5.0 REVISIONS TO THE REVISED DRAFT EIR

5.1 INTRODUCTION

The following chapter presents corrections, modifications and clarifications to text, tables and figures as presented in the RDEIR. These changes and corrections have been initiated by City of Petaluma staff (as Lead Agency), and/or have been made in response to public comments received on the RDEIR. Changes include revisions warranted or required to ensure accuracy and clarity of the environmental analysis. These changes made to the RDEIR constitute information that clarifies or amplifies or makes insignificant modifications to the adequate RDEIR (see *CEQA Guidelines* § 15088.5b). As such, the following changes do not require recirculation of the RDEIR.

As indicated in the Introduction to this document, the entirety of the Scott Ranch Project Final EIR consists of the RDEIR and its appendices, and this Response to Comments document. Thus, changes to the RDEIR presented below supersede the corresponding original text of the RDEIR. Throughout this chapter, newly added text is shown in underline format, and deleted text is shown in ~~strikeout~~ format. Changes are listed in the order in which they appeared in the RDEIR (e.g., **Chapter 1.0, Introduction; Chapter 2.0, Executive Summary**).

Chapter 1.0, Introduction

Page 1.0-1, second paragraph:

As further discussed below, in Section 1.2, Project History, this DEIR is a Revised DEIR (RDEIR), which analyzes a reduced development at the project site from what was analyzed in the 2013 DEIR (93-lot residential project) and in the 2017 DEIR (66/63-lot residential project). Following the publication of the RDEIR, the project Applicants, have made further revisions to the proposed project. With these revisions, the residential component would continue to provide 28 single-family residences, but would use no natural gas, would reduce the acreage of residential lots and associated streets from approximately 12 to 6.4 acres, would provide 5 acres of private open space, and would increase the acreage of the Putnam Park Extension Project component from approximately 44 acres to 47 acres.

Page 1.0-3: Proposed Scott Ranch Project:

In June 2018, the Kelly Creek Protection Project (KCPP) of Earth Island Institute announced that it had entered into an agreement with Davidon Homes to purchase approximately 44 acres of the project site to develop it as an extension to Helen Putnam Regional Park (project details presented in Chapter 3.0, Project Description). Davidon Homes then modified the residential project analyzed in the 2017 Draft EIR to

propose a reduced development of 28 single-family homes on a little less than 11.2 ~~15~~ acres of the project site (see Chapter 3.0, Project Description), which would increase the acreage of the extension to Helen Putnam Regional Park to approximately 47 acres. The residential component would also provide 5 acres of private open space. KCPP and Davidon Homes are working collaboratively, but each submitted an application for its respective component of the Scott Ranch project. If the project is approved, each applicant will receive separate approvals. The 47 ~~44~~-acre park portion of the property will be transferred to KCPP and developed as an extension of Helen Putnam Park only if the City approves both the residential and park components of the Scott Ranch project. As City Council found the 2017 Draft EIR inadequate, the City of Petaluma has determined to prepare this RDEIR to analyze the revised project and address comments received on the 2017 Draft EIR.

Page 1.0-4, second paragraph:

The Davidon (28-Lot) Residential Project component is restricted to approximately 11.2 ~~15~~ acres of the project site, north of Kelley Creek, with approximately 6.4 ~~12~~ acres for the residences and approximately 5 ~~3~~ acres of common open space.

The Putnam Park Extension Project component occupies the remainder of the project site (approximately 47 ~~44~~ acres) and includes multi-use trails both north and south of Kelly Creek, connecting the existing barn complex on the east of the site to the existing Helen Putnam Regional Park on the west. The barn complex would be restored and adapted for public use. An amphitheater, group picnic area and playground would be added nearby.

Chapter 2.0, Executive Summary

Page 2.0-2, Section 2.3, Project Description:

The residential project component would develop approximately 19 ~~25~~ percent of the project site (11.2 ~~15~~ acres) with 28 single-family residences, streets, and common open space. The single-family residences would be developed along two new proposed streets– one new street would branch north of Windsor Drive and a second new street would branch south of Windsor Drive. The homes would be arranged in clusters off each of the two proposed streets. Other infrastructure improvements (i.e., sewer, water, and storm drainage facilities, including detention basins) needed to serve the proposed project would also be constructed. A roundabout on City right-of-way at the intersection of D Street and Windsor Drive would be developed as part of the residential project component. A six-foot wide sidewalk would be provided on the south side of Windsor Drive from the new intersection to D Street, in addition to an off-site sidewalk between Windsor Drive and Sunnyslope Avenue running along the east side of D Street.

The proposed Putnam Park Extension Project component would extend the existing Helen Putnam Regional Park eastward to D Street by developing a park area on the approximately 47 ~~44~~-acres that constitute most of the project site. The proposed project would develop a barn center that would include the renovation of the existing barn complex and the cleaning shed, pathways between the structures, bike parking, information kiosks, vegetable gardens, demonstration and working corrals, antique farm equipment with a hand pump, and a~~n~~ small amphitheater for outdoor learning activities.

Page 2.0-4, Section 2.5 Alternatives:

A Draft EIR was previously published and circulated in 2013 for a larger 93-lot residential development project on the project site. In response to comments received on the 2013 Draft EIR, the applicant for this development (Davidon Homes) modified the project to a development of 66-single family homes that was analyzed as an alternative in the 2013 DEIR. This 66-single family homes project was analyzed in a Draft EIR that was published and circulated in 2017. In June 2018, following public hearings on the 2017 Draft EIR, Kelly Creek Protection Project (KCPP) of Earth Island Institute announced that it had entered into an agreement with Davidon Homes to purchase approximately 44 acres of the project site to develop it as an extension to the Helen Putnam Regional Park. Davidon Homes then modified the residential project analyzed in the 2017 Draft EIR to propose a smaller development of 28 single-lot homes on approximately 11.23 ~~15~~ acres of the project site, which would increase the acreage of the extension to Helen Putnam Regional Park to approximately 47 acres. The residential component would also provide 5 acres of private open space. If the City approves both components under the proposed project (Davidon (28-Lot) Residential Project component and the Putnam Park Extension Project component), then the 47 ~~44~~-acre park portion of the property would be transferred to KCPP and developed as an extension of Helen Putnam Regional Park.

This RDEIR and alternatives analysis takes into account the comments received on the NOP for the 2013 Draft EIR, the comments received on the 2013 Draft EIR, and the comments received on the 2017 Draft EIR. The Davidon (28-lot) Residential Project component analyzed in this RDEIR was considered as a reduced development alternative in the 2017 DEIR. Therefore, this RDEIR does not put forth a reduced alternative for the Davidon (28-lot) Residential Project component as the proposed project analyzed in this RDEIR includes a residential component that is in itself a reduced project alternative and has been significantly reduced from the originally proposed 93-lot residential development. The project site could be developed at a higher density by right (up to 113 ~~110~~ units). Any reduction from the 28 residential units currently proposed would fall below the minimum density of the project site, which would be inconsistent with the General Plan land use designation. ~~, and it is not feasible to reduce the residential density of the project more than currently proposed.~~

Page 2.0-5, Section 2.5-1 Alternative 1: No Project/No Development, second paragraph:

The project site is currently zoned Residential 1 (R1) on the City's Zoning Map and designated Very Low Density Residential (0.6 to 2.5 dwelling units per acre) in the City's General Plan. Given the project site zoning and General Plan designation, if the proposed project were not to be approved, the site could still be developed with 28-113 ~~110~~ single-family homes without requiring a General Plan amendment or rezoning.

Page 2.0-5, Footnote 1:

The net acreage of the site is 45.27 ~~45.154.23~~ acres (excludes public or private rights-of-way, required public open space [e.g., the three-acre neighborhood park required by the General Plan], and the 200-foot-wide Kelly Creek corridor ~~floodways~~, but does not exclude the Urban Separator per Policy 1-P-19). Because the General Plan's residential density formula excludes "proposed" vehicular rights-of-way from the net acreage calculation, the project's reductions in proposed street rights-of-way have resulted in an increase in the net acreage calculation. As such, the number of units allowed to be developed on the project site ranges between 28 ~~276~~ and 113 ~~110~~ dwelling units.

Page 2.0-5, second paragraph:

Following KCPP agreement with Davidon Homes in June 2018 to purchase approximately 44 acres of the project site to develop it as an extension to Helen Putnam Regional Park, Davidon Homes then modified the residential project analyzed in the 2017 Draft EIR to propose a reduced development of 28 single-family homes on a little less than 11.2 ~~15~~ acres of the project site KCPP, which would increase the acreage of the extension to Helen Putnam Regional Park to approximately 47 acres. The residential component would also provide 5 acres of private open space. ~~and~~ Davidon Homes are working collaboratively, but each submitted an application for its respective component of the Scott Ranch project. If the project is approved, each applicant will receive separate approvals. The 47 ~~44~~-acre park portion of the property will be transferred to KCPP and developed as an extension of Helen Putnam Park only if the City approves both the residential and park components of the Scott Ranch project. As City Council found the 2017 Draft EIR inadequate, the City of Petaluma has determined to prepare this RDEIR to analyze the revised project and address comments received on the 2017 Draft EIR. Concerns raised during the preparation of the 2013 and 2017 Draft EIRs were considered in the preparation of this Revised Draft EIR.

Page 2.0-14, Mitigation Measure BIO-1a:

Mitigation for impacts on regulated waters shall be provided at a minimum 2:1 ratio as detailed in Mitigation Measure BIO-3. Mitigation for impacts on habitat for CRLF shall be provided at a minimum 3:1

ratio for permanent impacts and 1:1 ratio for temporary impacts, as detailed in Mitigation Measure BIO-1b. In addition, ~~The~~ the project Applicants shall obtain all required permits from the USFWS, CDFW, RWQCB, and USACE (e.g., 1600 series permits, 404 and 401 permits), incidental take permits and any others. The project Applicants will submit with the permit application a Wetland Mitigation Program for review and approval by the regulatory agencies. The project Applicants shall implement mitigation measures, as required by federal and State law and included in the permits, to avoid, minimize, or offset impacts to any species listed under either the state or Federal Endangered Species Acts or protected under any other state or federal law. Evidence that the project Applicants have secured all required authorization from these agencies shall be submitted to the Community Development Department of the City of Petaluma prior to issuance of any grading or building permits for the project.

Page 2.0-15, Mitigation Measure BIO-1b(a):

a. Preconstruction surveys shall be conducted by a Service-approved biologist prior to any grading or major vegetation clearance to ensure that no individual CRLF are lost during construction. These preconstruction surveys shall also verify the presence or absence of occupied dens of American badger, burrows of western burrowing owl, and individuals of foothill yellow-legged frog in the remote instance individuals were to disperse onto the site in advance of construction-related disturbance. The Final CRLFMP shall: 1) describe in detail the survey approach and methodology, and 2) specify that grading or vegetation clearance may not occur in any area where individual CRLF, American badger, western burrowing owl, and/or foothill yellow-legged frog are located until such time as the individual has either moved out of the disturbance zone or has been physically relocated by a Service-approved biologist legally authorized to handle the species. Any relocation effort for CRLF, American badger, western burrowing owl, and/or foothill yellow-legged frog shall be formulated in consultation with and approved by CDFW and USFWS, and shall be implemented by a qualified biologist.

Page 2.0-16, Mitigation Measure BIO-1b(g):

g. Avoid development and associated direct and indirect impacts on CRLF in accordance with project revisions required as part of the consultation review and approval process with CDFW and USFWS. Compensatory mitigation shall be provided at a minimum of 3:1 for permanent impacts and 1:1 for temporary impacts to CRLF habitat. This may be accomplished through permanent protection and establishment of two conservation easements or other mechanisms of suitable habitat on-site and off-site, where necessary to achieve the minimum compensatory mitigation requirements or as otherwise required by the CDFW and USFWS.

Page 2.0-16, Mitigation Measure BIO-1c:

Any active nests of raptors or other birds protected under federal and state regulations in the vicinity of construction shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading, vegetation removal and demolition activities during the non-nesting period (September 1 through January 31 ~~August 30 through February 14~~), or if this is not feasible, by conducting a preconstruction survey for raptor and other bird nests. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following:

Page 2.0-19, Mitigation Measure BIO-2a:

A detailed Landscape and Vegetation Management Plan (Plan) shall be prepared by a qualified landscape architect in consultation with CDFW and a plant ecologist experienced with native species.

Page 2.0-22, Mitigation Measure BIO-2e:

A Native Grassland Avoidance and Replacement Program (Program) shall be developed by a qualified biologist in consultation with CDFW to address the loss of native grasslands on the site and provide for adequate replacement. The Program shall define short-term construction controls and long-term maintenance requirements necessary to ensure grasslands are successfully reestablished and existing and restored native grasslands remain viable. The maintenance and management requirements shall include provisions for annual invasive species removal, and control on the establishment of both native and non-native trees and shrubs that could eventually shade out the grassland to be protected. The Final Program shall be subject to review and approval by the City and CDFW~~, including peer review by a qualified biologist selected by the City~~

Page 2.0-23, Mitigation Measure BIO-2e(g):

Annual monitoring reports shall be prepared by the qualified biologist and submitted to the CDFW and the Community Development Department of the City of Petaluma by December 31 of each monitoring year, for a minimum of five years or until the defined success criteria are met. The annual report shall summarize the results of the monitoring effort, performance standards, and any required contingency measures, and shall include photographs of the monitoring transects and program success. Maps shall be included in the monitoring report to show the location of monitoring transects and photo stations.

Page 2.0-24, Mitigation Measure BIO-3:

A Final Wetland Replacement and Enhancement Program (WREP) shall be prepared and implemented to compensate for the loss of jurisdictional waters on the project site. The Final WREP shall be prepared by a

qualified wetland consultant in consultation with and for review and approval by the City, the RWQCB, the USACE, and the CDFW.

Page 2.0-55, Mitigation Measure TRANS-1:

~~**Impact TRANS-1**~~	~~Development of the proposed project would generate VMT per capita greater than the City threshold.~~	~~*Significant*~~	No feasible mitigation measures were identified. ~~**Mitigation Measure TRANS-1**~~ ~~The Applicants shall contribute their fair share to mitigation measures that aim to reduce Citywide VMT per capita by an equivalent amount to the reduction of project-generated VMT from 19.6 VMT per capita to a level at or below 16.2 VMT per capita. These mitigation measures for reducing VMT shall include funding for transit passes or multi-modal infrastructure, such as transit shelters or other accessibility improvements, to address existing capital needs determined by the City of Petaluma's Engineer and Transit Manager. These measures, when applied to people working, living, or visiting areas of Petaluma with higher density, a greater mix of uses, and more amenities within a convenient walk, bike, or transit trip, are effective at reducing VMT. For example, constructing transit shelters and other amenities that support transit-oriented neighborhoods as outlined in the CAPCOA Strategy LUT-5 Increase Transit Accessibility are estimated to have a VMT reduction potential up to 5.8 percent. However, in the absence of a Citywide policy outlining the specific improvements and the effectiveness of these improvements at reducing VMT, the feasibility of the mitigation measure is currently unknown.~~	~~*Significant and Unavoidable*~~

Page 2.0-55, Footnote Number 2:

~~Based on the MTC 2015 model, the existing total Citywide daily VMT is 986,618. The project would generate 1,356 total daily VMT (19.6 VMT per capita * 28 homes * 2.47 average household size in Petaluma = 1,356 total VMT), and would be required to reduce this amount by 233 VMT (28 homes * 2.47 average household size * [19.6 VMT – 16.2 VMT per capita]). Therefore, the project would be responsible for a 0.02% reduction to total citywide VMT (233 total VMT / [986,618 total VMT + 1,356 total VMT] = 0.02%) in order to reduce citywide VMT per capita by an equivalent level of 16.1 VMT per capita for the project.~~

Page 2.0-56, Improvement Measure TRANS-2:

Impact TRANS-2	Development of the proposed project would not result in impacts related to the internal circulation system, substantially increase hazards due to a geometric design feature, nor substantially impact emergency access.	*Less than Significant*	No mitigation is required. ~~Recommended Improvement Measures:~~ ~~**IM TRANS-2**: During the SPAR process, at the City engineers' discretion, the project Applicants shall fund the following measures: striping of a northbound left turn lane at the parking lot access on D Street, trimming or removing any landscaping that may grow in such a manner that could obstruct the line of sight between motorists exiting the driveway and traveling along D Street, and installing flashing warning lights, signage, and striping to warn drivers about the driveway and roundabout. The installation of this northbound left turn pocket would provide adequate space for a northbound motorist to decelerate into the turn lane prior to waiting for a gap in the southbound direction and making a turn into the project site. The length of the storage of the turn pocket and bay taper should be 100 feet and 120 feet, respectively, and should be verified during the development of final design documents.~~	*Less than Significant*

Page 2.0-56, Impact TRANS-4:

Impact TRANS-4	Development of the proposed project would not impact pedestrian and bicycle facilities or create hazardous conditions for pedestrians or bicyclists that currently do not exist.	*Less than Significant*	No mitigation is required. ~~Recommended Improvement Measure:~~ ~~**IM TRANS-4:** During the SPAR process, at the City engineers' discretion, the proposed project shall enhance the design of pedestrian facilities in manner consistent with the recommended features in the General Plan. This may include the following:~~ ~~a. Sidewalk on the north side of Windsor Drive;~~ ~~b. Wider sidewalks with planter strips;~~ ~~c. Directional curb ramps, ADA compliant cross slopes, and tighter curb radii;~~ ~~d. Crosswalks on all intersection legs; and~~ e. ~~Intersection crossing measures such as RRFB's and bulb outs at the proposed crosswalk, in a manner consistent with MUTCD recommendations.~~	

Page 2.0-58, Cumulative Impact TRANS-2 :

Cumulative Impact TRANS-1	Development of the proposed project and the regional park trail would generate VMT per capita greater than the project threshold under cumulative conditions.	*Significant*	<u>No feasible mitigation measures were identified.</u> ~~Implement **Mitigation Measure TRANS-1.**~~	*Significant and Unavoidable*

Chapter 3.0, Project Description

Revised Project Description

The project Applicants, Davidon Homes and KCPP, have proposed a revised project following the publication of the RDEIR that would include reduction to the acreage of the residential lots and associated streets from approximately 12 to 6.4 acres, would provide 5 acres of private open space, and would increase the acreage of the Putnam Park Extension project component from approximately 44 to 47 acres. **Chapter 2.0** of this document provides the changes to the **RDEIR Chapter 3.0, Project Description**, pursuant to these revisions. Revisions to the proposed project and the environmental analysis of the revised project, as well as revisions to mitigation measures from the RDEIR that have been made in response to the revised project and its environmental analysis are presented in **Chapter 2.0, Revised Project Description** of this document.

Chapter 4.0, Environmental Impact Analysis

Page 4.0-6, last row of Table 4.0-1:

Deer Creek Residential	0 N McDowell/ (2.3 miles to the northeast)	New construction of a 129-unit residential development within five three-story buildings on 4.71 acres. The project will provide up to 194 off-street parking spaces.	CUP approved <u>by</u> ~~be~~ Planning Commission May 14, 2019. Still requires SPAR approval.

Page 4.0-19, first bullet:

- The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. There would be less than significant impact.

  Native tree species form woodland cover along Kelly Creek, D Street tributary, and the southwestern portion of the project site. Although this woodland cover could be considered a "land that can support 10-percent native tree cover" as defined in PRC Section 12220(g). The proposed project would remove 12 native coast live oak. However, approximately <u>327</u> ~~159~~ oak trees ~~of various sizes~~ would be planted ~~throughout the development areas~~ <u>with 112 trees of various sizes, as part of the residential component, and at least 215 additional trees as part of the restoration of the riparian corridor within the Putnam Park Extension Project component</u>. Therefore, implementation of the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, this impact would be less than significant.

Section 4.1, Aesthetics

Page 4.1-8, Section 4.1.4.3, Project Impacts and Mitigation Measures, second paragraph under Impact AES-1:

As described in **Section 1.2, Project History,** of this document, public comments expressed concerns with the previously proposed residential development and its impact on the aesthetic resources of the project site. The proposed Scott Ranch project includes a substantially smaller residential component than the previously proposed development that would be clustered on a 11.2 ~~15~~-acre portion of the 58-acre project site adjacent to existing housing subdivisions. Approximately 5 ~~3~~ acres of the 11.2 ~~15~~-acre portion would be landscaped as a common open space. The remaining 47 ~~44~~ acres that constitute the major portion of the project site would remain undeveloped and would be improved as an extension to the Helen Putnam Regional Park. Improvements under the Putnam Park Extension Project component would include demolition of the existing unoccupied mobile home and the remnants of the collapsed farm home, restoration of the barn complex and development of a barn center, a trail network, nature study area, playground, picnic areas, parking, and restrooms. The Putnam Park Extension Project component would also include new livestock fencing, enhancement to the stock pond, ephemeral drainages stabilization, riparian corridor enhancement for Kelly Creek and the D Street Tributary, and two infiltration basins. The Putnam Park Extension Project component improvements would result in minor changes to the scenic character of the 47 ~~44~~-acre portion of the site. Although the barn complex may be relocated for stabilization and preservation purposes, it would remain in the same area; therefore, the scenic value of the project site would be maintained.

Page 4.1-10, third paragraph:

The project site is located near the vantage point on D Street in the vicinity of the City limit. **Figure 4.1-3, Existing View from D Street Facing Northwest (near City limit)**, presents the view of the project site as seen from this vantage point. As the figure shows, short- to mid-range views of the project site from D Street at the City limit consists of grassy hillsides, meadows with low shrubs, mature trees, and the Victoria Subdivision in the background. **Figure 4.1-4, Updated View D Street Facing Northwest Showing Project Buildout**, presents a photo simulation depicting how the project site would appear from this vantage point.

Figure 4.1-3:

Figure title has been revised as follows: Existing View from D Street Facing Northwest.

SOURCE: LCA Architect, 2017

FIGURE **4.1-3**

IMPACT SCIENCES

Existing View from D Street Facing Northwest

Figure 4.1-4:

View from D-Street showing project buildout has been updated to show the revised project footprints.

Figure Number has been revised as follows: Updated Figure 4.1-4.

