilities along emergency access and evacuation routes to make them more reliable and to minimize hazards from fallen power lines.

The project would comply with Policy PHS-4.9 by including an underground utility system. The project itself would not exacerbate wildfire risks and expose occupants to pollutant concentrations from a wildfire or uncontrolled spread of wildfire since the site is generally flat and is not surrounded by slopes or hills prone to fire, and project design features would help to protect project buildings from the effects of wildfire**.** Despite this, the project would have potentially significant wildfire impacts, as existing codes and regulations cannot fully prevent the potential for wildfires from damaging structures or occupants. The project would increase the exposure of new residential development to risk of loss or damage from wildfire given the history of wildfire in the direct vicinity of the project site (e.g.**,** Kincade Fire) and wider region. Therefore, Mitigation Measure WF-1 would be required to ensure compliance with Policy PHS-4.3, and Mitigation Measure WF-2 would be required to ensure the Project is built to the requirements set forth in Chapter 7A of the California Building Code, which improves fire resistance of new structures, thereby reducing the potential for structures on the project site to act as a point of ignition. Impacts would be less than significant with mitigation.

## Mitigation Measure

### *WF-1 Fire Suppression Requirements*

During project design, the applicant shall ensure that all fire hydrants on the project site are able to satisfy the Town's minimum fire flow requirements. Compliance shall be verified by the Town prior to issuance of a certificate of occupancy.

### *WF-2 California Building Code Chapter 7A Compliance*

During project design, the applicant shall ensure that materials and construction methods outlined in Chapter 7A of the California Building Code are followed. Compliance shall be verified by the Town prior to building permit approval.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

The Town is adjacent to SRA lands classified as Moderate Fire Hazard Severity Zone, but the project site is not in an SRA or lands classified as Very High Fire Hazard Severity Zone. The project would involve the construction of a driveway that would extend from the intersection of Hembree Lane and Shiloh Road, eastward through the site along the south side of the commercial buildings and turning south along the neighboring property boundary but would not involve the construction of new utility infrastructure that could exacerbate fire risk. The impacts of the roadway construction proposed as a part of the project has been analyzed throughout this IS-MND. Furthermore, roads, maintained landscaping, and fire-resistant building materials would help prevent the spread of uncontrolled wildfire. Wildfire impacts from associated project infrastructure would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is relatively flat and is not in a landslide hazard zone. The substantive landslide risk within Windsor's Town limits is very small, and only areas north, east and southwest of the Town face substantive landslide risks (Town of Windsor 2017). Since the project site is generally flat and is not located on or near a slope or hillside area, it would not expose people or structures to flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes, and would not exacerbate existing hazards. Furthermore, as mentioned in Section 10, *Hydrology and Water Quality*, the project would integrate bioretention areas to capture site runoff, and the floor of the lowest building proposed would be nearly a foot above street elevation which would reduce inundation. In addition, full volume capture would ensure that runoff does not exceed the existing capacity of stormwater drainage systems which would reduce the potential of flooding. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 21 Mandatory Findings of Significance

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Does the project: | | | | |
| a. 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? | ☐ | ■ | ☐ | ☐ |
| b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ■ | ☐ | ☐ |
| c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ■ | ☐ | ☐ |

*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?*

As discussed in Section 4, *Biological Resources*, the project would not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife species population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal. Compliance with Mitigation Measures BIO-1 through BIO-6 would reduce impacts to special-status wildlife species, bird, and tree species to a less than significant level. As discussed in Section 5, Cultural Resources, the project may impact unanticipated archaeological resources. Compliance with Mitigation Measures CUL-1 through CUL-3

would ensure important examples of major periods of California history and prehistory are maintained. Therefore, impacts would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

The proposed project would have no impacts to mineral resources. For all other issue areas, the proposed project would have either direct or indirect impacts that have been determined to be less than significant, or less than significant with mitigation incorporated. The project would not adversely affect biological, cultural, or other physical resources outside of the project site. Other impacts, such as air quality, GHG emissions, noise, transportation, and utilities impacts, would be minor and would not be cumulatively considerable. The project would have a less than significant impact to traffic. There are several planned or pending projects within two miles of the project including, the BoDean Co. Asphalt Processing Plant, the Overlook, Portello (APM Homes), Portello (JKB Living), and 6500 and 6516 Old Redwood Hwy Subdivision. As discussed in Section 7, *Geology and Soils*, the project site is located in an area of high paleontological sensitivity. Thus, the potential for the recovery of buried paleontological materials during construction remains. Implementation of Mitigation Measure GEO-1 would reduce impacts to previously undiscovered paleontological resources to a less than significant level by providing a process for evaluating and, as necessary, avoiding impacts to any resources found during construction. However, the project would implement mitigation measures to reduce impacts to less than significant, including GEO-1. Impacts would be reduced to a less than significant level with mitigation. Thus, the project would not result in cumulatively considerable impacts.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, geology and soils, noise, traffic safety, and wildfires. With the implementation of mitigation measures identified in this IS-MND, the project would not result, either directly or indirectly, in substantial adverse impacts related to these issue areas. Therefore, impacts would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# List of Preparers

Rincon Consultants, Inc. prepared this IS-MND under contract to the Town of Windsor. Persons involved in data gathering analysis, project management, and quality control are listed below.

### RINCON CONSULTANTS, INC.

Matt Maddox, AICP, Principal
Kari Zajac, MESM, Senior Environmental Planner
April L. Durham, PhD, Environmental Planner and Project Manager
Craig Lawrence, Senior Biologist/Regulatory Specialist
Anastasia Ennis, MS, Biologist
Aaron Rojas, Environmental Planner
Nichole Yee, Environmental Planner
Audrey Brown, GIS Analyst

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