

# DECRISTO MULTI-FAMILY PROJECT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

PREPARED BY: CITY OF PETALUMA 11 ENGLISH STREET PETALUMA, CA 94952

March 20, 2019

# DECRISTO MULTI-FAMILY PROJECT CEQA ENVIRONMENTAL CHECKLIST AND INITIAL STUDY

Initial Study Checklist	
Project Title:	DeCristo Multi-Family Project
Lead Agency:	City of Petaluma 11 English Street Petaluma, CA 94952
Contact Person and phone number:	Aaron Hollister, Senior Planner ahollister@m-group.us 707-540-0723 x 210
Project Location:	109 Ellis Street, City of Petaluma, Sonoma County, California Assessor's Parcel Number 007-361-003
Project Sponsor:	Jerry A. Kler 475 Gate 5 Road, Suite 222 Sausalito, CA 94965 415-332-3868
Property Owners:	Lands of DeCristo Family Trust 7356 Country Club Drive San Diego, CA 92037
General Plan Designation:	Medium Density Residential (8.1-18.0 units acre); Floodplain
Zoning:	R4 (Residential 4) Zone; FP-C (Floodplain Combining) Zone
Description of project:	The project proposes the demolition of all existing residential structures found on the 0.705-acre project site, including three dwelling units and associated residential accessory structures, and the construction of three, three-story residential buildings containing 13 multi-family apartments including one affordable unit that will be offered at the very low-income level. Twenty-two off-street vehicular parking spaces and 24 secured, off-street bicycle spaces are provided onsite. Landscaping improvements are proposed throughout the project site. Residential common areas will be located in between the proposed buildings and on the side portions of property, and a common pool area will be located at the rear of the property.
	The project includes development of a detention/bioretention basin. The basin has a design capacity of 4,708 cubic feet, which exceeds the volume of flood waters being displaced by the project. The detention basin would accommodate rising flood waters within Washington Creek to be diverted into the basin via a 12-inch inflow pipeline extending 32 linear feet within top of bank just below the 100-year base flood elevation. A 6-inch outflow stormdrain extending 50 linear feet would discharge filtered water from the bottom of the bio-retention basin into Washington Creek.
	Frontage improvements to Ellis Street include a new driveway

curb cut, replacement of sidewalks and signage for Class III bicycle facilities along Ellis Street. The project also includes the development of an 8-foot wide public recreational trail along the site frontage to Washington Creek. The trail will be constructed to BASMAA standards using pervious pavement. residential density bonus and development incentive/concession have been requested as allowed by Chapter 27 of the Implementing Zoning Ordinance and California Density Bonus Law. The residential density bonus would allow the project to propose a residential density of 18.43 units/acre where the General Plan Designation of Medium Density Residential on the project site allows a maximum of 18.0 dwelling units/acre. One development incentive/concession has been requested to reduce the proposed parking requirement of the project from 25 parking spaces to 22 parking spaces. The project is located in Central Petaluma approximately 1,000 Surrounding land uses and setting; briefly describe project's feet southwest of the U.S. Highway 101 Corridor. Urban uses surroundings: surround the project site including multi-family residential to the north and south, and McKinley Elementary School to the west of the project site. Washington Creek is located immediately to the east of the project site, and single-family, detached housing is located on the opposite side of the creek. California Department of Fish and Wildlife (CDFW); Regional Other public agencies whose approval is required (e.g. permits, Water Quality Control Board (RWQCB); and Sonoma County financial approval, or participation Water Agency (SCWA) agreements): Have California Native American The Federated Indians of Graton Rancheria (FIGR) did not tribes traditionally and culturally request consultation within the statutory timeframe provided by affiliated with the project area Public Resources Code §21080.3.1. Notice of the project was requested consultation pursuant to sent to FIGR in October 2018. To date the City of Petaluma has Public Resources Code section not received a response from FIGR requesting consultation. 21080.3.1? If so, has consultation begun?

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### 1. SUMMARY AND INTRODUCTION

### 1.1. PURPOSE AND INTENT

This Environmental Checklist for the proposed DeCristo Multi-Family project (hereinafter referred to as the "project") has been prepared by the City of Petaluma as lead agency in full accordance with the procedural and substantive requirements of the California Environmental Quality Act (CEQA) and the CEQA Guidelines.

This Initial Study is intended to inform City decision-makers, responsible agencies, interested parties and the general public of the proposed project and its potential environmental effects. This Initial Study is also intended to provide the CEQA-required environmental documents for all city, local and state approvals or permits that might be required to implement the proposed project.

CEQA Guidelines Section 15063(c) lists the following purposes of an Initial Study:

Provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration.

Enable an Applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby possibly enabling the project to qualify for a Negative Declaration.

Assist in the preparation of an EIR, if one is required.

Facilitate environmental assessment early in the design of a project.

Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment.

Eliminate unnecessary EIRs.

Determine whether a previously prepared EIR could be used with the project.

The City of Petaluma, as the lead agency, has conducted an Initial Study to determine the level of environmental review necessary for the proposed project. Consistent with Section 15070(b) of the CEQA Guidelines, the Initial Study identified potentially significant effects, but:

1) Revisions in the Project plans or proposal made by or agreed to by the applicant before a proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect would occur; and

There is no substantial evidence, in light of the whole record before the agency, that the Project as revised may have a significant effect on the environment.

Therefore, as the lead agency, the City of Petaluma has determined that a Mitigated Negative Declaration is the appropriate level of environmental review.

### 1.2. PROJECT SUMMARY

The proposed DeCristo Multi-Family project consists of a multi-family residential development including 13 multi-family apartments, with one of the units being offered at the very low-income level pursuant to a density bonus agreement. The project is located on a 0.705-acre site in central Petaluma, Sonoma County, California. The project site would be developed with three, three-story buildings, common outdoor areas including an inground swimming pool, on-site parking, landscaping, a bioretention/detention basin, and ancillary improvements. Offsite improvements include streetscape landscaping improvements along the project's Ellis Street frontage, extension of utility service laterals, and installation of an 8-foot wide pervious pathway along the full extent of the site frontage to Washington Creek. The project is subject to Site Plan and Architectural Review and has requested a Density Bonus to allow for a density of 18.43 units per acre in exchange for offering one unit at the very low-income level and a development concession/incentive to reduce the number of onsite parking spaces from the 25 required by code to 22 parking spaces. The proposed development is consistent with the land use and zoning anticipated by the Petaluma General Plan 2025 pursuant to the project's residential density bonus request and request for a development incentive/concession.

# 1.3. PETALUMA GENERAL PLAN AND EIR

General Plan: The Petaluma General Plan 2025, adopted in 2008, serves the following purposes:

- Reflects a commitment on the part of the City Council and their appointed representatives and staff to carry out the Plan;
- Outlines a vision for Petaluma's long-range physical and economic development and resource conservation; enhances the quality of life for all residents and visitors; recognizes that human activity takes place within the limits of the natural environment; and reflects the aspirations of the community;
- Provides strategies and specific implementing policies and programs that will allow this vision to be accomplished;
- Establishes a basis for judging whether specific development proposals and public projects are in harmony with Plan policies and standards;
- Allows City departments, other public agencies, and private developers to design projects that will
  enhance the character of the community, preserve and enhance critical environmental resources, and
  minimize impacts and hazards; and
- Provides the basis for establishing and setting priorities for detailed plans and implementing programs, such as Development Codes, the Capital Improvement Program (CIP), facilities and Master Plans, redevelopment projects, and the Urban Growth Boundary (UGB).

# **General Plan EIR**

The General Plan EIR was certified by the City Council on April 7, 2008 (SCH# 2004082065). The General Plan EIR reviewed all potentially significant environmental impacts and developed measures and policies to mitigate impacts from buildout of the General Plan. Nonetheless, significant and unavoidable impacts were determined to occur. Therefore, the City adopted a statement of overriding considerations, which balances the merits of approving the project despite the potential environmental impacts. The impacts identified as significant and unavoidable in the General Plan EIR are:

- Increased motor vehicle traffic which would result in unacceptable level of service (LOS) at six intersections covered in the Master Plan:
  - McDowell Boulevard North/Corona Road, Lakeville Street/Caulfield Lane, Lakeville Street/East D Street, Petaluma Boulevard South/D Street, Sonoma Mt. Parkway/Ely Boulevard South/East Washington Street, and McDowell Boulevard North/Rainier Avenue.
- Traffic related noise at General Plan buildout, which would result in a substantial increase in existing exterior noise levels that are currently above City standards.
- Cumulative noise from proposed resumption of freight and passenger rail operations and possible resumption of intra-city trolley service, which would increase noise impacts.
- Air quality impacts resulting from General Plan buildout to population levels that could conflict with the Bay Area 2005 Ozone Strategy. (This regional air quality plan has since been replaced by the 2010 Clean Air Plan, which is further discussed in Sections 3.3 Air Quality and 3.7 Greenhouse Gases.)
- A possible cumulatively considerable incremental contribution from General Plan development to the significant impact of global climate change.

Because CEQA discourages "repetitive discussions of the same issues," this environmental document tiers off the General Plan EIR (SCH NO. 2004082065) to examine site-specific impacts of the proposed project, as described below. A copy of the City of Petaluma's General Plan and EIR are available at the Community Development Department, 11 English Street, Petaluma, California 94952, during normal business hours and online at <a href="http://cityofpetaluma.net/cdd/plan-general-plan.html">http://cityofpetaluma.net/cdd/plan-general-plan.html</a>.

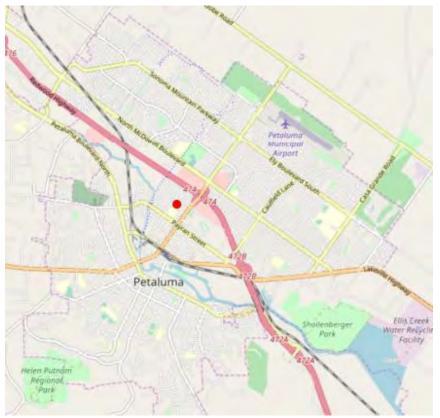
# 2. PROJECT DESCRIPTION

# 2.1. ENVIRONMENTAL SETTING

# **Regional Setting**

Petaluma is located in southwestern Sonoma County along the Highway 101 corridor approximately 15 miles south of Santa Rosa and 20 miles north of San Rafael. It is situated at the northernmost navigable end of the Petaluma River, a tidal estuary that drains to the San Pablo Bay. The City originated along the banks of the Petaluma River, spreading outward over the floor of the Petaluma River Valley as the City developed. The Valley itself is defined by Sonoma Mountain on the northeast and by the hills extending northward from Burdell Mountain on the west. To the south are the Petaluma Marshlands and the San Francisco Bay beyond.

Petaluma's Urban Growth Boundary (UGB) defines the limits within which urban development may occur and encompasses approximately 9,911 acres. The UGB was implemented in 1987 (as the Urban Limit Line), formally adopted as the UGB in 1998 via Measure I and will expire in 2025. The General Plan and EIR evaluated potential impacts associated with existing development and buildout of all land use within the UGB. The project site is located within the UGB and has been used for residential purposes. The project's location within the City of Petaluma and surrounding environs is shown in **Figure 1: Regional Location**.



**Figure 1: Regional Location** 

# **Vicinity Setting**

The project site is located at 109 Ellis Street in central Petaluma and within the Petaluma General Plan's Payran-McKinley Planning Subarea, which is generally contained within an area bordered by Highway 101, the railroad tracks, Lakeville Street, and East Washington Street. The Planning Subarea consists primarily of residential uses and a few large vacant parcels, primarily adjacent to the Petaluma River, Lynch and Washington Creeks, and Highway 101. It features a diverse range of housing densities, with single-family dwellings, townhomes, apartments, and senior housing options.

A few active agricultural processing and industrial uses are located along the river and the railroad tracks in the area, which remain important to the agricultural history of the community and the farming community still operating in the county. This subarea contains a network of open spaces along the Petaluma River and tributary creeks, which are intended to be improved with greenways and trails, while preserving riparian corridors and maintaining flood water conveyance.

# **Project Site**

The project site is a 0.705-acre property (APN 007-361-003) that is located on the east side of Ellis Street, midblock, between Madison Street and Martin Circle in Central Petaluma. Land uses adjacent to the subject property include multi-family residential to the north and south, and McKinley Elementary School to the west. Washington Creek and its associated riparian corridor are located immediately to the east of the property, while single-family residential uses are located on the opposite side of the creek (**Figure 2: Project Vicinity**).



Figure 2: Project Vicinity

The project site is currently developed with residential structures and uses, including three detached single-family dwelling units and associated residential accessory structures. Vehicular access to the site is provided via an existing curb cut on the southerly portion of the project site's frontage on Ellis Street. A gravel driveway provides for vehicular circulation on the site as it traverses the southerly side of the property from the curb cut. The topography of the site is generally flat with a slight downslope of approximately one foot from east to west. A majority of the site contains maintained grass areas and residential landscaping, including six trees.

The project site extends to Washington Creek, including a narrow strip of riparian corridor. Washington Creek is located along the eastern edge of the property. The segment of Washington Creek within the study area is an engineered channel that is maintained by the Sonoma County Water Agency. Washington Creek is identified as a blue-line stream by the USGS. Within the study area, Washington Creek has a width of approximately 15 feet at the ordinary high water mark (OHWM). The width between the tops of bank of the stream was approximately 50 feet. Riparian vegetation along the Washington Creek corridor includes arroyo willow (*Salix lasiolepis*), Pacific willow (*Salix lasiandra*) and narrowleaf willow (*Salix exigua*). Other vegetation within the top of bank included non-native grassland, dominated by wild oats, fennel, and bristly ox-tongue.

The project site has a General Plan land use designation of Medium Density Residential (8.1 to 18 dwelling units/acre) and Floodplain (see **Figure 3: General Plan Land Use**). The project site is currently zoned as R4 (Residential 4), while a portion of the front of the property has a FP-C (Flood Plain-Combining District) overlay, as shown in **Figure 4: Zoning**. The front portion of the site is subject to the applicable policies and provisions of Chapter 6 of the IZO pertaining to floodplains. Sections 6.070.B and 6.070.D are applicable to the proposed project.



Figure 3: Land Use Designation

Figure 4: Zoning

### 2.2. PROJECT DESCRIPTION

The project proposes the development of three, three-story buildings that would include 13 residential apartments with associated landscaping and changes to existing features at the site (grassland, trees, and gravel), as described below. The project also includes an outdoor swimming pool, common open space, sitting areas, parking spaces, and internal circulation areas. The project's site plan is shown in **Figure 5**: **Site Plan**.



Figure 5: Site Plan

# **Apartment Buildings**

The project includes the construction of three, three-story apartment buildings. Two of the buildings would contain four, two-bedroom units, while the third building would contain four two-bedroom units and one, one-bedroom unit. All two-bedroom units would measure 1,115 square feet each, while the one-bedroom unit would measure 737 square feet. The two-bedroom units are located in the upper two stories of each of three-story buildings. The one-bedroom unit is located on the ground floor of one of the buildings and is a disabled accessible unit.

The general design of each of the buildings is similar and are centered around an elevated courtyard area. The upper stories of each of the buildings contains the two-bedroom residential units and the ground floors contain common amenity spaces, parking, utility spaces, and the one-bedroom unit. The facades of the upper stories are proposed to be largely composed of stucco and glazed areas with horizontally orientated metal panel bands. Balconies and angled bay windows are also proposed on the upper stories. The lower stories will be finished with board-form concrete.

Building roof types for the apartment buildings are flat with a built-up cornice. Photovoltaic panels and screened groupings of rooftop mechanical features are proposed at the roofs of the buildings. The maximum height of the buildings will be 32.5 feet, as shown in **Figure 6: Apartment Buildings' Elevations**.



FRONT ELEVATION REAR ELEVATION



Figure 6: Site Elevations

# Landscaping/Fencing/Pool/Recreation Trail

The preliminary planting plan includes trees, shrubs, perennials, groundcover, and vines. Trees and other landscaping will be planted along the perimeter of the subject property, in courtyard areas between the buildings, and in common open space areas. All proposed planting species require very low to moderate water use. A green wall with planting trays is proposed on the street-facing façade of the west most building. Landscape areas will provide aesthetic value, establish buffers and will serve as stormwater retention facilities.

A metal and wire mesh fence is proposed along the project's north, south, and east property lines. The fence would be six feet in height with the exception of the first 15 feet of the property as measured from the Ellis Street frontage. In this area, the fence would measure 42 inches in height. There is no fencing proposed along the Ellis Street frontage of the property. There is a pedestrian gate proposed in the fencing along the east property line to provide access to the recreational trail along Washington Creek.

Outdoor amenities include an in-ground pool and lounge area located towards the eastern portion of the site adjacent to the eastern most building. The pool area will contain outdoor furniture including bench seating. Colored concrete paving is proposed around the pool area and extending along the southerly portion of the site, where a pedestrian access is provided to buildings, bike storage, and common outdoor spaces.

The project also includes the installation of an eight-foot wide permeable recreational trail located along the entire length of the project site's frontage to Washington Creek. The recreational trail would be constructed in accordance with Bay Area Stormwater Management Agencies Association (BASMAA) standards including a uniform subgrade and at least 3 inches of crushed rock beneath for rainfall retention and soil infiltration. As proposed GraniteCrete pervious pavement would be used for the trail.

### **Detention/Bioretention**

The project includes development of a detention/bioretention basin located at the easternmost portion of the parcel. The basin has a design capacity of 4,708 cubic feet, comprised of 4,590 cubic feet of storage to accommodate flood waters displaced by the project introducing fill to the floodplain, and approximately 118

cubic feet of bioretention storage. The detention basin would accommodate rising flood waters within Washington Creek to be diverted into the basin via a 12-inch inflow pipeline extending 32 linear feet within the top of bank just below the 100-year base flood elevation. A 6-inch outflow stormdrain extending 50 linear feet would discharge filtered water from the bottom of the bio-retention basin into Washington Creek. A diffuser tee located at the end of the outflow drain would dissipate and disperse the outflow over a wider area, and a rip rap apron would be installed immediately beneath the diffuser to absorb outflow energy. As proposed, the outflow drain, diffuser and rip rap apron will be accommodated above the ordinary high water level.

### Site Access and Circulation

The project site is currently accessed via an existing curb cut on the southeasterly portion of the project site's frontage on Ellis Street. A gravel driveway provides for vehicular circulation on the site as it traverses the southerly side of the property from the curb cut. The site's vehicular access point and curb cut would be moved to the southwesterly portion of the site with internal vehicular circulation provided via a two-way driveway. A total of 22 onsite vehicle parking spaces would be provided. Eighteen of the proposed parking spaces would be provided in enclosed garages located at the ground-floor areas of the residential structures. The remaining four parking spaces would be covered by the elevated courtyard area and would be located between the buildings. Two parking spaces would contain EV charging stations.

The pedestrian entrance to the site would be provided at the southeastern corner of the property. A total of 24 interior, secured bicycle parking spaces are proposed to be located on site. Each of the buildings would contain a bicycle storage room with each of the rooms containing eight bicycle parking spaces.

# **Utilities**

The project would utilize public water and sewer from existing mains in Ellis Street. Potable water would be accommodated via the installation of new water lines within the project site that would connect to the existing water main in Ellis Street. Wastewater would be conveyed from the project site through new sanitary sewer pipes, to the existing sanitary sewer main within Ellis Street, and ultimately to the Ellis Creek water recycling facility.

Under proposed conditions, the stormwater from the new buildings and other impervious surfaces would be collected and routed to a detention/bio-retention area at the rear of the site, allowing for treatment and infiltration. The stormwater exiting the basin would be discharged to the Washington Creek channel.

### **Site Preparation and Construction**

Development of the proposed project is presumed to occur over an approximately 18-month construction period and will initiate with site preparation and grading. Site preparation will involve demolition of all existing on-site structures and minimal grubbing to remove grasses and vegetation. Site preparation also includes the removal of gravel surfaces. All six on-site trees (three Common Figs, one Bald Cypress, one Common Hawthorn, and one dead tree) are also proposed to be removed during the site preparation and grubbing stage. There are no protected trees onsite.

Grading activities will result in the cut of approximately 164 cubic yards of soil and the fill of approximately 153 cubic yards of soil, resulting in a net export of 11 cubic yards of soil.

Following completion of grading activities, infrastructure improvements and building foundations will be constructed. Utilities, storm drains and catch basins will be installed. As all public utilities currently extend to the project site, improvements will be limited to the installation of new laterals and tie-ins to connect to the existing water, sewer, power, and gas services in place within Ellis Street. Frontage improvements along Ellis Street will be installed, including a new sidewalk, landscaping and signage.

Construction equipment expected to be utilized includes tractors, backhoes, haul trucks, graders, pavers, cranes, water trucks and other heavy-duty construction equipment. Staging of construction equipment and materials will occur within the footprint of the project site and within the right-of-way or Ellis Street (through the issuance of an encroachment permit).

# **Density Bonus**

A residential density bonus and development incentive/concession have been requested as allowed by Chapter 27 of the Implementing Zoning Ordinance and California Density Bonus Law. The residential density bonus allows the project to propose a residential density of 18.43 units/acre where the General Plan Designation of Medium Density Residential on the project site allows a maximum of 18.0 dwelling units/acre. One development incentive/concession has been requested to reduce the parking requirement of the project from 25 parking spaces to 22 parking spaces.