Figure source has been updated as follows: LCA Architects, 2022 ~~2017~~.

SOURCE: LCA Architect, 2022~~2017~~

UPDATED FIGURE **4.1-4**

IMPACT SCIENCES

View from D Street Facing Northwest Showing Project Buildout

Page 4.1-17, third paragraph:

Updated Figure 4.1-5, Key to Nearby Viewpoint Locations, identifies the location of photograph viewpoints.

Page 4.1-17, fourth paragraph:

Views of the project site from the Ridge Trail to the west currently are of grassy hillsides and mature trees lining the Kelly Creek riparian area as shown in **Figure 4.1-6, Existing View from the Ridge Trail**.

Page 4.1-17, last paragraph:

Updated Figure 4.1-7 presents photo simulations depicting how the project site would appear from this viewpoint (View 1).

Page 4.1-18, second paragraph:

Views of the project site from within Victoria Subdivision along Windsor Drive facing southeast (View 2) and south (View 3) are currently of grassy hillsides and the top of mature trees lining the Kelly Creek riparian area as shown in **Figure 4.1-8, Existing Views from Victoria Subdivision**.

Page 4.1-18, third paragraph:

Updated Figure 4.1-9 presents photo simulations depicting how the project site would appear from the two viewpoints within the Victoria Subdivision.

Page 4.1-18, fourth paragraph:

Views of the project site from Windsor Drive near the middle of the project site facing southwest (View 4) and south (View 5) are currently of grassy hillsides and mature trees lining the Kelly Creek riparian area as shown in **Figure 4.1-10, Existing Views from Windsor Drive**.

Page 4.1-18, fifth paragraph:

Updated Figure 4.1-11 presents photo simulations depicting how the project site would appear from this viewpoint.

Page 4.1-18, last paragraph:

As shown in **Figure 4.1-12, Existing Views from Pinnacle Heights Subdivision**, a grassy hillside with some mature oak trees on the ridgeline is visible on the northern portion of the site (View 6). A

Figure 4.1-5:

Figure Number has been revised as follows: Updated Figure 4.1-5.

Figure showing viewpoint locations has been updated to show the revised project footprints.

Figure source has been updated as follows: LCA Architects, 2022 ~~2017~~

SOURCE: LCA Architect, 2022~~2017~~

UPDATED FIGURE **4.1-5**

IMPACT SCIENCES

Key to Nearby Viewpoint Locations

1222.01•10/19

Figure 4.1-6:

Figure title has been revised as follows: Existing View from the Ridge Trail.

SOURCE: LCA Architect, 2017

FIGURE **4.1-6**

IMPACT SCIENCES

Existing View from Ridge Trail

1222.01•10/19

Figure 4.1-7:

Figure Number has been revised as follows: Updated Figure 4.1-7.

Figure showing viewpoint locations has been updated based on the revised project footprints.

Figure source has been updated as follows: LCA Architects, 2022.

SOURCE: LCA Architect, 2022~~2017~~

UPDATED FIGURE **4.1-7**

IMPACT SCIENCES

View from Ridge Trail Showing Project Buildout

1222.01•10/19

Figure 4.1-8:

Figure title has been revised as follows: **<u>Existing</u> Views from Victoria Subdivision.**

View 3 (Victoria Subdivision Facing South) has been revised with the existing view at this location.

View 2 – Victoria Subdivision facing Southeast

View 3 – Victoria Subdivision facing South

SOURCE: LCA Architect, 2017

FIGURE **4.1-8**

IMPACT SCIENCES

Existing View from Victoria Subdivision

Figure 4.1-9:

Figure number has been revised as follows: Updated Figure 4.1-8.

View 3 has been updated based on the revised project footprints.

Captions of the two views in the figure have been revised as follows:

View 2 – ~~Option A and Option B~~ View southeast from the Victoria Subdivision

View 3 – ~~Option A and Option B~~ View south from the Victoria Subdivision

Figure source has been updated as follows: LCA Architects, 2022.

View 2 – ~~Option A and Option B~~View southeast from the Victoria Subdivision

View 3 – ~~Option A and Options B~~View south from the Victoria Subdivision

SOURCE: LCA Architect, 2022~~2017~~

UPDATED FIGURE **4.1-9**

IMPACT SCIENCES

Views from Victoria Subdivision Showing Project Buildout

Figure 4.1-10:

Figure title has been revised as follows: **<u>Existing</u> Views from Windsor Drive.**

View 4 - Windsor Drive
Facing Southwest

View 5 - Windsor Drive
Facing South

SOURCE: LCA Architect, 2017

FIGURE **4.1-10**

IMPACT SCIENCES

Existing Views from Windsor Drive

Figure 4.1-11:

Figure number has been revised as follows: Updated Figure 4.1-11.

View 4 has been updated based on the revised project footprints.

Captions of the two views in the figure have been revised as follows:

View 4 - ~~Option A and Option B~~ View Southwest from Windsor Drive.

View 5 - ~~Option A and Option B~~ View South from Windsor Drive.

Figure source has been updated as follows: LCA Architects, 2022.

View 4 - ~~Option A and Option B~~ View Southwest from Windsor Drive

View 5 - ~~Option A and Option B~~View South from Windsor Drive

SOURCE: LCA Architect, 2022~~2017~~

UPDATED FIGURE **4.1-11**

IMPACT SCIENCES

Views from Windsor Drive Showing Project Buildout

Figure 4.1-12:

Figure number has been revised as follows: Updated Figure 4.1-12

View 6 – Intersection of D Street and Pinnacle Drive Facing West

View 7 – Pinnacle Drive Facing West

SOURCE: LCA Architect, 2017

FIGURE **4.1-12**

IMPACT SCIENCES

Existing Views from Pinnacle Heights Subdivision

Page 4.1-27, fourth paragraph:

Views from D Street near the intersection of Pinnacle Drive and Windsor Drive facing south (View 8) are currently of residential homes in the Pinnacle Heights Subdivision, hillsides, and meadows to the east and a low wooden fence located along the property line, the barn complex, and mature trees lining the Kelly Creek riparian area to the south as shown in **Figure 4.1-14, Existing Views from D Street**.

Page 4.1-28, first paragraph:

Of the approximately 58-acre site, approximately 11.2 ~~15~~ acres would be developed as single-family residences that would include approximately 4.8 acres of common open space. The remaining approximately 47 ~~44~~ acres, a majority of the project site, would be maintained as open space with improvements limited to the restoration of the barn complex for public use, the development of an amphitheater, group picnic area, playground, trails, public parking lots, restrooms, livestock fencing, infiltration basins and drainage features.

Page 4.1-28, second and third paragraphs:

Except for improvements of the Putnam Park Extension Project component, the proposed project would maintain 100-foot setbacks from the centerline of Kelly Creek and D Street tributary to Kelly Creek. A majority of the project site would be preserved as open space to protect special-status wildlife species (see **Section 4.3, Biological Resources**). In addition, a 300-foot Urban Separator along the southern boundary of the project site would be maintained as part of the 47 acres south of Kelly Creek that would be dedicated to Sonoma County Regional Parks.

Although the proposed project would remove approximately 30 trees, it would plant 327 ~~159 oak~~ trees with 112 oak trees of various sizes as part of the residential component, and at least 215 additional trees as part of the Putnam Park Extension Project component. The proposed project would also ~~and~~ introduce other landscaping.

Figure 4.1-14:

Figure title has been revised as follows: **Existing Views from D Street.**

View 8 – Intersection of D Street and Pinnacle Drive Facing South

View 9 – D Street Facing North

SOURCE: LCA Architect, 2017

FIGURE **4.1-14**

IMPACT SCIENCES

Existing Views from D Street

1222.01•10/19

Page 4.1-32, second paragraph:

The proposed project would include planting 327 ~~159 Oak~~ trees of various sizes. In addition, native trees, shrubs, and groundcover would be planted throughout the development areas.

Section 4.2, Air Quality

Page 4.2-19, footnote number 4:

In the CEQA Air Quality Guidelines, the BAAQMD put forth a screening methodology that sets forth the types and sizes of land development projects that would be expected to result in less than significant air quality impacts. For operational air emissions, the screening project size is identified at 325 single-family homes. The proposed project would construct 28 ~~66~~ single-family homes, and therefore based on the BAAQMD's screening criteria, would not be expected to generate operational emissions that would result in significant air quality impacts and quantification of operational emissions is not required. However, the screening methodology was not used in this Revised Draft EIR and CalEEMod was used to estimate the operational air emissions.

Page 4.2-24, Table 4.2-8:

Table 4.2-8
Operational Criteria Pollutant Emissions

	Estimated Emissions			
Emissions Source	**ROG**	**NOx**	**PM10[b]**	**PM2.5[b]**
Davidon (28-Lot) Residential Project Component	0.55	0.43	0.02	0.02
Putnam Park Extension Project Component (Phase 1)	0.02	0.03	0.0002	0.0002
Putnam Park Extension Project Component (Phases 2 and 3)	0.034	0.05	0.0004	0.0004
Total (tons)	0.604	0.51	0.021	0.021
Annual Thresholds (tons)	*10*	*10*	*15*	*10*
Exceeds Thresholds?	***No***	***No***	***No***	***No***
Average Daily Emissions (lbs/day)	3.31	2.79	0.11	0.11
Daily Thresholds (in lbs.)[a]	*54*	*54*	*82*	*54*
Exceeds Thresholds?	***No***	***No***	***No***	***No***

Source: CalEEMod data, Impact Sciences, 2019. See Appendix 4.2.
Note: Following the City's adoption of All-Electric Construction in New Constructed Buildings ordinance on May 3, 2021, the proposed project was revised to preclude the use of natural gas; no extension of natural gas infrastructure would occur as part of the project. Therefore, quantified emissions of the project's operational criteria pollutants would be slightly reduced from those presented in this table.
[a] *- Assumes 365-day operation.*
[b] *- PM10 and PM2.5 totals are for exhaust.*

Section 4.3, Biological Resources

Page 4.3-8, third paragraph:

As indicated in **Updated Figure 4.3-2, Native Grasslands**, the stands of native grasslands are scattered across the project site and occupy much of the hillside slopes along the southern edge of the project site.

Page 4.3-8, fourth paragraph:

Grasslands on the site not mapped as native in **Updated Figure 4.3-2** are non-native grasslands. Areas of non-native grassland are dominated by non-native grasses and forbs.

Page 4.3-9, last paragraph:

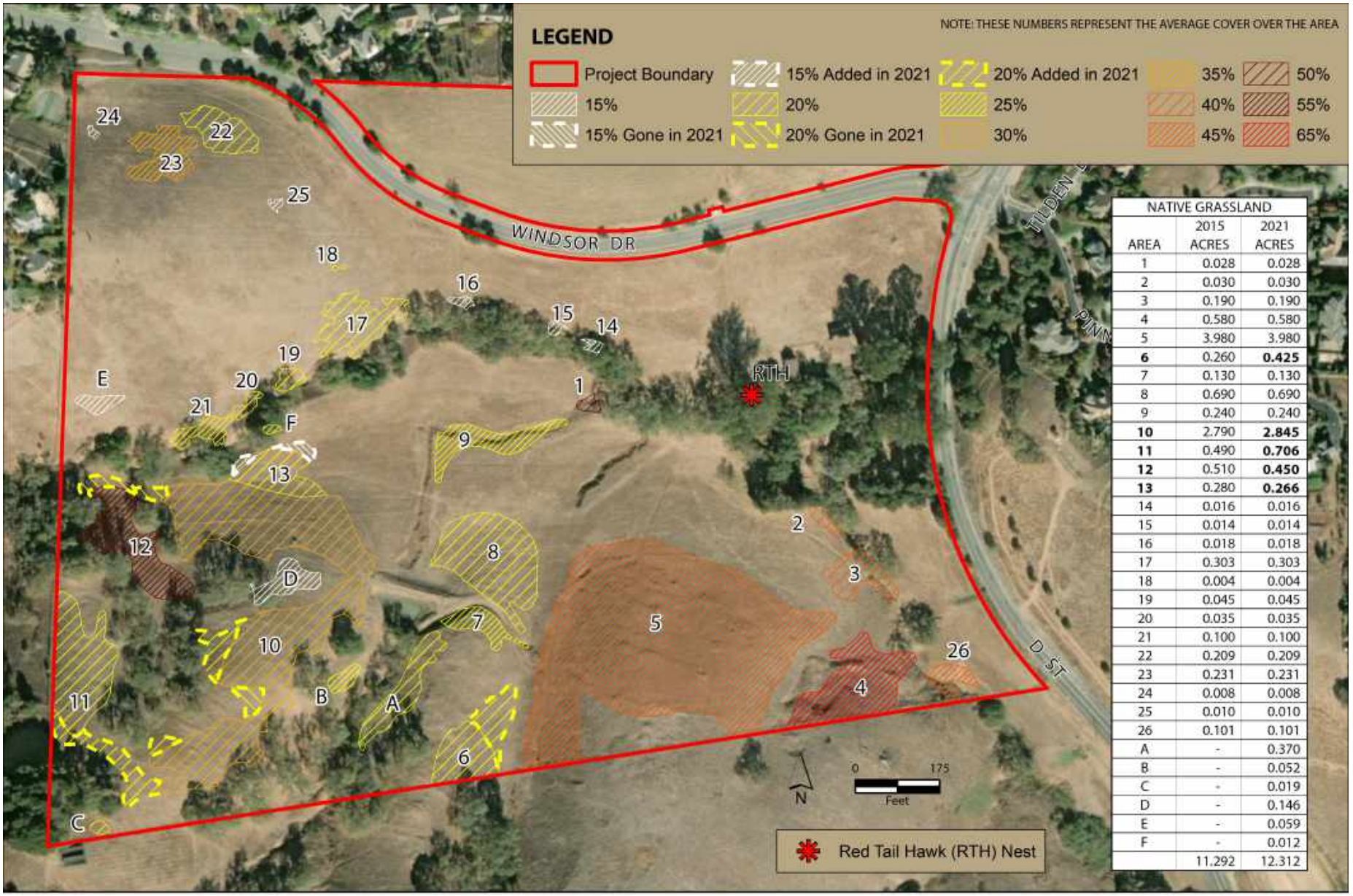
The locations of mapped trees from the 2013 and 2016 tree surveys are shown in **Updated Figure 4.3-3, Tree Locations and Proposed Removal**.

Figure 4.3-2:

Figure number has been revised as follows: Updated Figure 4.3-2.

Figure has been updated to show the revised grassland footprints according to the surveys conducted after the publication of the RDEIR.

Figure source has been updated as follows: Zentner and Zentner,2022; Martin, 2022; ~~Zentner and Zentner, 2016A~~



NATIVE GRASSLAND		
AREA	2015 ACRES	2021 ACRES
1	0.028	0.028
2	0.030	0.030
3	0.190	0.190
4	0.580	0.580
5	3.980	3.980
6	0.260	**0.425**
7	0.130	0.130
8	0.690	0.690
9	0.240	0.240
10	2.790	**2.845**
11	0.490	**0.706**
12	0.510	**0.450**
13	0.280	**0.266**
14	0.016	0.016
15	0.014	0.014
16	0.018	0.018
17	0.303	0.303
18	0.004	0.004
19	0.045	0.045
20	0.035	0.035
21	0.100	0.100
22	0.209	0.209
23	0.231	0.231
24	0.008	0.008
25	0.010	0.010
26	0.101	0.101
A	-	0.370
B	-	0.052
C	-	0.019
D	-	0.146
E	-	0.059
F	-	0.012
	11.292	12.312

SOURCE: Zentner and Zentner, 2016A; Environmental Collaborative 2021

UPDATED FIGURE **4.3-2**

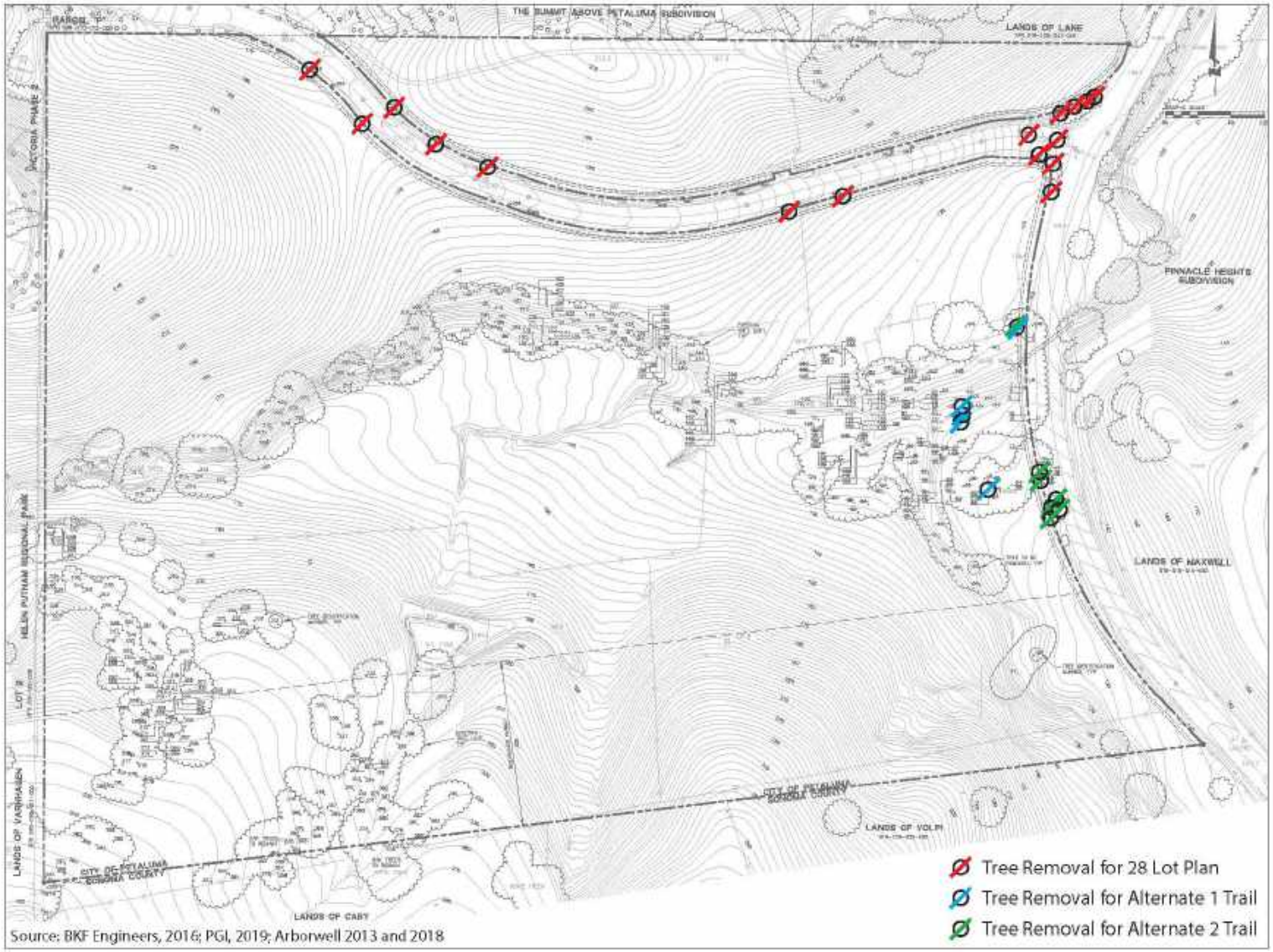
Native Grasslands

IMPACT SCIENCES

1222.001•07/16

Figure 4.3-3:

Figure has been replaced to show the correct number of trees that would be removed as part of the residential component. As revised, two trees along the south side of Windsor Drive would not be removed. The residential component would result in the removal of 16 trees onsite (with up to 3 trees as part of the offsite sidewalk improvements not shown on the figure). The park extension component would result in the removal of 11 trees.



SOURCE: BKF Engineers, 2016; PGI, 2019; Arborwell, 2013 and 2018

UPDATED FIGURE **4.3-3**

IMPACT SCIENCES

Tree Locations and Proposed Removals

1222.001•10/19

Page 4.3-18, Table 3-1:

Foothill yellow-legged frog _/~~C~~, SSC Permanent streams with riffles and cobble bottom (unlikely)

Page 4.3-22, third paragraph:

As indicated in **Updated Figure 4.3-2**, an estimated 12.3 ~~11.3~~ acres of native grasslands occur on the site, with a range in native species component from 15 to 65 percent. These native grasslands were not observed as distinct stands during earlier surveys of the site, including the special-status plant surveys conducted in 2003 and 2004, and the biological resource assessments prepared in 2003 and 2009.

Page 4.3-34, section 4.3.4.2, Project Details Methodology, second paragraph:

Implementation of the proposed project would still require disturbance of an estimated 16.7 ~~22.1~~ acres of the site. Vegetation within the anticipated limits of grading would be removed as part of recontouring in the northwestern portion of the site to accommodate residential development, as well as localized grading for roadway, parking, and pathway construction in the public park areas for improved public access and habitat enhancement. Most of the affected vegetation would consist of grasslands, including an estimated 0.95 ~~1.21~~ acres that qualify as native grasslands.

Page 4.3-37, Impact on Foraging and Estivation Habitat, first paragraph:

Given the presence of the stock pond breeding location, the entire project site provides suitable foraging and estivation habitat for CRLF. The proposed project would develop approximately 7.09 ~~11.7~~ acres of CRLF suitable habitat on the project site to accommodate proposed residences, roadways, and two detention basins along Windsor Drive. An estimated additional 8.2 ~~10.4~~ acres would be temporarily disturbed by grading. The 8.2 ~~10.4~~ temporarily disturbed acres includes grading in the northwestern portion of the project site to accommodate the proposed Davidon (28-lot) Residential Project component, which would be inaccessible to CRLF during construction and would likely have reduced suitability as habitat due to loss of natural cover, possible poor revegetation success, inaccessibility, or proximity to future development and other factors. The 8.2 ~~10.4~~ acres to be temporarily disturbed also includes grading and other disturbance for the Putnam Park Extension Project component would include construction of the proposed parking lots and multi-use trails, three pedestrian bridges over Kelly Creek, habitat enhancement plantings, and installation of livestock fencing and piping to water troughs. This would leave approximately 41.9 ~~36.56~~ acres (or about 71 ~~62~~ percent) of the project site undisturbed by residential development, open space improvements, and construction-related disturbance.