### 2.3. PUBLIC OUTREACH

Pursuant to City of Petaluma Resolution No. 2018-107 N.C.S., one formal, required public outreach event was held to obtain feedback from the community. The event took place on February 20, 2019, from 6 p.m. to 8 p.m. and was held at the City of Petaluma Community Center. All property owners and occupants within 1,000 feet of the project site were notified of the meeting via U.S. Mail with the notice sent to the public on February 4, 2019.

### 2.4. ENTITLEMENTS & APPROVALS

The following entitlements are requested of the City of Petaluma to authorize this proposal:

- 1. Site Plan and Architectural Review (SPAR) approval for the site, building and landscaping design details;
- 2. Development Permit for development within the FP-C (Floodplain-Combining District); and
- 3. Residential Density Bonus and a development concession/incentive for the reduction in required vehicular parking.

The following approvals are expected to be required from outside agencies and regulatory agencies:

Sonoma County Water Agency- Approval of the Hydrology Study, Stormwater Detention/Bioretention feature, and discharge to Washington Creek.

California Department of Fish and Wildlife – Lake and streambed alteration agreement in accordance with Fish and Game Code Section 1602 for activities within top of bank.

Regional Water Quality Control Board – Water quality certificate in accordance with Section 401 of the Clean Water Act.

### 3. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

1.	Aesthetics		8.	GHG Emissions		15.	Public Services	
2.	Agriculture / Forestry		9.	Hazards		16.	Recreation	
3.	Air Quality	X	10.	Hydrology	Х	17.	Transportation	
4.	Biological Resources	X	11.	Land Use / Planning		18.	Tribal Cultural Resources	
5.	Cultural Resources	X	12.	Mineral Resources		19.	Utilities / Service Systems	
6.	Energy		13.	Noise	Х	20.	Wildfire	
7.	Geology / Soils	X	14.	Population / Housing		21	Mandatory Findings	

# 3.1. DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

I find that the proposed project <b>COULD NOT</b> have a significant effect on the environment and a <b>NEGATIVE DECLARATION</b> will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. <b>A MITIGATED NEGATIVE DECLARATION</b> will be prepared.	x
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 <b>MAY</b> have a "potentially significant impact" or "potentially significant unless mitigated" 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 <b>ENVIRONMENTAL IMPACT REPORT</b> is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (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.	

Olivia Ervin: M-Group Consulting Planner

for the City of Petaluma

Date

Jerry Kler. 109 Ellis Representative

### 4. EVALUATION OF ENVIRONMENTAL IMPACTS

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

The following discussion addresses the potential level of impact relating to each aspect of the environment.

# 4.1. **AESTHETICS**

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				$\boxtimes$
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				$\boxtimes$
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			$\boxtimes$	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			$\boxtimes$	

Sources: City of Petaluma General Plan 2025 and EIR; City of Petaluma Implementing Zoning Ordinance (IZO); California Scenic Highway Mapping System; and SPAR Submittal – Illustrative Plans, Color Board, and Photometric Plan.

**Aesthetics Setting:** The natural features that characterize Petaluma and its surroundings provide for a visually rich setting. The City of Petaluma is located in the Petaluma River Valley, which is northwest-southeast trending between Sonoma Mountain and Mount Burdell. The City is flanked by the foothills and peaks associated with these mountain ranges which provide for views of rolling hills and agricultural landscapes. Petaluma is traversed by the Petaluma River and tributaries that contribute to the aesthetic quality of the City. A long established urban form within City limits contrasts with the surrounding natural and agricultural features.

The project site is currently developed with existing residential uses including three detached single-family dwelling units and accessory structures. Frontage improvements along Ellis Street include an existing sidewalk, curb and gutter. A gravel driveway provides for vehicular access to the project site via a curb cut at the southerly portion of the property. The topography is generally flat with a slight downslope of about one foot from east to west. A majority of the site contains maintained grass areas and ornamental landscaping including six trees.

Washington Creek abuts the eastern portion of the property and includes a narrow strip riparian corridor. The segment of Washington Creek abutting the property is an engineered channel maintained by the Sonoma County Water Agency. At the project site, Washington Creek has a width of approximately 15 feet at the ordinary high water mark (OHWM) and a width of approximately 50 feet between the tops of bank.

The project site is located within the Payran-McKinley subarea, which includes a variety of residential housing densities. Surrounding the project site are multi-family residential units to the north and south, single family to the east, beyond Washington Creek, and the McKinley Elementary School located to the west, beyond Ellis Street. The project site is situated within a well-established neighborhood that had been occupied with a mix of residential uses and the Elementary School since the early 1980s. Aesthetic and visual resources present in the project area are limited to views of the narrow Washington Creek corridor and intermittent views of the Sonoma Mountains to the north.

# **Aesthetics Impact Analysis:**

**4.1 (a) (Scenic Resource or Vista) No Impact:** The General Plan 2025 EIR (Figure 3.11-1) identifies hills to the west and south of the City, vistas of Sonoma Mountain, and land along the Petaluma River as local scenic

resources. The General Plan 2025 EIR utilizes the following three public viewpoints to determine potential adverse effects upon the aforementioned vistas: (a) Washington Street overpass; (b) McNear Peninsula; and (c) Rocky Memorial Dog Park.

The project is not located near the McNear Peninsula or Rocky Memorial Dog Park public viewpoints and would not be visible from the Washington Street overpass. The proposed three story buildings would change views of Sonoma Mountain in the background as currently viewed from Ellis Street. However, the proposed site plan maintains views at the access points, where pedestrian and vehicular access are proposed. Sonoma Mountain will continue to visible in a similar pattern established along Ellis Street as views are interrupted by urban forms. Buildings setback and heights are consistent with adopted city policy documents (i.e., Petaluma General Plan and IZO). Therefore, the project would have a less than significant impact related to the obstruction of designated scenic vistas.

- **4.1 (b) (Scenic Resources from a Designated State Highway) No Impact:** According to the California Scenic Highway Program, US 101 and State Route 116 (Lakeville Highway) are not designated scenic highways within the City of Petaluma, nor are they considered eligible to be officially designated. The project will not be visible from Highway 101 due to existing urban development, landscaping and trees between the project site and the Highway. Development of the proposed project will not damage scenic resources including, but not limited to trees, rock outcroppings, and historic buildings viewable from a designated (or eligible) State scenic highway. Therefore, no impacts to scenic resources viewable from a designated state highway will result from development of the proposed project.
- **4.1 (c) (Degrade Visual Character or Conflict with Scenic Quality) Less Than Significant Impact:** The project will introduce three new three-story residential buildings to a site that currently contains one-story structures. The abutting residential units on either side of the property are two-story multi-family developments. One and two-story structures currently exist along Ellis Street in proximity to the project site. Existing residential units along Ellis Street exhibit a range of architectural styles. The McKinley Elementary School building to the west of the project site is a single-story with a rectangular form extending nearly the full length of the school property. The development pattern along Ellis Street is primarily uniform with a minimum 10 foot setback observed along the front property line, curbs and sidewalks. Overhead powerline run along the north side of Ellis Street with street lamps located approximately ever 100 feet.

The architectural materials of the new buildings include glass, metal, concrete and stucco. The buildings exhibit a square form with the massing broken up through the breezeways, courtyards, and angular window treatments. The building fronting onto Ellis Street includes a green screen living wall to further soften the building form. The color pallet includes slate, gray, and chestnut painted stucco, and black wire metal mesh at fences and gates.

The proposed siting of the three new buildings and the elevation of the three-story buildings are consistent with the R4 development standards set forth in the IZO. The building height at the top of the parapet roof extend to 30 feet in height. The top of the roof at the building entry is 32.5 feet in height. The zoning code allows for a maximum height limit of 35 feet. The proposed site plan demonstrates that front, side, and rear setbacks meet the 10-foot minimum. As proposed, the site coverage would occupy 37% of the property, which meets the 60% lot standard set forth in the IZO. As such, the project is consistent with the IZO and does not conflict with local regulations governing scenic quality. Therefore, environmental impacts would be less than significant.

**4.1 (d) (Light and Glare) Less Than Significant Impact:** The project has the potential to result in new lighting associated with exterior and interior residential lighting, landscaping lighting, and lights from vehicles entering and exiting the project site. New lighting introduced onsite could potentially affect nighttime views in the project area. However, a submitted photometric plan depicting proposed illumination levels demonstrates conformance with the standards of IZO §21.040(D). Further, the project is required to conform to Implementing Zoning Ordinance (IZO) §21.040(D)(Glare), which provides standards to prevent indirect and direct glare. Such Standards to reduce light and glare impacts include specifying the maximum illumination, and light location, height, and relationship to structures. Therefore, compliance with IZO §21.040(D) would ensure the project's potential light and glare impacts would be less than significant.

Aesthetics Mitigation Measures: None required.

# 4.2. AGRICULTURAL AND FORESTRY RESOURCES

Wo	ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				$\boxtimes$
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				$\boxtimes$
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				
So	urces: 2025 General Plan and EIR.				

**Agricultural and Forestry Setting:** Agricultural lands within the Urban Growth Boundary (UGB) are limited to "Farmland of Local Importance", "Grazing Land", and "other land" and there are no identified forestlands within the City of Petaluma. No agricultural or forestland designations are present on or near the project site.

# **Agricultural and Forestry Impact Analysis:**

**4.2** (a-e) (Farmland Conversion, Williamson Act, Forestland/Timberland Conflict) No Impact: The project site does not include any agricultural or forested lands. The project, as proposed, consists of infill development located on a previously developed lot and will not impact prime farmland, unique farmland or farmland of statewide importance. The project will not interfere with Williamson Act contracts or any existing agricultural uses.

In the absence of forested lands there is no potential for the project to conflict with existing forested land zoning or encourage the loss or conversion of forested land to another use. As the project is infill within the UGB it will not provide an impetus for the conversion of farmland or forest to any alternative use. Therefore, the project will have no impact to agricultural and forestry resources.

Agricultural and Forestry Mitigation Measures: None required.

# 4.3. AIR QUALITY

by pol	nere available, the significance criteria established the applicable air quality management or air lution control district may be relied upon to make following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			$\boxtimes$	
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			$\boxtimes$	
c)	Exposure of sensitive receptors to substantial pollutant concentrations?		$\boxtimes$		
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			$\boxtimes$	

Sources: City of Petaluma General Plan and EIR; BAAQMD 2017 Bay Area Clean Air Plan; and BAAQMD CEQA Guidelines May 2017.

Air Quality Setting: The City of Petaluma is located within the San Francisco Bay Area air basin regulated by the Bay Area Air Quality Management District (BAAQMD). Air quality within the Bay Area Air Basin is influenced by natural geographical and meteorological conditions as well as human activities such as construction and development, operation of vehicles, industry and manufacturing, and other anthropogenic emission sources. The Federal Clean Air Act and the California Clean Air Act establish national and state ambient air quality standards respectively. The BAAQMD is responsible for planning, implementing, and enforcing air quality standards within the Bay Area Air Basin, including the City of Petaluma.

The Bay Area Air Basin is designated as non-attainment for both the one-hour and eight-hour state ozone standards; 0.09 parts per million (ppm) and 0.070 ppm, respectively. The Bay Area Air Basin is also in non-attainment for the PM10 and PM2.5 state standards, which require an annual arithmetic mean (AAM) of less than 20  $\mu$ g/m3 for PM10 and less than 12  $\mu$ g/m3 for PM2.5. In addition, the Basin is designated as non-attainment for the national 24-hour fine particulate matter (PM2.5) standard and will be required to prepare a State Implementation Plan (SIP) for PM2.5. All other national ambient air quality standards within the Bay Area Air Basin are in attainment.

Air quality emissions of carbon monoxide (CO), ozone precursors (ROG and NOx) and particulate matter (PM10 and PM2.5) from construction and operation are evaluated pursuant to the BAAQMD CEQA Air Quality Guidelines established in May 2010<sup>1</sup> and updated in May 2017. With release of the 2017 Bay Area Clean Air Plan (CAP) and the associated EIR, it is expected that updated thresholds and guidelines may be developed in the near term. In the absence of updated guidelines and thresholds, based upon its own judgment and analysis, the City of Petaluma recognizes that these thresholds represent the best available scientific data and has elected to rely on BAAQMD Guidelines dated May 2017 in determining screening levels and significance.<sup>2</sup> BAAQMD air quality thresholds are presented in **TABLE 1** below.

2 In March 2012, the Alameda County Superior Court ordered BAAQMD to set aside use of the significance thresholds within the BAAQMD 2010 CEQA Guidelines and cease dissemination until they complete an assessment of the environmental effects of the thresholds in accordance with CEQA. The Court found that the thresholds, themselves, constitute a "project" for which environmental review is required.

<sup>1</sup> Adopted by Board of Directors of the BAAQMD in June 2010 (Resolution No. 2010-6).

TABLE	1: AIR QUALITY SIGNIFICAN	CE THRESHOLDS			
	Construction Thresholds	Operationa	Thresholds		
Pollutant	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)		
Criteria Air Pollutants					
ROG	54	54	10		
NOx	54	54	10		
PM10	82	82	15		
PM2.5	54	54	10		
СО	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (hour average)			
Fugitive Dust	Construction Dust Ordinance or other BMP	Not Applicable			
Single-Source Health Risks and H	Hazards for New Sources	or New Receptors			
Excess Cancer Risk	>	10.0 per one million			
Chronic or Acute Hazard Index		> 1.0			
Incremental annual average PM <sub>2.5</sub>	> 0.3 µg/m³				
<b>Cumulative Health Risks and Haz</b>	ards for Sensitive Recep	otors			
Excess Cancer Risk	>	100.0 per one million			
Chronic Hazard Index	•	> 10.0	·		
Annual Average PM <sub>2.5</sub>		> 0.8 µg/m³			

Source: BAAQMD's May 2017 CEQA Air Quality Guidelines; BMP = Best Management Practices

Note: ROG = reactive organic gases, NOx = nitrogen oxides, PM10 = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers ( $\mu$ m) or less, PM2.5 = fine particulate matter or particulates with an aerodynamic diameter of 2.5 $\mu$ m or less; and GHG = greenhouse gas.

The City's General Plan sets forth policies and programs to maintain and enhance air quality. There are several policies that are particularly applicable to the subject project, including 4-P-6 to improve air quality through the planting of trees along streets, 4-P15 D to reduce emissions from residential uses, and 4-P-16 to reduce emissions during construction.

# Air Quality Impact Analysis:

**4.3 (a) (Conflict with Air Quality Plan) Less Than Significant Impacts:** The BAAQMD adopted the 2017 Bay Area Clean Air Plan (CAP) on April 19, 2017 to comply with state air quality planning requirements set forth in the California Health & Safety Code. The 2017 CAP includes a wide range of control measures designed to decrease emissions of the air pollutants most harmful to Bay Area residents and which include particulate matter (PM), ozone (O3), and toxic air contaminants (TACs). The CAP further aims to reduce emissions of methane and other "super-greenhouse gases (GHGs)" that are potent climate pollutants in the near-term and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The proposed control strategy for the 2017 CAP consists of 85 distinct measures targeting a variety of local, regional, and global pollutants. The CAP includes control measures for stationary sources, transportation, energy, buildings, and agriculture, natural and working lands, waste management, water, and super-GHG pollutants. Implementation of some of the control measures could involve retrofitting, replacing, or installing

In August 2013, the First District Court of Appeal reversed the Alameda County Superior Court's decision. The Court held that adoption of the thresholds was not a "project" subject to CEQA because environmental changes that might result from their adoption were too speculative to be considered "reasonably foreseeable" under CEQA. In December 2015, the California Supreme Court reversed the Court of Appeal's decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court's opinion. The BAAQMD published a new version of the Guidelines dated May 2017, which includes revisions made to address the Supreme Court's opinion. The May 2017 Guidelines update does not address outdated references, links, analytical methodologies or other technical information that may be in the Guidelines or Thresholds Justification Report. The BAAQMD is currently working to update any outdated information in the Guidelines.

new air pollution control equipment, changes in product formulations, or construction of infrastructure that have the potential to create air quality impacts.

The BAAQMD CEQA Guidelines set forth criteria for determining consistency with the CAP. In general, a project is consistent if a) the project supports the primary goals of the CAP, b) includes control measures and c) does not interfere with implementation of the CAP measures. The proposed project would have a less than significant impact due to a conflict with the Clean Air planning efforts since, a) the project supports the goals of the CAP in that it limits urban sprawl by proposing development within existing urban limits; b) includes control measures to protect air quality during construction by implementing best control measures set forth by BAAQMD; and c) the proposed project would generate air quality emissions well below the BAAQMD criteria pollutant thresholds (see Section 6.3(b) below). Therefore, the project does not conflict with the regional air quality plan and impacts will be less than significant.

**4.3 (b) (Violate Air Quality Emission Standard) Less Than Significant Impacts:** Air quality emissions associated with the proposed project would result from short-term construction activities and ongoing operation. BAAQMD "screening criteria" provide a conservative estimate above which a project would be considered to have a potentially significant impact to air quality. Projects that are below the screening criteria levels are reasonably expected to result in less than significant impacts to air quality since pollutant emissions would be minimal. When projects fall below the screening criteria levels, a quantitative analysis of the project's air quality emissions is not required.

The screening level criteria for multi-family residential development is shown in **Table 2** below.

Land Use Type Operational Screening Size		Construction Screening Size	
Apartment, Low Rise	451 du (ROG)	78 du (GHG)	240 du (ROG)

Source: Table 3-1, page 3-2 BAAQMD 2017 CEQA Guidelines, May 2017. du= dwelling unit; ksf= thousand square feet

Table 2 shows the screening size for construction and operation of low-rise apartments. The project proposes the development of 13 multi-family units, which is well below the screening size for construction (240 dwelling units) and operation (451 dwelling units for criteria pollutants and 78 dwelling units for GHG's). Given that the proposed project size is well below the screening criteria, the project does not trigger the need for a quantitative air quality analysis. It can be conclusively determined that the proposed project would have less than significant impacts due to degraded air quality.

**3.3 (c) (Impact Sensitive Receptors) Less Than Significant Impacts with Mitigation:** The 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 people with illnesses." Examples of sensitive receptors include places where people live, play or convalesce and include schools, day care centers, hospitals, residential areas and recreation facilities.

The project site is located in close proximity to existing sensitive receptors including adjacent multi-family residential uses to the east and west, and the McKinley Elementary School to the south, located at 110 Ellis Street. Residential uses and schools are sensitive receptors because people (children and elderly) are often at home/school for extended periods of time.

During construction, onsite activities will result in the emission of exhaust from vehicles and heavy-duty equipment as well as the generation of fugitive dust from grading and ground disturbing activities. To ensure that fugitive dust emissions are reduced to levels below significance, **Mitigation Measure AQ-1** shall be implemented. AQ-1 incorporates BAAQMD Basic Control Strategies and requires covering haul trucks, watering during active ground disturbance, limiting idling time, proper maintenance of equipment, and other standard measures.

The nearest sensitive residential land uses would be located approximately 10 feet from construction activities. Given the proximity of sensitive receptors to construction activities, which will include the use of heavy-duty construction equipment, emission levels may be occasionally elevated. As such, **Mitigation Measure AQ-2**, as

set forth below shall be implemented, which requires enhanced construction mitigation measures recommended by the BAAQMD. With implementation of measure AQ-1 and AQ-2, potential impacts to sensitive receptors during construction will be reduced to levels below significance.

As a residential development, the proposed project will not generate air quality emissions that impact sensitive receptors at operation. Therefore, operational impact to sensitive receptors will be less than significant.

**4.3 (d) (Other Emissions or Odor) Less Than Significant Impact:** There may occasionally be localized odors during site development associated with construction equipment, paving and the application of architectural coatings. Any odors generated during construction would be temporary and not likely to be noticeable beyond the immediate construction zone. As a residential development, operation of the project will not create objectionable odors affecting a substantial number of people. Therefore, the project will have less than significant impacts to air quality due to objectionable odors.

# **Air Quality Mitigation Measures:**

- **AQ-1:** Latest BAAQMD recommended Best Management Practices (BMPs) to control for fugitive dust and exhaust during all construction activities shall be incorporated into all demolition and construction plans to require implementation of the following:
  - 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
  - 2. All haul trucks transporting soil, sand, or other loose material shall be covered.
  - 3. 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.
  - 4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
  - 5. 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.
  - 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
  - 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper working condition prior to operation.
  - 8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.
- AQ-2: The Applicant and contractor(s) shall implement additional construction mitigation measures recommended by BAAQMD, when activities occur within 100 feet of nearby sensitive receptors, including the following:
  - 1. Activities shall be phased to reduce the amount of disturbed surfaces at any one time. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time should be avoided.
  - 2. Idling time of diesel-powered construction equipment shall be limited to two minutes.
  - 3. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.
  - 4. Require all contractors to use equipment that meets California Air Resource Board's (CARB) most recent certification standard for off-road heavy-duty diesel engines.

# 4.4. BIOLOGICAL RESOURCES

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
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 (Formerly Fish and Game) 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, regulations or by the California Department of Fish and Wildlife (formerly Fish and Game) or U.S. Fish and Wildlife Service?				
c)	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?				$\boxtimes$

Sources: City of Petaluma General Plan 2025 and EIR; City of Petaluma Implementing Zoning Ordinance (IZO); Tree Preservation Plan for 109 Ellis Street, prepared by Sherby Sanborn Consulting Arborist, November 16, 2018; and Biological Resources Assessment, prepared by WRA Environmental Consultants, December 2018.

**Biological Resources Setting:** Biological resources are protected by statute including the Federal Endangered Species Act (FESA), the California Endangered Species Act (CESA), and the Clean Water Act (CWA). The Migratory Bird Treaty Act (MBTA) affords protection to migratory bird species including birds of prey. These regulations provide the legal protection for plant and animal species of concern and their habitat. As reported in the 2025 General Plan EIR several plant and animal species with special-status have been recorded or are suspected to occur within the Urban Growth Boundary of the City of Petaluma. The City also contains species identified in the California Natural Diversity Database (CNDDB) due to rarity and threats and are considered sensitive resources.

Within the Urban Growth Boundary, biological resources are largely limited to the Petaluma River and its tributaries, which contain aquatic and riparian resources, as well as wetlands. The National Wetland inventory identifies fresh emergent wetlands in the southern portion of the Petaluma River and Northern coastal salt marsh wetland and brackish marsh wetland in the lower reaches of the Petaluma River.

# **Project Specific Biological Resource Assessment**

A project-specific biological resources assessment was prepared by WRA Environmental Consultants in December 2018. The study area included 0.89 acres, comprised of the 0.70 acre development parcel and lands on either side of Washington Creek along the project site frontage, including Washington Creek. According to the biological assessment, the study area contains 0.80 acres of non-sensitive communities comprised of 0.29 acres of developed lands and 0.51 acres of non-native annual grassland. Sensitive communities within the study area are limited to 0.05 acres of arroyo willow riparian and 0.04 acres of perennial stream (Washington Creek). See Figure 7 below for the identified communities in the project site study area.

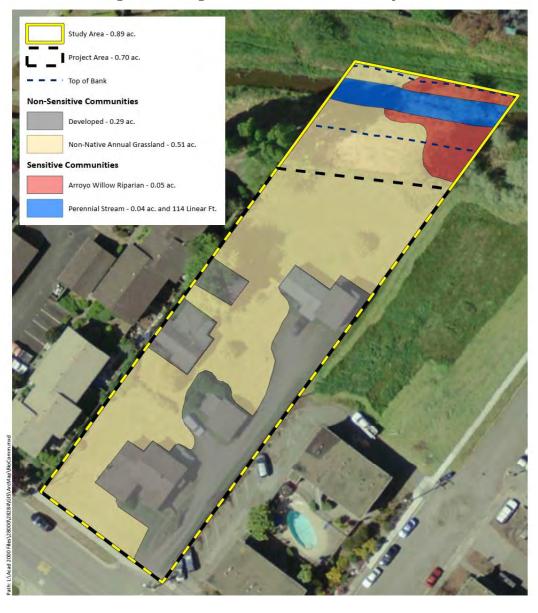


Figure 7: Biological Communities within Study Area

Source: Biological Resource Assessment, Figure 2, prepared by WRA, December 2018.

# **Non-Sensitive Communities**

The non-sensitive communities within the study area include developed and non-native grasslands. The developed areas contain existing structures, driveway and parking areas, and ornamental landscaping. The non-native grassland community is dominated by Italian rye grass, wild oats, soft chess, Bermuda grass, common lippie, willow lettuce, and field bindweed. The project site was historically used for agriculture and has been developed with residential use since 1952.

# **Sensitive Communities**

The sensitive communities within the study area include the perennial stream (Washington Creek) and the arroyo willow thicket (riparian). Washington Creek is located along the eastern edge of the study area. The segment of Washington Creek within the study area is an engineered channel that is maintained by the Sonoma County Water Agency. Washington Creek is identified as a blue-line stream by the USGS. Within the study area Washington Creek has a width of approximately 15 feet at the ordinary high water mark (OHWM) and the deepest pool observed was approximately 3 feet in depth. The width between the tops of bank of the stream was approximately 50 feet. Riparian vegetation included arroyo willow (*Salix lasiolepis*), Pacific willow (*Salix lasiandra*) and narrowleaf willow (*Salix exigua*), located on the stream banks. Other vegetation within the top of bank included non-native grassland, dominated by wild oats, fennel, and bristly ox-tongue. Evidence of mowed vegetation and tree removal within the top of bank was observed. As a perennial stream, Washington Creek is within the jurisdiction of the U.S. Army Corps of Engineers (Corps) under 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under 401 of the CWA and the Porter Cologne Water Quality Control Act, and the Californian Department of Fish and Wildlife (CDFW) under Section 1602 of the California Fish and Game Code.

The arroyo willow thicket community was observed in a small patch along Washington Creek. The tree canopy was continuous and the understory was dense grass. The arroyo willow thicket is associated with the perennial stream and is considered riparian habitat. As such it is under the jurisdiction of the CDFW (Section 1602). Individual native trees within this community are considered "protected trees" in accordance with the City's Tree Ordinance.

# **Special-Status Species**

As detailed in the Biological Resource Assessment, several special-status species have moderate occurrence potential or were present within the study area. Details on these wildlife species ranges, habitat and foraging preferences, and occurrence potential are provide in the Biological Resources Assessment, see **Appendix B**. The following identifies special status species with moderate potential to occur or were observed (present) in the study area. The protected status for each species is also provided below:

- Fringed myotis (Myotis thysanodes). WBWG High Priority. Moderate Potential.
- Long-legged myotis (Myotis volans). WBWG High Priority. Moderate Potential.
- Pallid bat (Antrozous pallidus) CDFW Species of Special Concern. WBWG High Priority. Moderate Potential.
- Townsend's big-eared bat (Corynorhinus townsendii) CDFW Species of Special Concern. WBWG High Priority. Moderate Potential.
- Nuttall's woodpecker (Picoides nuttallii) USFWS Bird of Conservation Concern. Present.
- Oak titmouse (Baeolophus inornatus) USFWS Bird of Conservation Concern. Present.
- Western pond turtle (Actinemys marmorata) CDFW Species of Special Concern. Moderate Potential.
- Chinook Salmon Central Valley Fall/late fall-run ESU (*Orcorhynchus tshawytscha*) NMFS Species of Concern. CDFW Species of Special Concern. Moderate Potential.
- Steelhead Central California Coast DPS (*Orcorhynchus mykiss irideus*) Federal Threatened. Moderate Potential.
- Sacramento Splittail (*Pogonichthys macrolepidotus*) CDFW Species of Special Concern. Moderate Potential.

The first four special status species listed above are species of bats. Bat species have moderate potential to occur within existing onsite structures (buildings) and trees including those onsite and in the immediate vicinity along the riparian corridor of Washington Creek. The bird species (woodpecker and titmouse) typically inhabitant riparian areas and may occur along Washington Creek and onsite trees. The final four special status species listed above are associated with aquatic habitat and may occur within Washington Creek and in the case of the pond turtle basking along creek banks.

# **Biological Resources Impact Analysis:**

4.4 (a) (Special Status Species) Less Than Significant with Mitigation: As described above, the project site

and vicinity has moderate potential to support several special status species including bats, birds, pond turtle and fish. Bats could potentially roost in onsite buildings, and if present would be adversely affected during demolition. The bat species with moderate occurrence potential are species of special concern, but none are state or federally listed as endangered, threatened or candidates for listing. Impacts to special status bat species would be considered a potential impact and can avoided through implementation of **Mitigation Measure BIO-1**. Measure BIO-1 provides that building demolition occur outside of the bat roosting season or requires predemolition bat roost survey. In the event that roosts are identified, BIO-1 requires a 200-foot no work buffer until completion of the maternity season or through consultation with CDFW and under the direction of a qualified biologist. With implementation of BIO-1, potential impact to special status bat species will be avoided and impacts will be reduced to levels below significance.

The project site contains a few scattered mature trees and is immediately adjacent to Washington Creek, which contains riparian habitat and may provide suitable nesting or foraging habitat for Nuttall's woodpecker and Oak titmouse (USFWS Birds of Conservation Concern) and may support common songbirds, passerine bird species (such as warblers, flycatchers and swallows), and raptors. All of these birds are protected under the Migratory Bird Treaty Act (50 CFR 10.13) and their eggs and young are also protected under California Fish and Game Code Sections 3503, 3503.5. Potential impacts from the proposed project to the special-status bird species or other birds protected under the MBTA, include disturbance to nesting birds, and possibly death of adults and/or young if not properly mitigated. To avoid impact to special status bird species, **Mitigation Measure BIO-2** shall be implemented. Mitigation Measure BIO-2 requires that activities occur outside of the nesting season from September 1 through January 31 or through pre-construction surveys conducted within 14 days prior to start of work. With implementation of Mitigation Measure BIO-2, potential impacts to special-status birds, including those protected under the MBTA would be reduced to less than significant levels.

The project involves development activities adjacent to and extending into the top of bank of Washington Creek, which has a moderate potential of supporting the western pond turtle. The detention basin includes two pipes, a 6 inch outflow pipe and a 12 inch inflow pipe that extend to Washington Creek within the top of bank and above the ordinary high water mark (OHWM). If individual wester pond turtles are present the project could result in impacts to individuals during detention basin pipe installation. The proposed 12-inch culvert is large enough for a western pond turtle to pass through should individuals be near the pipe under high flood water conditions. To avoid impacts to western pond turtle **Mitigation Measure BIO-3** shall be implemented. BIO-3 requires that within 48 hours of the pipe installation activities within top of bank of Washington Creek, a qualified biologist conduct a preconstruction survey for western pond turtles and if present the biologist shall carry out relocation procedures in consultation with the CDFW. With measures BIO-3 through BIO-5 impacts to western pond turtle from the proposed project will be reduced to levels below significance.

The project involves development activities adjacent to and extending into the top of bank of Washington Creek, which has a moderate potential of supporting the special status fish species. Inflow and outflow pipes installation for the detention basin may require heavy equipment operating near Washington Creek, which could result in temporary impacts to water quality due to sediment, fuels or lubricant, or other toxic substances entering the creek. Individual fish could also become trapped in the pipes or in the detention basin during flood events. To avoid impacts to special status fish species **Mitigation Measure BIO-4** shall be implemented. BIO-4 requires that a screen be placed at the end of the inflow and outflow pipes, limits construction activities to the dry season, mandates that an accidental spill prevention and cleanup plan be prepared and identifies best management practices to protect water quality. With implementation of measures BIO-4 and BIO-5 impacts to special status fish species will be reduced to level below significance.

**4.4 (b) (Riparian Habitat) Less Than Significant:** The proposed project will not result in direct or indirect adverse impacts to riparian habitat along Washington Creek. The detention basin, inlet pipe and outfall pipe do not conflict with the arroyo willow thicket and no riparian tree removal or removal of riparian vegetation will occur from project development. The detention basin is set back approximately 20 feet from the top of bank and the proposed eight-foot-wide recreational trail is located within 5 feet of top of bank at the nearest location. Therefore, impacts to the riparian habitat along Washington Creek will be less than significant from the proposed project.

**4.4 (c) (Jurisdictional Waters) Less Than Significant with Mitigation:** The project includes development of a detention basin that will be located outside the top of bank of Washington Creek. The detention basin will be

hydraulically connected to Washington Creek through the installation of pipes positioned at a depth of 1 foot below grade and 6 feet below grade. Trenching activities to install the pipes for the detention basin will result in temporary impacts to upland grassland habitat on the upper creek bank. Pipes will extend below the top of bank but above the ordinary high water mark of Washington Creek. Trenching activities and discharge from the new pipes could result in soil erosion and sedimentation in Washington Creek, which would be considered a potentially significant impact affecting water quality of jurisdictional waters. To mitigate potential impacts to jurisdictional waters, **Mitigation Measure BIO-5** shall be implemented, which requires installing and maintaining soil erosion best management practices, limiting construction activities to the dry season, and if determined necessary by regulatory agencies compensatory offsets. Regulatory permits from the CDFW for a Streambed Alteration Agreement and from the RWQCB for a 401 Water Quality Certification Waste Discharge Requirement will be necessary for the detention basin outfall and improvements occurring within the top of bank. Because trenching and improvement will be located above the OHWM, regulatory permits from the Army Corps of Engineers is not required. With implementation of mitigation measure BIO-2 and adherence to regulatory permit conditions, the project's impacts to jurisdictional waters will be reduced to levels below significance.

- **4.4 (d) (Wildlife/Fish Movement) Less Than Significant with Mitigation:** The project involves activities adjacent to and within the top of bank of Washington Creek, which has moderate potential to support special status species including fish. With implementation of mitigation measures BIO-1 through BIO-5, potential impacts to wildlife and fish movement would be reduced to less than significant levels.
- **4.4 (e) (Conflict with Local Ordinances) Less Than Significant Impact**: The City of Petaluma's Tree Preservation Ordinance defines protected trees as California native oaks (*Quercus spp.*) 4 inches diameter or greater measured at 4.5 above grade ("diameter at breast height" or DBH), California buckeye (*Aesculus californica*) 6 inches DBH or greater, California bay (*Umbellularia californica*) 12 inches DBH or greater, coast redwood (*Sequoia sempervirens*) 18 inches DBH or greater, heritage trees as approved by Council resolution per Title 8 of the Petaluma Municipal Code, significant groves or stands of trees, trees located in riparian corridors, any tree required to be planted or preserved as mitigation or condition of approval for a discretionary development project, or trees in the public right-of-way.

The project specific Tree Preservation Plan (**Appendix C**) included an inventory of all trees onsite, which identified six trees. None of the six trees onsite are considered protected under the City's Tree Preservation Ordinance. The proposed project will not result in the removal of protected trees, nor otherwise adversely impact protected trees including the arroyo willow thicket (riparian) located in the study area. Therefore, the project will not conflict the City Tree Preservation Ordinance and impact will be less than significant.

**4.4 (f) (Conflict with Habitat Conservation Plan) No Impact:** There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other regional or state habitat conservation plan that exists for Petaluma. No impact would result under this criterion.

# **Biological Resources Mitigation Measures:**

- BIO-1: To avoid impacts to roosting bats, any project activities that would impact potential bat roosts (building demolition) shall be initiated outside of the maternity roosting season (March 1 July 31). If building demolition cannot occur outside of the maternity season, then a bat roost survey shall be conducted within 14 days prior to the start of such activities by a qualified biologist. Any structures or trees that are determined to support roosts shall have a 200-foot no work buffer placed around them, and the buffer shall remain in effect until the maternity season has completed as determined by a qualified biologist. If a 200 foot no work buffer is infeasible, then appropriate species- and roost-specific measures shall be developed by a qualified biologist in consultation with CDFW. The qualified biologist shall be granted authority to establish no work buffers and carryout species and roost specific protocol.
- **BIO-2:** For the protection of special-status birds, and native nesting birds protected by the MBTA and CFGC, future Project activities shall occur outside of the nesting season from September 1 January 31, to the extent feasible.

If working outside of the nesting season is not possible, and project activities are initiated during the nesting season (February 1 – August 31), a qualified wildlife biologist shall conduct a nesting bird survey no more than 14 days prior to the start of Project activities. If no active nests are identified during the surveys, no impacts will occur to birds and work will progress without restriction. If active nests are identified, a no-disturbance buffer around the nest shall be implemented to avoid impacts to nesting birds. Buffers shall be determined by a qualified biologist, and typically range from 25 feet to 500 feet depending on the species and protection status. Once a qualified biologist determined that the nest is no longer be active, because of young fledging or nest failure, the buffer around the nest shall be removed and work shall progress without restriction.

- **BIO- 3**: Within 48 hours prior to the initiation of Project work within the top of bank of Washington Creek, a qualified biologist shall conduct a preconstruction survey for western pond turtles. If a pond turtle is found during the survey, a qualified biologist shall relocate it outside of the work area, or it shall be allowed to move out of the area under its own power.
- **BIO-4**: To avoid and minimize potential impact to aquatic species, including special status fish species that may be present within Washington Creek, the following shall be implemented:
  - 1. Install and maintain a screen placed at the end of the 12-inch inflow pipe and 6-inch outflow pipe to prevent accidental entrapment of special status fish and other aquatic species.
  - 2. All construction work occurring within the top of bank of Washington Creek shall be completed during the dry season between July 15 and October 1.
  - 3. Prior to construction, the contractor shall be required to prepare an Accidental Spill Prevention and Cleanup Plan. This plan shall include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times.
  - 4. All refueling and maintenance of equipment, other than stationary equipment, shall occur at least 100 feet from the creek's top of bank. Refueling or maintenance of stationary equipment within the channel (top of bank to top of bank) shall only occur when secondary containment sufficient to eliminate escape of all potential fluids is in place. Any hazardous chemical spills shall be cleaned immediately.
  - 5. All stockpiling of construction materials, equipment, and supplies, including storage of chemicals, refueling and maintenance, with the exception of stationary equipment, shall occur as far as possible outside the creek channel. No equipment shall be washed where runoff could enter the creek.
  - 6. No motorized equipment shall be left within the channel (top of bank to top of bank) overnight.
  - 7. All construction activities shall be conducted in isolation from flowing water.
- **BIO-5**: To avoid, minimize and offset potential impact to waters of the united states and waters of the state (Washington Creek), the following shall be implemented:
  - 1. Install and maintain soil erosion/sedimentation best management practices (BMP) prior to and during construction and following construction apply permanent BMPs for soil and erosion control such as seeding with a native erosion control seed mix).
  - 2. Trenching and ancillary activities associated with the detention basin pipe installation shall occur during the dry season between July 15 and October 1. Trenches shall be back filled to match original land contours.
  - 3. A dissipation apron shall be incorporated into the construction plans of the detention basin and shall be located below the 6-inch pipe outflow to minimize erosion of the stream bank. If the apron extends below the OHWM of Washington Creek, then a 404 permit from the Army Corps of Engineers shall be obtained.
  - 4. Compensatory mitigation for temporary and permanent impacts to the Washington Creek bank, if determined necessary by regulatory agencies (CDFW and RWQCB) during permit application process, may be required at a ratio of 1:1 or as otherwise directed by the permit requirements. If compensatory mitigation is required, then the applicant shall purchase mitigation credits at a suitable mitigation bank in accordance with permit requirements.

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5. Prior to initiating construction activities within RWQCB or CDFW jurisdiction, regulatory permits shall be obtained, conditions therein shall be implemented, and copies of the permits/agreements shall be provided to the City of Petaluma.

# 4.5. CULTURAL RESOURCES

Wo	uld the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				$\boxtimes$
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		$\boxtimes$		
c)	Disturb any human remains, including those interred outside of formal cemeteries?			$\boxtimes$	

**Cultural Resources Setting:** Petaluma's historic and cultural resources contribute to the city's unique character and identifiable sense of place. The city and adjacent areas contain resources that date to the inhabitation of the Coastal Miwok Tribe and a number of resources that visibly chronicle the evolution of the city from early settlement through present day. Such resources include buildings, structures, landscapes, sites, and objects. The history of Petaluma is present in the contemporary landscape and the unique character that arises from the side by side existence of new and old. Petaluma's historical resources are preserved and encouraged through policies and programs that serve to maintain the historic character.

# **Cultural Resources Impact Analysis**

- **4.5 (a) (Historical Resource) No Impact:** The project is not located within a historic district and does not contain a designated historic landmark. A Historic Resource Evaluation (**Appendix D**) prepared for the project site found no evidence that the existing buildings and structure onsite are significant historical resource or eligible resources as they fail to meet one or more of the criterion for listing in the California Register of Historic Resources. None of the existing buildings or structure onsite are eligible for listing as historic resources at the local, state, or national level, nor do they represent or convey any important architectural, visual, or cultural features that are important in preserving the historic character of the existing neighborhood. As such, demolition of the onsite buildings and structures will not impact historical resources. Therefore, the project will have no impacts related to historical resources.
- **4.5 (b) (Archaeological Resources) Less than Significant with Mitigation:** The City of Petaluma has a rich archeological history due to the presence of the Coast Miwok Indians prior to European settlers in California. As such, undisturbed lands within the Urban Growth Boundary, particularly lands in the vicinity of ridgetops, midslope terraces, alluvial flats, ecotones, and sources of water have a greater possibility of containing a prehistoric archaeological resource. Potentially significant archeological resources include, but are not limited to concentrations of artifacts or culturally modified soil deposits, modified stone, shell, bone, or other cultural materials such as charcoal, ash, and burned rock indicative of food procurement or processing activities, or prehistoric domestic features including hearths, fire pits, or house floor depressions or other such historic artifacts (potentially including trash pits and all by-products of human land use greater than 50 years of age).