Page 4.3-40, Conclusions:

Mitigation for ~~potential~~ impacts on CRLF would ~~presumably~~ be achieved through ~~a combination of~~ on-site ~~and possibly off-site~~ habitat preservation and enhancement. Temporary impacts on CRLF habitat would be addressed through appropriate construction restrictions and controls, through adequate revegetation of temporarily disturbed areas, and by enhancing the existing creek corridors, stock pond, and uplands to be retained as permanent open space. Permanent habitat impacts (habitat lost as a result of development) would ~~presumably~~ be mitigated at a 3:1 ratio, consistent with USFWS practices for impacts on CRLF. Based on preliminary estimates of permanent impacts to 9.2~~16.2~~ acres of the project site for both the Davidon (28-lot) Residential Project component and the Putnam Park Extension Project component, protection of an estimated 27.5 ~~48.6~~ acres would be required at a minimum. A total of approximately 36 acres south of Kelly Creek would be left undisturbed by development which is sufficient for mitigation purposes in addressing permanent impacts to CRLF. Assuming all of the on-site open space lands south of Kelly Creek ~~would~~ qualify as conservation easement lands, ~~about~~ ~~42.4 acres~~ sufficient acreage would be available for mitigation purposes onsite. ~~A minimum of 6.1 acres, at a yet to be identified off-site location, would be required to meet the standard mitigation ratio for permanent impacts.~~ These estimates assume that the regulatory agencies would agree to a proposed mitigation program, which ~~presumably~~ would include permanent protection of on-site habitat by preserving the open space via the establishment of two conservation easements and mitigating the temporary impacts associated with grading and other construction-related disturbance on-site.

Page 4.3-42, Mitigation Measure BIO-1a:

Mitigation for impacts on regulated waters shall be provided at a minimum 2:1 ratio as detailed in **Mitigation Measure BIO-3**. Mitigation for impacts on habitat for CRLF shall be provided at a minimum 3:1 ratio for permanent impacts and 1:1 ratio for temporary impacts, as detailed in **Mitigation Measure BIO-1b**. In addition, the ~~The~~ project Applicants shall obtain all required permits from the USFWS, CDFW, RWQCB, and USACE (e.g., 1600 series permits, 404 and 401 permits), incidental take permits and any others. The project Applicants will submit with the permit application a Wetland Mitigation Program for review and approval by the regulatory agencies. The project Applicants shall implement mitigation measures, as required by federal and state law and included in the permits, to avoid, minimize, or offset impacts to any species listed under either the state or federal Endangered Species Acts or protected under any other state or federal law. Evidence that the project Applicants have secured all required authorization from these agencies shall be submitted to the Community Development Department of the City of Petaluma prior to issuance of any grading or building permits for the project.

Page 4.3-42, Mitigation Measure BIO-1b:

A Final California Red-Legged Frog Mitigation Plan (CRLFMP) shall be prepared by a qualified wildlife biologist to minimize and mitigate potential impacts of the project on CRLF. The Final CRLFMP shall be prepared in consultation with and be approved by the USFWS, CDFW, USACE, and City, and shall provide for the protection, replacement, and management of habitat for CRLF affected by proposed development and public open space use on the project site. The Final CRLFMP shall be required as a condition of approval for the project Tentative Map, and shall include the following components and meet the following standards:

Preconstruction and Construction Avoidance Provisions

a. Preconstruction surveys shall be conducted by a Service-approved biologist prior to any grading or major vegetation clearance to ensure that no individual CRLF are lost during construction. These preconstruction surveys shall also verify the presence or absence of occupied dens of American badger, burrows of western burrowing owl, and individuals of foothill yellow-legged frog in the remote instance individuals were to disperse onto the site in advance of construction-related disturbance. The Final CRLFMP shall: 1) describe in detail the survey approach and methodology, and 2) specify that grading or vegetation clearance may not occur in any area where individual CRLF, American badger, western burrowing owl, and/or foothill yellow-legged frog are located until such time as the individual has either moved out of the disturbance zone or has been physically relocated by a Service-approved biologist legally authorized to handle the species. Any relocation effort for CRLF, American badger, western burrowing owl, and/or foothill yellow-legged frog shall be formulated in consultation with and approved by CDFW and USFWS, and shall be implemented by a qualified biologist.

b. All project-related -vegetation clearing and grading activities within potential habitat for CRLF shall be monitored by a Service-approved biologist. The Final CRLFMP shall specify the duties of the Service-approved biologist.

c. All construction personnel shall be trained in CRLF identification, habitat description, legal protective status, construction restrictions, and procedures to avoid unnecessary disturbance to potential habitat or incidental take of these species. The Final CRLFMP shall describe this training program.

d. Exclusionary fencing shall be installed prior to grading or major vegetation clearance where appropriate to keep CRLF out of construction areas. The Final CRLFMP shall identify where such fencing is to be installed and provide procedures for fence installation, monitoring, and

maintenance. The Final CRLFMP shall require that the exclusionary fencing be installed under the direct supervision of a Service-approved biologist and shall be maintained during the course of construction activities on the site.

e. If necessary, identify the locations for use of permanent exclusionary fencing or other barriers to prevent and minimize dispersal of CRLF into areas with concentrated human activity, based on input from the USFWS and CDFW. This may be particularly important at locations along segments of the multi-use trail to the south of Kelly Creek or parking lot and staging area on the east side of the D Street tributary, to prevent the movement of individual frogs into areas, of intensive bike, pedestrian and vehicle activity. If used, the permanent exclusionary fencing/barriers shall be designed and installed during project construction under the supervision of a Service-approved biologist.

f. Appropriate signage shall be designed and installed to restrict unauthorized human access into essential habitat areas for CRLF during construction.

Habitat Avoidance and Mitigation Provisions

g. Avoid development and associated direct and indirect impacts on CRLF in accordance with project revisions required as part of the consultation review and approval process with CDFW and USFWS. Compensatory mitigation shall be provided at a minimum of 3:1 for permanent impacts and 1:1 for temporary impacts to CRLF habitat. This may be accomplished through permanent protection and establishment of two conservation easements or other mechanisms of suitable habitat on-site and off-site, where necessary to achieve the minimum compensatory mitigation requirements or as otherwise required by the CDFW and USFWS.

h. Control unauthorized access to the on-site stock pond and open space in the southwestern portion of the project site to protect these essential habitat features for CRLF. Install fencing and interpretive displays and restrictive signage along all trail systems as necessary to control access from the proposed multi-use trails and other locations where unauthorized access is likely.

i. Where disturbance and improvements within essential habitat and movement corridors cannot be completely avoided and on-site mitigation is considered insufficient by the CDFW and USFWS, the loss shall be mitigated by permanently preserving similar quality habitat known to support CRLF at off-site locations preferably in the Petaluma vicinity of Sonoma County, as negotiated with the regulatory agencies. It is possible that the mitigation location, whether on-site or possibly off-site as well, could be used to achieve mitigation for other biological and wetland impacts,

depending on its habitat characteristics, provisions for habitat creation and/or enhancement defined as part of the Final CRLFMP, and negotiations with the CDFW and USFWS.

j. Identify methods to minimize the potential for harassment or take of listed and nonlisted species as a result of increased human activity associated with development and open space use of the site. This shall include an educational program for future residents and visitors, fencing and interpretive signage at access points into natural open space, use of sensitive grade changes, culverted undercrossings, and bridged overcrossings in uplands where roadways or trails bisect movement corridors, and possible use of permanent exclusionary fencing.

Habitat Connectivity and On-Site Management Provisions

k. Define methods to provide connectivity for CRLF between open space areas on site and to the surrounding undeveloped lands to the west, south, and east.

l. Provide for permanent protection and adaptive management of open space lands (both on-site and possibly off-site) intended to function as potential habitat for CRLF.

Page 4.3-44, Mitigation Measure BIO-1c:

Any active nests of raptors or other birds protected under federal and state regulations in the vicinity of construction shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading, vegetation removal and demolition activities during the non-nesting period (September 1 through January 31 ~~August 30 through February 14~~), or if this is not feasible, by conducting a preconstruction survey for raptor and other bird nests. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following:

a. To avoid "take" of barn owls in the large barn, any relocation or restoration work shall be initiated in the non-nesting period or shall be performed in conformance with the pre-construction survey procedures detailed below.

b. If grading is scheduled during the active nesting period (February 1~~5~~ through August 31), a qualified wildlife biologist shall conduct a pre-construction nest survey no more than 15 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity.

c. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading and vegetation removal in the vicinity of the nest shall be deferred until the young birds have fledged

or are no longer dependent on the nest. A nestsetback zone shall be established within which all construction-related disturbances shall be prohibited. These are typically at least 300 feet for all raptors and 100 feet for other birds protected under the Migratory Bird Treaty Act and State Fish and Game Code, unless site-specific conditions allow for some variation from these distances as determined by the qualified wildlife biologist in coordination with CDFW. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel restricted from the area.

d. If permanent avoidance of the nest is not feasible, impacts shall be minimized by prohibiting disturbance within the nest-setback zone until a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from the nest are foraging independently and capable of independent survival.

e. Demolition of any existing buildings and removal of any trees shall also consider possible bat use of the site, as defined below in Mitigation Measure BIO-1d.

f. A survey report by the qualified biologist verifying that the young birds have fledged shall be submitted to the Community Development Department of the City of Petaluma prior to initiation of grading and vegetation removal in the nest-setback zone.

Page 4.3-46, Impact BIO-2, first paragraph:

Proposed grading would generally occur in areas dominated by non-native grassland and largely avoids the Kelly Creek and D Street tributary riparian corridors. However, an estimated 0.95 ~~1.21~~ acres of native grasslands and small areas of riparian habitat and seasonal wetlands would be affected, which would represent significant impacts on sensitive natural communities, as detailed below.

Page 4.3-47, second paragraph:

Extensive enhancement plantings are proposed as part of improvements under the Putnam Park Extension Project component (see **Updated Figure 3.0-4**). The proposed project would replace the Protected Trees that would be removed in compliance with the City of Petaluma IZO Section 17.060 — Tree Removal. The City's tree ordinance requires Protected Trees determined to be in good to excellent condition to be replaced at a 1:1 trunk diameter ratio. Protected Trees determined to be in marginal to fair condition are required to be replaced at a 2:1 trunk diameter ratio. Protected Trees determined to be in poor condition are not required to be replaced (City of Petaluma IZO Section 17.065). In compliance with the City of Petaluma IZO Section 17.060 — Tree Removal,[14] the proposed project would include planting approximately 327 ~~159 oak~~ trees of various sizes. Native trees, shrubs, and groundcover would be planted throughout the development areas.

Street trees and a 5-foot sidewalk would be introduced along new public street, as required by City Standards.

Coast live oak, a native tree species, and riparian woodlands are protected by the City of Petaluma under the Tree Preservation Ordinance (IZO, Chapter 17). The ordinance calls for the protection, preservation, and maintenance of groves, stands, and individual mature trees with the objective of preventing any net loss of tree canopy and requiring adequate replacement of trees removed as a result of a new development. Based on the tree assessment prepared for the project (Arborwell 2018 and Prunuske Chatham, Inc. 2019a), approximately 27 ~~30~~ trees would be removed on-site, most of which qualify as Protected Trees under the City's Tree Preservation Ordinance given their location along the Kelley Creek corridor or along the Windsor Drive and D Street rights-of-ways. In addition, up to three (3) trees would be removed for the D Street off-site sidewalk improvement. On-site trees to be removed consist of 12 native coast live oak, six non-native London plane (Platanus acerifolia), two non-native scarlet oak (Quercus coccinea) five non-native eucalyptus, and two Monterey cypress.

Page 4.3-49, Native Grasslands, first paragraph:

Proposed grading and development would eliminate an estimated 0.95 ~~1.21~~ acres of native grasslands on the site with approximately 0.64 ~~0.85~~ acres to accommodate grading and development for the Davidon (28-lot) Residential Project component and the remaining 0.12 ~~0.36~~ acres associated with improvements under the Putnam Park Extension Project component. Additionally, an estimated 0.19 acres of native grassland would be temporarily disturbed but restored as part of trail construction and other improvements in proposed open space areas. The total 0.95 acres ~~This~~ represents roughly 8 ~~11~~ percent of the mapped 12.3 ~~11.29~~ acres of native grasslands on the site. For most of the Putnam Park Extension Project component, incursion into the highest quality stands of native grasslands to the south of Kelly Creek would be avoided, based on species diversity and native species abundance.

Page 4.3-49, Freshwater Marsh and Other Wetlands, first paragraph:

Modifications to scattered areas of freshwater seeps, seasonal wetlands, and riparian habitat would occur as a result of proposed grading and construction on the site. These consist of an estimated 0.13 ~~0.07~~ acre of federally regulated waters, as well as construction related disturbance and shading, as well as possible installation of abutments and revetment within state-regulated waters below the top-of-bank.

Page 4.3-51, Mitigation Measure BIO-2(a):

A detailed Landscape and Vegetation Management Plan (Plan) shall be prepared by a qualified landscape architect in consultation with CDFW and a plant ecologist experienced with native species […]

Page 4.3-53, Mitigation Measure BIO-2e:

A Native Grassland Avoidance and Replacement Program (Program) shall be developed by a qualified biologist in consultation with CDFW to address the loss of native grasslands on the site and provide for adequate replacement… The Final Program shall be subject to review and approval by the City and CDFW. ~~, including peer review by a qualified biologist selected by the City~~ […]

Page 4.3-54, Mitigation Measure BIO-2e(g):

Annual monitoring reports shall be prepared by the qualified biologist and submitted to the CDFW and the Community Development Department of the City of Petaluma by December 31 of each monitoring year, for a minimum of five years or until the defined success criteria are met. The annual report shall summarize the results of the monitoring effort, performance standards, and any required contingency measures, and shall include photographs of the monitoring transects and program success. Maps shall be included in the monitoring report to show the location of monitoring transects and photo stations.

Page 4.3-55, Impact BIO-3, first paragraph:

The proposed project would require fills and modifications to scattered areas of freshwater seeps, seasonal wetlands, and riparian habitat as a result of proposed grading and construction on the site. This would comprise an estimated 0.13 ~~0.07~~ acre of federal waters regulated by the USACE.

Page 4.3-56, Mitigation Measure BIO-3:

A Final Wetland Replacement and Enhancement Program (WREP) shall be prepared and implemented to compensate for the loss of jurisdictional waters on the project site. The Final WREP shall be prepared by a qualified wetland consultant in consultation with and for review and approval by the City, the RWQCB, the USACE, and the CDFW […]

Page 4.3-72, fourth paragraph:

With regard to development of the project site and its relationship to surrounding habitat, the proposed project would contribute to a cumulative loss of grassland and woodland habitat in the area, converting approximately 6.4 ~~12~~ acres of grassland to suburban residential development.

Page 4.3-73, first reference on the page:

Updated Wildland Resource Management, 2021 ~~2020~~, Fuel Management Plan, Scott Ranch, Petaluma, CA.

Section 4.4, Cultural and Tribal Cultural Resources

Page 4.4-5, Survey Conducted by Archaeological Resources Service (ARS), first paragraph:

On October 8, 2014, William Roop and Jacquie Prescott Frazier reexamined the project site for indications of prehistoric settlement or use within the project area. Particular attention was paid to the land north of Windsor Drive where a potential was raised for the presence of the southern extension of CA-SON-1082—a substantial prehistoric habitation site with midden soil located in close proximity to the project site. Pedestrian surveys concluded that CA-SON-1082 does not extend on to the northern parcel of the project site (for more information on this site, see below).

P**age 4.4-18, City of Petaluma Resolution No. 2005-198 as Amended in 2017, first bullet**:

1. All requests* for demolition of structures built in 1945 or earlier shall require discretionary review and approval prior to issuance of an associated building permit.

Section 4.5, Energy

Page 4.5-12, Electricity and Natural Gas:

Electricity ~~and Natural Gas~~

According to the CalEEMod estimates, once fully operational, the project would result in a demand of approximately ~~723,371 thousand British Thermal Units per year (kBTU/year) of natural gas and would demand up to~~ 242,463 kilowatt hour per year (kWh/year), or 0.24 GWh/year, of electricity (see Appendix 4.2).[The following footnote has been added: Following the City's adoption of All-Electric Construction in New Constructed Buildings ordinance on May 3, 2021, the proposed project was revised to preclude the use of natural gas; no extension of natural gas infrastructure would occur as part of the project. Therefore, the quantified demand for electricity presented above would increase to replace the demand for gas for furnaces, water heaters, and cooktops. The shift to electrical use would meet the goals of the Climate Emergency Framework and would not result in significant use of electricity that would change the conclusions of the RDEIR.

The project would be required to comply with the 2019 California Green Building Codes under Title 24 (CALGreen). The 2019 California Green Building Code goes into effect January 1, 2020 and represents the state policy on building energy efficiency. The goals of the Title 24 standards are to improve energy efficiency of residential and non-residential buildings, minimize impacts during peak energy-usage periods, and reduce impacts on state energy needs. Residences would incorporate sustainable design features, including solar energy generation, in compliance with the new Building Energy Efficiency

Standards of California Building Code Title 24, which will require zero net electricity residences effective January 1, 2020. A net zero electricity residence generates enough energy from renewable sources to offset all on site electricity use.

Additionally, the project is subject to the City of Petaluma Municipal Code 17.04.010, which states wholly new construction projects are required to meet CALGreen Tier 2. To meet Tier 2, a project must exceed the latest CALGreen design standards by a minimum of 15 percent. On May 3rd, 2021, the City of Petaluma adopted the All-Electric Construction in New Constructed Buildings ordinance with the goal of achieving carbon neutrality by 2030. Therefore, the proposed project would not include the use of natural gas. ~~In addition, the City of Petaluma, is currently considering an All Electric Building Code, these all electric requirements – called reach codes –would prohibit the construction of natural gas infrastructure for new buildings, thereby preventing the use of gas-powered appliances in those buildings. At this time, the City has not approved the All Electric Building Code and the proposed project would be constructed with natural gas powered furnaces, water heaters, cooktops and fireplace inserts~~.

The proposed project would also include the following features to minimize energy consumption, many of which are mandated by the CALGreen code, which would further reduce the amount of electricity ~~and natural gas~~ consumed by the proposed project from the estimates reported above in order to reach zero net electricity ~~and reduce natural gas consumption~~ (see Section 3.0, Project Description, for a complete list of energy conservation measures):

Indoor Features

- Approved high efficiency toilets (HET) as designated on the city's list of qualifying HETs.
- Lavatory and/or bar faucets not exceeding 1.5 gallons per minutes
- Showerheads with a flow rate of 2.0 gallons per minute or less
- Shower units with more than one showerhead would have each showerhead plumbed so it can be turned on and off independently from each other
- Kitchen and/or utility sink faucets not exceeding 2.2 gallons per minute
- High efficiency clothes washers (water factor of 6.0 or less)
- High efficiency dishwashers (Energy Star rated)

Outdoor Features

Landscaping and irrigation systems that meet the following requirements, in accordance with the current Petaluma Water Efficient Landscape Ordinance:

- Weather-based irrigation controller with rain shutoff
- Flow sensor and master valve shutoff (large landscapes)
- Matched precipitation (flow) rates for sprinkler heads
- Drip/microspray/subsurface irrigation when appropriate
- Minimum irrigation system distribution uniformity of 75 percent
- Proper hydro-zoning, turf minimization and use of native/drought tolerant plants materials
- Use of landscaping contouring to minimize precipitation runoff

In addition to measures required under state and local law, the proposed project would include an electric vehicle charger in each residence and electric vehicle charging stations in the lower parking lot. The electricity ~~and natural gas reductions~~ from these measures was not included in the CalEEMod modeling and, as a result, the total electricity ~~and natural gas usage~~ during project operation is a conservative estimate. As the project would comply with Title 24 and include the above sustainable project features to minimize energy use, electricity ~~and natural gas~~ use would not be inefficient, wasteful, and unnecessary.

Page 4.5-13, footnote Number 3:

City of Petaluma. 2021. Introduction of an Ordinance amending the Petaluma Municipal Code to create a new Chapter 17.09 entitled All-Electric Construction in Newly Constructed Buildings, adopting new local amendments to the California Building Standards Code, and deleting existing all-electric incentive in Petaluma Municipal Code Section 17.04.010(J). ~~All Electric Building Codes (Reach Codes).~~ Available online at: https://petaluma.granicus.com/MetaViewer.php?view_id=31&clip_id=3273&meta_id=490507 ~~https://cityofpetaluma.org/all-electric-building-rules/~~, accessed March 10, 2020.

Page 4.5-15 and 4.5-16, last and first paragraphs:

Beyond state requirements to ensure increases in fuel efficiency, the project Applicants will construct 240-volt outlets in the garages of each residence so that residents have the ability to charge electric vehicles. Additionally, the Putnam Park Extension Project component would include 4 electric-vehicle charging stalls in the parking lots. Residences will include exterior wall outlets and be required to use electric lawn equipment instead of fuel. Additionally, park vegetation and trail maintenance will be accomplished with

electric equipment instead of fuel. ~~Residences would use natural gas for furnaces, water heaters, cooktops, and fireplace inserts.~~ Implementation of these project design features in conjunction with state laws requiring increases in vehicle efficiency and promotion of electric vehicles ensures that the project would result in an efficient use of petroleum fuel.

Page 4.5-17, Electricity and Natural Gas:

Electricity ~~and Natural Gas~~

As stated above, the proposed project would comply with Title 24 standards and CALGreen. CALGreen sets minimum and mandatory energy efficiency and materials requirements in order to reduce environmental impact through better planning, design, and construction practices. Title 24 (AB 970) contains energy efficiency standards for residences based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy use. See Impact EN-1 above, which lists the Title 24 measures that the project will implement.

Additionally, the City of Petaluma's General Plan includes energy policies and programs with the goal to reduce reliance on non-renewable energy sources in existing and new development. Most of these policies are aimed toward the City, however, by complying with Title 24 and constructing the residences with solar generation capabilities, the proposed project would comply with the General Plan's energy policies.