The project site has been used for residential purposes, including activities that would have resulted in ground disturbance, and there is no past record of archeological resources onsite. Nonetheless, there is the potential for archeological resources to be discovered during ground disturbing construction activities. In order to avoid inadvertently causing a substantial adverse change in the significance of an archaeological resource,

**Mitigation Measure CUL-1** provides all work shall halt in the event that a potential archeological resource is unearthed during construction. Should any archeological features be identified during construction, the CUL-1 requires compliance with CEQA §21083.2 and CEQA Guidelines §15064.5. Given the project's location and application of a condition addressing accidental discovery, the project is not expected to result in a substantial adverse change to an archaeological resource. Therefore, with implementation of CUL-1 potential impacts will be reduced to less than significant levels.

**4.5 (c) (Human Remains) Less than Significant with Mitigation:** No evidence suggests that human remains have been interred within the boundaries of the project site. However, in the event that during ground disturbing activities, human remains are discovered to be present, all requirements of state law pursuant to California Health and Safety Code Section (CA HSC) 7050.5 shall be duly complied with, including the immediate cessation of ground disturbing activities near or in any area potentially overlying adjacent human remains and contacting the Sonoma County Coroner upon the discovery of any human remains. If it is determined by the Coroner that the discovered remains are of Native American descent the Native American Heritage Commission shall be contacted immediately. If required, the project sponsor shall retain a City-qualified archeologist to provide adequate inspection, recommendations and retrieval. Compliance with CA HSC Section 7050.5 and performance of actions therein will ensure that in the event of accidental discovery of historically significant remains all impacts will remain at levels below significance.

# **Cultural Resources Mitigation Measures:**

**CUL-1**: If during the course of ground disturbing activities, including, but not limited to excavation, grading and construction, a potentially significant prehistoric or historic resource is encountered, all work within a 100 foot radius of the find shall be suspended for a time deemed sufficient for a qualified and city-approved cultural resource specialist to adequately evaluate and determine significance of the discovered resource and provide treatment recommendations. Should a significant archeological resource be identified a qualified archaeologist shall prepare a resource mitigation plan and monitoring program to be carried out during all construction activities.

# 4.6. ENERGY

<ul> <li>a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?</li> <li>b) Conflict with or obstruct a state or local plan for renewable</li> </ul>	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
,			
energy or energy efficiency?			

**Energy Setting:** Energy resources include electricity, natural gas and other fuels. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. Energy production and energy use both result in the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emission of pollutants. Energy usage is typically quantified using the British Thermal Unit (BTU). The BTU is the amount of energy that is required to raise the temperature of one pound of water by one degree Fahrenheit.

County Regional Climate Action Plan, prepared by the Sonoma County Regional Climate Protection Authority, July 2016.

The City of Petaluma contains energy resources that encompass a variety of fuels that provide lighting for residential and commercial uses, provide heating and cooling for indoor environments, and aid in the operation of transportation systems. In 2010 the City of Petaluma's annual household consumption rate was 6,000 kwh

(electricity) and 493 therms (natural gas). The City of Petaluma's largest energy consumer is the transportation sector.

The General Plan contains goals, policies and programs to reduce energy consumption. Chapter 2: Community design, Character, and Green Building identifies sustainable building strategies and practices, which minimize energy consumption. Chapter 4: The Natural Environment contains policies and programs to reduce reliance on non-renewable energy sources in existing and new development. Energy policies supporting alternative and efficient transportation systems, and the reduction of energy consumption in buildings by means of appropriate design and orientation are identified in Section 3.3: Sustainable Building and Chapter 5: Mobility. Residential energy efficiency is addressed in Chapter 11: Housing Element.

# **Energy Impact Analysis:**

- **4.6 (a) (Wasteful, Inefficient, Unnecessary Consumption of Energy) Less Than Significant Impact:** Energy would be consumed through daily operation of the new residential buildings, the delivery of water for potable and irrigation purposes, solid waste management, and vehicle use. While the long-term operation of the project would result in an increase in energy consumption compared to existing conditions, the project will incorporate design measures (related to electricity, natural gas and water use) in compliance with CalGreen requirements that minimize energy consumption. Operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy. Furthermore, the project includes rooftop solar, on each building, which will offset energy consumption for the life of the project. Therefore, impacts due to wasteful energy consumption would be less than significant.
- **4.6 (b) (Conflict with State or Local Plan) Less than Significant Impact:** In December 2007, the CEC prepared the State Alternative Fuels Plan in partnership with the CARB and in consultation with the other state, federal, and local agencies.<sup>3</sup> The plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce greenhouse gas emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality. As a 13-unit residential development that would install energy conservation features, the proposed project would not conflict with or obstruct implementation of the State Alternative Fuels Plan and impacts would be less than significant.

**Energy Mitigation Measures:** None required.

# 4.7. GEOLOGY AND SOILS

Would	the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
SU	rectly or indirectly cause potential bstantial adverse effects, including the risk of loss, injury, death involving:				
i.	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Publication 42.				
ii.	Strong Seismic ground shaking?			$\boxtimes$	
iii.	Seismic-related ground failure, including liquefaction?			$\boxtimes$	

<sup>&</sup>lt;sup>3</sup> California Energy Commission, Final Adopted State Alternative Fuels Plan, Adopted December 2007, http://www.energy.ca.gov/ab1007/, Accessed September 12, 2008.

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i	iv. Landslides?			$\boxtimes$	
b)	Result in substantial soil erosion or the loss of topsoil?		$\boxtimes$		
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			$\boxtimes$	
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?		$\boxtimes$		
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				$\boxtimes$
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			$\boxtimes$	
Sources: 2025 General Plan and EIR; GP DEIR Fig. 3.7-5 Geologic Hazards; and Soils Investigation Report, prepared					

**Geology and Soils Setting:** The City of Petaluma is located within California Building Code (CBC) Seismic Zone 4 and is susceptible to the effects of regional seismic activity that in the past has produced moderate to strong ground shaking reaching intensity levels of V to VIII according to the modified Mercalli scale. The nearest known active fault trace identified by the state under the Alguist-Priolo Earthquake Fault Zoning Act of 1972 is

by Reese & Associates Consulting Geotechnical Engineers, October 3, 2018.

known active fault trace identified by the state under the Alquist-Priolo Earthquake Fault Zoning Act of 1972 is the Rodgers Creek segment of the Hayward- Rodgers Creek Fault Zone. The traces of the Rodgers Creek Fault have not been active within the last 200 years, but have exhibited activity within the last 11,000 years. There are no earthquake fault zones and no known active faults within the City's UGB. Nonetheless, seismic events in the region have the potential to result in geologic hazards from strong seismic ground shaking.

Expansive soils and soil erosion also remain a concern within the City of Petaluma. The clay rich soils in Petaluma typical of low-lying regions and valley floodplains have a tendency to shrink or swell according to fluctuations in moisture content. Without proper geotechnical considerations, buildings, utilities and roads can be damaged by expansive soils due to soil properties that can cause cracking, settling and weakening of foundations. To reduce the potential risks posed by the presence of expansive soils, the City's building code requires that any construction site that is intended for human occupancy and suspected to contain expansive soils be investigated and mitigated accordingly.

A site specific soil investigation report was prepared by Reese & Associates to identify potential geological risks (**Appendix E**). The soils report is informed by three test borings that were drilled to depths of approximately 12 to 49 feet. The primary geotechnical concerns of the site are associated with existing fill materials and expansive soils.

# Geology and Soils Impact Discussion:

**4.7 (a.i.) (Faults) No Impact:** Fault rupture occurs when the ground surface fractures from fault movement during an earthquake and almost always follows preexisting fault traces, which are zones of weakness. Given that the project site does not overlap with an Alquist-Priolo Earthquake fault zone and no identified active faults traverse the site, there is no expectation that the site would be vulnerable to fault rupture. There is no risk of fault-related ground rupture during earthquakes within the limits of the site due to a known Alquist-Priolo Earthquake Fault Zone. Therefore, there are no impacts due to a fault rupture at the project site.

4.7 (a.ii) (Ground-Shaking) Less than Significant Impact: The proximity of the City's UGB to the Hayward

Rodgers Creek Fault Zone places it within Zone IX, "Violent" on the Mercalli Intensity Shaking Severity level. The project site is located approximately 4.5 miles to the Rodgers Creek Fault to the northeast, 15 miles to the San Andreas Fault to the southwest, 17 miles to the West Napa Fault to the east. As such, the project site holds potential to expose people and structures to potentially substantial adverse effects resulting from strong seismic ground shaking. The resultant vibrations would likely cause primary damage to buildings and infrastructure with secondary effects being ground failures in loose alluvium and poorly compacted fill. Both the primary and secondary effects of seismic activity pose a risk of loss of life or property.

The intensity of earthquake motion will depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site specific geologic conditions. The soil investigation report identified the following earthquake design data:

Table 3: 2016 CBC Ground Motion Parameters					
Site Class	D				
Ss	1.626 g				
S <sub>1</sub>	0.639 g				
S <sub>DS</sub>	1.084 g				
S <sub>D1</sub>	0.639 g				
Source: Soils Investigation Report, prepared by Reese &					
Associates, October 2018					

Conformance with standards set forth in the Building Code of Regulations, Title 24, Part 2 (the California Building Code 3.7-20 Chapter 3: Setting, Impacts, and Mitigation Measures [CBC]) and the California Public Resources Code, Division 2, Chapter 7.8 (the Seismic Hazards Mapping Act) will ensure that potential impacts from seismic shaking are less than significant. Adherence to Class D specifications for ground motion parameters will ensure that the proposed buildings and associated improvements onsite would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death as a result of seismic activity. Therefore, potential impacts from ground shaking will have a less than significant impact.

- **4.7 (a.iii-iv) (Ground Failure, Liquification, and Landslides) Less than Significant Impact:** Seismically inducted ground failure can occur during strong earthquakes, which could potentially expose people and property to risks. Liquefaction is the rapid transformation of saturated, loosely packed, fine grained sediment to a fluid like state as a result of ground shaking. Landslides can occur from ground shaking and the presence of liquefied subsurface materials. Landslides are typically limited to slopes steeper than 15% and confined to areas underlain by geologic units that have demonstrated stability problems in the past. The project site is generally flat and is not at risk of exposure to landslides. According to the Soil Investigation Report, the risk of liquification is considered low due to the presence of clayey fines and depth to groundwater. Therefore, potential impacts associated with ground failure, liquefaction and landslides will be less than significant.
- **4.7 (b) (Erosion) Less than Significant Impact with Mitigation:** Preparation for site grading will involve demolition of the existing structures, removal of vegetation and root systems, and excavation of the undocumented fill. Development of the project has the potential to result in soil erosion if not properly controlled. In order to ensure that potential impacts related to soil erosion are reduced to levels below significant, **Mitigation Measure GEO-1**, set forth below, requires that the applicant to submit an erosion control plan that identifies measures to be implemented during construction and establishes provisions for grading activity during the rainy season. With implementation of GEO-1, impacts associated with soil erosion will be reduced to less than significant levels.
- **4.7 (c) (Unstable Geologic Unit) Less than Significant Impact:** The project site is generally flat and exhibits a minimal grade with no apparent soil migration within the project site boundaries. No signs of soil creep or lateral spreading are readily apparent on or near the project site, nor is the project site located in an area known to be particularly susceptible to landslides, lateral spreading, subsidence or collapse. The project site is not known to contain an especially unstable geologic unit that may become unstable as a result of development activities. Adherence to standard CBC stipulations are sufficient to ensure that impacts related to landslides, lateral spreading, subsidence, and collapse would remain at less than significant levels with the introduction of the proposed development. Therefore, the project would have less than significant impacts due to the presence of a geologic unit or soil that is unstable, or that would become unstable as a result of the project.

- **4.7 (d) (Expansive Soils) Less than Significant Impact with Mitigation:** Expansive soils are a concern within the Urban Growth Boundary including the project site. In order to ensure that the presence of expansive soils does not result in significant impacts, recommendations set forth in the Soil Investigation Report and as directed by the City Engineer shall be implemented in accordance with **Mitigation Measure GEO-2**. Measures to correct expansive soils include but are not limited to pre-watering prior to the placement of foundations, removal of expansive material and replacement with non-expansive fill, and/or the use of soil stabilizers. With implementation of mitigation measure GEO-2 potential impacts due to the presence of expansive soils will be reduced to levels below significance.
- **4.7 (e) (Septic Tanks) No Impact:** The proposed project will be connected to the existing sewer system that treats all wastewater effluent generated within the UGB. There are no septic tanks or alternative wastewater disposal systems proposed as part of the project. Therefore, there will be no impact resulting from the adequacy of soils to support septic tanks or other wastewater disposal system.
- **4.7 (f) (Paleontological Resources) Less than Significant Impact:** The Petaluma General Plan does not identify the presence of any paleontological or unique geological resources within the boundaries of the UGB. The project site has experienced ground disturbance from previous development activities and the proposed development will not extend to depths were such resources are typically encountered. As such, there is limited potential for paleontological resources to be present on the project site. Given the project's location and application of a condition addressing accidental discovery, the project is not expected to result in a substantial adverse change to unique paleontological or geologic resources and impacts will be less than significant.

# **Geology and Soils Mitigation Measures:**

- **GEO-1**: Prior to issuance of a grading permit, an erosion control plan along with grading and drainage plans shall be submitted to the City Engineer for review. All earthwork, grading, trenching, backfilling, and compaction operations shall be conducted in accordance with the City of Petaluma's Grading and Erosion Control Ordinance #1576, Title 17, Chapter 17.31 of the Petaluma Municipal Code. These plans shall detail erosion control measures such as site watering, sediment capture, equipment staging and laydown pad, and other erosion control measures to be implemented during construction activity on the project site.
- **GEO-2**: As determined by the City Engineer and/or Chief Building Official, all applicable recommendations set forth in the in Soils Investigation Report (Reese & Associates) prepared for the subject property, including, but not limited to grading, excavation, foundations systems, and compaction specifications shall be incorporated. Final grading plan, construction plans, and building plans shall demonstrate that recommendations set forth in the geotechnical reports have been incorporated into the design of the project.

Nothing in this mitigation measure shall preclude the City Engineer and/or Chief Building Official from requiring additional information to determine compliance with applicable standards. The geotechnical engineer shall inspect the construction work and shall certify to the City, prior to issuance of a certificate of occupancy that the improvements have been constructed in accordance with the geotechnical specifications.

### 4.8. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
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?			$\boxtimes$	
Sources: 2025 General Plan and EIR; Climate Action 2020 an July 2016; and 2017 BAAQMD CEQA Guidelines.	d Beyond So	noma County R	egional Climat	e Action Plan,

**Greenhouse Gas Setting:** Greenhouse gases (GHGs) are generated from natural geological and biological processes and through human activities including the combustion of fossil fuels and industrial and agricultural processes. GHGs include carbon dioxide (CO2), nitrous oxide (N2O), methane (CH3), chlorofluorocarbons, hydrofluorocarbons and perfluorocarbons.

While GHGs are emitted locally they have global implications. GHGs trap heat in the atmosphere, which heats up the surface of the Earth. This concept is known as global warming and is contributing to climate change. Changing climatic conditions pose several potential adverse impacts including sea level rise, increased risk of wildfires, degraded ecological systems, deteriorated public health, and decreased water supplies.

To address GHG's at the State level, the California legislature passed the California Global Warming Solutions Act in 2006 (Assembly Bill 32), which requires that statewide GHG emissions be reduced to 1990 levels by 2020. Executive Order S-3-05 provides the California Environmental Protection Agency with the regulatory authority to coordinate the State's effort to achieve GHG reduction targets. S-3-05 goes beyond AB 32 and calls for an 80 percent reduction below 1990 levels by 2050. Senate Bill 375 has also been adopted, which seeks to curb GHGs by reducing urban sprawl and vehicle miles traveled.

The City of Petaluma has taken steps to address GHG emissions within city limits. The City adopted Resolutions 2002-117, 2005-118, and 2018-009 (incorporated herein by reference), which calls for the City's participation in the Cities for Climate Project effort and established GHG emission reduction targets.

A Climate Action Plan has been prepared in partnership with the County and other local jurisdictions (July 2016). This effort implements General Plan Policy 4-P-27. A number of General Plan policies serve to reduce GHG emissions associated with project construction, design and operation. General Plan Goal 5-G-8, which calls for the City to "expand the use of alternative modes of mobility serving regional needs," is being implemented in part through the Sonoma Marin Area Rail Transit (SMART) Plan, which as of Fall 2017 provides light rail commuter service to Petaluma. The light rail effort is estimated to take more than 1.4 million car trips off Highway 101 annually and reduce GHGs by at least 124,000 pounds per day. In addition, General Plan policy 3-P-127 requires that projects prepare a Construction Phase Recycling Plan that would address recycling of major waste generated by demolition and construction activities.

In 2016, the City adopted an update to the California Building Standards Code, which contains the mandatory California Green Building Standards Code (CalGreen). All new development within the City of Petaluma must comply with these standards, which generally achieve energy efficiency approximately 15% beyond Title 24 as well as construction waste reduction rate of 65%. As such, new development is expected to be more energy efficient, use fewer resources and emit fewer GHGs.

On January 22, 2018, the City of Petaluma adopted Resolution No. 2018-009 N.C.S reaffirming the City's intent to reduce greenhouse gas emissions as part of a coordinated effort through the Sonoma County Regional Climate Protection Authority. As presented in the Sonoma County Climate Action Plan, the City of Petaluma could achieve GHG reduction through a combination of state, regional and local measures. Reduction measures at the state level are promulgated through state laws and mandates addressing topics, including but not limited to vehicle fuel efficiency standard, green building standards, low carbon fuel standards and the Renewable Portfolio Standard. When realized locally in Petaluma, these measures will achieve a GHG reduction in the amount of 119,000 metric tons of carbon dioxide equivalence (MTCO<sub>2</sub>e). Separate regional efforts implemented within Petaluma by entities such as the Regional Climate Protection Authority, Sonoma County Water Agency, County of Sonoma Energy Independence Office, Sonoma County Transportation Authority, and Sonoma Clean Power will result in an additional GHG reduction of 28,200 MTCO<sub>2</sub>e. Under the City of Petaluma's authority, the Sonoma County Climate Action Plan identifies 12 goals and 24 measures that would achieve an additional GHG reduction of 18,490 MTCO<sub>2</sub>e. Taken altogether, the state, regional and local

measures combined can achieve a GHG reduction of 166,350 MTCO2e within Petaluma.

Under a business as usual approach (i.e., without state, regional or local GHG reduction measures), the City of Petaluma is projected to emit 542,970 MTCO<sub>2</sub>e by 2020. With implementation of reduction measures, GHG emissions would be reduced to 376,620 MTCO<sub>2</sub>e. This represents a 31% reduction of GHG emissions relative to the 1990 per capita emission levels.

At present, the Sonoma County Regional Climate Action Plan is an advisory document to assist the City in achieving its stated intent to reduce GHG emissions. Development projects within the City of Petaluma are encouraged to comply with the intent of the Climate Action Plan and realize GHG reductions through voluntary application of reduction measures.

# **Greenhouse Gas Impact Analysis**

**4.8 (a) (Significant GHG Emissions) Less than Significant Impact:** Greenhouse gas emissions associated with the proposed project would result from short-term construction activities and ongoing operation. BAAQMD "screening criteria" provide a conservative estimate above which a project would be considered to have a potentially significant impact to air quality. Projects that are below the screening criteria levels are reasonably expected to result in less than significant impacts to greenhouse gases since pollutant emissions would be minimal. When projects fall below the screening criteria levels, a quantitative analysis of the project's air quality emissions is not required.

As presented in Table 2 above, the GHG screening level criteria for multi-family residential development is 78 dwelling units. The project proposes the development of 13 multi-family units, which is well below the GHG screening size. As such, it can be conclusively determined that the proposed project would have less than significant impacts due to GHG emissions.

**4.8 (b) (GHG Plan Conflict) Less than Significant Impact:** The proposed project is consistent with applicable GHG regulations and General Plan policies. The project is required to comply with the CalGreen Building standards and 2016 Building & Energy Efficiency Standards. The project proposes the installation of roof top solar and in accordance with 2016 CalGreen garages will be pre-plumed for electrical vehicle-charging. Two electric vehicle charging stations will be provided onsite. Additionally, the project includes water efficient landscaping, complies with the maximum applies water allowance and the City's water conservation regulations. As a condition of project approval, the project will develop a Construction Phase Recycling Plan pursuant to policy 2-P-122 to address the disposal of materials from demolition and construction. As proposed, the project is consistent with relevant General Plan policies and GHG regulations. Therefore, potential impacts due to the generation and emission of greenhouse gases would be less than significant.

Greenhouse Gas Mitigation Measures: None required.

# 4.9. HAZARDS/HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
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			$\boxtimes$	

	or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?				
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 of 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?				$\boxtimes$
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.				$\boxtimes$
Sources: 2025 General Plan and EIR; Sonoma County Well and Septic Systems; and Phase I Environmental Site Assessment, prepared by Trans Tech Consultants, December 18, 2018.					

Hazards/Hazardous Materials Setting: Regulations governing the use, management, handling, transportation and disposal of hazardous materials and waste are administered by federal, state and local governmental agencies. Federal regulations governing hazardous materials and waste include the Resource Conservation, and Recovery Act of 1976 (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA); and the Superfund Amendments and Re-authorization Act of 1986 (SARA).

In California hazardous materials and waste are regulated by the Department of Toxic Substances (DTSC). Pursuant to the California Planning and Zoning Law the DTSC maintains a hazardous waste and substances site list, also known as the "Cortese List." In California the Secretary for Environmental Protection established the Unified Hazardous Materials and Hazardous Waste Management Program, also known as "Unified." The Unified program is intended to consolidate and ensure consistency in the administration of requirements, permits and inspections for six programs, including the Underground Storage Tank (UST) program.

The six programs established by the Unified Program are administered and implemented locally through "Certified Unified Program Agencies" (CUPA). The Petaluma CUPA manages the acquisition, maintenance and control of hazardous materials and waste generated by industrial and commercial business under the auspices of the Petaluma Fire Department. Under CUPA, projects that intend to store, transport or generate hazardous waste must apply for and obtain a permit and submit a Hazardous Materials Release Response Plan and Inventory on an annual basis.

# **Phase I Environmental Site Assessment**

In accordance with the guidelines of the American Society of Testing and Materials (ASTM) Standard Practice E1527-13 Standard Practices Trans Tech Consultants prepared a Phase I Environmental Site Assessment (ESA) for the property at 109 Ellis Street on December 18, 2018 (**Appendix F**). The Phase I ESA discusses the Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs), and Historical Recognized Environmental Conditions (HRECs), none of which were identified in connection with the site assessment. The Phase I ESA identified the following:

- Four sites (Sherwin-Williams, Sonoma Marin Fairgrounds, Shell Service Station, and Former ARCO Station) ranging from 400 to 1,600 feet from the property are listed in regulatory databases due to past incidences. All four are in regulatory compliance or have received site closure status.
- A records review of the City of Petaluma (Fire Department and Building Department), North Coast Regional Water Quality Control Board, County of Sonoma (Department of Health Services, Permit Resources Management Department, and Fire & Emergency Services), and California Department of Water Resources indicated no files for the subject property.
- A review of Aerial Photographs indicate that existing structures onsite were present as early as 1942
  and surrounding land was in agricultural use until 1968 when apartments on the south side of Ellis
  Street were constructed. By 1982 surrounding uses including single and multi-family housing and the
  school were developed.
- Site reconnaissance identified four residential units and a gravel covered driveway. No sign of hazardous materials waste or storage was observed. Minimal (de-minimis) oi staining was present in the areas of vehicle parking.

The primary hazardous materials considerations related to the project include proper disposal and removal of demolition debris during construction.

## Hazards/Hazardous Materials Impact Analysis:

- **4.9 (a) (Routine Transport) Less than Significant Impact:** As a residential use the project will not create a significant hazard to the public or the environmental through the routine transport, use, or disposal of hazardous materials. There are no elements of the residential project that require the routine transport, use of disposal of hazardous materials. Activities onsite are limited to residential uses which do not typically require the use of hazardous materials nor generate hazardous waste. As a residential development, common household cleaners, solvents, and other products may be routinely used, which do not present a significant hazard to people or the environment. The project also includes a proposed pool and landscaping, which require maintenance and may involve application and storage of regulated chemicals, fuels, and related products. Potentially hazardous materials such as common household products, pool chemicals, and landscaping supplies may be transported to the project site in small quantities intended for consumer use. Additionally, materials are required to be handled, transported and stored in manner that is in compliance with all existing federal, state and local regulations. Therefore, impacts from the project due to routine transport of hazardous materials and hazardous waste will be less than significant.
- **4.9 (b) (Upset and Accident Involving Release) Less than Significant Impact with Mitigation:** Site preparation and construction activities will result in the temporary presence of potentially hazardous materials including, but not limited to fuels and lubricants, paints, solvents, insulation, electrical wiring, and other construction related materials onsite. All potentially hazardous materials present onsite are required to be handled, stored and disposed of in compliance with all existing federal, state and local safety regulations. Once construction is complete there will not be any ongoing use or generation of hazardous materials onsite, except as may be necessary for ongoing maintenance, onsite landscaping and the proposed pool.

Ongoing use of hazardous materials and hazardous waste related to maintenance and landscaping activities and pool operations include chemicals, paints and architectural coating, and fuels. The limited volume of such materials onsite is not expected to create a hazard to the public or environment due to accidental release. All potentially hazardous materials are required to be handled, stored and disposed of in compliance with all existing federal, state and local safety regulations.

Construction of the proposed project involves demolition and removal of existing structures and improvements onsite. Given the age of existing buildings, there a potential that asbestos-containing materials (ACM) and lead-based paints (LBP) may be present. If such materials are present, demolition activities could release ACM and LBP, potentially impacting people and the environment. Compliance with **Mitigation Measure HAZ-1**, which requires an asbestos and lead-based paint survey prior to demolition of the existing structures and the

implementation of Occupational Safety and Health Administration (OSHA) procedures for removal and disposal, will ensure potential impacts related to ACMs or LBP are reduced to less than significant levels.

In addition to onsite aboveground structures, the project site contains a groundwater well and may support one or more buried septic tanks. As described in the Phase I ESA there is no evidence that the site contains contamination or have been impacted by nearby releases. In order to ensure that groundwater is protect during well removal or abandonment **Mitigation Measure HAZ-2** shall be implemented, which requires that the existing well be properly decommissioned per applicable Sonoma County regulations. Similarly, any underground holding tanks, septic or otherwise, shall be removed and properly disposed of in accordance with Sonoma County regulations (**Mitigation Measure HAZ-3**).

Implementation of measures HAZ-1 through HAZ-3 and compliance with other required regulations governing hazardous materials, will ensure that potential hazards to the public or the environment due to upset or accidental release of hazardous materials, will be reduced to less than significant levels.

**4.9 (c) (Emit or Handle Hazardous Materials within** ½ **Mile of School) Less than Significant Impact:** The project site is located approximately 100 feet from the existing McKinley Elementary School. Adherence to existing federal, state and local regulations will ensure that all potentially hazardous materials onsite are properly labeled, transported and stored. Established policies and programs set forth by the EPA, DTSC, CAL/OSHA and other regulatory agencies provide that the presence of potential hazardous materials occurs in the safest possible manner by reducing the risk of accident release and ensuring that a response plan is in place.

The Petaluma Fire Prevention Bureau regulates hazardous materials. If and when construction activities involve the on-site storage of potentially hazardous materials, a declaration form will be filed with the Fire Marshal's office and a hazardous materials storage permit will be obtained. Compliance with Federal, State and Local regulations will ensure that potential impacts due to the proximity of the school to the subject site would be less than significant.

- **4.9 (d) (Government Code §65962.5 Site) No Impact:** There are no Cortese sites located within the City of Petaluma, including that of the project site. The project will not create a significant hazard to the public or the environment due to an identified Cortese site. Therefore, the project would have no impact associated with a hazardous materials site.
- **4.9 (f) (Public Airport Land Use Plan) No Impact:** The project is not located within the boundaries of an airport land use plan or located in close proximity to a private airstrip; the nearest airport is the Petaluma Municipal Airport located approximately 2 miles northeast of the project site. Therefore, no impacts associated with airport-related hazards are expected.
- **4.9 (e) (Impair Emergency Response Plan) No Impact:** The project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. The project will not alter any emergency response or evacuation routes. Site access adequately accommodates emergency vehicles and provide connectivity to the existing circulation and street system. Therefore, the proposed Project will have no impact on the emergency response plan or emergency evacuation plan.
- **4.9 (g) (Wildland Fire) No Impact:** Wildland fires are of concern particularly in expansive areas of native vegetation of brush, woodland, grassland. The project site is located within central Petaluma, surrounded by roadways and developed land uses. Therefore, there are no impacts related to the exposure of people or structures to a significant risk of loss, injury or death involving wildland fires.

#### **Hazards/Hazardous Materials Mitigation Measures:**

HAZ-1: In order to avoid potential impacts related to the release of asbestos-containing materials or lead-based paint, an asbestos survey adhering to sampling protocols outlined by the Asbestos Hazard Emergency Response Act (AHERA) and lead-based paint screening shall be conducted prior to demolition of the existing structures. In the event that such substances are found, the applicant shall be subject to requirements set forth by the Occupational Safety and Health Administration (OSHA) AHERA requirements, lead standard contained in 29 CFR 1910.1025 and 1926.62, and any other

local, state, or federal regulations. Treatment, handling, and disposal of these materials shall adhere to all requirements established by OSHA and other agencies.

- **HAZ-2**: The existing well contained with a detached outbuilding onsite shall be properly abandoned or decommissioned in accordance with applicable regulations established by the County of Sonoma. As application, a deconstruction permit shall be obtained from the County of Sonoma and all provisions therein shall be implemented.
- **HAZ-3**: Any buried holding tanks including septic systems shall be properly decommissioned in accordance with applicable regulations established by the County of Sonoma. Removal of underground tanks shall be immediately followed by backfill in accordance with Engineering recommendations. Materials shall be properly disposed of at permitted facilities.

## 4.10. HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		$\boxtimes$		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			$\boxtimes$	
c) Substantially alter the existing drainage pattern on 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:				
<ul> <li>result in substantial erosion or siltation on- or off- site;</li> </ul>			$\boxtimes$	
<li>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</li>				
<li>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</li>				
iv. impede or redirect flood flows?				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?		$\boxtimes$		
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			$\boxtimes$	

Sources: City of Petaluma General Plan 2025 and EIR; Our Coast Our Future; Sonoma County Water Agency Stream maintenance program Zone 2A; Federal Emergency Management Agency's Flood Insurance Rate Map, Map Number 06097C0982G, October 2, 2015; Preliminary Stormwater Control Plan for a Regulated Project, prepared by Steven J.

Lafranchi & Associates, November 30, 2018; and Hydrology Study prepared by Steven J. Lafranchi & Associates, December 2018.

**Hydrology and Water Quality Setting:** Surface water quality is regulated by the North Coast RWQCB via the Water Quality Control Plan for the North Coast (Basin Plan). The RWQCB is responsible for implementing Section 401 of the Clean Water Act through the issuance of a Clean Water Certification when development includes potential impacts to jurisdictional areas such as creeks, wetlands or other Waters of the State.

Section 402 of the Clean Water Act regulates the discharge of pollutants to waters of the U.S. Locally, this is implemented through the National Pollution Discharge Elimination System (NPDES) General Permit. Requirements apply to the project's construction activities including grading, grubbing, and other site disturbance.

The Petaluma River is the primary watercourse within the City of Petaluma and the Petaluma watershed (an area of approximately 46 square miles). The Petaluma River is tidally influenced and flows in a southeast direction into San Pablo Bay. The Petaluma River is used for recreational boating and water sports as well as long standing river dependent industrial operations. Several creeks and streams are tributary to the Petaluma River including Washington Creek.

The Sonoma County Water Agency (SCWA) manages flood control facilities throughout the County, including flood Zone 2A, within which the entire City of Petaluma is located. SCWA is responsible for structural repairs to culverts and spillways, grading and reshaping channels, and debris removal to maintain hydraulic capacity of all waterways within Zone 2A. The segment of Washington Creek within the study area is identified as an SCWA owned in fee-engineered channel.

Construction activities on more than one acre are subject to NPDES permitting requirements including, the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The NPDES General Permit requirements also address post-construction conditions resulting from development including, but not limited to, through Low Impact Development (LID) requirements. Under LID requirements, new development, including the project, is required to mimic pre-developed conditions, protect water quality, and retain runoff from impervious surfaces onsite.

As the project site is less than one acre, requirements for a SWPPP is not triggered. A preliminary stormwater control plan in accordance with the Bay Area Stormwater Management Agencies Association (BASMAA) has been prepared. The Preliminary Stormwater Control Plan identifies low impact development (LID) design strategies such as the use of permeable pavement and dispersal of runoff to pervious areas. It also documents the design of the joint bioretention/detention basin, stormwater collection and discharge points, drainage patterns across the site, and best management practices for operation and maintenance.

The City of Petaluma collects Storm Drainage Impact Fees as a means of mitigating storm drainage impacts occurring as a result of development. The criteria provides for either the payment of fees or the construction of on- or off-site detention areas, based upon the type of project and amount of runoff generated, as calculated for a 100-year storm. Fees collected are used by the City for the acquisition, expansion, and development of storm drainage improvements.

Chapter 15.80 of the City's Municipal Code regulates stormwater discharges. Grading and erosion control requirements are set forth in Chapter 17.31 of the Municipal Code. Low Impact Development (LID) requirements establish limitations on the stormwater runoff emanating from development sites. New development, including the subject project, is required to mimic pre-developed conditions, protect water quality, and retain runoff from impervious surfaces introduced onsite.

The Federal Emergency Management Agency's (FEMA's) flood hazard mapping program provides important guidance for the City in planning for flooding events and regulating development within identified flood hazard areas. FEMA's National Flood Insurance Program is intended to encourage State and local governments to adopt responsible floodplain management programs and flood measures. As part of the program, the FEMA defines floodplain and floodway boundaries that are shown on the Flood Insurance Rate Maps (FIRMs).

The southern portion of the project site, proximate to Ellis Street, is located within FEMA Special Flood Hazard

Zone AE, as delineated on FIRM community panel map number 06097C0982G (effective date October 2, 2015). According to this designation, the project site is subject to 100-year flooding with a one percent chance of being flooded in a given year. The project includes development of a detention basin designed to accommodate the volume waster displaced by fill that will be introduced to the floodplain. The Hydrology Study (**Appendix G**) provides preliminary design information intended to offset the fill volume in the 100-year floodplain.

The proposed detention basin consists of both detention and bioretention. The capacity of the detention basin is designed to equal or exceed the volume of flood waters being displaced by the fill within the floodplain. The detention basin would accommodate rising flood waters within Washington Creek to be diverted into the basin via a 12-inch inflow pipeline extending 32 linear feet within top of bank just below the 100-year base flood elevation (21 feet). A 6-inch outflow stormdrain extending 50 linear feet would discharge filtered water from the bottom of the bio-retention basin.

## **Hydrology and Water Quality Impact Analysis:**

**4.10 (a) (Water Quality Standards) Less than Significant Impact with Mitigation:** Construction activities within the City of Petaluma are covered by the Construction General Permit (2009-0009-DWQ). As the project will result in disturbance to less than 1 acre of land, the requirements for a Storm Water Pollution Prevention Plan (SWPPP) is not triggered and potential water quality impacts are generally considered to be minimal. Nonetheless, standard erosion and sediment control requirements will be implemented during all stages of construction. Typical Best Management Practices (BMP) that are generally applied during construction activities include use of fiber filter rolls, sand bags or interceptors at storm drain inlets, track pads at access points, and spill prevention, amongst others.

The Preliminary Stormwater Control Plan (Appendix H) identifies installation of bio-retention features to receive and filter on-site runoff prior to discharging to Washington Creek. The bio-retention basin is sized to accept runoff from impervious surfaces introduced onsite and accommodates runoff from the 85th percentile storm. Runoff from development will not substantially increase relative to existing conditions because LID design strategies include a 6,194 square foot area of permeable pavement, landscaping, drainage swales, and runoff from impervious features is directed to the bio-retention area via downspout, area drains and sheet flow. Discharge from the bio-retention basin would occur via 6-inch outflow pipe extending to Washington Creek. As described under the Biological Resources Analysis above, the 6-inch outflow pipe has the potential to result in erosion of the stream bank. However, Mitigation Measure BIO-5 requires that a dissipation apron be incorporation into the construction plan as part of the bio-retention/detention basin design. The dissipation apron set forth in mitigation measure BIO-5 is reiterated below under Mitigation Measure HYDRO-1, which requires installation of a dissipation apron below the 6-inch outflow pipe, positioning the outflow pipe at a 45-degree angle to the stream, and incorporating any other requirements from the regulatory agencies (RWQCB and CDFW). With installation of the dissipation apron located below the 6-inch outfall pipe, impacts to water quality will be reduced to levels below significance. Furthermore, adherence to best management practices for erosion control during construction activities as required by the City's grading and erosion control ordinance (Chapter 17.31 of the Municipal Code) will ensure that water quality standards and waste discharge requirements are met. Therefore, the project's potential to violate water quality or waste discharge standards would be reduced less than significant levels.

**4.10 (b) (Groundwater Supply and Recharge) Less than Significant Impact**: The City has adequate water supply resources to accommodate development 13 dwelling unit without depleting, degrading or altering groundwater supplies or interfering substantially with groundwater recharge. The subject project would not result in the lowering of the aquifer or the local groundwater table. The project's water demands are consistent with water demands evaluated in the City UWMP, which found sufficient water supplies are available to meet existing and planned future development within the UGB. Groundwater reserves will not be depleted due to the proposed development as the City's water supply is largely dependent on surface water flows from the Sonoma County Water Agency. There are no groundwater wells proposed as part of the project, rather the project will be served by the City's municipal water supply. Therefore, potential impacts to groundwater will be less than significant.

**4.10 (ci-civ). (Drainage Pattern, Runoff and Storm Drain Capacity) Less than Significant Impact:** The proposed project will not substantially alter the course of a stream or river and the post development flows will

largely mimic predevelopment conditions. Runoff currently flows towards Ellis Street in the southern portion of the site where it accumulates in a topographically low area. The project's preliminary stormwater control plan addresses post-construction runoff through the introduction new landscaping, pervious pavers, drainage swales, and a bio-retention area (also see discussion above under 4.10(a).

Pollutants will be removed, and runoff reduced through implementing Post-Construction Low Impact Design (LID) measures and using the Bio-Retention Basin. Rooftops will be equipped with downspouts and non-permeable concrete will be designed to direct stormwater to onsite stormdrain that convey flows to the bio-retention basin. The bio-retention basin provides for filtration and settlement prior to discharge to the outflow pipe to Washington Creek.

With the proposed post construction LID measures, the introduction of new impervious surfaces onsite would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. Onsite drainage, consisting of 6-inch and 12-inch stormdrain pipes, provides stormwater protection during storm events. New stormdrain systems onsite will not contribute runoff water that exceeds the capacity of the existing storm drain system.

The proposed storm drain system onsite and the bio-retention/detention basin adequately accommodate run from new impervious surfaces introduced onsite. As stated in the Hydrology Report, the proposed bio-retention basin will provide 4,708 cubic feet of storage volume. According to the Stormwater Control Plan the minimum facility area to accommodate onsite drainage is 703.7 square feet. The proposed facility is 726 square feet.

Therefore, the project will not result in a drainage pattern that causes substantial erosion or siltation on- or offsite, exceed capacity of stormwater systems, redirect flows, nor will developed conditions result in flooding onor off-site. Thus, impacts to drainage and runoff would be less than significant.

**4.10 (d). (Flood Hazards, Seiche, Tsunami, Mudflow) Less than Significant Impact:** As described above the project site has a base flood elevation of 21 feet. The proposed grading plan would result in the lowest habitable floor elevation of 22 feet. Per Section 6.070(D) of the IZO, new residential structures permitted in FP-C (Flood Plain-Combining) zones shall have the lowest habitable floor, including basement, elevated at least 12 inches above the level of the base flood elevation or depth number specified on the FIRM. To ensure compliance with the City's requirements in Section 6.070(D) of the IZO, **Mitigation Measure HYDRO-2** shall be implemented, which requires that upon completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, to be properly elevated. Compliance with Section 6.070(D) of the IZO and implementation of HYDRO-2, reduces potential impacts to levels below significance.

The site is not located within an inundation area of a levee or dam, nor is the site expected to be impacted by inundation by seiche, tsunami or mudflow. Washington Creek would not cause inundation due to seiche, tsunami or mudflow and impacts would be less than significant.

**4.10 (e). (Conflict with Water Quality Control or Sustainable Groundwater Management Plans) Less than Significant Impact:** The project's will not conflict with a water quality control plan or a sustainable groundwater management plan. As described above, the project includes bio-retention and LID strategies that will minimize runoff, reduce sedimentation and protect water quality. Additionally, mitigation measures set forth above further provide for protection of water quality during construction and at operation. The City of Petaluma is in the process of developing a Groundwater Sustainability Plan, which must be prepared by 2022 in accordance with the Sustainable Groundwater Management Act (SGMA). As no Groundwater Management Plan has been developed, the project will not result any conflicts to such a plan. Therefore, potential impacts will be less than significant.

## **Hydrology and Water Quality Mitigation Measures:**

**HYDRO-1:** A dissipation apron shall be incorporated into the detention basin design and shall be installed below the 6-inch outflow pipe. As appropriate the pipe shall be positioned at a 45-degree angle to the flowline of Washington Creek. Other water quality control measures as prescribed by the RWQCB shall be implemented.

- **HYDRO-2:** Following construction of the residential buildings within the FP-C (Flood Plain Combining District), and prior to occupancy, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, to be properly elevated. Such certification or verification shall be provided to the Floodplain Administrator. As determined to be appropriate by the Floodplain Administered, the following standards may also be required:
  - 1. All new improvements shall be anchored to present flotation, collapse, or lateral movement.
  - 2. All new improvements shall be constructed with materials and utility equipment resistant to flood damage and using methods and practices to minimize flood damage.
  - 3. All electrical, heating, air conditioning, ventilation, and plumbing shall be designed and located to prevent water from entering or accumulating within components during flooding.
  - 4. All new construction and improvements shall insure that fully enclosed areas below the lowest floor that are subject to flooding be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. A minimum of two opening not less than one square inch for every square foot of enclosed area shall be provided.