Page 4.5-19, Cumulative Impact EN-1:

Based on the analysis above, the proposed project would not result in a wasteful use of energy resources and would comply with renewable energy plans. Additionally, the regional park trail would only use minimal petroleum fuel during construction and operation is expected to result in minimal increases electricity ~~and natural gas use~~. Therefore, the proposed project and the regional park trail would result in a less than significant cumulative impact.

Section 4.6, Geology and Soils

Page 4.6-17, Impact GEO-2:

The Davidon (28-Lot) Residential Project component would result in ground disturbance on approximately 11.2 ~~15~~ acres of the project site. The Putnam Park Extension Project component would be located on the remaining approximately 47 ~~44~~ acres of the project site and include a multi-use trail network of approximately one mile extending from D Street on the east to Helena Putnam Regional Park on the west and aligned along both the north and south sides of Kelly Creek. It would also include a Class I trail that runs north/south parallel to D Street and improvements to the barn complex. The construction of the

Putnam Park Extension Project component would result in ground disturbance along the planned pathways and trails, and at parking lots, driveways, and site structures, such as the barn, restrooms, and pedestrian bridge foundation and abutment locations.

Page 4.6-20 and 4.6-21, Impact GEO-3:

Landslides, earthslips, mudflows, and soil creeps are soil instabilities caused by steep slopes, shallow soil development, excess water, and lack of soil shear resistance in the area. Erosion of supporting material at the foot of constructed slopes is another major cause of sliding. There are 18 landslides, designated as landslides A through R in **Figure 4.6-3**. Landslides A, B, C, D, and G are located on the flanks of the hillsides in the southern portion of the site. Landslides E, F, and H are located on the flank of the large bedrock knob in the northwest portion of the site. The remaining landslides (Landslides I through R) are located along the banks of Kelly Creek and are the result of typical creek bank oversteepening. Of the landslides, eight are large (Landslides A through H) and the remaining (Landslides I through R) are small landslides. Two of the large landslides (Landslides E and F) are located ~~within~~ outside the limits of residential grading. Three of the large landslides (Landslides B, G, and H) and four of the small landslides (Landslides L, N, O, and R) are located within, or very close to, the limits of grading for the loop trail. The rest of the landslides are outside the grading limits of the Davidon (28-Lot) Residential Project component and the Putnam Park Extension Project component. ~~Of the two landslides (Landslides E and F) that are within grading limits of the Davidon (28-Lot) Residential Project component, previous design-level geotechnical investigations have recommended that both landslides should be removed in conjunction with the design grading in that portion of the site.~~ With regards to large Landslides G and H, movement of these landslides could have an adverse impact on the foundations of the proposed footbridge that would cross Kelly Creek at the western edge of the property. Other landslides (Landslides B, L, N, O, and R) could adversely impact the proposed loop trail, potentially resulting in damage to the paved surface and non-compliance with ADA requirements. With respect to the other large landslides (Landslides A, C, and D) located outside of the limits of grading, previous design-level geotechnical investigations recommended remediating Landslides A and D to reduce their potential for future movement and no remediation measures were recommended for the large Landslide C or the remaining small landslides (Landslides I, J, K, M, P, and Q).

Page 4.6-22, Mitigation Measure GEO-3a:

GEO-3a Landslide Remediation

Where landslide mitigation is required under **Mitigation Measure GEO-1a**, the project geotechnical engineer or personnel under their direct supervision shall inspect the excavation and grading associated with the landslide removal and/or stabilization work to

ensure that the geotechnical recommendations associated with mitigating landslide hazards are properly implemented during construction. ~~As a minimum, the project geotechnical engineer shall provide project specific design level recommendations for the removal of Landslides E and F, which are located within the Davidon (28 Lot) Residential Project component. The recommendations shall include, but shall not be limited to, 1) a cross section(s) showing the limits of landslide debris, depths of planned excavation, planned toe key and benches, and configuration of planned engineered fill, 2) design criteria for surface and subsurface drainage systems, including the locations of subdrain clean outs and drain outlets, 3) fill placement and compaction requirements, including recommendations for overbuilding, then shaving back the fill to expose a well compacted slope surface, and 4) geologic/geotechnical observation and testing requirements during site grading activities. Where cut or fill slopes over 30 feet in height are planned, intermediate surface benches shall be incorporated into the slope design as described below, unless the project geotechnical engineer provides alternative project specific recommendations for the design of surface benches on graded slopes. The benches shall be spaced no more than 25 feet vertically on the slope. The benches shall be a minimum of 8 feet wide and include a concrete lined V ditch to intercept surface water runoff.~~

The project geotechnical engineer shall evaluate ~~other landslides (~~Landslides B, G, H, L, N. O, and R~~)~~, which have a potential to adversely impact the foundations of footbridges and/or the loop trail pavement. As a minimum, the project geotechnical engineer shall establish an inspection and maintenance program to ensure that any damage to the planned footbridge foundations and loop trail improvements due to landslide movements are identified and repaired.

Section 4.7, Greenhouse Gas Emissions

Page 4.7-30:

Table 4.7-6
Operational Greenhouse Gas Emissions

Source	Emissions (MT CO2e/year)
Construction (Amortized)	39.8
Davidon (28-Lot) Residential Project Component	431
Putnam Park Extension Project Component Phase 1	41
Putnam Park Extension Project Component Phase 2 and 3	80
Total Operational Emissions	592
BAAQMD 2020 Bright-line Threshold	**1,100**
Exceed Thresholds?	***No***
Estimated BAAQMD 2030 Bright-line Threshold	**717**
Exceed Thresholds?	***No***

Source: Impact Sciences, 2019. See Appendix 4.2.
Note: Following the City's adoption of All-Electric Construction in New Constructed Buildings ordinance on May 3, 2021, the proposed project was revised to preclude the use of natural gas; no extension of natural gas infrastructure would occur as part of the project. Therefore, quantified emissions of the project's Operational greenhouse gas would be slightly reduced from those presented in this table.

Page 4.7-30, third paragraph:

This is a conservative estimate because it uses model defaults to estimate the GHG emissions from electricity use in the proposed homes; it does not take into account the increased energy efficiency that new homes have to comply with under state law; and it does not account for the planting of 327 ~~156 oak~~ trees as part of the proposed project and the removal of approximately 30 trees.

Page 4.7-33, second paragraph:

In summary, the total operational emissions associated with the proposed project are anticipated to be well below the threshold put forth by the BAAQMD due to the fact the proposed project is much smaller than the BAAQMD GHG screening criteria, and as stated in Impact GHG-1 above, the project includes energy and water efficiency features that would further reduce GHG emissions. Furthermore, carbon sequestration provided by the planting of 327 ~~156 oak~~ trees as replacement for the removal of approximately 30 trees ~~replacement trees~~ would also reduce the project's operational emissions. Therefore, the proposed project

would not conflict with plans, policies, or regulations for reducing GHG emissions, and the impact would be less than significant.

Section 4.8, Hydrology and Water Quality

Page 4.8-1, Hydrology, second paragraph:

Average annual rainfall in the project vicinity is just under 26 ~~25~~ inches (West Yost 2021). Nearly 95 percent of this precipitation falls during the winter rainy season, October through April, with the heaviest rainfall typically occurring in December, January, and February. During a 30-minute duration, 10-year recurrence interval storm, peak rainfall intensity is approximately 1.0 inch per hour and increases to 1.31 inches per hour during a 30- minute, 100-year storm. Air temperatures range from below freezing in winter to above 100 degrees Fahrenheit in summer.

Page 4.8-20, first paragraph:

As described in **Section 3.5.2, Putnam Park Extension Project Component**, the proposed project would stabilize slopes on either side of Kelly Creek with native woody plantings and native grasslands that would be protected and enhanced. If any soil disturbance impacts native grasslands, the affected park or pasture area would be seeded with native grassland species suited for the site.

Page 4.8-23, second paragraph:

As noted previously, the main parking lot and the residential buildings within the project site would be set back at least 100 feet from the centerline of Kelly Creek and 50 feet from the top of the bank of Kelly Creek and the D Street tributary. As a result, the creek corridor would remain largely unaffected by the proposed development, and thus any recharge that does occur within the stream channel itself would continue to occur similar to post-project conditions. In addition, runoff generated within the project site would continue to be discharged into Kelly Creek. Furthermore, approximately 80 ~~75~~ percent of the 58.6-acre project site would remain undeveloped and would be preserved as open space without affecting existing infiltration. The proposed development at the project site is planned as low-density residential, with lot sizes between 0.13 ~~0.23~~ and 0.22 ~~0.83~~ acres. Stormwater treatment measures for impervious surfaces would be designed to maximize infiltration in order to reduce runoff (see discussion above under **Impact HYD-1**), and minimize potential impacts to groundwater recharge. Therefore, the proposed project would not substantially interfere with groundwater recharge or impede sustainable groundwater management, and the impact would be less than significant.

Page 4.8-33, Impact HYD-8, second paragraph:

The proposed project is not located within the boundaries of a groundwater basin as defined by the California Department of Water Resources. Flow from the site, discharges to Kelly Creek, which flows eastward toward the Petaluma River, and thus is tributary to the area defined as the Petaluma Valley Groundwater Basin. As discussed under Impact HYD-2, the project site is not located within an area of either confirmed or potential regional groundwater recharge and consists of soils with generally low infiltration capacity. The proposed project would also limit the residential development and associated impervious area on the 58-acre site to only about 6.4 ~~12~~ acres, with the remaining area developed as the Putnam Park Extension Project component. For these reasons, the development proposed at the project site would not conflict with or obstruct implementation of a sustainable groundwater management plan and the potential impact would be less than significant.

Page 4.8-36, References:

West Yost. 2021. West Yost. 2020 Urban Water Management Plan. Draft Report. Prepared for the City of Petaluma. May.

Section 4.9, Land Use and Planning

Page 4.9-2, Section 4.9.2.3, Existing Land Use Designation and Zoning, first paragraph:

The City's General Plan Land Use map designates a majority of the project site as Very Low Density Residential (0.6 to 2.5 dwelling units per acre)[1] (**Figure 3.0-8, Land Use Designations** ~~**3.0-4, Putnam Park Extension Project Component Conceptual Plan**~~). A 300-foot band along the southern boundary of the project site is designated as an Urban Separator and the area surrounding Kelly Creek is designated as Open Space. In addition, the General Plan identifies a proposed city park on the eastern portion of project site. The project site is within the West Hills planning subarea as identified by the City's General Plan.

Page 4.9-7, second paragraph:

The proposed project would develop 28 single-family homes at a density of 0.63 du/ac based on the net acreage of the project site of 45.27 ~~45.15~~ acres. The density of the proposed development would be within the approved density range for the "Very Low Density Residential" designation. The riparian corridor along Kelly Creek would be maintained as open space in accordance with the General Plan. A 300-foot band along the southern boundary of the project site would remain undeveloped and maintained as an Urban Separator. In addition, the proposed project would develop an extension to the existing Helen

[1] Based on net acreage which excludes public or private rights-of-way, public open space and floodways, but does not exclude the Urban Separator per General Plan Policy 1-P-19.

Putnam Regional Park on the approximately 47 ~~44~~ acres that constitute most of the project site and lie on the southwest corner of the intersection of Windsor Drive and D Street, which would be in accordance with the City's General Plan. The project would not conflict with the General Plan land use designations for the project site, and this impact would be less than significant.

Page 4.9-8, Table 4.9-1:

Table 4.9-1
Proposed PUD Development Standards

City Development Standards	Proposed PUD Zoning ~~for Options A and B~~
Minimum Lot Area	5,800 ~~10,000~~ sf
Minimum Lot Width	50 feet for interior lot; 55 ft for corner lot ~~80~~ ft
Minimum Lot Depth	80 ~~90~~ ft
Minimum Front Yard Setback	14 ~~20~~ ft
Minimum One Side Yard Setback	5 ft
Minimum Aggregate Both Side Yards Setback	10 ~~15~~ ft
Minimum Rear Yard Setback	9 ~~20~~ ft
Maximum Building Height	30 ~~20~~ ft

Page 4.9-8, second paragraph:

Chapter 17, Tree Preservation, of the IZO requires the design of every development project (which requires a discretionary approval or other development permit) to recognize the desirability of preserving Protected Trees to the greatest extent possible. In the event that tree removal is proposed, the IZO requires that Protected Trees determined to be in good or excellent health shall be replaced at a one-to-one trunk diameter at breast height (dbh) ratio. Protected Trees determined to be in fair or marginal health shall be replaced on a two to one dbh ratio. The proposed project would comply with these requirements and has designed development on the project site to avoid the greatest amount of tree removal. Oak woodland cover along Kelly Creek, D Street tributary, and the southwestern portion of the project site would be preserved by design. A total of approximately 30 trees are proposed for removal as part of the proposed project. Replacement plantings required in compliance with the City's Tree Preservation Ordinance could be accommodated on-site. The Conceptual Plan for the Putnam Park Extension Project component (see **Updated Figure 3.0-4, Putnam Park Extension Project Component Conceptual Plan**) shows a considerable amount of native tree plantings (327 ~~159 Oak~~ trees) for habitat enhancement purposes that would be substantially more than required to meet the Tree Preservation replacement requirements. These include

supplemental plantings along the margins of the Kelly Creek and D Street tributary corridors, around the stock pond, in scattered locations in grasslands, along the southern edge of the proposed residential use, and around the large detention basin that parallels the southside of Windsor Drive. There would be no conflict with Chapter 17 of the IZO, and this impact would be less than significant.

Page 4.9-9, Consistencies with General Plan Policies, Policy 1-P-18, first paragraph:

The proposed project would permanently protect the 300-foot Urban Separator along the southern boundary of the project site. In addition, the proposed project would dedicate approximately 47 ~~44~~ acres of the project site to the Sonoma County Regional Parks to be retained as open space and protected habitat.

Page 4.9-12, second paragraph:

As discussed in **Section 3.0, Project Description**, the Putnam Park Extension Project component, covering approximately 47 ~~44~~ acres of the project site, would preserve open space. The Putnam Park Extension Project component would preserve trees and California red-legged frog breeding habitat. The proposed project would minimize grading and avoid some landslide areas by not developing the project site south of Kelly Creek for residential purposes and improving this area as an open space.

Page 4.9-12, fourth paragraph:

In addition, as discussed in **Section 3.0, Project Description**, the proposed project would include a connection to Helen Putnam Regional Park via a 0.35-mile section of the loop trail along the north side of Kelly Creek (north trail). The proposed project also would include trailhead facilities with restrooms and parking. As a result, development under the proposed project would meet the policy's requirements with regard to a connection to Helen Putnam Regional Park and trailhead facilities. Furthermore, the proposed Putnam Park Extension Project component would extend the existing Helen Putnam Regional Park eastward to D Street by developing a park area on the approximately 47 ~~44~~-acres that constitute most of the project site. Therefore, the proposed project would meet and exceed the policy's requirement of providing a minimum 3.0-acre park.

Page 4.9-1, Table 4.9-2:

Policy 1-P-16 Allow development in hillside areas that preserve ridgelines and are site sensitive. A. Establish development and design standards related to residential development in hillside areas that address: • Location of hillside residential units, including preserving ridgelines.	Consistent: The project site is located in the hills of Petaluma. Ridgelines and prominent hillsides, including the upper hillsides in the southern portion of the site would be retained as open space through clustering the single-family homes in two areas on the northern portion of the project site. This clustering would maximize the open space areas for wildlife protection and avoid construction of new homes on prominent ridgelines. Unique natural features, such as Kelly Creek, most of the trees lining the creek, and the stock pond, would also remain unchanged. Portions of the undeveloped hillsides on the northern portion of the project site would be replaced with single-family homes and associated landscaping and on-

• Specific provisions to preserve open space, natural assets (woodlands, creeks, etc.). • Standards for building height and massing. • Appropriate forms of clustered development, including amount of bonus, alternate development forms, common recreational facilities, phasing, etc. B. Enhance the hillside development regulations in the Development Code to include: • Regulating development density by degree of hillside slope. • Protecting unique natural features, including landforms, mature trees and their surrounding habitat, and ridge lines, by requiring location of structures away from these assets. • Requiring architectural design that reflects the natural form of the hillside setting, in order to minimize visual and environmental impacts. • Preventing the significant alteration of hillside topography through grading and paving. Use of visually unobtrusive building materials.	site roadways. Grading would be limited to the extent possible. Oak woodland would be preserved on the project site. The Putnam Park Extension Project component would occupy the majority of the project site (approximately 47 ~~44~~ acres of the southern portion of the site) and no residential units. The 47 ~~44~~ acres would be preserved for the Barn Center, multi-use trail (north and south of Kelly Creek), and the remainder as open space. **Mitigation Measures BIO-2a** through **BIO-2e** set criteria for detailed tree and habitat management and preservation, and require the replanting of native trees, shrubs and groundcover. The project would be required to comply with design recommendations as a result of Planning Commission review, which would ensure that the architectural design is visually unobtrusive and conform to site topography (**Mitigation Measures AES-1a** and **AES-1b**).
Policy 1-P-17 Retain ridgelines and prominent hillsides as open space through appropriate clustering and/or transfer of density to other parts of a development site (applies to Rural and Very Low Residential areas within the West Hills, South Hills and Petaluma Boulevard North subareas only).	**Consistent:** The proposed project is designed to minimize impacts to views of hillsides on the project site and the hills and ridgelines adjacent to the project site by clustering development near existing residential development to the north of the project site, not constructing homes south of Kelly Creek, and leaving about 47 ~~44~~ acres of the site, including the Kelly Creek riparian area as open space. The proposed project would not change the views of the prominent hillside and would be integrated into the existing scenery.
Policy 1-P-18 Maintain a permanent open space around the city by the continuation of the Urban Separator and the use of an Urban Separator Pathway, as designated.	**Consistent**: The proposed project would permanently protect the 300-foot Urban Separator along the southern boundary of the project site, in addition to all land south of Kelly Creek, by dedicating approximately 47 ~~44~~ acres to the Sonoma County Regional Parks to be retained as open space and protected habitat. No development or grading would occur within the 300-foot buffer. As described above, an Urban Separator Pathway will not be installed at this location due to sensitive habitat. However, the project meets the intent of this policy by maintaining the Urban Separator and additional lands as open space and providing public pathways north and south of Kelly Creek.
Policy 1-P-36 For properties adjoining the Urban Growth Boundary, it is the intent of the City that projects developed in the City or requesting City services shall be of limited density (as shown on the General Plan Land Use Map), unless greater density is required to satisfy the requirements of state housing laws, and shall be designed to preserve the visual and physical openness and preserve the aesthetic and natural features of that portion of the property proximate to the rural areas outside of the designated Urban Growth Boundary.	Consistent: The proposed project, which consists of 28 single-family dwelling units, is consistent with the City of Petaluma General Plan Land Use designation of "Very Low Density Residential" which permits a density of 0.6 to 2.5 dwelling units per net acre. The net acreage of the project site is 45.27 ~~45.15~~ acres (excludes public or private rights-of-way, public open space and floodways, but does not exclude the Urban Separator per Policy 1-P-19). As such, the number of units allowed to be developed on the project site ranges between 27~~6~~-113 ~~110~~ dwelling units. The proposed project falls within this range.

Policy 1-P-49 Preserve existing tree resources and add to the inventory and diversity of native/indigenous species.	**Consistent:** As discussed in **Section 4.3, Biological Resources**, an estimated 509 trees are located on the project site, and of these 472 qualify as protected trees based on criteria from the City of Petaluma Tree Preservation Ordinance (Chapter 17). The project would preserve a majority of these trees and would require the removal of approximately 30 trees, all of which qualify as protected trees under the City of Petaluma Tree Protection Ordinance. The project would meet the requirements of the City of Petaluma Tree Protection Ordinance by planting 327 ~~159 Oak~~ trees of varying sizes. Thus, the proposed project would preserve approximately 94 percent of the protected trees on the project site and increase the number of trees on the site after replacement and new plantings.
Policy 1-P-50 Preserve and expand the inventory of trees on public property.	**Consistent:** The proposed Scott Ranch project would preserve 479 trees. The proposed project would remove 30 trees, out of which, 11 trees would be removed for the improvements of the park extension component. However, it would plant 327 ~~159 Oak~~ trees and other ornamental trees and shrubs. it would also preserve the rest of the trees at the project site.
Policy 2-P-6 Create a strong sense of entry into the city at key locations, identified as Gateways. Each gateway should be considered individually with some requiring architectural and/or landscape treatments and others more simply protecting/ enhancing what already exists (e.g., cultural landscapes and ecological diversity) to provide a sense of transition or entry to Petaluma.	**Consistent:** D Street has been identified in the *2025 General Plan* as a gateway at the southwestern entrance to the City. The proposed project would be located at the D Street/Windsor Street intersection and would be the first visible development upon entering the City. The proposed project would preserve most of the project site as open space, retain and enhance the barn complex, and development of residential units would be limited to approximately 11.23 ~~15~~ acres north of Kelly Creek, proximate to existing subdivisions that would include 5 acres as private open space. To minimize adverse changes to views of the site from D Street, **Section 4.1, Aesthetics**, of this RDEIR sets forth mitigation measures that include restrictions on the design of the proposed project, and require that architectural materials of the subdivision include natural, terrain-neutral colors. Also see Policy 2-P-5 above.
Policy 2-P-8 Require single-loaded streets along the Urban Separator and riparian corridors to ensure the creation of linear open space corridors with maximum public accessibility, visibility, and opportunities for stewardship. **Note:** A single-loaded street is a street on which homes have been built along one side of the street only with no need for access to the front yard, rear yard, or parking on the other side.	**Generally Consistent**: The new street north of Windsor Drive (proposed "A" street) would be single loaded and the proposed design maximizes preservation and access to Kelly Creek and open space preservation by clustering the minimum required density to one edge of the site and maintaining approximately 47 ~~44~~ acres for open space with public access. The new street proposed between Windsor Drive and Kelly Creek (proposed "B" street) would be double-loaded. Although the residential lots on the proposed "B" street would have rear yards toward the Kelly Creek corridor, a 100-foot buffer along both sides of Kelly Creek is proposed and a multi-use loop trail would be constructed on both sides of Kelly Creek within this buffer to provide public accessibility and visibility along the Kelly Creek corridor.
Policy 2-P-56 Preserve and enhance the oak woodland setting and integrate development to protect and enhance these resources.	**Consistent**: The proposed project would remove 30 trees from the project site, all of which qualify as protected trees under the City's Tree Preservation Ordinance. The project would plant more than twice the number of trees removed (327 ~~159 oak~~ trees). Thus, the proposed project would preserve more than 94 percent of the protected trees on the project site and increase the number of trees on the site after replacement.

Policy 2-P-60 Provide a transition from the urban densities of Downtown to the rolling hills and agricultural lands beyond the UGB.	**Consistent**: At 0.63 du/ac, the density of the proposed development would be at the lower end of the approved densities for the "Very Low Density Residential designation" and would permanently protect approximately 47 ~~44~~ acres at City limits adjacent to the UGB as open space.
Policy 2-P-61 Protect existing agricultural uses, wildlife, historic and cultural resources, and natural vegetation.	**Consistent**: Approximately 11.2 ~~22~~ acres of the approximately 58-acre site would be disturbed, and the remainder would be undisturbed and permanently protected. The project would preserve about 94 percent of the existing trees on the site and maintain the existing barn complex.
Policy 2-P-65 Require dedication of the Urban Separator and/or Urban Separator Pathway along the western and southern boundaries of the UGB.	**Consistent:** As discussed above, the project maintains the 300-foot Urban Separator along the southern boundary of the project site. Dedication of approximately 47 ~~44~~ acres including lands within the Urban Separator to Sonoma County Regional Parks for open space preservation and the provisions of onsite trails north and south of Kelly Creek with connectivity to the adjacent Helen Putnam Regional Park meets the intent of this policy.
Policy 2-P-66 Develop gateways at City entrances on Bodega Avenue, Western Avenue and "D" Street that recognize the transition from a rural to urban area by enhancing existing natural to urban tree patterns.	**Consistent:** South of Kelly Creek and west of D Street, 47 ~~44~~ acres of open space would be preserved along with a renovated barn complex. The 44 acres of open space would act as an extension of the urban separator from the south side of the project site up to Kelly Creek. This continuation of the urban separator would provide a smooth transition from rural to urban by preserving trees to the maximum extent possible, implementing pasture improvements, enhancing the riparian corridor for Kelly Creek and the D Street Tributary west of D Street, and incorporating a trail network. Single-family homes would be limited to north of Kelly Creak and there would be no single-family homes developed with a 100-foot building setback from D Street. The homes would be constructed at low density which would provide a fluid shift from rural uses. Also See Policies 2-P-5 and 2-P-6 above.
Policy 2-P-116 Street trees shall be preserved and their numbers increased as development/ redevelopment/remodeling occurs.	**Consistent:** The proposed project would not remove any street trees with the exception of a few trees that would require trimming or removal for the D Street off-site sidewalk improvement. However, sidewalks proposed along Windsor Drive and D Street would include the planting of street trees. The proposed project would include planting 327 ~~159 Oak~~ trees of various sizes.
Policy 4-P-6 Improve air quality through required planting of trees along streets and within park and urban separators, and retaining tree and plant resources along the river and creek corridors. A. Require planting of trees for every significant tree removed at a project site. Replacement planting may occur on the project site or on a publicly owned area, with long-term maintenance assured. • Encourage the use of trees which provide biogenic benefits to air quality and are suitable to the local environment.	**Consistent:** The project site contains a total of 509 trees that are four-inches in diameter or greater, 30 of which would be removed to accommodate development. From the 30 trees, 11 trees would be removed to accommodate the park extension component. The proposed project would include planting 327 ~~159 oak~~ trees of various sizes distributed throughout the site. In addition, **Mitigation Measures BIO-2c** and **BIO-2d** require the project to replace the removed trees, and maintain the new trees for a five-year period, consistent with set criteria and a landscape and vegetation management plan approved by the City. The increased number of trees at the project site would provide air quality benefits.

Policy 4-P-15 Improve air quality by reducing emissions from stationary point sources of air pollution (e.g., equipment at commercial and industrial facilities) and stationary area sources (e.g., wood-burning fireplaces & gas powered lawn mowers) which cumulatively emit large quantities of emissions.

A. Continue to work with the Bay Area Air Quality Management District to achieve emissions reductions for non-attainment pollutants; including carbon monoxide, ozone, and PM-10, by implementation of air pollution control measures as required by State and federal statutes.

B. Continue to use Petaluma's development review process and the California Environmental Quality Act (CEQA) regulations to evaluate and mitigate the local and cumulative effects of new development on air quality.

C. Continue to require development projects to abide by the standard construction dust abatement measures included in BAAQMD's CEQA Guidelines. These measures would reduce exhaust and particulate emissions from construction and grading activities.

D. Reduce emissions from residential and commercial uses by requiring the following:

- Use of high efficiency heating and other appliances, such as cooking equipment, refrigerators, and furnaces, and low NOx water heaters in new and existing residential units;
- Compliance with or exceed requirements of CCR Title 24 for new residential and commercial buildings;
- Incorporation of passive solar building design and landscaping conducive to passive solar energy use for both residential and commercial uses, i.e., building orientation in a south to southeast direction, encourage planting of deciduous trees on west sides of structures, landscaping with drought resistant species, and use of groundcovers rather than pavement to reduce heat reflection;
- Provide natural gas hookups to fireplaces or require residential use of EPA-certified wood stoves, pellet stoves, or fireplace inserts.

Consistent: The proposed project does not include any stationary sources. Operational emissions would result primarily from increased vehicular trips to and from the residential development and the public park. Other sources of emissions associated with the proposed project would include area source emissions, such as the use of natural gas for water heaters and cooking appliances. As the analysis in **Section 4.2, Air Quality,** shows, the operational emissions from the proposed project would not exceed any of the thresholds put forth by the BAAQMD for criteria air pollutants.

Appliances that are purchased for the project would be consistent with existing energy efficiency standards. The project would be required to comply with the updated Title 24 standards for building construction, including exterior lighting. New standards include requirements for indoor lighting efficiency, cool roof coating, duct insulation, and efficient space conditioning.

The project would comply with the City's adopted CalGreen Building Standards Code which includes CalGreen Tier One measures. The proposed project would retain a majority of the existing trees onsite and would introduce landscaping including new native trees, ornamental trees, shrubs and groundcover. A majority of the property would be undisturbed and would be preserved as open space.

As noted in **Mitigation Measure AIR-2**, the project would comply with the BAAQMD Best Management Practices with regards to construction dust and abatement measures.

Current building code standards generally ban the installation of open-hearth, woodburning fireplaces and wood stoves in new construction. However, they allow for the use of low-polluting wood stoves and inserts in fireplaces approved by the federal Environmental Protection Agency, as well as fireplaces fueled by natural gas. Project residences would incorporate sustainable design features, including solar energy generation, in compliance with the new Building Energy Efficiency Standards of California Building Code Title 24, which require zero net electricity residences effective January 1, 2020. A net zero electricity residence generates enough energy from renewable sources to offset all on site electricity use. This would be accomplished through a combination of highly efficient building systems and solar power generation at each residence. California is the first state in the U.S. to require zero net electricity residences. ~~The residences would use natural gas for furnaces, water heaters, cooktops and fireplace inserts.~~

Policy 5-P-8 The priority of mobility is the movement of people within the community including the preservation of quality of life and community character.	**Consistent:** The project introduces new public sidewalks on Windsor Drive and D street, two new public streets, and provides pedestrian trails internally through the site that connects to a future offsite trail at Helen Putnam Regional Park. People utilizing the on-site trails and sidewalks would have views of the 47 ~~44~~ acres of open space preserved on the project site south of Kelly Creek. Improvements also include a new roundabout at Windsor Drive and D Street, which would provide crosswalks on all approaches with Rectangular Rapid Flash Beacons (RRFB).
Policy 6-P-1 Develop additional parkland and recreational facilities in the city, particularly in areas lacking these facilities and where new growth is proposed, to meet the standards of required park acreage. F. Require land development along designated trails and pathway corridors to provide sufficient right-of-way for trails and amenities and to ensure that adjacent new development does not detract from the scenic and aesthetic qualities of the corridor.	**Consistent.** The project would preserve 47 ~~44~~ acres of open space and would introduce public recreation facilities including the public barn complex and a multi-use loop trail along the north and south sides of Kelly Creek with connectivity to various project elements. In addition, the project would provide for future connection to the Helen Putnam Regional Park trail system at the western edge of the project site, thereby providing adequate connectivity to local and regional trails. The proposed project would be landscaped with both existing and proposed native trees, shrubs and groundcover and would retain all oak woodlands on the site and oak/bay riparian woodland along Kelly Creek and would also involve the replanting of various other native trees, shrubs and groundcover.
Policy 6-P-5 New parkland or recreation facilities, beyond those identified in the General Plan, may be required as part of any development review and entitlement process.	**Consistent:** The Putnam Park Extension Project component, would preserve approximately 47 ~~44~~ acres of open space on the project site and would include access to a loop trail north and south of Kelly Creek and public amenities. Features of the Putnam Park Extension Project component would include picnic tables and benches, an agricultural museum, vegetable gardens, demonstration and working corrals, antique farm equipment with a hand pump, and an amphitheater for outdoor learning activities.
Policy 6-P-6 Achieve and maintain a park standard of 5 acres per 1,000 residents (community park land at 3 acres per 1,000 population and neighborhood park land at 2 acres per 1,000 population) and an open space/urban separator standard of 10 acres per 1,000 population, in order to enhance the physical environment of the city and to meet the recreation needs of the community.	**Consistent:** Implementation of the proposed project would result in the development of 28 single-family homes and an anticipated net increase in the total permanent population of 77 persons. The Putnam Park Extension Project component, covering approximately 47 ~~44~~ acres of the project site, would extend the Helen Putnam Regional Park and preserve open space. Therefore, the proposed project contribution to the recreation needs of the community would substantially exceed the required community park land or neighbor park land with respect to the project population.
Policy 6-P-8 In designing park and recreational facilities, recognize that accessibility will vary depending on the location and purpose of the facility, consistent with State and Federal guidelines.	**Consistent:** The approximately 47 ~~44~~-acre Putnam Park Extension Project component would include parking lots, public restrooms, and multi-use trail consistent with state and federal accessibility guidelines.
Policy 6-P-18 Development that occurs adjacent to designated trails and pathway corridors shall be required to install and maintain the publicly owned and accessible trail, in perpetuity.	**Consistent:** The proposed project would permanently protect the 300-foot Urban Separator along the southern boundary of the project site, in addition to all land south of Kelly Creek, by dedicating approximately 47 ~~44~~ acres to the Sonoma County Regional Parks to be retained as open space and protected habitat, in perpetuity via two conservation easements.

Policy 8-P-20 Manage groundwater as a valuable and limited shared resource by protecting potential groundwater recharge areas and stream sides from urban encroachment within the Petaluma watershed. A. Control construction of impervious surfaces in groundwater recharge areas. Potential recharge area protection measures at sites in groundwater recharge areas include, but are not limited to: • Restrict coverage by impervious materials; • Limit building or parking footprints; • Require construction of percolation ponds on site; • Require surface drainage swales.	**Consistent:** As noted in **Section 4.8, Hydrology and Water Quality**, the proposed project site is not located within an area of either confirmed or potential groundwater recharge, as shown on the City's map of Groundwater Resources. Furthermore, approximately 80 ~~75~~ percent of the 58.6-acre project site would remain undeveloped and would be preserved as open space without affecting existing infiltration. Stormwater treatment measures for impervious surfaces would be designed to maximize infiltration in order to reduce runoff and minimize potential impacts to groundwater recharge. Additionally, the project proposes two separate detention/bio-infiltration facilities to collect runoff from impervious surfaces and provide water quality treatment functions per NPDES requirements.
Policy 8-P-39 Consider, to the extent practicable, requiring sustainable site design practices as outlined in the 'Sustainable Site Planning' text box contained herein. All development activities shall be constructed and maintained in accordance with Phase 2 National Pollutant Discharge Elimination System permit requirements. The Sustainable Site Planning measures listed in the General Plan text box that would apply to evaluation of the proposed project's impact on hydrology and storm drainage can be summarized as follows: • Limit the amount of impervious surface on development sites by reducing building footprints, clustering development, minimizing street widths and utilizing permeable paving materials; • Maximize natural filtration and enhance infiltration opportunities by routing storm water runoff across lawns, through vegetated swales or into pervious storage facilities before discharging to the storm drain system;	**Consistent:** Development under the proposed project would be clustered in the areas north of Kelly Creek to minimize disturbance to oak woodland, Kelly Creek, and open space within the southern portion of the site and the Urban Separator. Approximately 47 ~~44~~ acres of the project site would be preserved as open space. Narrow streets would be used for internal circulation. See Policy 8-P-38.
Policy 2.1 Encourage a mix of housing design types.	**Consistent:** The purpose of this policy is to provide opportunities for development at a variety of densities that allows a variety of product types. The General Plan provides 8 residential land use categories providing opportunities for a mix of housing types within the City. The proposed project is located within the "Very Low Density Residential" zoning designation, which allows a density range of 0.6 to 2.5 units per acre. The Applicants are proposing market rate housing, which would contribute to the City's fair share of the Regional Housing Needs Allocation for the above Moderate Income groups. Additionally, the single-family homes would be at most 2 stories and constructed in a variety of architectural styles, including Cottage ~~Spanish~~, Craftsman, Farmhouse or California Ranch. Exterior materials would include a mix of stucco, hardboard siding, stone and masonry. In addition, implementation of **Mitigation Measure AES-1a** would place restrictions on the design of the proposed project and **Mitigation Measure AES-1b** would require that architectural materials of the subdivision include natural, terrain-neutral colors to complement and blend with the project environment.

Page 4.9-37, Impact LU-3:

As discussed in **Section 3.0, Project Description**, of this RDEIR, the project site is located in an urbanized area surrounded by existing residential developments, a regional park, and unincorporated lands of Sonoma County that consist of agricultural and large lot residential uses. The Summit above Petaluma subdivision to the north and the Victoria subdivision to the northwest are both designated "Low Density Residential" (2.6 to 8.0 dwelling units per acre [du/ac]) in the City's General Plan while the Pinnacle Heights subdivision to the east is designated "Very Low Density Residential" (0.6 to 2.5 du/ac) in the City's General Plan. The residential nature of the proposed project would be compatible with the existing residential subdivisions that are located adjacent to the project site, and in addition, at a density of 0.63 du/ac, the proposed project would have a density similar to that of the Pinnacle Heights subdivision to the east. The proposed 300-foot-wide Urban Separator proposed along the southern boundary of the project site would provide a buffer between the proposed project and agricultural land to the south in unincorporated Sonoma County while the approximately 47 ~~44~~-acre Putnam Park Extension Project component in the southern portion of the project site would be compatible with the open space within Helen Putnam Regional Park to the west. For these reasons, the proposed project would not result in development of land uses that are substantially incompatible with existing adjacent land uses or with planned uses, and this impact would be less than significant.

Section 4.10, Noise

Page 4.10-7, Table 4.10-1:

Table 4.10-4
2009 Roadway Noise Levels Off-Site

Roadway	Roadway Segment	Existing Land Uses Located Along Roadway Segment	dBA CNEL[1]
D Street	North of Petaluma Blvd	Commercial	65.0 ~~65.5~~
	Between Petaluma Blvd and 6th Street	Residential and Commercial	65.0 ~~64.9~~
	Between 6th Street and El Rose Dr/Sunny Slope Ave	Residential	64.1 ~~63.8~~
	Between El Rose Dr/Sunny Slope Ave and Windsor Dr/Pinnacle Dr	Residential	64.2 ~~62.0~~
	South of Windsor Dr/Pinnacle Dr	Open Space and Residential	64.3 ~~60.8~~

*Source: Christopher A. Joseph Associates 2009. Calculation data and results are provided in **Appendix 4.9**.*
Notes: Compared to traffic volumes at these roadway segments at the time of noise data collection in 2009, current traffic volumes in the project area are generally similar or slightly higher. Therefore, current noise levels are estimated to be similar or higher than the 2009 ambient noise levels
[1] *Values represent noise levels at 50 feet from the centerline of each roadway.*

Page 4.10.22, Table 4.10-10:

Table 4.10-10
Predicted Future Roadway Noise Levels at the Project Site

		Noise Levels in dBA CNEL				
Roadway Segment	**Proposed Land Use**	**Future Exterior Noise Level**	**City Exterior Noise Standards**	**Assumed Exterior-to-Interior Reduction**	**Future Interior Noise Level**	**City Interior Noise Standard**
D St, south of Windsor Dr.	Residential	62.9 ~~58.8~~	60.0[1]	-25.0	<45.0	45.0

Source: Christopher A. Joseph Associates 2009. ***Appendix 4.9***
Notes:
[1] *City of Petaluma 1987 General Plan exterior noise standard. It should be noted that existing exterior noise levels along D Street also exceed 60.0 dBA CNEL.*

Page 4.10-17, Mitigation Measure NOISE-1, bullet (g):

g. The construction contractor shall not stage equipment within 200 feet of the existing residences adjacent ~~residencesadjacent~~ to the project site.

Page 4.10-26, Operational Cumulative Impacts:

Operational Cumulative Impacts

During operation, the proposed project and the regional park trail would result in noise impact during associated with future users of the trails. However, as discussed above, this be a negligible increase as compared to the existing noise environment. Cumulative operational noise impacts would occur primarily as a result of increased traffic on local roadways due to the proposed project and related projects within the study area. Therefore, cumulative traffic-generated noise impacts were assessed based on the contribution of the project to the future cumulative base traffic volumes on the roadway segments in the project vicinity. Noise level increases associated with existing traffic volumes and future traffic volumes associated with the development analyzed in the 2017 Draft EIR are presented in **Table 4.10-11**. As noted above, the proposed project trip generation is significantly reduced as compared to the development presented in the 2017 Draft EIR. As a result, the traffic noise estimates presented in **Table 4.10-11** are considered a worst-case scenario.

Table 4.10-11
Estimated Noise Levels Increases at Off-site Locations

Roadway Segment	Existing Land Uses Along Roadway Segment	Existing Traffic Volumes	Cumulative Traffic Volumes Without Project	Noise Increase above Existing without Project (dBA)	Cumulative Traffic Volumes with Project	Noise Increase above Existing with Project (dBA)	Significance Threshold
D St, North of Petaluma Blvd.	Commercial	1,184	1,500	1.1 ~~1.0~~	1,530	1.2 ~~1.1~~	4.0
D St, between Petaluma Blvd and 6th St	Residential and Commercial	1,172	1,180	0.0	1,230	0.2	4.0
D St, between 6th St and El Rose Dr	Residential	960	1,020	0.3	1,080	0.5	4.0
D St, between El Rose Dr and Windsor Dr	Residential and Commercial	975	1,070	0.4	1,120	0.6	4.0
D St, south of Windsor Dr	Open Space and Residential	986	1,080	0.3 ~~0.4~~	1,100	0.4 ~~0.5~~	4.0

Source: Appendix 4.9

As shown in the table, traffic associated with cumulative development including the proposed project would increase local noise levels on D Street by a maximum of 1.2 ~~1.1~~ dBA, which would be imperceptible to most people and would not exceed the identified threshold of significance. Therefore, the cumulative impact associated with traffic noise would be less than significant.

Section 4.11, Population and Housing

Page 4.11-5, Indirect Impacts, first paragraph:

Single-family homes are located adjacent to the project site to the north (The Summit above Petaluma subdivision), northwest (Victoria subdivision), and east (Pinnacle Heights subdivision) and these developments are currently served by existing roadways and infrastructure. Direct access to the project site is currently provided by Windsor Drive and D Street. In addition, existing utility infrastructure is located within Windsor Drive to the north and D Street to the east. Internal roadways would be constructed to

serve the proposed residential uses. In addition, utilities would be extended to the project site to serve the new residences and the Putnam Park Extension Project component. The roadway and utility improvements proposed by the project, would be limited in scale and capacity and would only serve new residents. Thus, improvements would not indirectly induce growth. The proposed project also retains open space lands including within the 300-foot Urban Separator along the southern property line, which serves to control urban growth and separate the project site development from rural residential uses in unincorporated Sonoma County to the south.

The Putnam Park Extension Project component would dedicate approximately 47 ~~44~~ acres of the project site to the Sonoma County Regional Parks to be retained as open space and protected habitat. While most of the Putnam Park Extension Project component would include pasture improvements, various enhancements, and drainages stabilization, it would also include recreational areas accessible to the public such as an amphitheater, group picnic area, a playground, restrooms, and multi-use trails that would connect the existing barn complex on the east of the site to the Helen Putnam Regional Park to the west. The Putnam Park Extension Project component would serve as a recreation facility for those living in the area, including the additional population generated by the proposed Davidon (28-lot) Residential Project component. Therefore, the Putnam Park Extension Project component would not permanently increase the population of the area, and would not indirectly induce unplanned population growth. There would be no unplanned indirect population growth as a result of the proposed project.

Section 4.12, Public Services, Including Recreation

Page 4.12-14, Impact PUB-5:

As noted above, the City's Parks and Recreation Department strives to provide 5.0 acres of parkland per 1,000 residents. This ratio has been developed by the City in order to add parkland as the City's population grows so that overcrowding and excessive use of the City's park facilities do not occur. At the time that the General Plan was being prepared, the City was just above this standard with regard to community and neighborhood parks.

Implementation of the proposed project would contribute to an increase in demand for parkland because the proposed project would potentially add an additional 77 residents to the City. Based on the requirement of Section 20.34.090 of the City's Municipal Code, the construction of 28 single-family homes would result in a required parkland dedication of 0.28 acre. Additionally, the City's General Plan Policy 2-P-68, which is specifically focused on the project site, requires the project provide a minimum 3-acre park site.

The project would include approximately 5 ~~3~~ acres of private ~~common~~ open space within the Davidon (28-lot) Residential Project component and 47 acres of public open space within the Helen Putnam Expansion

Project component, which would develop a public trail north and south of Kelly Creek. The Helen Putnam Expansion Project component would include the restoration of the red barn complex and development of a barn center, a trail network, playground, picnic areas, parking, and restrooms. Additionally, the Helen Putnam Expansion Project component would include pasture improvements, new livestock fencing, enhancement to the stock pond, gully stabilization, riparian corridor enhancement for Kelly Creek and the D Street Tributary, and an infiltration basin.