## 4.11. LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
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?				
Sources: City of Petaluma General Plan and EIR; and City of Petalum	a Implementir	ng Zoning Ord	inance.	

Land Use Setting: The project site is located at 109 Ellis Street in central Petaluma and within the Petaluma General Plan's Payran-McKinley Planning Subarea, west of Highway 101 and north of East Washington Street. The project site is located on the east side of Ellis Street, mid-block, between Madison Street and Martin Circle in central Petaluma. Ellis street is identified as a proposed Class III bicycle route and Washington Creek contains a proposed recreational trail as identified on General plan Figure 5-2 Proposed and Existing Bicycle Facilities. Land uses adjacent to the subject property include multi-family residential to the north and south, and the McKinley Elementary School to the west. Washington Creek is located immediately to the east of the project site.

The project site has a General Plan land use designation of Medium Density Residential (8.1 to 18 dwelling units/acre) and Floodplain (**Figure 3: General Plan Land Use**). The project is requesting a Density Bonus in accordance with IZO Section 27.090 and California Density Bonus Law. The project site is zoned as R4 (Residential 4) and a portion of the front of the property has an FP-C (Flood Plain-Combining District) overlay, as shown in **Figure 4: Zoning**. The front portion of the site within the FP-C District is subject to the applicable policies and provisions of Chapter 6 of the IZO pertaining to floodplains. In particular, Sections 6.070.B and 6.070.D are applicable to the proposed project.

# Land Use Impact Analysis:

**4.11 (a) (Divide an Established Community) No Impact:** The project consists of infill development on an underutilized parcel within an established residential neighborhood. There are no aspects of the project that would introduce a physical barrier or otherwise divide an established community. There will be no impacts under this criterion.

**4.11 (b) (Land Use Plan, Policy, Regulation Conflict) Less than Significant Impact:** With approval of the proposed Density Bonus, the project will be consistent with the General Plan, Zoning and land use regulations established by the City of Petaluma. The proposed siting of the three new buildings and the elevation of the three-story buildings are consistent with the R4 development standards set forth in the IZO, Table 4.9- R4 and R5 Zone Development Standards.

The residential density bonus would allow the project to propose a residential density of 18.43 units/acre where the General Plan Designation of Medium Density Residential on the project site allows a maximum of 18.0 dwelling units/acre. In accordance with the IZO Section 27.090 and California Density Bonus Law one development incentive/concession has been requested to reduce the parking requirement set forth in the IZO from 25 parking spaces to 22 parking spaces. There are no anticipated environmental impacts associated with the requested concession of three fewer parking spaces.

The City's Bicycle and Pedestrian Plan identifies a proposed recreational trail along Washington Creek and a Class III Bike facility along Ellis Street. As proposed the project includes construction of an eight-foot-wide recreational trail for the length of the parcel along Washington Creek. The recreational trail is part of the proposed project and has been evaluated throughout this analysis for potential environmental impacts. Construction of the recreational trail will be subject to all project Mitigation Measures and conditions of approval, which provide for the protection of Washington Creek. The project is consistent with the City's Bicycle and Pedestrian Circulation Plan and does not present any conflicts that would result in an environmental impact.

Per Section 6.070(D) of the IZO, new residential structures permitted in FP-C (Flood Plain-Combining) zones shall have the lowest habitable floor, including basement, elevated at least 12 inches above the level of the base flood elevation or depth number specified on the FIRM. The project site has a base flood elevation of 21 feet. As set forth in the proposed grading plan the project would result in the lowest habitable floor elevation of 22 feet and would be required to comply with all provisions of the IZO (Mitigation Measure Hydro-2). As such, the project is consistent with Section 6.070(D) of the IZO.

There are no conflicts with City land use regulation that have been identified for the proposed project. Therefore, impacts due to a conflict that would result in an environmental impact will be less than significant.

**Land Use Mitigation Measures:** None required beyond those identified in the Biological Resources, Hydrology and Water Quality and Geology and Soils chapters.

## 4.12. MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?				$\boxtimes$

**Mineral Resources Impact Discussion** 

4.12 (a-b). (Mineral Resources or Resource Plans) No Impact: There are no known mineral resources within

the UGB. The project site has not been delineated as a locally important resource recovery site. It is not expected that the project will result in the loss of availability of known mineral resources, including those designated as "locally important". Therefore, the proposed project will have no impact that results in the loss of availability of mineral resources.

Mineral Resources Mitigation Measures: None required.

## 4.13. NOISE

Wo	ould the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
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?			$\boxtimes$	
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			$\boxtimes$	

Sources: 2025 General Plan and EIR; IZO 21.040; and Environmental Noise Assessment prepared by Illingworth & Rodkin, December 11, 2018.

**Noise Setting:** Noise is generally defined as unwanted sound. It is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). The sound pressure level is the most common descriptor used to characterize the loudness of an ambient (existing) sound level. The decibel (dB) scale is used to quantify sound intensity, given that the human ear is not equally sensitive to all frequencies in the entire spectrum, noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called "A-weighting," written as "dBA" and referred to as "A-weighted decibels". In general, human sound perception is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling the sound level.

The City of Petaluma regulates the noise environment through Section 21.040 of the Implementing Zoning Ordinance (IZO). The IZO stipulates an hourly average level of 60 dBA as the maximum that may be generated on one land use that may affect another land use; the allowable levels are adjusted to account for the ambient noise levels and in no case shall the maximum allowed noise level exceed 75 dBA after adjustments are made.

The 2025 General Plan provides policies to protect the health and welfare of the community from undesirable noise levels. Figure 10-2 of the General Plan shows the Land Use Compatibility Standards for various land uses and provides the relative acceptability level. Multi-family residential land uses are considered normally acceptable in a noise environment up to 65 dB (Ldn or CNEL). The Noise Contours Figure 10-1 indicates that noise levels at the site are projected to be 65 dB CNEL at General Plan build out due to Highway 101 transportation noise.

A site-specific Noise Assessment was prepared for the subject project by Illingworth and Rodkin (see **Appendix I**). The Noise Assessment analyzed noise levels generated by proposed construction activities, on-site operations, and project generated traffic on area roadways. The existing noise environment in the project vicinity is characterized primarily by roadway traffic noise and school related activities at the nearby McKinley Elementary School.

To quantify the existing noise environment of the project vicinity Illingworth & Rodkin performed a noise monitoring study on November 29<sup>th</sup> and 30<sup>th</sup>, 2018. Noise measurements were collected using a Larson Davis Laboratories (LDL) Type 1 Model 820 Sound Level Meter fitted with a ½ inch pre-polarized condenser microphone and widescreen. The long-term measurements were collected at the northeastern and southwestern edges of the site and short-term measurements were located along the eastern property line in the north and south. Noise survey results indicate that existing noise exposure at the project range from a CNEL of 62 dBA towards Ellis Street up to 64 dBA towards Washington Creek.

## **Noise Impact Analysis:**

**4.13 (a) (Noise Standards) Less than Significant Impact with Mitigation:** As a residential land use the proposed project will not introduce new sources of noise that increase the ambient noise environment to levels that exceed established land use compatibility standards. The project would introduce new multi-family residential development in an area adjacent to existing multifamily residential units and the McKinley Elementary School. Noise generated by the proposed project will occur on a temporary basis during construction and at operation from typical residential activities such as talking, vehicle use, building and landscaping maintenance, barking dogs and children at play. New vehicles trips introduced by the 13-unit residential project will have a negligible effect on noise volumes along Ellis Street and project area roadways.

During temporary construction activities, noise levels are expected to be in the range of 83 to 96 dBA at distances of 20 to 40 feet from noise generating sources and project construction would not exceed 60 dBA L<sub>eq</sub> or the ambient noise environment by 5 dBA L<sub>eq</sub> for a period greater than one year. Although nearby residents will be exposed to elevated noise levels from construction, exposure is intermittent and temporarily and will cease once construction is complete. At a minimum the project is required to adhere to the standards set forth in Section 21.040.A.3.a of the City's Implementing Zoning Ordinance (IZO). Given the site's proximity to existing residents and the McKinley School, **Mitigation Measures NOI-1** is set forth below to ensure that standard noise controls pursuant to the City's IZO are implemented. Therefore, the project will not exceed noise standards and impact from temporary construction activities will be less than significant.

- **4.13 (b) (Groundborne Vibration and Noise) Less than Significant Impact:** The project would result in temporary noise and vibration during construction activities at typical levels associated with multifamily development. Demolition, site improvements, building construction, and material hauling will involve the use of heavy-duty construction equipment that generate groundborne noise and vibration. Construction activities will occur generally at distance of 40 to 100 feet from nearest residential uses and approximately 100 feet from the existing school building. At the closest point, construction activities will occur within 20 feet of existing residential structures. For structural damage a vibration limit of 0.5 inches per second, peak particle velocity (PPV) is applied. Vibration levels from construction equipment at 20 feet ranges from 0.004 (for a Small Bulldozer) to 0.26 (for a vibratory roller). As such, construction activities will not approach the level where structural damage would occur. Due to the intermittent and temporary use of construction equipment, the project will not result in substantial impacts from groundborne vibration and nose. Therefore, impacts will be less than significant.
- **4.13 (c) (Airport Noise) No Impact:** The project site is not located within a private airstrip, an airport land use plan or within two miles of a public airport or public use airport and would therefore not expose people residing or working in the project area to excessive noise levels. The Community Noise Equivalency Level (CNEL) noise contours from the Petaluma Municipal Airport do not affect the subject site. The project would not expose people working onsite to significant noise levels generated by the Petaluma Municipal Airport. Therefore, noise from the Petaluma Airport will have no impact to people residing or working onsite.

## **Noise Mitigation Measures:**

**NOI-1:** The following Best Construction Management Practices shall be implemented to reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance:

- 1. Limit construction hours to between 7:00 a.m. and 7:00 p.m., Monday through Friday and between 9:00 a.m. and 7:00 p.m. on Saturday, Sunday and State, Federal and Local Holidays.
- 2. Delivery of materials and equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above.
- 3. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- 4. Unnecessary idling of internal combustion engines shall be strictly prohibited.
- 5. Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- 6. Acoustically shield stationary equipment located near residential receivers with temporary noise barriers.
- 7. Utilize "quiet" air compressors and other stationary noise sources where technology exists.
- 8. Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities.
- 9. Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from existing residences.
- 10. Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- 11. The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- 12. Coordinate with the McKinley School to minimize construction noise interference. As feasible conduct noisy construction activities after school hours or when school is not in session.
- 13. Notify all adjacent residences and the McKinley School of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses.
- 14. Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

#### 4.14. POPULATION AND HOUSING:

Wo	ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				$\boxtimes$
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			$\boxtimes$	

Sources: City of Petaluma General Plan and EIR; and City of Petaluma Implementing Zoning Ordinance.

**Population and Housing Setting:** The 2025 General Plan contemplates development of approximately 6,000 additional residential units and a buildout population of approximately 72,700. This represents an annual growth rate of nearly 1.2% per year. The project would add 13 for-rent, multi-family dwelling units.

According to the U.S. Census Bureau, American Community Survey, 5-year estimates between 2013 and 2017 the City of Petaluma had an average of 2.68 persons per household. As a 13-unit development, the proposed project is expected to add approximately 35 people.

## **Population and Housing Impact Analysis:**

- **4.14 (a) (Substantial Unplanned Growth) No Impact**: The proposed 13-unit multi-family residential project is within the range of residential development anticipated by the General Plan. There are no elements of the project that would result in substantial unplanned population growth. Therefore, the project would have no impact under this criterion.
- **4.14 (b) (Housing or Persons Displacement) Less Than Significant Impact:** The proposed project would result in the demolition of three existing residential structures and would introduce 13 new residential units. A substantial number of existing housing would not be removed by this project. Therefore, impacts due to the displacement of a substantial number of housing units would be less than significant.

Population and Housing Mitigation Measures: None required.

## 4.15. PUBLIC SERVICES:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			$\boxtimes$	
b) Police protection?			$\boxtimes$	
c) Schools?			$\boxtimes$	
d) Parks?			$\boxtimes$	
				$\boxtimes$

**Public Services Setting:** The City of Petaluma charges one-time impact fees on new private development to offset the cost of improving or expanding City facilities to accommodate the demand generated by new development. Impact fees are used to fund the construction or expansion of capital improvements. Petaluma also collects impact fees for open space, parkland, and other amenities. Development impact fees are

necessary to finance public facilities and service improvements and to pay for new development's fair share of the costs of the City planned public facilities and service improvements identified to accommodate buildout of the General Plan.

## **Public Services Impact Analysis:**

**4.15 (a-b) (Fire & Police Protection) Less than Significant Impact:** The project site is located in an established residential neighborhood that is well served by existing public services. The increase in residents from the proposed project may result in a slight increase in demand for police and fire services. However, the incremental increase on fire and police services are anticipated by the General Plan build-out and are accounted for with the City Facilities Development Impact Fees that are intended to offset the impacts of growing demand for fire and policing services.

General Plan policy 7-P-19 establishes a four-minute travel time and six-minute response time for emergencies within the city. The project is situated approximately 1 mile from Fire Station 1, located at 198 East D Street, approximately 2.7 miles from Fire Station 2, located at 1001 N. McDowell Boulevard, and approximately 1.5 miles from Fire Station 3, at 831 S McDowell Boulevard. The project is within the response radii of all three fire stations (see General Plan EIR Figure 3.4-2) and travel time is achievable within the targeted 4 minutes. The project is consistent with the General Plan 2025 because of the redundancy of approach access, the ability of emergency response vehicles to override traffic controls with lights, sirens, and signal pre-emption, and their ability to travel in opposing travel lanes in congested conditions.

Although additional fire and/or police service calls may occur as a result of the project, substantial new fire protection or police protection facilities will not be warranted to maintain necessary levels of service. As a standard condition of project approval, the applicant shall pay all development impact fees applicable to a residential development, including a facilities fee. These funds are sufficient to offset cumulative increase in demands to fire and police protection services and ensure that impacts from new development are less than significant.

**4.15 (c) (Schools) Less than Significant Impact:** The Project will not result in a substantial increase in student enrollment requiring new school facilities. The project site is located within the Petaluma Elementary School District. The nearest school, McKinley Elementary School, is located across the street from the project site at 110 Ellis Street. The General Plan projects that the Petaluma Elementary School District will experience a slight increase in enrollment, but that the projected enrollment would not exceed the existing capacity of the public elementary schools located within the city limits. Overall, the projected enrollment for public elementary schools would decline and would utilize 93.9 percent of current capacity. Sufficient school facilities are in place to accommodate the minor increase in enrollment associated with development of the proposed 13 multi-family units. The project is subject to the payment of statutory school impact fees to offset any cumulative impacts on the school system. Therefore, the proposed project will have less than significant impacts to schools.

**4.15 (d) (Parks) Less than Significant Impact:** The City has adopted a citywide parks standard of 5 acres of parkland per 1,000 residents. The nearest existing parks to the project site are located on East Washington Street including Kenilworth Community Park and the Petaluma Swim and Skate Park. There are also public open space trails along the Petaluma River and Lynch Creek. A recreational trail is also planned along the length of Washington Creek between the Petaluma River and East Washington Street. As proposed the project would construct a portion of the Washington Creek recreational trail for the length of the project site. In addition, the project proposes onsite open space areas including a private pool and courtyard areas.

Parks in the vicinity of the project site provide recreational opportunities to future residences. The proposed project would result in 13 new multi-family dwellings and will not constitute a substantial growth in population. Existing park facilities are expected to be sufficient to meet active and passive recreational demands of new residents. A substantial adverse impact to park facilities is not expected to occur from implementation of the subject project. Therefore, impacts to park lands due to the project will be less than significant.

**4.15 (e) (Other Public Facilities) Less than Significant Impact:** The Project will not result in substantial adverse impacts associated with other public facilities. The project area is surrounded by established residential uses and is well served by existing public services and facilities. The project will not generate a substantial increase in demands that warrant the expansion or construction of new public facilities. Therefore, there would

be no impacts related to other public facilities.

Public Services Mitigation Measures: None required.

#### 4.16. RECREATION

Wc	ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?				

**Recreation Setting:** The City of Petaluma offers a number of passive and active recreation opportunities within the UGB with approximately 18% of land (1,300 acres) devoted to parks and open space. Park land development and open space acquisition impact fees are required and help to mitigate any potential impacts to parks and open space generated by development projects.

## **Recreation Impact Analysis:**

**4.16 (a-b) (Park Deterioration and Recreation Facilities) Less Than Significant Impact:** The 13-unit multifamily residential project is not expected to result in significant impacts to parks or recreational facilities. The City is well served by existing parks and recreational facilities. While the new residential units would create a slight increase in the use of surrounding parks and recreational facilities, the existing recreational facilities will be sufficient to meet active and passive recreational demands of the new residents within the project site.

The project as proposed includes the construction of on-site recreational facilities including a swimming pool, common outdoor area and a path along the site's frontage to Washington Creek. The environmental impact associated with construction of these onsite and offsite improvements are analyzed throughout this document.

The project will not substantially increase the use of existing neighborhood and regional parks such that physical deterioration of facilities occurs or are accelerated. Therefore, impacts related to the increased use, deterioration, construction or expansion of recreational facilities are expected to be less than significant as a result of the proposed project.

Recreation Mitigation Measures: None required.

## 4.17. TRANSPORTATION

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

Sources: City of Petaluma General Plan and EIR; City of Petaluma Bicycle and Pedestrian Plan 2008; City of Petaluma Safe Routes to School Plan; and Technical Advisory On Evaluating Transportation Impact in CEQA, prepared by the California Office of Planning and Research, December 2018.

**Transportation Setting:** The City of Petaluma is bisected by Highway 101, which serves as the primary route between San Francisco and Marin and Sonoma Counties. Highway 101 accommodates over 90,000 vehicles per day, within Petaluma. The circulation system within the City of Petaluma consists of approximately 140 miles of streets including arterials, collectors, connectors, and local streets.

The project site is located on the south side of Highway 101 in the central portion of Petaluma. It is situated at 109 Ellis Street, east of Madison Street and west of East Washington Street. The intersection of Ellis Street and Madison Street is a four way stop sign controlled. The intersection of Ellis Street and East Washington Street is signal controlled.

Ellis Street is a two-lane collector with parking and sidewalks on both sides. Ellis Street serves as the primary drop off location for the McKinley Elementary School. The speed limit on Ellis Street is 25 miles per hour. There is a crosswalk across Ellis Street at Martin Court, east of the subject project site and directly in front of the school entrance. The crosswalk has an In-Roadway Warning Light system. Crossing guards assist students crossing Ellis Street in front of the school during the drop off and pick up periods.

As depicted on Figure 5-2 Proposed and Existing Bicycle Facilities of the City's General Plan, Ellis Street is identified as a proposed Class III bicycle route. Class III facilities provide for shared use of travel lanes with motorists and cyclists. In addition, Figure 5-2 identifies a proposed public recreational along Washington Creek.

At the project site, the Ellis Street frontage is improved with curb, gutter and sidewalk. Currently, the project site is accessed via one gravel driveway located at the eastern edge of the property.

## General Plan Policies: Mobility

The following General Plan policies are particularly relevant to the proposed Project:

- 5-P-10: Maintain an intersection level of service (LOS) standard for motor vehicle circulation that ensures efficient traffic flow and supports multi-modal mobility goals. LOS should be maintained at Level D or better for motor vehicles due to traffic from any development project.
- 5-P-20: Ensure that new development provides connections to and does not interfere with existing and proposed bicycle facilities.

5-P-22: Preserve and enhance pedestrian connectivity in existing neighborhoods and require well connected pedestrian network linking new and existing development to adjacent land uses.

## **Transportation Impact Analysis:**

**4.17 (a) (Conflicts with Plans, Policies, Ordinances) Less Than Significant Impact:** The proposed project is infill development located on an underutilized parcel within an established neighborhood in the City of Petaluma. The project is consistent with City plans, ordinances and policies relating to the circulation system. Consistent with the City's Bicycle and Pedestrian Plan, the project includes development of a public recreational trail at the site frontage to Washington Creek. The project also includes frontage improvements along Ellis Street including installation of an ADA compliant sidewalk, curb and gutter, and accommodates three parallel public parking stalls. Signage for Class II bicycle facilities will also be installed.

The City of Petaluma Traffic Guidelines state that a traffic study is needed when trip generation during the a.m. and p.m. peak hours is expected to equal or exceed 50 vehicles or when trip generation during a 24-hour period is expected to equal or exceed 500 vehicles. The trips generated by the proposed 13-unit multi-family project would not equal or exceed the standards identified by the City of Petaluma triggering the need for a traffic impact study. The trip generation for the proposed project will be a total of 95 daily trips and the peak hour trip contribution will be approximately 7 trips, as shown in Table 4 below.

**Table 4: Proposed Project Trip Generation Summary** 

	_	D	aily	Peak	Hour		
Land Use	Units	Rate	Trips	Rate	Trips		
Apartment	13 du	7.32	95.16	0.56	7.28		
Source: Institute of Transportation Engineers (ITE), <i>Trip Generation Manual</i> , 10 <sup>th</sup>							

Edition, Land Use Code 220.