Section 4.13, Transportation

Page 4.13-4, first paragraph:

Petaluma Boulevard is an arterial street extending in the northwest-southeast direction, parallel to the Petaluma River and U.S. 101 through the entire length of the City. Petaluma Boulevard is the principal northwest southeast arterial street serving central Petaluma and experiences congestion during peak periods, particularly north of its intersection with D Street. West of D Street, Petaluma Boulevard is a two-lane roadway with a two-way left turn median. East of D Street, Petaluma Boulevard is a four-lane roadway. The City of Petaluma is implementing ~~scheduled in 2021 to implement~~ a road diet on Petaluma Boulevard South from D Street east to Crystal Lane Roundabout to include two-lanes and a center turn lane. Petaluma Boulevard carries approximately 20,100 vehicles per day near its intersection with D Street.

Page 4.13-9, second paragraph:

Prior to August of 2020, the ~~The~~ primary tool used for calculating VMT was~~is~~ the Metropolitan Transportation Commission (MTC) Travel Demand Model, an activity-based regional travel demand model covering the nine-county Bay Area. In August 2020, the Sonoma County Transportation Authority (SCTA) updated their travel demand model covering Sonoma County for the purposes of VMT analysis and in July 2021 the City of Petaluma adopted the SCTA travel model as the official model for SB 743 compliance. This model was further updated in August 2021 with a base year reflecting 2019 conditions. The Model includes a base year scenario, which is used to measure existing levels of VMT, and a future year scenario, which is used to measure cumulative levels of VMT. The model inputs include land use information, demographic information, and information related to the transportation system. This information is organized into a structure of traffic analysis zones (TAZs) that simplify the information for model purposes. The TAZ structure can be used to extract VMT data for a single TAZ (i.e., neighborhood level) or aggregated to extract VMT data for an entire city, county, or region. VMT data extracted from the model is reported as VMT per capita, which is the total daily VMT generated by residents (also referred to as home-based VMT) divided by the total number of residents. Based on the data extracted from the

aggregate of TAZs within the City of Petaluma, the City of Petaluma from the SCTA model generates 17.8 ~~19.1~~ VMT per capita under the base year scenario.

Page 4.13-14, second paragraph:

To aid in SB 743 implementation, the following non-binding state guidance has been produced.

- *Technical Advisory on Evaluating Transportation Impacts in CEQA,* California Governor's Office of Planning and Research, December 2018
- *California Air Resources Board 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals*, California Air Resources Board, January 2019
- *Draft VMT-Focused Transportation Impact Study Guide*, Caltrans, May 20, 2020 ~~February 28, 2020~~

Page 4.13-14, footnote 9:

https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf ~~https://dot.ca.gov/programs/transportation-planning/office-of-smart-mobility-climate-change/sb-743~~

Page 4.13-15, Caltrans Guidelines, second paragraph:

Caltrans released the *VMT-Focused Transportation Impact Study Guide* (~~February 28~~May 20, 2020) that recommends use of the OPR recommendations for land use projects and plans. For transportation projects, Caltrans has suggested that any increase in VMT would constitute a significant impact. This has been referred to as the "Net Zero VMT threshold." Caltrans also recently released the *Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance* (July 2020) to provide guidance about the analysis of safety on the state highway system.

Page 4.13-15, Metropolitan Transportation Commission, first paragraph :

The Metropolitan Transportation Commission (MTC) is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area (Bay Area). It is responsible for developing the regional transportation plan and prioritizing regional transportation projects for state and federal funding. MTC maintains the Travel Demand Model used for ~~this~~ the RDEIR VMT analysis.

Page 4.13-16, Sonoma County Transportation Authority:

The Sonoma County Transportation Authority (SCTA) is the County's Congestion Management Agency. The SCTA works with the local jurisdictions to provide countywide transportation planning to help meet

demands and improve Sonoma County's transportation system. SCTA produces long range documents including the Comprehensive Transportation Plan and the Countywide Bicycle and Pedestrian Master Plan. The SCTA also assists local jurisdictions in local specific plans, like Station Area Plans around transit stations and Priority Development Area plans for transit oriented and walkable communities. SCTA prepared the Sonoma County Travel Behavior Study that was used to estimate trip distribution for this study. VMT estimates below are based on the SCTA model.

Page 4.13-22, Vehicular Traffic:

As a component of the City of Petaluma's on-going SB 743 implementation, the City is currently engaged in a process to update the performance metrics and thresholds used to measure transportation system impacts of discretionary projects. Since the City has not yet adopted a VMT threshold, OPR's recommended threshold of 15 percent below the City average is used for analyzing VMT impacts of the project (*Technical Advisory on Evaluating Transportation Impacts in CEQA*, OPR, 2018). For the Scott Ranch project, a significant impact would occur if the project generates:

- greater than ~~16.2~~15.1 VMT per capita under existing plus project conditions based on 15 percent below the existing City average of ~~19.1~~ 17.8 VMT per capita; or

- greater than ~~13.9~~ 14.8 VMT per capita under cumulative plus project conditions based on 15 percent below the cumulative City average of ~~16.3~~ 17.4 VMT per capita. The methodology for calculating cumulative City average VMT per capita is presented in **Section 4.13.4.2 Vehicular Traffic Analysis**, under Scenario 5: Cumulative Conditions (without Project).

These VMT per capita values are based on the SCTA travel demand model, as noted in **Section 4.13.2.2 Roadway Network Analysis**.

Page 4.13-27, Project Trip Generation, second paragraph:

The proposed project would also construct two off-street surface public parking lots (one adjacent to D Street and one adjacent to Windsor Drive) with a combined capacity of 37 vehicles. The lots would serve the visitors of the 47 ~~44~~-acre Putnam Park Extension Project component at the project site, which includes amenities such as trails and an education center. As shown in **Table 4.13-4**, the 47 ~~44~~-acre extension of the county park and amenities would generate one vehicle trip during the AM peak hour and five vehicle trips during the PM peak hour.

Page 4.13-28, Table 4.13-4:

Table 4.13-4
Project Trip Generation Rates and Estimates

	Trip Generation Rates[1]			Number of Trips Generated						
		AM Peak	PM Peak		AM Peak Hour			PM Peak Hour		
Use	Daily	Hour	Hour	Daily	Total	In	Out	Total	In	Out
Single Family (28 du)	11.50	0.89 25%/75%	1.07 63%/37%	322	25	6	19	30	19	11
Putnam Park Extension - Public Park (47 ~~44~~ acres)[2]	0.78	0.02 59%/41%	0.11 55%/45%	34	1	1	0	5	3	2
			Total	356	26	7	19	35	22	13

Source: Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE), 2017. Fehr & Peers, 2019.
Notes:
[1] Trip rates are expressed as trips per dwelling unit (du) or trips per acre. For peak hour trip rates, the direction of travel is expressed as (inbound percentage) / (outbound percentage).
[2] Trip rates based on Public Park Land Use 411 from the ITE Trip Generation Manuel, 10th Edition. These national trip rates were compared to local rates prepared for Taylor Mountain Regional Park study, which were lower than ITE Trip Rates.

Page 4.13-29, Project-Generated VMT per Capita:

Project-Generated VMT per Capita

Project-generated VMT per capita is calculated based on the VMT generated by residents living in the SCTA ~~MTC~~ Travel Demand Model TAZ in which the project is located divided by the residential population of the TAZ. Based on this methodology, the project would generate 20.5 ~~19.6~~ VMT per capita at operation under existing conditions.

Page 4.13-30, Project Effect on VMT:

Project Effect on VMT

The project's effect on VMT describes changes in VMT generation from neighboring land uses by comparing area VMT for "no project" and "plus project" scenarios. An analysis of the project's effect on VMT requires the use of sophisticated tools, such as a locally-calibrated and validated travel demand forecasting model. ~~The MTC Travel Demand Model, which is used to analyze project generated VMT per capita, is a regional travel demand forecasting model that has limited sensitivity to local changes in land use and therefore is not appropriate for use in analyzing project effect on VMT for this project. Two other forecasting models which geographically overlap with the project site, are the SCTA Travel Demand Model~~

~~and the City of Petaluma Travel Demand Model. However, as of 2019 when the traffic analysis was completed, these two models did not have a recently completed calibration and validation process, and therefore, are not appropriate for use at the time of this analysis.~~ Due to these limitations in available tools and the limited effect that a small project of this size would have on VMT, a quantitative analysis of the project's effect on VMT is not included in this RDEIR. However, given the similarities in the proposed project land uses to those of the surrounding land uses (e.g., location that generates higher than average VMT for the City and similarly sized single-family dwelling units), the analysis of project-generated VMT per capita provides a reasonable estimation of the environmental consequences associated with the project's effect on VMT.

Page 4.13-44, Cumulative VMT per Capita:

Cumulative VMT per Capita

Cumulative VMT per Capita is calculated based on the methodology described in **Section 4.13.2.2** using the future year scenario of the SCTA ~~MTC~~ Travel Demand Model, which assumes land use growth and transportation improvements consistent with Plan Bay Area. Based on this data, under cumulative conditions the City of Petaluma would generate 17.4 ~~16.3~~ VMT per capita (based on the average of all the TAZ's within Petaluma, including the project site) and the TAZ containing the site of the proposed project would generate 21.4 ~~16.1~~ VMT per capita. The lower citywide VMT per capita under cumulative conditions compared to existing conditions indicates that the addition of land use growth in the region and transportation improvements would lower the total amount of miles each person in Petaluma travels, particularly for people who live in areas with high-quality transit service.

Page 4.13-47, Cumulative Plus Project VMT Per Capita:

Cumulative Plus Project VMT Per Capita

Cumulative VMT per Capita for the proposed project was analyzed based on the future year scenario of the MTC Travel Demand Model, which assumes land use growth and transportation improvements consistent with Plan Bay Area. Based on this data, under cumulative conditions the City of Petaluma would generate 17.4 ~~16.3~~ VMT per capita and the TAZ containing the site of the proposed project would generate 21.4 ~~16.1~~ VMT per capita.

Page 4.13-50, Impact Trans-1:

Impact TRANS-1: Development of the proposed project would generate VMT per capita greater than the project threshold (*Significant; Significant and Unavoidable*)

As documented above, the proposed project would generate 20.5 ~~19.6~~ VMT per capita at operation under existing conditions, which is greater than the significance threshold of 15.1 ~~16.2~~ VMT per capita based on 15 percent below the City average. Therefore, the proposed project would have a significant impact on VMT.

As noted above in the Vehicle Traffic Analysis (**Section 4.13.4.2**), the 47 ~~44~~-acre Putnam Park Extension Project component is screened out from VMT analysis due to the size and characteristics and the impact on VMT would be less-than-significant.

The California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA 2021)[2] presents the latest state guidance for quantifying VMT reductions. The proposed project would need to reduce project-generated VMT by approximately 26 percent under existing-plus-project conditions to reduce the project's VMT impact to a less-than-significant level. This represents approximately 376 VMT under existing-plus-project conditions, without accounting for the on-site VMT reduction measures described below.[3]

As described in **Section 3.5, Description of the Project Components**, the proposed project would improve bicycle and pedestrian access through the following measures: new sidewalks along the south side of Windsor Drive, multiuse pathways on the west side of D Street south of Windsor Drive, pedestrian crossing improvements at D Street and Windsor Drive, and sidewalk improvements of approximately 800 feet along the east side of D Street north of Windsor Drive. These improvements fall under TDM measure T-18, Provide Pedestrian Network Improvement, presented within CAPCOA 2021, a strategy that focuses on creating pedestrian networks that connect the project to nearby destinations, and is calculated based on the community-level VMT to account for the benefits associated with improving accessibility more broadly (for example, to the existing regional park and homes in the area). As shown in **Appendix RTC-B**, these pedestrian network improvements would result in a community-level VMT reduction of approximately

2 California Air Pollution Control Officers Association, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, December 2021. https://www.caleemod.com/handbook/index.html

3 5.4 VMT per capita over the threshold * 2.5 average household size in Petaluma * 28 households = 376 VMT over threshold under existing conditions

105 VMT under existing conditions. There is limited evidence in CAPCOA 2021 that would support additional on-site and near-site VMT reductions for projects in single-use low density location with limited transit service such as the Scott Ranch project site. The remaining VMT over the threshold would be approximately 271 VMT under existing plus project conditions.

The following CAPCOA 2021 measures, as described briefly below and in more detail in **Appendix RTC-B,** were evaluated for the proposed project as they are appropriate for the residential land use and context of the proposed project:

- T-1. Increase Residential Density
- T-4. Integrate Affordable and Below Market Rate Housing
- T-19-A. Construct or Improve Bike Facility
- T-25. Extend Transit Network Coverage or Hours
- T-35. Provide Traffic Calming Measures
- T-40. Implement School Bus Program
- T-49 Replace Traffic Controls with Roundabout

TDM strategy T-1. Increase Residential Density quantifies the VMT reduction associated with projects that are designed at a higher residential density compared to the nationwide average density of residential development[4] of 9.1 dwelling units/acre (Ewing et al. 2007).[5] While incorporating ADUs into the proposed project would increase the project's residential density from 1.9 dwelling units/acre to 3.7 dwelling units/acre and result in beneficial impact in the form of additional housing, the maximum residential density of the project with ADUs would still be lower than the nationwide average density of 9.1 dwelling units/acre. Therefore, the addition of ADUs would not help the project achieve quantifiable VMT reductions.

Integrating affordable or below market rate housing (**TDM measure T-4. Integrate Affordable and Below Market Rate Housing**) can result in VMT reductions because multi-family affordable housing projects generate approximately 50 percent fewer VMT compared to the proposed project's single-family homes. However, CAPCOA 2021 indicates that the reduction is partially associated with access to active transportation and transit to destinations, which is not present at the Scott Ranch project site. Therefore,

[4] The nationwide average density of residential development is based on the blended average density of residential development in the U.S. forecasted for 2025. This estimate includes apartments, condominiums, and townhouses, as well as detached single-family housing on both small and large lots.

[5] Ewing, R., K. Bartholomew, S. Winkelman, J. Walters, and D. Chen. 2007. Growing Cooler: The Evidence on Urban Development and Climate Change. October. Available: https://www.nrdc.org/sites/default/files/cit_07092401a.pdf. Accessed: May 31, 2022

the addition of affordable housing units to the proposed project would not help the project achieve quantifiable VMT reductions.

~~**Mitigation Measures:** As a component of the City's on-going SB 743 implementation, the City will be adopting a set of preferred VMT mitigation measures and methodologies for quantifying VMT reductions resulting from these mitigation measures. These mitigation measures for significant VMT impacts may include transportation demand management (TDM) strategies that are required for individual projects or on a citywide basis. Research on the effectiveness of TDM strategies published in *Quantifying Greenhouse Gas Mitigation Measures* (CAPCOA, August 2010)[6] identifies 50 transportation measures for reducing VMT with a range of effectiveness. Of the 50 transportation measures presented in the report, 41 are applicable at building and site level. The remaining nine transportation measures are functions of, or depend on, site location and/or actions by local and regional agencies or funders.~~

~~Based on research documented in *SB 743 Implementation TDM Strategy Assessment* (Fehr & Peers, February 26, 2019)[7], the most effective TDM strategies for VMT reductions (and resultant emissions) derive from regional infrastructure and service investments that support use of transit, walking, and bicycling. However, many of these measures would be outside the capabilities at the project level. Of the 41 strategies applicable at the building and site level, only a few are likely to be effective in a suburban setting, such as on the urban fringe of Petaluma, since they are dependent on the land use context and final building occupants who choose to be located in walkable or transit supportive locations. **Appendix 4.13** documents the VMT reduction strategies and an assessment of their potential application to this RDEIR. Within the context of the project, the following four CAPCOA strategies were determined to be most applicable to the project:~~

~~LUT-5 Increase Transit Accessibility: this strategy focuses on encouraging a mode shift from private automobile to transit by promoting convenient access to high frequency transit, thereby reducing VMT.~~

~~SDT-1 Provide Pedestrian Network Improvements: this strategy focuses on creating a pedestrian network within the project and connecting the project to nearby destinations. Given the small size of the proposed project, this strategy would likely focus on the construction of network improvements that connect the project site directly to nearby destinations.~~

~~SDT-2 Provide Traffic Calming Measures and Low Street Bicycle Network Improvements: this strategy creates networks with low vehicle speeds and volumes that are more conducive to walking and bicycling. Building a low-stress bicycle network produces a similar outcome. Implementation options are similar to those for providing pedestrian network improvements. One potential change in this strategy over time is~~

~~[6] CAPCOA. *Quantifying Greenhouse Gas Mitigation Measures.* August 2010. http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf.~~

~~[7] Fehr & Peers. *SB 743 Implementation TDM Strategy Assessment.* February 2019. https://www.fehrandpeers.com/wp-content/uploads/2019/03/WRCOG-SB743-Document-Package.pdf.~~

~~that e-bikes (and e-scooters) could extend the effective range of travel on the bicycle network, which could enhance the effectiveness of this strategy. However, given that these technologies have only recently gained popularity, there is not currently evidence to support a VMT reduction in a setting similar to Petaluma.~~

~~TRT-13 Implement School Bus Program: this strategy implements a school bus program that reduces VMT for school trips only.~~

~~Pedestrian and bicycle network improvements (SDT-1 and SDT-2, respectively) are included as part of the proposed project to fulfill City requirements as outlined in the below Pedestrian, Bicycle, and Public Transit section. These infrastructure improvements include new sidewalks along the south side of Windsor Drive, a crosswalk at the new intersection of Windsor Drive at the proposed A and B Streets, as well as off-site crossing improvements at the D Street/Windsor Drive intersection and sidewalk improvements along the east side of D Street between Windsor Street and Sunnyslope Avenue, for a distance of approximately 800 feet, to connect with the existing sidewalk.~~ The project also includes infrastructure improvements to the bicycle network (**TDM strategy T-19-A. Construct or Improve Bike Facility**) via a Class I trail along the west side of D Street from the southeast corner of the project site to connect with a proposed sidewalk at the northeast corner of the site. Project improvements would also include a new multi-use trail connecting D Street with the proposed multi-use trail along Kelly Creek. However, the project location on the edge of the City and urban development and the hilly terrain limits the effectiveness of bicycle and pedestrian network improvements in reducing project-generated VMT as documented in **Appendix RTC-B~~4.13~~**. Therefore, TDM strategy T-19-A ~~strategies SDT-1 and SDT-2~~ would have a negligible effect on reducing the project's VMT.

~~A school bus program (TRT-13) was evaluated as mitigation for the proposed project's VMT impact. Research documented in **Appendix 4.13** suggests that a school bus program has a VMT reduction potential of 5-30 percent of VMT generated by school trips. The project site is within one-half mile of Route 501, which provides public transit school service, so the proposed project is within walking distance of this program. However, output from the MTC Travel Demand Model TAZ in which the project is located shows that school trips represent only two percent of total home-based VMT. Therefore, this strategy would have a negligible effect on reducing the project's VMT.~~

TDM measure **T-25 Extend Transit Network Coverage or Hours** ~~TDM Strategy LUT-5~~ would require providing funding for expanding the transit network to the project site. ~~This measure is estimated to have VMT reduction potential of 0.0 to 5.8 percent.~~ However, the City of Petaluma does not have plans to extend transit service to the project site due to the low density and other design characteristics of the surrounding

community that would not support a viable fixed transit service.[8] Therefore, this strategy would be infeasible for reducing the project's VMT.

The remaining TDM strategies (**T-35. Provide Traffic Calming Measures, T-40. Implement School Bus Program,** and **T-49. Replace Traffic Controls with Roundabout**) are documented in CAPCOA 2021 as "supporting or non-quantified" measures because quantifiable VMT reductions are not supported by the current research. However, the proposed project's traffic calming measures and roundabout would provide co-benefits with the proposed pedestrian network improvements.

The effectiveness of these measures or other traditional on-site TDM strategies are highly dependent on the project's location, as contextual features such as the mix and density of land uses and the provision of safe and convenient walking, biking, and transit connections are critical to shifting travel behaviors to non-automobile modes. For the proposed project, the established low-density development pattern and lack of convenient amenities and transit access in the neighborhood adjacent to the project site, limits the effectiveness of on-site VMT-reduction measures. Increasing the density and mix of uses of the surrounding neighborhood is beyond the scope of the proposed project and would be inconsistent with existing City policies, land use designation, and zoning standards.

While there are ~~few, if any,~~ no additional feasible strategies (beyond the proposed sidewalks) for reducing project-generated VMT due to the location and characteristics of the proposed project and project site, these measures are proven effective at reducing VMT for people living, working, and visiting in areas of Petaluma with higher density, a mix of uses, and more amenities within a convenient walk, bike, or transit trip. Therefore, the project could help the City and state meet their GHG goals by contributing to measures consistent with these strategies elsewhere in the City. This concept can include VMT impact fees, VMT mitigation exchange, and VMT mitigation bank.[9] As a component of the City of Petaluma's ~~on-going SB 743 implementation~~ VMT reduction program, the City is currently engaged in a process to develop a mitigation program that would address the transportation system impacts of discretionary projects, including those for which there is no feasible mitigation measure for VMT impacts. The measures for reducing VMT would include the following:

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8 Per email on March 13, 2020 from Jared Hall, City of Petaluma Transit Manager~~.~~, the City of Petaluma does not currently have plans to extend transit service closer to the project site due to the low density and other design characteristics of the surrounding community that would not be expected to support the transit demand required for a viable fixed transit service. Petaluma Transit's upcoming Short Range Transit Plan will re-evaluate the benefit of new fixed-route or on-demand service to serve the project site compared to the benefit of allocating these funds to provide service elsewhere in Petaluma and will consider how to best fulfill City goals such as Greenhouse Gas Reduction and achieve reductions to Vehicle Miles Traveled given the available resources.