As a 13-unit multi-family residential project, the peak hour trip contribution is well below the City's standard to trigger a traffic study. As such it can be conservatively determined that the project will not generate vehicle trips at a level that would adversely affect the transportation network or impact level of service at nearby intersections. Therefore, there would be less than significant impacts due to a conflict with transportation related plan, policies and ordinances.

**4.17 (b) (Conflict with 15064.3(b) VMT) Less Than Significant:** As an infill residential development, the proposed project is not expected to substantially increase vehicle miles travels (VMTs). The project will provide housing in close proximity to goods and services, public schools and employment centers located within Petaluma. To access potential conflict with 15064.3(b) the project was reviewed under the Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impact in CEQA, published December 2018. As set forth therein, the screening thresholds for small projects is the generation of fewer than 110 vehicle trips per day. For projects that generate or attract fewer than 110 daily trips, it can generally be assumed that impact to VMT would be less than significant. Because the proposed project is infill development that would generate few than 110 daily trips it can be determined that potential impacts due to a conflict with 15604.3(b) would be less than significant.

**4.17 (c) (Geometric Design Feature Hazard) Less Than Significant:** As proposed the project would generally retain the geometric design of Ellis Street including one access driveway off Ellis Street. The Ellis Street right of way would be retained under its current geometric design and alignment. The access driveway to the project site would be relocated from its existing position at the eastern portion of the property to western portion of the property. The new driveway would have a width of 20 feet. Frontage improvements to Ellis Street would include curb, gutter and sidewalk repair and replacement in accordance with City of Petaluma standards and ADA requirements. Parallel parking is currently allowed at the site frontage along Ellis Street and accommodates three vehicles. As proposed the project would retain three public parallel spaces at the site frontage to Ellis Street. The preliminary landscaping plan does identify any vegetation or signage that would obstruct ingress or egress. The proposed project would not introduce any geometric design feature hazards. Therefore, impact related to design hazards would be less than significant.

4.17 (d) (Emergency Access) Less Than Significant: The project's access driveway has been reviewed by

the Petaluma Public Works and Fire Departments. Emergency vehicle access and parking areas are provided via the proposed driveway. Site circulation was determined to be adequate, including sufficient driveway width to allow for fire truck access and access to the proposed apartment buildings. Therefore, the project's potential to result in impacts due inadequate emergency access would be less than significant.

The increase of construction vehicles traveling to and from the project site on a temporary basis would not result in inadequate emergency access. Ellis Street would remain open to travel during construction of all phases of the proposed project. To construct the project, road closure is not anticipated, although temporary encroachment may occur during frontage improvements to Ellis Street. Therefore, temporary impacts to emergency access will be less than significant during project construction.

Transportation Mitigation Measures: None required.

#### 4.18. TRIBAL CULTURAL RESOURCES

Would	d the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
ín in si g o	Vould the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a lite, feature, place, cultural landscape that is eographically defined in terms of the size and scope if the landscape, sacred place, or object with cultural lalue to a California Native American tribe, and that is:				
i.	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			$\boxtimes$	
ii.	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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			$\boxtimes$	

**Tribal Cultural Resources Setting:** The Federated Indians of Graton Rancheria did not request consultation within the statutory timeframe provided by Public Resources Code §21080.3.1. The City of Petaluma provided notice to the Tribe in a letter dated October 18, 2018. Graton Rancheria received the notification letter and provided no reply to the City of Petaluma within the thirty (30) day time-period provided for consultation requests. Additionally, no subsequent request or correspondence by the Graton Rancheria has been received by the City of Petaluma.

## **Tribal Cultural Resources Impact Analysis:**

**4.18 (ai- aii) (Listed or Eligible for Listing) Less than Significant**: This section incorporates by reference all text included within the Cultural Resources topic above. Given past disturbance onsite, the existing uses, and the protective measures added under Cultural Resources above, development of the project would have less

than significant impacts to tribal cultural resources.

Tribal Cultural Resources Mitigation Measures: None required.

#### 4.19. UTILITIES AND SERVICE SYSTEMS

Wo	ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less than Significant Impact	No Impact
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?			$\boxtimes$	
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?			$\boxtimes$	
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			$\boxtimes$	

Sources: City of Petaluma General Plan 2025 and EIR; Water Resource and Conservation 2015 UWMP; and Sonoma County Water Agency 2015 UWMP.

**Utilities and Service Systems Settings:** The City's water supply is sourced from the Russian River Water System and supplemented with local groundwater. Water from the Russian River Water System is obtained via the Petaluma Aqueduct through a contract with the Sonoma County Water Agency (SCWA). The City's Water Resource and Conservation Division (WR&C) provides municipal water service to approximately 60,000 customers and therefore must comply with the Urban Water Management Plan Act, which requires the preparation of an Urban Water Management Plan (UWMP) every five years.

In 2015, the City updated its UWMP including a baseline demand analysis in compliance with the interim 2015 Urban Water Use target, an Urban Water Use target analysis for 2020, projected urban Water Use through the year 2040, and a description of programs to achieve the target demand reductions in the UWMP.

Instream flow requirements have also been established to protect fish and wildlife species and recreation.<sup>4</sup> Based on regional water supply availability, the SCWA expects to be able to increase annual water deliveries to Petaluma from approximately 7,200 acre-feet (AF) in 2010 to 11,400 AF by 2035.

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State Water Resources Control Board: Decision No. 1610 (http://www.waterboards.ca.gov/waterrights)

Based on the evaluation of future Russian River supply including, minimum in-stream flow requirements, SCWA expects to obtain water rights approvals necessary to increase its total diversions above 75,000 acre-feet per year (AFY) by 2027 and to 80,000 AFY by 2035. This assumption is based on the most likely outcome of decisions by regulatory agencies and implementation of the Restructured Agreement (executed in 2006) and proposed improvements to the water delivery system.

To assure that the City of Petaluma has sufficient water supplies to meet increased water demand, the General Plan requires routine monitoring of water supplies against actual use and evaluation for each new development project (Policy 8-P-4).

The Ellis Creek Water Recycling Facility treats all wastewater generated by the City of Petaluma and the unincorporated Sonoma County community of Penngrove. The collection system is comprised of approximately 195 miles of underground piping and nine (9) pump stations. The treatment capacity is about 6.7 million gallons per day (average dry weather flow). Approximately five (5) million gallons per day are treated under the existing wastewater generation condition, leaving approximately 1.7 million gallons in available treatment capacity. In the winter, secondary treated wastewater effluent is conveyed to the Petaluma River. During the summer, effluent receives tertiary treatment and the recycled water is used for irrigation of agricultural lands, golf courses, city parks, schools, and landscaped areas of residential and commercial development.

Within the City of Petaluma storm drains convey runoff from impervious surfaces such as streets, sidewalks, and buildings to gutters that drain to creeks and the Petaluma River and ultimately the San Pablo Bay. Most stormwater is untreated and carries with it any contaminants picked up along the way such as solvents, oils, fuels and sediment. The City has implemented a storm drain-labeling program to provide a visual reminder that storm drains are for rainwater only. The City's Stormwater Management and Pollution Control Ordinance, set forth in Chapter 15.80 of the City's Municipal Code, establishes the standard requirements and controls on the storm drain system. All existing and proposed development must adhere to the City's Stormwater Management and Pollution Control Ordinance.

## **Utilities and Service Systems Impact Analysis:**

**4.19 (a) (Relocation/Expansion of Utilities) Less Than Significant Impact:** The project site is well served by existing utilities. Based on the size and scale of development, 13 multi-family units, the project will not require or result in the relocation or expansion off utilities. Existing water, wastewater, electric power, natural gas, and telecommunications facilities extend to the project site and have sufficient capacity to service the proposed 13-unit development. Therefore, the project is expected to result in less than significant impacts due to the relocation or expansion of utilities.

Currently, there is no stormdrain system located onsite and stormwater runoff sheet flows downgrade to existing public stormdrains. The proposed project will increase impervious surfaces onsite from the new buildings, walkways, and parking areas. The project includes approximately 6,198 square feet of permeable concrete and 7,249 square feet of landscaping. Onsite drainage improvements will be installed during construction and designed to capture stormwater runoff and convey flows to the proposed detention/bioretention basin (See Section 4.10 Hydrology and Water Quality discussion above). Environmental impacts associated with the proposed basin have been evaluated throughout this document and will be subject to conditions of approval and mitigation measures set forth herein.

The project has been designed with the integration of Low Impact Design (LID) standards. Proposed LID measures include tree plantings, permeable concrete and the bio-retention basin that will capture stormwater runoff during precipitation events and provide for treatment and filtration of stormwater runoff onsite prior to release. With the proposed LID measures and compliance C.3 stormwater requirements, the project will not significantly increase runoff relative to the existing condition and no new offsite stormwater facilities will be required. Therefore, the project is expected to result in less than significant impacts due to the expansion of existing storm water drainage facilities or construction of new facilities.

**4.19 (b) (Sufficient Water Supplies) Less Than Significant Impact:** In evaluating the sufficiency of water supplies to meet existing water demands in addition to water demand generated by the proposed project, the City has compared General Plan 2025 projected water demand to actual use. In 2018 the City's average per

capita water usage rate was 75.35 gallons per capita per day (GPCD).<sup>5</sup> As presented in the City's UWMP the SB X7-7 GPCD target for the City of Petaluma, was 130.74 for the year 2018.<sup>6</sup> The results of that comparison find that potable water demand is well within the available SCWA supply, both for this project, and for cumulative demand through 2035 as set forth in the 2015 UWMP.

As noted in General Plan 2025 Policies 8-P-5-C and 8-P-19, the City anticipated continuing use of groundwater to meet emergency needs and to offset peak demands. Per Policy 8-P-4 of the Petaluma General Plan 2025, City staff is required to monitor actual demand for potable water in comparison to the supply and demand projections in the 2006 Water Supply and Demand Analysis Report. Based on the 2015 UWMP the demand for potable water supplies in 2015 was 8,226 acre-feet for all uses including single and multi-family residential, commercial, industrial, institutional/governmental, and landscaping. By 2040 the water demand for buildout of the General Plan is projected to be 9,435 acre-feet per year. The UWMP establishes a 2015 baseline daily per capita water use of 111 gallons based on a gross water use of 7,678 acre-feet per year. For year 2015, the UWMP concludes that the City complies with the 2020 water use target, which aims to achieve a 5% reduction in the per capita use relative to the 5-year baseline.

A comparison of actual demand for potable water was made relative to the an annual SCWA supply limit for Petaluma of 4,366 million gallons per year (13,400 acre-feet) and a peak supply limit of 21.8 million gallons per day. In both instances, potable demand is well within available SCWA supply capacity. The projected demand is less than 10,000 acre-feet.<sup>8</sup> Tiered water rates, conservation efforts, and the conversion of Rooster Run Golf Course to recycled water have in recent years kept annual and peak demands within the available SCWA supply.

The UWMP establishes Demand Management Measures and a Water Shortage Contingency Plan (2016 Updated), which provide a means for water conservation and planning for periods of drought. Additionally, individual development projects are required to comply with the City's Water Conservation Ordinance for interior and exterior water usage, thereby minimizing water demands generated by new development. The UWMP concludes that there are sufficient water supplies to meet water demands projected by the General Plan.

The proposed project is consistent with development anticipated by the General Plan and water demands are captured in the 2015 UWMP for future year conditions. Additionally, the project will be subject to the latest California Building Code requirements including plumbing and water efficiency standard as well as the City's Water Conservation Ordinance, which will further reduce water demands generated by the proposed Project. Therefore, existing water supplies, facilities, and infrastructure are sufficient to meet the water demands of the project and future development during normal, single and multiple dry year event. Impacts of the project to water supplies are considered to be less than significant.

**4.19 (c) (Sufficient Wastewater Treatment Capacity) Less Than Significant Impact:** The expected wastewater generated by the project is consistent with the service needs anticipated by the Petaluma General Plan 2025 and will not require the expansion of treatment facilities. Applicable City Wastewater Capacity fees will be collected from the applicant to fund the project's share for use of existing facilities and planned improvements. Wastewater flows from the proposed project will be conveyed to the Ellis Creek Water Recycling Facility, which has sufficient operating capacity to handle the additional flows generated by the proposed project. There would be no new construction or expansion of domestic water or wastewater facilities as part of the proposed project.

As a 13-unit residential development, the project is not expected to exceed wastewater treatment requirements set forth by the Regional Water Quality Control Board, nor necessitate the expansion or construction of wastewater treatment facilities. The estimated wastewater generation of the proposed project falls within the capacity of the existing sanitary sewer lines and the City's wastewater treatment plant. The project does not include any activities that would generate wastewater requiring special treatment nor would it contain constituents exceeding applicable standards. The project would not exceed wastewater treatment requirements

<sup>&</sup>lt;sup>5</sup> Water Usage Summary February 2019, City of Petaluma Department of Public Works.

<sup>&</sup>lt;sup>6</sup> City of Petaluma 2015 UWMP page 23.

<sup>&</sup>lt;sup>7</sup> City of Petaluma 2015 UWMP Table 3-6, Total Water Demands.

<sup>8</sup> See Item 4(B) of June 1, 2015 City Council agenda (http://cityofpetaluma.net/cclerk/archives.html).

and adequate treatment capacity would be available to accommodate wastewater generated by the project. Therefore, the project would have less than significant impacts to wastewater treatment facilities.

**4.19 (d, e) (Solid Waste Generation/Compliance with Solid Waste Management) Less Than Significant Impact:** The proposed project, consisting of the demolition of existing buildings onsite and the development of 13 multi-family dwelling units. Construction and operation of the project will contribute to the generation of solid waste. However, as a residential project the amount of solid waste generated is considered minimal and is consistent with the service needs anticipated by the Petaluma General Plan and evaluated in the General Plan EIR.

Policy 4-P-21 requires waste reduction in compliance with the Countywide Integrated Waste Management Plan (ColWMP). Construction related waste will be reduced, consistent with General Plan Policy 2-P-122, through the development of a construction waste management plan mandated by the California Green Building Standards Code.

At present, the City is under contract with Recology for solid waste disposal and recycling services. This company provides canisters for garbage, green (plant waste) materials, and recycling. Solid waste is collected and transferred to the Sonoma County landfill sites. Solid waste disposal facilities are owned and operated by the Sonoma County Department of Transportation and Public Works and the City maintains a franchise solid waste hauling agreement requiring the franchise hauler as part of its contractual obligations to select properly permitted Approved Disposal Location(s) with adequate capacity to serve city service needs. The project would be supplied with the same solid waste and recycling opportunities through the County's existing waste management system via the City's solid waste service provider. Although the project would generate additional solid waste, it is not expected to exceed landfill capacity and is not expected to result in violations of federal, state, and local statutes and regulations related to solid waste. Therefore, the project will have a less than significant impact due to the generation and disposal of solid waste.

Utilities and Service Systems Mitigation Measures: None Required.

#### 4.20. WILDFIRE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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?	′ 🗆			$\boxtimes$
b) Due to slope, prevailing winds, and other factors exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	: 🗌			$\boxtimes$
c) Require the installation or maintenance of associated infrastructure (such as roads, fue breaks, emergency water sources, power lines of other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	i r 🗆 t			
d) Expose people or structures to significant risks including downslope or downstream flooding o landslides, as a result of runoff, post-fire slope	r 📙			

instability, or drainage changes?

Sources: 2025 General Plan and EIR; and CalFire Sonoma County.

**Wildfire Setting:** Petaluma is susceptible to wildland fires due to the steep topography, abundant fuel load, and climatic conditions, particularly along the edges of the City. The areas most susceptible to fire hazards are located near the wildland urban interface at the City margins. Lands surrounding the City of Petaluma that are within the State Responsibility Area are classified as moderate fire hazard severity zone to the west and south of the City and high and moderate to the east and north. Land within City limits is classified as non-Very High Fire Hazard Severity Zone (VHFHSZ) in local, state or federal responsibility areas.

In October 2017, the Tubbs Fire (Central LNU Complex) burned approximately 36,807 acres in Sonoma County. Residents were exposed to direct effects of the wildfire, such as the loss of a structure, and to the secondary effects of the wildfire, such as smoke and air pollution. Smoke generated by wildfire consists of visible and invisible emissions that contain particulate matter (soot, tar, water vapor, and minerals) and gases (carbon monoxide, carbon dioxide, nitrogen oxides). Public health impacts associated with wildfire include difficulty in breathing, odor, and reduction in visibility.

## Wildfire Impact Analysis:

**4.20 (a-d) (Impair Emergency Plan, Expose Occupants to Wildfire Pollutants, Require Infrastructure, Pose Wildfire Related Risks) No Impact:** The project site is categorized as a Non-VHFHZ by CAL FIRE. The project is not located in or near state responsibility areas of lands classified as very high fire hazard severity zones. The project site is located over one mile from state responsibility areas. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan. There are no factors, such as steep slopes, prevailing winds, or the installation/maintenance of new infrastructure, that would exacerbate fire risk or expose project occupants to the uncontrolled spread of a wildfire, pollutant concentrations from a wildfire, post-fire slope instability, or post-fire flooding. Therefore, the project would have no impacts related to wildfire risks.

Wildfire Mitigation Measures: None required.

## 4.21. MANDATORY FINDINGS OF SIGNIFICANCE (CAL. PUB. RES. CODE §15065)

A focused or full environmental impact report for a project may be required where the project has a significant effect on the environment in any of the following conditions:

Wo	ould the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
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)?		
c)	Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		

## **Mandatory Findings Discussion:**

**4.21 (a) (Degrade the Environment) Less Than Significant Impact:** The project is located within the City of Petaluma's UGB in an established residential neighborhood. The project site is currently occupied by existing residential uses and accessory structures. The proposed 13-unit development on the project site is consistent with the General Plan Land Use and supports the goals, policies, and programs outlined in the General Plan.

As described above in the Biological Resources discussion, impacts to special-status plants, wildlife species, or sensitive habitat communities will be avoided or substantially reduced with implementation of mitigation measures. Mitigation measures set forth in the Biological Resources discussion ensure that potential impacts due to possible presence of special-status bats, nesting raptors, nesting passerine birds or waterfowl, fill to the floodplain, and outfall of stormwater to Washington Creek will be reduced to less than significant levels.

The Hydrology and Water Quality discussion and the Geology discussion identify measures to avoid and minimize potential environmental impacts associated with water quality, flooding, and soil stability. Additionally, the Cultural Resources discussion identifies measures to ensure that potential impact to buried cultural resources are avoided. No other impacts associated with environmental degradation, plant or animal communities, species population and ranges, or California history or pre-history have been identified. As such, with conditions of approval imposed by the City and implementation of mitigation measures the project will not degrade the quality of the environment, reduce habitat, or affect cultural resources. Therefore, the project will have less than significant impacts due to degradation of the environment.

**4.21 (b) (Cumulatively Affect the Environment) Less Than Significant Impact:** The project will contribute to cumulative impacts identified in the City's General Plan EIR but not to a level that is considered cumulatively considerable. As described above, the project will contribute to incremental growth in the City resulting in increased demands for public services and utilities, additional trips on city and regional roadways, and contributions to air quality and GHG emissions. Given that the scale of the project is limited to a 13-unit residential development, the incremental increase in cumulatively demand will be negligible.

The project is consistent with the surrounding land uses and implements the intent of the UGB through the development of an underutilized parcel in the existing urbanized area at an elevated density (General Plan Policy 1-P-2). Public utility and service providers will be capable of serving the project with existing or planned facilities. Potential environmental impacts are expected to remain at, or be mitigated to levels below significance, and long-term environmental goals are not expected to be adversely impacted by the project.

The project will contribute to cumulative impacts identified in the City's General Plan EIR but not to a level that is considered cumulatively considerable. When the project contributes to a cumulative impact identified in the General Plan, its contribution is incremental and at a level anticipated by the General Plan. Therefore, the project's cumulative impacts will be less than significant.

**4.21 (c) (Substantial Adverse Effect on Humans) Less Than Significant Impact:** The project has the potential to result in adverse impacts to humans due to air quality, biological resources, geology and soils, noise, and hydrology and water quality. With mitigation measures set forth above, environmental effect that would directly or indirectly impact human beings onsite or in the project vicinity will be reduced to less than significant levels. Therefore, the project will have less than significant impacts due to substantial adverse effects on human beings.

Mitigation Measures: None required.

## 5. REFERENCE DOCUMENTS:

#### 5.1. TECHNICAL APPENDICES

- A. Site Plan and Architectural Review Drawings for 109 Ellis Street, prepared October 9, 2018 and November 29, 2018.
- B. Biological Resources Assessment, prepared by WRA, Inc., December 2018.
- C. Tree Preservation Plan for 109 Ellis Street, prepared by Sherby Sanborn, November 16, 2018.
- D. Historic Resource Evaluation for 109 Ellis Street, prepared by the City of Petaluma, May 1, 2018.
- E. Soils Investigation Report, prepared by Reese & Associates, October 3, 2018.
- F. Phase I Environmental Site Assessment prepared by Trans Tech Consultants, December 18, 2018.
- G. Hydrology Study, prepared by Steven J. Lafranchi & Associates, Inc., December 2018.
- H. Preliminary Stormwater Control Plan, prepared by Steven J. Lafranchi & Associates, Inc., December 2018.
- I. Environmental Noise Assessment, prepared by Illingworth & Rodkin Inc., November 30, 2018.