9 Source: https://www.fehrandpeers.com/wp-content/uploads/2020/04/VMT-Fees_Exchanges_Banks-White-Paper_Apr2020.pdf.

- T-18. Pedestrian Network Improvements
- T-22-B. Implement Electric Bikeshare Program
- T-20. Expand Bikeway Network
- T-26. Increase Transit Service Frequency
- T-9. Implement Subsidized or Discounted Transit Program
- T-46. Improve Transit Access, Safety, and Comfort

As described in more detail in the **Appendix RTC-B**, there is evidence that these measures, when applied to people working, living, or visiting areas of Petaluma with higher density, a greater mix of uses, and more amenities within a convenient walk, bike, or transit trip would reduce Citywide VMT by the amount of project-generated VMT over the threshold (approximately 271 VMT). However, due to the nascency of VMT, no measures are currently feasible that would reduce VMT impacts to the less than significant levels given the uncertainties related to outside agency approval requirements, the timing that it will take to implement these measures, the lack of design or plans in place to implement, and the lack of a Citywide administration plan to oversee the collection of VMT fees and the implementation and monitoring of VMT reductions. Therefore, the project would result in significant and unavoidable impacts to an exceedance of the VMT threshold.

Mitigation Measure: None feasible.

~~**TRANS-1** The Applicants shall contribute their fair share to mitigation measures that aim to reduce Citywide VMT per capita by an equivalent amount to the reduction of project-generated VMT from 19.6 VMT per capita to a level at or below 16.2 VMT per capita. These mitigation measures for reducing VMT shall include funding for transit passes or multi-modal infrastructure, such as transit shelters or other accessibility improvements, to address existing capital needs determined by the City of Petaluma's Engineer and Transit Manager. These measures, when applied to people working, living, or visiting areas of Petaluma with higher density, a greater mix of uses, and more amenities within a convenient walk, bike, or transit trip, are effective at reducing VMT. For example, constructing transit shelters and other amenities that support transit oriented neighborhoods as outlined in the CAPCOA Strategy LUT-5 Increase Transit Accessibility are estimated to have a VMT reduction potential up to 5.8 percent. However, in the absence of a Citywide policy outlining the specific improvements and the effectiveness of these improvements at reducing VMT, the feasibility of the mitigation measure is currently unknown.~~

Significant and Unavoidable ~~**Significance after Mitigation:**~~ There are no feasible mitigation measures that ~~Implementation of **Mitigation Measure TRANS-1**~~ would effectively reduce VMT by the amount of project-

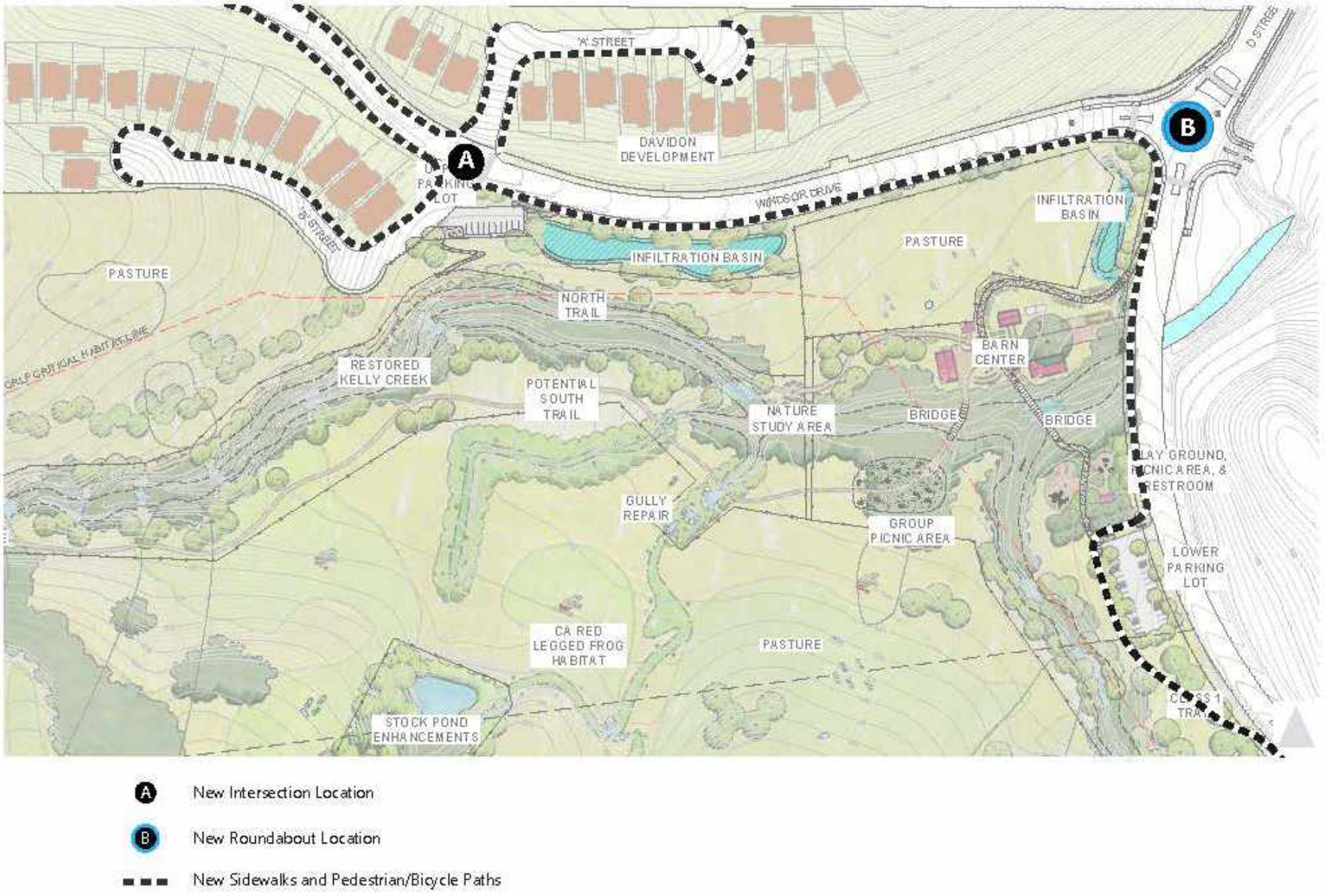
generated VMT over the threshold (approximately 271 VMT). Although an exhausted review of potentially feasible VMT reduction measures were explored, as presented in **Appendix RTC-B**, none are currently feasible for quantifiable VMT mitigation purposes given the uncertainties related to outside agency approval requirements, the timing that it will take to implement these measures, the lack of design or plans in place to implement, and the lack of a Citywide administration plan to oversee the collection of VMT fees and the implementation and monitoring of VMT reductions.~~; improve the attractiveness of transit service or access for people walking or bicycling in Petaluma; however, the effect of this measure on reducing Citywide VMT is unknown.~~ Therefore, since there is no feasible ~~this~~ mitigation measure ~~cannot guarantee that the impact of the proposed project on VMT would be reduced to a less than significant level~~, this impact would be significant and unavoidable.

Page 4.13-53, Footnote Number 20:

~~Based on the MTC 2015 model, the existing total Citywide daily VMT is 986,618. The project would generate 1,356 total daily VMT (19.6 VMT per capita * 28 homes * 2.47 average household size in Petaluma = 1,356 total VMT), and would be required to reduce this amount by 233 VMT (28 homes * 2.47 average household size * [19.6 VMT – 16.2 VMT per capita]). Therefore, the project would be responsible for a 0.02% reduction to total citywide VMT (233 total VMT / [986,618 total VMT + 1,356 total VMT] = 0.02%) in order to reduce citywide VMT per capita by an equivalent level of 16.1 VMT per capita for the project.~~

Page 4.13-57, Figure 4.13-11:

Figure has been updated to show the revised footprint of the residential component.



SOURCE: Fehr & Peers, ~~2019~~ 2022

UPDATED FIGURE **4.13-11**

IMPACT SCIENCES

Site Plan and New Intersections

1222.001•06/2022

Page 4.13-59, Improvement Measures:

~~**Improvement Measures**~~

~~**IM TRANS-2**: During the SPAR process, at the City engineers' discretion, the project Applicants shall fund the following measures: striping of a northbound left turn lane at the parking lot access on D Street, trimming or removing any landscaping that may grow in such a manner that could obstruct the line of sight between motorists exiting the driveway and traveling along D Street, and installing flashing warning lights, signage, and striping to warn drivers about the driveway and roundabout. The installation of this northbound left turn pocket would provide adequate space for a northbound motorist to decelerate into the turn lane prior to waiting for a gap in the southbound direction and making a turn into the project site. The length of the storage of the turn pocket and bay taper should be 100 feet and 120 feet, respectively, and should be verified during the development of final design documents.~~

~~**Significance after Improvement Measure**: Implementation of **Improvement Measures TRANS-2** would further reduce the project's less than significant impact.~~

Page 4.13-62, final paragraph:

. . . To further reduce the less than significant impact on pedestrian and bicycle facilities, the proposed project could enhance the design of pedestrian facilities in manner consistent with the recommended features in the General Plan ~~(see **Improvement Measure Trans-4**)~~. Additionally, project condition of approval imposed at the discretion of the City Engineer ~~**Improvement Measure TRANS-2**~~, would provide a warning to northbound drivers on D Street about the approaching roundabout to slow vehicles entering Petaluma from rural Sonoma County. This ~~measure~~ would further reduce less than significant hazards for pedestrians crossing D Street at the roundabout at Windsor Drive.

Page 4.13-62, Improvement Measures:

~~**Improvement Measures:**~~

~~**IM TRANS-4: During the SPAR process, at the City engineers' discretion, the proposed project shall enhance the design of the pedestrian facilities in manner consistent with recommended features in the General Plan. This may include the following:**~~

~~**a) Sidewalk on the north side of Windsor Drive;**~~

~~**b) Wider sidewalks with planter strips;**~~

~~**c) Directional curb ramps, ADA-compliant cross slopes, and tighter curb radii;**~~

~~**d) Crosswalks on all intersection legs; and**~~

~~**e) Intersection crossing measures such as RRFB's and bulb-outs at the proposed crosswalk, in a manner consistent with MUTCD recommendations.**~~

~~**Significance after Improvement Measure**: Implementation of **Improvement Measures TRANS-4** and **Improvement Measure TRANS-2** would further reduce the project's less than significant impact.~~

Page 4.13-64, last paragraph:

Significance after Mitigation: Implementation of **Mitigation Measure** TRANS-5 ~~**TRANS-6**~~ would reduce the temporary construction impacts of the proposed project to a less-than-significant level.

Page 4.13-65, RPT Impact TRANS-1, first paragraph:

RPT Impact TRANS-1: Implementation of the proposed regional park trail project would not conflict with any applicable plans, ordinances or policies establishing measures of effectiveness for the performance of the traffic circulation system; increase traffic hazards; or result in inadequate emergency access. (*Less than Significant*)

Conflict with Applicable Plans or Programs

No vehicular roadways or traffic improvements would be constructed as part of the proposed regional park trail project. The proposed regional park trail project would not construct any parking lots and would only allow for non-vehicular access, such as pedestrians, cyclists, and equestrians. ~~pedestrian access~~.

Page 4.13-66, Cumulative Impact TRANS-1:

Cumulative Impact TRANS-1: Development of the proposed project and the regional park trail would generate VMT per capita greater than the project threshold under cumulative conditions. (*Significant; Significant and Unavoidable*)

As documented above, under cumulative conditions the TAZ containing the site of the proposed project would generate 21.4 ~~16.1~~ VMT per capita, which is greater than the significance threshold of 14.8 ~~13.9~~ VMT per capita based on the significance criteria of 15 percent below the City average under cumulative conditions. The proposed project would need to reduce project-generated VMT by approximately 31 percent under cumulative plus project conditions to reduce the project's VMT impact to a less-than-significant level. This represents approximately 465 VMT under cumulative plus project conditions,

without accounting for the credit associated with on-site VMT reduction measures described below.NEW FOOTNOTE As shown in **Appendix RTC-B** of this document, the proposed pedestrian network improvements would result in a community-level VMT reduction of approximately 144 VMT under cumulative conditions and there is limited evidence in CAPCOA 2021 that would support additional on-site and near-site VMT reductions for projects in single-use low density locations with limited transit service such as the Scott Ranch project. The remaining VMT over the threshold would be approximately 321 VMT under cumulative plus project conditions. Therefore, the project would have a significant impact on VMT under the cumulative condition. ~~**Mitigation Measure TRANS-1** is set forth above to address this significant impact. However, with mitigation, t~~ This impact would remain significant and unavoidable.

NEW FOOTNOTE:

6.6 VMT per capita over the threshold * 2.5 average household size in Petaluma * 28 households = 465 VMT over threshold under cumulative conditions

Mitigation Measures: There are no feasible mitigation measures that would effectively reduce VMT. ~~The project shall implement **Mitigation Measure TRANS-1**, which requires funding for transit infrastructure, such as transit shelters, to address existing capital needs.~~

Significant and Unavoidable ~~**Significance after Mitigation:**~~ There are currently no feasible VMT mitigation measures given the uncertainties related to outside agency approval requirements, the timing that it will take to implement these measures, the lack of design or plans in place to implement, and the lack of a Citywide administration plan to oversee the collection of VMT fees and the implementation and monitoring of VMT reductions. ~~Implementation of **Mitigation Measure TRANS-1** would improve the attractiveness of transit service in Petaluma; however, the effect of this measure on reducing Citywide VMT is unknown.~~ Therefore, since there are no feasible ~~this~~ mitigation measures and quantifiable reductions cannot be guaranteed ~~that the impact of the proposed project on VMT would be reduced to a less than significant level~~, this cumulative impact would be significant and unavoidable.

Page 4.13-67, last paragraph:

Mitigation Measures: No mitigation measures are required. ~~The project shall fund the measures outlined in **Improvement Measure TRANS-2** at the City engineers' discretion to further reduce the project's less than significant impact.~~ **Page 4.13-69, Cumulative Impact TRANS-5:**

Cumulative Impact TRANS-5: The proposed project and the regional park trail would not cause temporary disruption to the transportation network due to construction under Cumulative conditions. (*Less than Significant*)

Construction of the proposed project and the regional park trail, in conjunction with the related projects listed in **Table 4.0-1, Approved and Pending Projects in Section 4.0** of this RDEIR, has the potential to affect local transportation systems. However, since timing cannot be predicted, such conflicts are expected to be addressed on a case-by-case basis, and conflicts will be resolved through the proper use of best alternative construction practices as described in **Mitigation Measure** TRANS-5 ~~TRANS-7~~. Therefore, significant cumulative construction conflicts are not anticipated. As previously mentioned, construction for the proposed regional park trail project would occur over a short period of time and would involve a small number of vehicle trips. All cut and fill material would be balanced on site and thus would not result in haul trips. Worker trips would be low and would not cause a disruption to the transportation network. Thus, construction of the regional park trail would not contribute to a temporary disruption to the transportation network that may occur due to other construction projects. The cumulative impact would be less than significant.

Page 4.13-71, last paragraph:

While traffic operations at D Street/Lakeville Street and D Street/8th Street would conflict with Petaluma's General Plan Policy 5-P-10, through the proposed multi-modal circulation improvements, the contribution of City of Petaluma Development Impact Fees, and compliance with conditions of approval ~~**Mitigation Measure TRANS-1**~~, the proposed project will contribute to improvements to improving citywide circulation.

Page 4.13-72, Section 4.13.6, References:

California Air Pollution Control Officers Association. *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. December 2021. https://www.caleemod.com/handbook/index.html

Section 4.14, Utilities and Service Systems

Page 4.14-1, Introduction:

This section describes existing utilities that serve the project site and its vicinity and analyzes the potential for the Scott Ranch project (proposed project) to affect water supply and the water distribution system; wastewater collection, conveyance, and treatment systems; solid waste services; ~~natural gas;~~ and electricity. It also presents potential impacts to utilities and services systems from the construction and operation of

the Helen Putnam Regional Park Trail (regional park trail), which is considered a related project because it would provide a connection from the trails proposed under the Scott Ranch project to existing trails in the Park. (see **Section 4.14.4.4** below).

Pager 4.14-3, Groundwater:

Groundwater

The Petaluma Valley Basin (Basin Number 2.1), located in the Petaluma River Valley starting at Penngrove on the north and following the valley south to San Pablo Bay, is about 46,100 acres. The groundwater subbasin has low permeability and limited groundwater storage as a result. Additionally, the subbasin has water quality issues from naturally occurring arsenic, iron, manganese, nitrate, and coliform. The City maintains 12 wells (6 are active) that tap into this subbasin (City of Petaluma 2016). The City uses groundwater, as necessary, for emergency backup supply, peaking needs, and other short-term scenarios. From 2011 to 2015, groundwater use remained consistent, with an increase in usage in 2015. In 2015, the City supplied approximately 5 percent of its annual demand using groundwater. This increase was the product of rehabilitated well sites and studies to determine actual production capabilities in the event of emergency use. Groundwater usage was high in 2015, due to the impacts of wholesale water rates increase from Sonoma Water, formerly the SCWA. Therefore, the City opted to supply more groundwater in an attempt to reduce the costs burden on its ratepayers. From 2015 to 2017, local groundwater production accounted for approximately 5 percent of supply. There was no groundwater production for water supply in 2018 and 2019. ~~.~~The City continues to maintain and sample the wells per state requirements and to keep the wells in working condition should they be required in an emergency (City of Petaluma 2016).

Page 4.14-6, second paragraph:

Average annual rainfall in the project vicinity is just under 26 ~~25~~ inches (West Yost, 2021). Nearly 95 percent of this precipitation falls during the winter rainy season, October through April, with the heaviest rainfall typically occurring in December, January, and February. During a 30-minute duration, 10-year recurrence interval storm, peak rainfall intensity is approximately 1.0 inches per hour, and increases to 1.31 inches per hour during a 30-minute, 100-year storm (BKF Engineers, 2018).

Page 4.14-8, Section 4.14.2.6, Natural Gas:

~~4.14.2.6 Natural Gas~~

~~Natural gas is provided and distributed to residents and businesses in the City of Petaluma by PG&E. PG&E purchases gas supplies at daily, monthly and longer term basis from producers and marketers in Canada, the Rockies, and the U.S. Southwest.~~

~~In 2012, natural gas used within California was extracted in the State of California (9 percent), Canada (16 percent), the Rocky Mountain region of the United States (40 percent), and in the southwest United States (35 percent) (CPUC 2019). In 2012, natural gas was used in California to produce electricity (45.6 percent), in residential uses (21 percent), in industrial uses (25 percent), and in commercial uses (8.6 percent). The total natural gas usage in 2012 was 23,130 million therms (CEC 2019b). Proposed natural gas infrastructure on the project site would connect to existing natural gas line located within the eastern portion of D Street, just north of the proposed round-a-bout at the intersection of Windsor Drive and D Street.~~

Page 4.14-13, City of Petaluma Ordinance 2562:

The City of Petaluma Ordinance 2562, which came in effect February 4, 2016 ~~1026~~, repealed and replaced §§ 15.17.020 and 15.17.050 of the City of Petaluma Municipal Code and repeals Ch. 15.18, water conservation regulations. The Ordinance updates the Petaluma Municipal Code to comply with state water efficient landscape requirements and to remove redundancy with the City's Water Shortage Contingency Plan.

Page 4.14-20, second paragraph:

The environmental effects from the construction of on-site storm water drainage facilities are evaluated throughout this RDEIR, and to the extent that there would be significant impacts on biological resources, cultural resources, air quality and noise from their construction, those impacts would be reduced to less than significant levels with the mitigation measures set forth in this RDEIR. As discussed in **Section 4.8 ~~Section 4.7~~, Hydrology and Water Quality**, no off-site storm water drainage improvements would be required. The impact related to storm water facilities would be less than significant.

Page 4.14-21, Impact UTL-6, Electric Power and Natural Gas, first paragraph:

Impact UTL-6 **Development of the proposed project would not result in the relocation or construction of new or expanded electric power, ~~natural gas,~~ or**

telecommunication facilities, the construction or relocation of which could cause significant environmental effects. ***(Less than Significant)***

Electric Power ~~and Natural Gas~~

~~As demonstrated in **Section 4.5, Energy**, the project would result in a demand of approximately 723,371 thousand British Thermal Units per year (kBtu/year) of natural gas. According to United States Energy Information Administration, in 2017 the State of California consumed approximately 2,188.77 trillion Btu. Therefore, the proposed project's natural gas demand would represent approximately 0.0003% of the state's total consumption.~~

In addition, the project would demand up to 242,463-kilowatt hour per year (kWh/year), or 0.24 GWh/year, of electricity. According to the California Energy Commission (CEC), California produced a total of 285,488 GWh of electricity in 2018. As a result, the project would represent less than 0.000001% of the total electricity produced within the state.

Furthermore, the proposed project is consistent with planning and growth projections for the City of Petaluma. The electrical loads ~~and natural gas demand~~ associated with the proposed project are within the parameters of projected load growth in the City, and PG&E would be able to meet the demand in this area. Sonoma Clean Power (SCP), which serves the project area, already utilizes PG&E wiring and infrastructure to deliver energy from renewable sources. As the project site is within the service area for SCP, energy for the future residents would be through either SCP's CleanStart service or Evergreen service. PG&E would still deliver the electricity through their existing power lines and infrastructure. ~~.~~Only minor modifications to the on-site distribution system would be required to connect the proposed project to the existing off-site electrical system. Given the small fraction that the project's demand would constitute with respect to the total statewide demand, the proposed project would not require the construction of new power generation facilities. Therefore, the project would not result in the relocation or construction of new or expanded electric power ~~or natural gas facilities~~. The impact would be less than significant.

Page 4.14-24, Section 4.14.4.5, Cumulative Impacts and Mitigation Measures:

The geographic area for the evaluation of cumulative impacts on utilities is the City of Petaluma because with the exception of electricity, ~~natural gas,~~ and telecommunications, all other utilities to the Scott Ranch project site would be provided by the City of Petaluma, and to the extent that there are cumulative impacts, they would occur within the city. The regional park trail project would not result in a demand for utilities and therefore would not contribute to any cumulative impacts.