## **5.2. OTHER DOCUMENTS REFERENCED**

- 1. City of Petaluma, General Plan 2025 and EIR.
- 2. City of Petaluma Municipal Code and Implementation Zoning Ordinance.
- 3. BAAQMD 2017 Bay Area Clean Air Plan, prepared by the Bay Area Air Quality Management District, April 2017.
- 4. California Environmental Quality Act Air Quality Guidelines, prepared by the Bay Area Air Quality Management District, May 2017.
- 5. California Department of Conservation Farmland Mapping and Monitoring Program.
- 6. City of Petaluma 2015 Urban Water Management Plan, prepared June 2016.
- 7. 2008 Energy Action Plan Update, prepared by the California Energy Commission, http://www.energy.ca.gov/2008publications/CEC-100-2008-001/CEC-100-2008-001.PDF, accessed April 3, 2018.
- 8. 2011 Energy Efficiency Strategic Plan, prepared by the California Energy Commission, http://www.energy.ca.gov/ab758/documents/CAEnergyEfficiencyStrategicPlan\_Jan2011.pdf, accessed April 3, 2018.
- 9. California Scenic Highway Mapping System, http://www.dot.ca.gov/hq/LandArch/16\_livability/scenic\_highways/index.htm, accessed March 2019.
- 10. 2016 California Green Building Standards Code (CALGreen), Effective January 1, 2017

6. MITIGATION MONITORING AND REPORTING PROGRAM



# City of Petaluma, California

Community Development Department
Planning Division
11 English Street, Petaluma, CA 94952

Project Name: DeCristo Multi-Family Project

File Number: File No. PLSR 18-0030

Address/Location: 109 Ellis Street, Petaluma, CA

(APN: 007-361-003)

## MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with Section 21081.6 of the California Environmental Quality Act (CEQA) and Section 15097 of the CEQA Guidelines. This document has been developed to ensure implementation of mitigation measures and proper and adequate monitoring/reporting of such implementation. CEQA requires that this MMRP be adopted in conjunction with project approval, which relies upon a Mitigated Negative Declaration.

The purpose of this MMRP is to: (1) document implementation of required mitigation; (2) identify monitoring/reporting responsibility, be it the lead agency (City of Petaluma), other agency (responsible or trustee agency), or a private entity (applicant, contractor, or project manager); (3) establish the frequency and duration of monitoring/reporting; (4) provide a record of the monitoring/reporting; and (5) ensure compliance.

The following table lists each of the mitigation measures adopted by the City in conjunction with project approval, the implementation action, timeframe to which the measure applies, the monitoring/reporting responsibility, reporting requirements, and the status of compliance with the mitigation measure.

# **Implementation**

The responsibilities of implementation include review and approval by City staff including the engineering, planning, and building divisions. Responsibilities include the following:

- 1. The applicant shall obtain all required surveys and studies and provide a copy to the City prior to issuance of grading permits or approvals of improvements plans.
- 2. The applicant shall incorporate all applicable code provisions and required mitigation measures and conditions into the design and improvements plans and specifications for the project.
- 3. The applicant shall notify all employees, contractors, subcontractor, and agents involved in the project implementation of mitigation measures and conditions applicable to the project and shall ensure compliance with such measures and conditions.
- 4. The applicant shall provide for the cost of monitoring of any condition or mitigation measure that involves on-going operations on the site or long-range improvements.

- 5. The applicant shall designate a project manager with authority to implement all mitigation measures and conditions of approval and provide name, address, and phone numbers to the City prior to issuance of any grading permits and signed by the contractor responsible for construction.
- 6. Mitigation measures required during construction shall be listed as conditions on the building or grading permits and signed by the contractor responsible for construction.
- 7. All mitigation measures shall be incorporated as conditions of project approval.
- 8. The applicant shall arrange a pre-construction conference with the construction contractor, City staff and responsible agencies to review the mitigation measures and conditions of approval prior to the issuance of grading and building permits.

# **Monitoring and Reporting**

The responsibilities of monitoring and reporting include the engineering, planning, and building divisions, as well as the fire department. Responsibilities include the following:

- 1. The Building, Planning, and Engineering Divisions and Fire Department shall review the improvement and construction plans for conformance with the approved project description and all applicable codes, conditions, mitigation measures, and permit requirements prior to approval of a site design review, improvement plans, grading plans, or building permits.
- 2. The Planning Division shall ensure that the applicant has obtained applicable required permits from all responsible agencies and that the plans and specifications conform to the permit requirements prior to the issuance of grading or building permits.
- 3. Prior to acceptance of improvements or issuance of a Certificate of Occupancy, all improvements shall be subject to inspection by City staff for compliance with the project description, permit conditions, and approved development or improvement plans.
- 4. City inspectors shall ensure that construction activities occur in a manner that is consistent with the approved plans and conditions of approval.

## **MMRP Checklist**

The following table lists each of the mitigation measures adopted by the City in connection with project approval, the timeframe to which the measure applies, the person/agency/permit responsible for implementing the measure, and the status of compliance with the mitigation measure.

	DECRISTO MULTI-FAMILY PROJECT MITIGATION MONITORING AND REPORTING PROGRAM						
	MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY		TION OF NTATION DATE		
AID OI	IALITY				COMPLETED		
AQ-1:	Latest BAAQMD recommended Best Management Practices (BMPs) to control for fugitive dust and exhaust during all construction activities shall be incorporated into all demolition and construction plans to require implementation of the following:	Measures shall be included in project design and construction documents.	<ul><li> Applicant</li><li> Planning Division</li><li> Building Division</li></ul>				
1.	All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.	<ul> <li>Periodic inspections during construction to ensure that measures are in place.</li> </ul>	during construction to ensure that measures				
2.	All haul trucks transporting soil, sand, or other loose material shall be covered.						
3.	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.						
4.	All vehicle speeds on unpaved roads shall be limited to 15 mph.						
5.	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.						
6.	Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.						
7.	All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper working condition prior to operation.						
8.	Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and						

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	MITIGATION MEASURE	MITIGATION MEASURE IMPLEMENTATION RE	RESPONSIBLE PARTY	IMPLEME	TION OF ENTATION
	take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.			ACTIVITY	DATE COMPLETED
2.	The Applicant and contractor(s) shall implement additional construction mitigation measures recommended by BAAQMD, when activities occur within 100 feet of nearby sensitive receptors, including the following:  Activities shall be phased to reduce the amount of disturbed surfaces at any one time. The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time should be avoided.  Idling time of diesel-powered construction equipment shall be limited to two minutes.  All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.  Require all contractors to use equipment that meets California Air Resource Board's (CARB) most recent certification standard for off-road heavy-duty diesel engines.	<ul> <li>Measures shall be included in project design and construction documents.</li> <li>Periodic inspections during construction to ensure that measures are in place.</li> </ul>	<ul> <li>Applicant</li> <li>Planning Division</li> <li>Building Division</li> </ul>		
BIOLO	OGICAL RESOURCES				
BIO-1	To avoid impacts to roosting bats, any project activities that would impact potential bat roosts (building demolition) shall be initiated outside of the maternity roosting season (March 1 – July 31). If building demolition cannot occur outside of the maternity season, then a bat roost survey shall be conducted within 14 days prior to the start of such activities by a qualified biologist. Any structures or trees that are determined to support roosts shall have a 200-foot no work buffer placed around them, and the buffer shall remain in effect until the maternity season has completed as determined by a qualified biologist. If a 200 foot no work buffer is infeasible, then appropriate species- and roost-specific measures shall be developed by a qualified biologist in consultation with CDFW. The qualified biologist shall be granted authority to establish no work buffers and carryout species and roost specific protocol.	<ul> <li>Conduct construction in conformance with measures herein.</li> <li>Notify Planning Division and CDFW in the event of discovery.</li> </ul>	<ul><li>Applicant</li><li>CDFW</li><li>Planning Division</li><li>Qualified biologist.</li></ul>		

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	DECRISTO MULTI-FAMILY PROJECT MITIGATI	ON MONITORING AN	D REPORTING PR	ROGRAM	
	MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY	COMPLE IMPLEME ACTIVITY	TION OF NTATION DATE COMPLETED
BIO-2.	For the protection of special-status birds, and native nesting birds protected by the MBTA and CFGC, future Project activities shall occur outside of the nesting season from September 1 – January 31, to the extent feasible.  If working outside of the nesting season is not possible, and project activities are initiated during the nesting season (February 1 – August 31), a qualified wildlife biologist shall conduct a nesting bird survey no more than 14 days prior to the start of Project activities. If no active nests are identified during the surveys, no impacts will occur to birds and work will progress without restriction. If active nests are identified, a no-disturbance buffer around the nest shall be implemented to avoid impacts to nesting birds. Buffers shall be determined by a qualified biologist, and typically range from 25 feet to 500 feet depending on the species and protection status. Once a qualified biologist determined that the nest is no longer be active, because of young fledging or nest failure, the buffer around the nest shall be removed and work shall progress without restriction.	<ul> <li>Conduct construction in conformance with measures herein.</li> <li>As required, conduct pre-construction survey in accordance with actions specified in Measure.</li> <li>Notify Planning Division and CDFW in the event of nest discovery.</li> </ul>	<ul> <li>Applicant</li> <li>CDFW</li> <li>Planning Division</li> <li>Qualified Biologist</li> </ul>		
BIO-3.	Within 48 hours prior to the initiation of Project work within the top of bank of Washington Creek, a qualified biologist shall conduct a preconstruction survey for western pond turtles. If a pond turtle is found during the survey, a qualified biologist shall relocate it outside of the work area, or it shall be allowed to move out of the area under its own power.	<ul> <li>Notify Planning Division and CDFW if species present.</li> </ul>	<ul><li>Applicant</li><li>CDFW</li><li>Planning Division</li><li>Qualified Biologist</li></ul>		
BIO-4:	status fish species that may be present within Washington Creek, the following shall be implemented:	<ul> <li>Incorporate into construction documents.</li> <li>Installation of screen at inflow pipe shall be</li> </ul>	<ul><li>Applicant</li><li>Planning Division</li><li>Public Works</li><li>SCWA</li><li>CDFW</li></ul>		

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	DECRISTO MULTI-FAMILY PROJECT MITIGATI	ON MONITORING AN	ID REPORTING P	ROGRAM	
	MITIGATION MEASURE	MITIGATION MEASURE IMPLEMENTATION RESPONSIBLE PARTY		COMPLETION OF IMPLEMENTATION	
				ACTIVITY	DATE COMPLETED
2.	All construction work occurring within the top of bank of Washington Creek shall be completed during the dry season between July 15 and October 1.	verified by qualified biologist.	• RWQCB		
3.	Prior to construction, the contractor shall be required to prepare an Accidental Spill Prevention and Cleanup Plan. This plan shall include required spill control absorbent material, for use beneath stationary equipment, to be present onsite and available at all times.				
4.	All refueling and maintenance of equipment, other than stationary equipment, shall occur at least 100 feet from the creek's top of bank. Refueling or maintenance of stationary equipment within the channel (top of bank to top of bank) shall only occur when secondary containment sufficient to eliminate escape of all potential fluids is in place. Any hazardous chemical spills shall be cleaned immediately.				
5.	All stockpiling of construction materials, equipment, and supplies, including storage of chemicals, refueling and maintenance, with the exception of stationary equipment, shall occur as far as possible outside the creek channel. No equipment shall be washed where runoff could enter the creek.				
6.	No motorized equipment shall be left within the channel (top of bank to top of bank) overnight.				
7.	All construction activities shall be conducted in isolation from flowing water.				
BIO-5:	To avoid, minimize and offset potential impact to waters of the united states and waters of the state (Washington Creek), the following shall be implemented:	Incorporate into construction	<ul><li>Applicant</li><li>Planning Division</li></ul>		
1.	Install and maintain soil erosion/sedimentation best management practices (BMP) prior to and during construction and following construction apply permanent BMPs for soil and erosion control such as seeding with a native erosion control seed mix).	<ul> <li>Implement all provisions herein and any additional set forth</li> </ul>	<ul><li>Public Works</li><li>SCWA</li><li>CDFW</li></ul>		
2.	Trenching and ancillary activities associated with the detention basin pipe installation shall occur during the dry season between July 15 and October 1. Trenches shall be back filled to match original land contours.	in regulatory permits from CDFW and/or RWQCB. Provide the	• RWQCB		

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	DECRISTO MULTI-FAMILY PROJECT MITIGATI	ON MONITORING AN	D REPORTING PI	ROGRAM	
	MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY		TION OF NTATION DATE
3. 4.	A dissipation apron shall be incorporated into the construction plans of the detention basin and shall be located below the 6-inch pipe outflow to minimize erosion of the stream bank. If the apron extends below the OHWM of Washington Creek, then a 404 permit from the Army Corps of Engineers shall be obtained.  Compensatory mitigation for temporary and permanent impacts to the Washington Creek bank, if determined necessary by regulatory agencies (CDFW and RWQCB) during permit application process, may be required at a ratio of 1:1 or as otherwise directed by the permit requirements. If compensatory mitigation is required, then the applicant shall purchase mitigation credits at a suitable mitigation bank in accordance with permit requirements.  Prior to initiating construction activities within RWQCB or CDFW jurisdiction, regulatory permits shall be obtained, conditions therein shall be implemented, and copies of the permits/agreements shall be provided to the City of Petaluma.	City with copy of permits.  • If required, purchase mitigation bank credit and submit proof to City and CDFW/RWQCB.			COMPLETED
	If during the course of ground disturbing activities, including, but not limited to excavation, grading and construction, a potentially significant prehistoric or historic resource is encountered, all work within a 100 foot radius of the find shall be suspended for a time deemed sufficient for a qualified and city-approved cultural resource specialist to adequately evaluate and determine significance of the discovered resource and provide treatment recommendations. Should a significant archeological resource be identified a qualified archaeologist shall prepare a resource mitigation plan and monitoring program to be carried out during all construction activities.	<ul> <li>Conduct construction in conformance with measures herein.</li> <li>Notify Planning Division in the event of potentially significant archaeological resource discovery.</li> </ul>	<ul> <li>Applicant</li> <li>Professional Archaeologist</li> <li>Planning Division</li> </ul>		
	Prior to issuance of a grading permit, an erosion control plan along with grading and drainage plans shall be submitted to the City Engineer for review. All earthwork, grading, trenching, backfilling, and compaction operations shall be conducted in accordance with the City of Petaluma's Grading and Erosion Control Ordinance #1576, Title 17, Chapter 17.31 of the Petaluma Municipal	Compliance with approved erosion control plan.	Applicant/Contra ctor/Geotechnica I Engineer		

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MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY		ETION OF ENTATION
			ACTIVITY	DATE COMPLETED
Code. These plans shall detail erosion control measures such as site watering, sediment capture, equipment staging and laydown pad, and other erosion control measures to be implemented during construction activity on the project site.		Public Works and Utilities     Building Division		
GEO-1. As determined by the City Engineer and/or Chief Building Official, all applicable recommendations set forth in the in Soils Investigation Report (Reese & Associates) prepared for the subject property, including, but not limited to grading, excavation, foundations systems, and compaction specifications shall be incorporated. Final grading plan, construction plans, and building plans shall demonstrate that recommendations set forth in the geotechnical reports have been incorporated into the design of the project.  Nothing in this mitigation measure shall preclude the City Engineer and/or Chief Building Official from requiring additional information to determine compliance with applicable standards. The geotechnical engineer shall inspect the construction work and shall certify to the City, prior to issuance of a certificate of occupancy that the improvements have been constructed in accordance with the geotechnical specifications.	The project geotechnical engineer shall inspect the construction work and shall certify to the City, prior to issuance of a certificate of occupancy that the improvements have been constructed in accordance with the geotechnical specifications.	<ul> <li>Applicant/Contra ctor/Geotechnica I Engineer</li> <li>Public Works and Utilities</li> <li>Building Division</li> </ul>		
HAZARDOUS MATERIALS				
HAZ-1. In order to avoid potential impacts related to the release of asbestos-containing materials or lead-based paint, an asbestos survey adhering to sampling protocols outlined by the Asbestos Hazard Emergency Response Act (AHERA) and lead-based paint screening shall be conducted prior to demolition of the existing structures. In the event that such substances are found, the applicant shall be subject to requirements set forth by the Occupational Safety and Health Administration (OSHA) AHERA requirements, lead standard contained in 29 CFR 1910.1025 and 1926.62, and any other local, state, or federal regulations. Treatment, handling, and disposal of these materials shall adhere to all requirements established by OSHA and other agencies.	<ul> <li>Submittal of asbestos and lead based paint screening.</li> <li>Development and implementation of a removal and disposal plan to be submitted to the City and carried out by the contractor.</li> <li>J Permit from the BAAQMD if required.</li> </ul>	<ul><li>Planning Division</li><li>Fire Department</li><li>BAAQMD</li></ul>		

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	DECRISTO MULTI-FAMILY PROJECT MITIGATION MONITORING AND REPORTING PROGRAM						
	MITIGATION MEASURE	ION MEASURE IMPLEMENTATION RESPONSIBLE COMPLETI PARTY IMPLEMENT ACTIVITY					
HAZ-2:	The existing well contained with a detached outbuilding onsite shall be properly abandoned or decommissioned in accordance with applicable regulations established by the County of Sonoma. As application, a deconstruction permit shall be obtained from the County of Sonoma and all provisions therein shall be implemented.	Applicant shall secure decommissions or abandonment permit from Sonoma County and provide the City Department of Public Works and Utilities with a copy.	<ul><li>Applicant</li><li>Planning Division</li><li>Public Works &amp; Utilities</li></ul>				
HAZ-3:	Any buried holding tanks including septic systems shall be properly decommissioned in accordance with applicable regulations established by the County of Sonoma. Removal of underground tanks shall be immediately followed by backfill in accordance with Engineering recommendations. Materials shall be properly disposed of at permitted facilities.	Applicant shall secure decommissions or abandonment permit from Sonoma County and provide the City with a copy.	<ul><li> Applicant</li><li> Planning Division</li><li> Public Works &amp; Utilities</li></ul>				
HYDROL	OGY AND WATER QUALITY						
HYDRO-:	L: A dissipation apron shall be incorporated into the detention basin design and shall be installed below the 6-inch outflow pipe. As appropriate the pipe shall be positioned at a 45-degree angle to the flowline of Washington Creek. Other water quality control measures as prescribed by the RWQCB shall be implemented.	<ul> <li>Conduct construction in conformance with measures herein.</li> <li>Incorporate into project design and construction documents.</li> </ul>	<ul> <li>Applicant</li> <li>Planning Division</li> <li>Building Division</li> <li>Public Works &amp; Utilities</li> </ul>				
HYDRO-2	2: Following construction of the residential buildings within the FP-C (Flood Plain – Combining District), and prior to occupancy, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, to be properly elevated. Such certification or verification shall be provided to the Floodplain Administrator. As determined	Incorporate into project design and construction documents.	<ul><li>Applicant</li><li>Planning Division</li><li>Building Division</li></ul>				

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	MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY		TION OF NTATION DATE
3	equipment resistant to flood damage and using methods and practices to minimize flood damage.	Conduct construction in conformance with measures herein.	• Public Works & Utilities		COMPLETED
NOISE		Conduct construction in	- Applicant		
NOI-1:	The following Best Construction Management Practices shall be implemented to reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance:	<ul> <li>Conduct construction in conformance with measures herein.</li> </ul>	<ul><li>Applicant</li><li>Planning Division</li></ul>		
1.	Limit construction hours to between 7:00 a.m. and 7:00 p.m., Monday through Friday and between 9:00 a.m. and 7:00 p.m. on Saturday, Sunday and State, Federal and Local Holidays.	Incorporate into project design and construction	Building Division		
2.	Delivery of materials and equipment to the site and truck traffic coming to and from the site is restricted to the same construction hours specified above.	documents.			
3.	Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.	<ul> <li>Maintain delivery, hauling and</li> </ul>			
4.	Unnecessary idling of internal combustion engines shall be strictly prohibited.	construction in			

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	MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY		ETION OF ENTATION DATE		
5. 6. 7. 8.	Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.  Acoustically shield stationary equipment located near residential receivers with temporary noise barriers.  Utilize "quiet" air compressors and other stationary noise sources where technology exists.  Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction activities.	accordance with measure.  Provide notice to surrounding properties in accordance with measure.  Applicant shall provide for periodic inspection during construction to ensure that measures are in place.			COMPLETED		
9.	Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from existing residences.						
10.	Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.						
11.	The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.						
12.	Coordinate with the McKinley School to minimize construction noise interference. As feasible conduct noisy construction activities after school hours or when school is not in session.						
13.	Notify all adjacent residences and the McKinley School of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses.						

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MITIGATION MEASURE	IMPLEMENTATION	RESPONSIBLE PARTY		ETION OF ENTATION		
			ACTIVITY	DATE COMPLETED		
14. Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.						

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