Page 4.14-26, Section 4.14.5, References:

~~California Energy Commission (CEC). 2019b. Gas Consumption by County. Available online at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx, accessed September 25, 2019.~~

~~California Public Utilities Commission (CPUC). 2019. *Natural Gas and California*. https://www.cpuc.ca.gov/natural_gas/, accessed September 25, 2019.~~

West Yost. 2021. West Yost. 2020 Urban Water Management Plan. Draft Report. Prepared for the City of Petaluma. May.

Section 4.15, Wildfire

Page 4.15-1, Existing Conditions, first paragraph:

Wildfire conditions are primarily influenced by weather, vegetation, topography, and human activities. The interaction of these factors produces local and regional fire regimes. The fire regime in any area is defined by several factors, including fire frequency, intensity, severity, and area burned.

Page 4.14-2, Weather, second paragraph:

The project site is located within the Petaluma Valley, bordered to the east by the Sonoma Mountains and to the west by a series of hills followed by Estero Lowlands, which open to the Pacific Ocean. The region from the Estero Lowlands to the San Pablo Bay (located south of Petaluma) is known as the Petaluma Gap. This low-terrain area allows marine air to travel into the Bay Area from the south and west (City of Petaluma 2008). Wind patterns in the Petaluma Valley are strongly influenced by the Petaluma Gap, with winds flowing predominantly to the east from the west. The project site's area is characterized by warm, dry summers and cool, moist winters. The area averages about 26 ~~30~~ inches of precipitation a year, primarily in the fall and winter (West Yost, 2021). Most of the measurable rainfall generally occurs during the winter months (mid-October to mid-April). Thus, the fire season (the time of highest fire danger) comprises the dry months of May through October. Although average summertime temperatures are usually quite warm (75° to 85° F), proximity to the San Francisco Bay and the fog that rolls in during early evenings often creates a pattern of hot days and cool nights. Fog also sometimes keeps summertime temperatures cool in the project area.

Page 4.15-21, Section. 4.15.4.2, Methodology:

To evaluate impacts related to wildfire, the analysis below is based on the *Revised Fuel Management Plan* report (included in **Appendix RTC-D** to this RDEIR) prepared for the proposed project that assess wildfire risk and establish appropriate treatment and monitoring measures.

Page 4.15-22, Impact WDF-1, second paragraph:

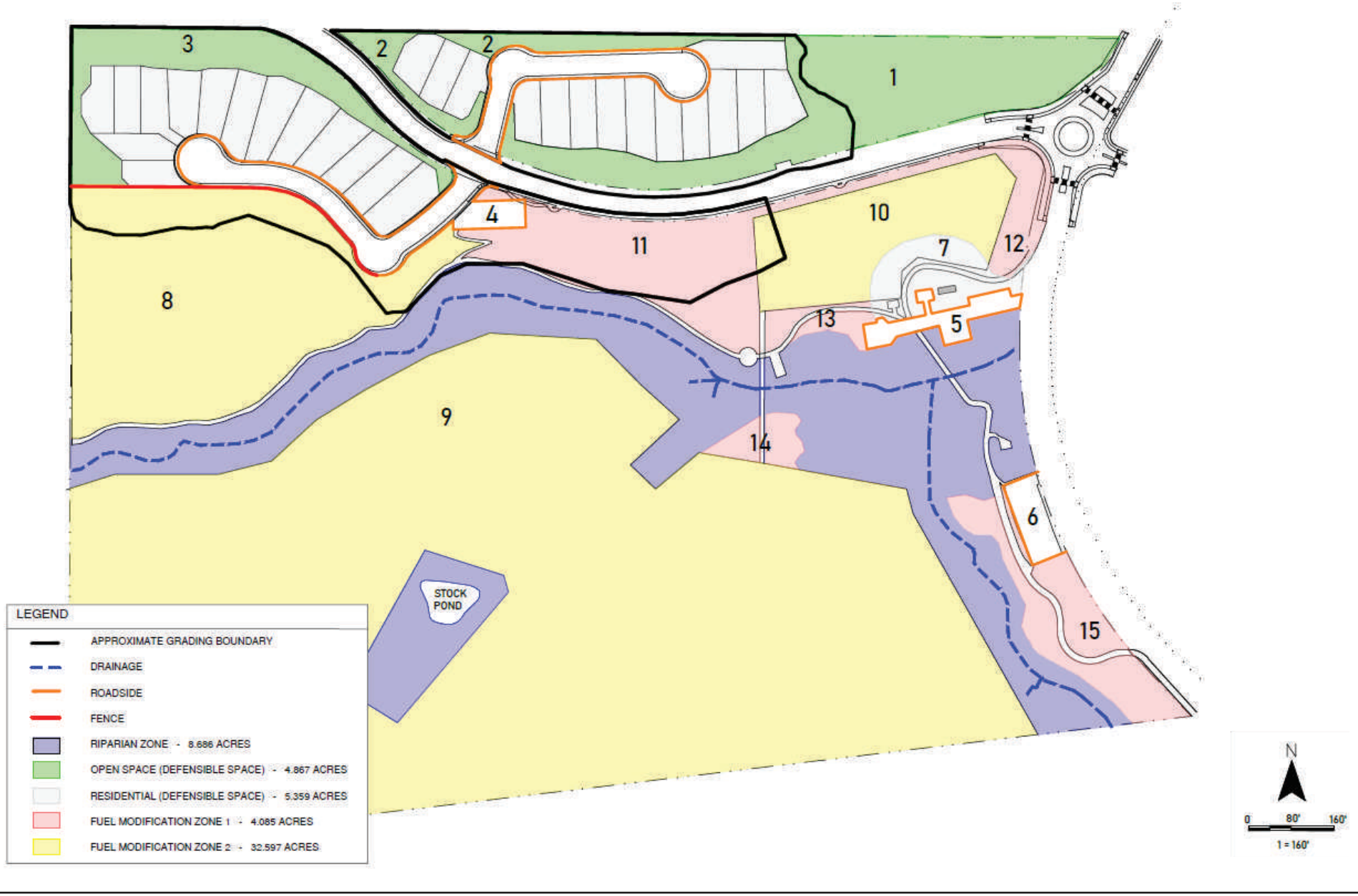
The Fuel Management Program, identified in the *Revised Fuel Management Plan* report and presented in **Section 3.0, Project Description**, identified a Roadside Vegetation Management Zone (orange boundary line), shown on **Updated Figure 4.15-3, Fuel Management Zones**, which includes vegetation near roads, driveways and parking lots. The Roadside Vegetation Management Zone would be designed to assist evacuation and emergency vehicle access to the residential and park portions of the proposed project and to limit ignitions from vehicles. As presented in **Section 3.0, Project Description**, maintenance standards identified by the Fuel Management Program for the Roadside Vegetation Management Zone would be similar to those identified for the Residential Defensible Space/Landscaping Zone shown in white on **Updated Figure 4.15-3** with one exception. Additional requirement in the Roadside Vegetation Management Zone is a 15-foot vertical clearance created by tree-trimming over pavement along the entire length of the roadway, parking lot, or driveway. Standards identified for this zone in the Fuel Management Program include ongoing maintenance of the emergency-access easement.

Figure 4.15-3:

Figure has been updated to show the updated fuel management zones per the *Revised Fuel Management Plan.*

Figure Number has been revised as follows: **Updated Figure 4.15-3**

Source has been revised as follows: WILDLAND RES MGT, Revised Fuel Management Plan, November 2021 ~~2020~~



SOURCE: WILDLAND RES MGT, Revised Fuel Management Plan, November 20212020.

UPDATED FIGURE **4.15-3**

IMPACT SCIENCES

Fuel Management Zones

1339.001•11/20

Page 4.15-24, first paragraph:

The assessment found that under both scenarios, all roadway segments would operate at volume to capacity (V/C) ratios of under 1.0, which indicates that the roadways can successfully operate at evacuation capacity. A V/C ratio of greater than 1.0 would result in a vehicle slowdown and longer travel times. The highest V/C ratio expected is 0.86, for Western Avenue between English Street and Petaluma Boulevard. Therefore, under the worst-case traffic assumptions and fire scenarios identified and analyzed in the *Revised Fuel Management Plan* report, D Street and Western Avenue would have sufficient capacity to accommodate evacuating vehicles while maintaining one lane along those streets for emergency access.

Page 4.15-24, Impact WDF-2, third paragraph:

Based on the *Revised Fuel Management Plan* report, most of the current vegetation at the project site is of low fire hazard. However, a fire could spread quickly with wind from the west in the summer.

Page 4.15-26, last paragraph:

In compliance with PMC Section 4907.1 and as discussed in **Section 3.0, Project Description**, the proposed project would include a Fuel Management Program identified in the *Revised Fuel Management Plan* report **(Appendix RTC-D)** which would provide protection measures for both the project site and neighboring properties from the wildfire risk that could occur on site or off site.

The Fuel Management Program would divide the project site into six treatment zones as shown on **Updated Figure 4.15-3.**

1. Residential Defensible Space/Landscaping Zone (grey)
2. Open Space Defensible Space Zone (green)
3. Roadside Vegetation Management Zone (orange boundary line)
4. Fuel-Modification Zone 1 (tan)
5. Fuel-Modification Zone 2 (yellow)
6. Riparian Zone (purple)

Both the Residential Defensible Space/Landscaping Zone and the Open Space Defensible Space Zone (including any barbecue areas in the developed portion of the extension of the Helen Putnam Regional Park) are designed to reduce ignitions near structures, support structural survival during a wildfire, and reduce the chance that an ignition would move offsite. The Residential Defensible Space/Landscaping Zone

is shown in grey ~~white~~ on **Updated Figure 4.15-3**~~, and labeled as DS~~. Area 7 shown on **Updated Figure 4.15-3**, would meet the standards defined below for the Residential Defensible Space Zone because it includes the barn complex. The Open Space Defensible Space Zone is indicated as green on the same figure, and is comprised of areas 1, 2, and 3~~, 4, 5 and 7~~.

The Roadside Vegetation Management Zone consists of vegetation near roads, driveways and parking lots, and is designed to assist evacuation and emergency vehicle access and to limit ignitions from vehicles. It is shown in an orange boundary ~~blue~~ on **Updated Figure 4.15-3** (zones 4, 5 and 6~~, 8, and 10~~) and also applies along Streets A and B. The standards and actions to comply with both the Defensible Space/Landscaping Zone and the Roadside Vegetation Management Zone are the same, with one exception. In the Roadside Vegetation Management Zone a 15-foot vertical clearance would be maintained by tree-trimming over pavement along the entire length of the roadway, parking lot, or driveway.

The Fuel Modification Zones (1 and 2) encompass the remainder of the open space portion of the project site (shown in yellow and tan, and ensure the fuels do not exacerbate fire hazards to adjacent landowners and structures. Fuel Modification Zone 1 (tan ~~yellow~~) is within the ~~fenced cattle grazing area~~ portion of the proposed Helen Putnam Park Extension where any cattle grazing is most likely to occur and is designed to limit fire intensity and spread by means of the pruning of trees, reduction of understory plants, and use of prescribed herbivory (grazing). Fuel Modification Zone 2 (yellow ~~tan~~) is also within the proposed Helen Putnam Park Extension, but is outside the ~~regular~~ most likely cattle grazing area; accordingly, options for fuel reduction other than prescribed herbivory are more likely to be used within this zone, although prescribed grazing is still an option.

The Riparian Zone is also within the proposed Helen Putnam Park Extension and outside the fenced cattle grazing area. This zone covers those areas along Kelly Creek and its tributary, and immediately surrounding the stock pond (shown in purple). For each of the site zones, the *Revised Fuel Management Plan* report identifies a set of maintenance standards that are developed in compliance with California State PRC 4291 and the Petaluma Municipal Code. Maintenance standards are included in **Section 3.5.7, Fuel Management Program**. ~~Section IV, Fuel Management Program.~~ The *Revised Fuel Management Plan* report also identifies general measures for fire-resistant landscaping including spacing and design, landscape maintenance, and species selection criteria (Appendix B of the *Revised Fuel Management Plan*, Fire-Resistant Plants and Prohibited Species).

The *Revised Fuel Management Plan* report examined fire behavior at the project site with three different fire scenarios: 1) a fire beginning to the southwest of the project site, near the main entrance of Helen Putnam Regional Park, on an August day with a southwesterly wind blowing toward the project site; 2) a fire beginning immediately to the northeast of the project site on an October day with northeasterly Diablo

winds blowing toward the project site and with normal moisture in on-site riparian vegetation; and 3) a fire beginning immediately to the northeast of the project site on an October day with northeasterly Diablo winds blowing toward the project site, but with on-site riparian vegetation dried by drought.

For all three scenarios, the *Revised Fuel Management Plan* report concluded that the proposed project with the implementation of the Fuel Management Program ~~Plan~~ showed improved fire conditions compared to the same scenarios under existing conditions, without the project. Modeling of fire growth showed a modest improvement for the first scenario (15,683 versus 16,337 acres burned in 9 hours assuming no fire suppression activity); good improvement for the second scenario (174 versus. 225 acres burned in 9 hours assuming no fire suppression activity); and excellent improvement for the third scenario (193 versus 4,833 acres burned in 9 hours assuming no fire suppression activity). Given the conversion of grasslands to residences, the improved conditions would also occur if grazing continues within the Putnam Park Extension portion of the project and the other vegetation management measures are not implemented within the park portion until the Putnam Park Extension Project component is open to the public.

Predicted Fire Behavior with Implementation of the Fuel Management Program[NEW FOOTNOTE] ~~*Plan Report*~~

Model analysis in the *Revised Fuel Management Plan* report showed that once the fire-management measures as outlined in the Fuel Management Program (**Section 3.5.7**, in the Project Description) have been implemented on the site, fire behavior in the area within 100 feet of structures would exhibit less than two-foot flame lengths. Flame lengths of less than two feet typically do not threaten structure survival. Also, because available fuels would either be kept mowed or would be compact in nature, any ignited fire(s) would travel at containable speeds.

Flame lengths produced further away than 100 feet from a structure would be slightly greater but crowning and torching of trees would be minimized; fires are expected to quickly subside in intensity in the Defensible Space/Landscape Zone. Where fuel management is limited (i.e., in riparian zone) flame length may exceed two feet.

The structures of the barn complex and the proposed residences would be minimally exposed to ignition from embers as a result of the band of non-combustible materials immediately next to the structure and landscaping of low fuel volume. Embers that land within 100 feet of structures would not be apt to ignite or carry fire with intensity that can damage a structure.

NEW FOOTNOTE:

While the siting of the 28 homes has been adjusted to reduce the original proposed footprints of the 28 residences, the results and conclusions of the analysis made for the previous footprints are still valid. The required vegetation management in the revised project setting, as outlined in **Section 3.5.7, Fuel Management Program**, would continue to ensure improved fire conditions compared to existing conditions, and the changes to the vegetative fuels and resulting fire behavior are limited and would not affect the conclusions. This is because the reduced acreage of land is grassland, where grazing or annual mowing would provide fuel reduction that is equivalent to residential defensible space standards.

Conclusion

The project's compliance with the California Building Code 2019 to develop the residential component with fire-resistant construction materials and the wildfire fuel control through the implementation of the Fuel Management Program developed for the proposed project would improvement existing conditions (without the proposed project), reduce the risk of wildfires, and facilitate quick containment, so that fire would not spread quickly within the residential portion of the site and nearby residential subdivisions. Also as discussed under **Impact WDF-1** above, with the worst-case traffic assumptions and fire scenarios identified and analyzed in the *Revised Fuel Management Plan* report, D Street and Western Avenue would have sufficient capacity to accommodate evacuating vehicles while maintaining one lane along those streets for emergency access. Therefore, the proposed project's impact associated with the risk wildfire and exposure of project occupants to spread of a wildfire would be less than significant.

Page 4.15-30, Impact WDF-4:

As described in **Section 4.6, Geology and Soils** and shown on **Figure 4.6-3**, of the 18 landslides at the project site, eight are large (Landslides A through H) and the remaining (Landslides I through R) are small landslides. Two of the large landslides (Landslides E and F) are located outside ~~within~~ the limits of residential grading. Three of the large landslides (Landslides B, G, and H) and four of the small landslides (Landslides L, N, O, and R) are located within, or very close to, the limits of grading for the loop trail. The rest of the landslides are outside the grading limits of the Davidon (28-Lot) Residential Project component and the Putnam Park Extension Project component. As discussed in **Section 4.6**, risk associated with potential destabilization of existing landslides would be reduced to a less-than-significant level with implementation of **Mitigation Measures GEO-1a** and **GEO-1b**, which would require the preparation and implementation of the recommendations of a preconstruction geotechnical report that would address project impact associated with landslides and landslide movement. **Mitigation Measures GEO-3a** and **GEO-3b**, which would require the preparation of project specific design-level recommendations for the

removal of the two large Landslides E and F and the design of surface benches on graded slopes. The provisions outlined in **Mitigation Measures GEO-1a, GEO-1b, GEO-3a,** and **GEO-3b** would reduce the impact associated with landslide movement as a result of soil instability post-fire to a less-than-significant level.

There is no FEMA-designated 100-year flood zone within the proposed project site; the 100-year flood would be contained within the incised stream channel. As described in **Section 4.8 ~~Section 4.7~~, Hydrology and Water Quality**, grading for the project site would be limited to elevations above the top of the bank of Kelly Creek, and grading would be limited to only the northwestern portion of the project site. As such, the proposed project would not significantly affect or redirect flood flows. As described under **Impact HYD-6** in **Section 4.8 ~~Section 4.7~~, Hydrology and Water Quality**, to reduce the potential impact of the proposed three pedestrian bridges to impede and or redirect flood flows within the Kelly Creek corridor, **Mitigation Measure HYD-6** would require designing the pedestrian footbridges to maximize the natural channel cross section and reduce potential obstruction of in-stream flow.

As described in **Section 4.8 ~~Section 4.7~~, Hydrology and Water Quality,** the proposed project would not alter drainage patterns. **Mitigation Measure HYD-4a** and **Mitigation Measure HYD-4b** were identified to ensure that final project designs maintain peak flows at or below existing conditions and ensure continuous maintenance of the proposed water detention facilities. Therefore, with incorporation of **Mitigation Measures GEO-1a, GEO-1b, GEO-3a, GEO-3b, HYD-4a, HYD-4b, and HYD-6**, the potential risk to expose people or structures to landslide, slope instability, flooding, or drainage changes would be less than significant.

Page 4.15-36, References:

West Yost. 2021. West Yost. 2020 Urban Water Management Plan. Draft Report. Prepared for the City of Petaluma. May.

Section 5.0, Alternatives

Page 5.0-10, Section 5.5.1, Alternative 1: No Project/No Development:

5.5.1 Alternative 1: No Project/No Development

Description and Analysis

The *State CEQA Guidelines* require the analysis of a No Project Alternative (Section 15125.6(e)). This analysis must discuss existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not to be approved, based on current plans, site zoning, and consistent with

available infrastructure and community services. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.

The project site is currently zoned Residential 1 (R1) on the City's Zoning Map and designated Very Low Density Residential (0.6 to 2.5 dwelling units per acre) in the City's General Plan. Given the project site zoning and General Plan designation, if the proposed project were not to be approved, the site could still be developed with 28 to 113 ~~110~~ single-family homes without requiring a General Plan amendment or rezoning. Such a No Project Alternative could result in the development of a subdivision that is comparable to or even larger than the proposed project and is, therefore, not evaluated in this RDEIR. Instead, the No Project Alternative analyzed in this RDEIR is the No Development Alternative, under which no alterations would be made to the project site, the existing barn complex and mobile home would remain in place, and the site would continue to be used as grazing land.

Page 5.0-10, footnote number 4:

> The net acreage of the site is 45.27 ~~45.15~~ acres (excludes proposed public or private rights-of-way, required public open space [the three-acre park required by the General Plan], and the 200-foot-wide Kelly Creek corridor~~,~~ ~~floodways~~, but does not exclude the Urban Separator per Policy 1-P-19). Because the General Plan's residential density formula excludes "proposed" vehicular rights-of-way from the net acreage calculation, the project's reductions in proposed street rights-of-way have resulted in an increase in the net acreage calculation. As such, the number of units allowed to be developed on the project site ranges between 28 and110 dwelling units.

Page 5.0-14, Wildfire:

Wildfire

The No Project/No Development Alternative would not include a Fuel Management Program to maintain vegetative fuels in a fire-safe conditions. As the analysis of wildfire scenarios documented in the *Revised Fuel Management Plan* Report (**Appendix RTC-D**) have shown, wildfire risk under this alternative would be higher than that under the proposed project.

Page 5.0-15, Section 5.5.2, Alternative 2: Davidon (28-Lot) Residential Project:

5.5.2 Alternative 2: Davidon (28-Lot) Residential Project

Description and Analysis

The Davidon (28-Lot) Residential Project Alternative would develop 28 single-family homes in the same lot configuration as the current project (**Updated Figure 5.0-1, Davidon [28-Lot] Residential Project Site Plan)**. Development of this alternative would be on approximately 11.23 ~~15~~ acres of the project site, north

of Kelley Creek, with approximately 6.4 ~~12~~ acres for the residences and associated streets and approximately *4.8* ~~3~~ acres of private open space. This alternative would not include the proposed Putnam Park Extension Project component. Under this alternative, the multi-use trails and pedestrian and livestock bridges would not be developed, the barn complex would remain in place and would not be restored, and there would be no pasture improvements or stock pond enhancements. This alternative would construct the roundabout at D Street and Windsor Drive and the detention and infiltration facility located south of Windsor Drive. It would also include a new off-site sidewalk improvement along the east side of D Street between Windsor Drive and Sunnyslope Avenue, for a distance of approximately 800 feet, to connect with the existing sidewalk. Storm drains would be installed in the new streets that serve the proposed residences to collect the runoff generated by new impervious surfaces. Collected storm water would be detained and infiltrated onsite before eventual discharge into Kelly Creek via a new outfall. A detention and infiltration facility would be constructed south of Windsor Drive. Another detention and infiltration basin would be installed at the southwest corner of Windsor Drive and D Street to capture existing, untreated runoff from Windsor Drive. The runoff would be intercepted on Windsor Drive in a newly constructed drop inlet and flow into a vegetated swale leading to the proposed infiltration basin. The potential environmental impacts associated with this alternative are described below and are compared to the environmental impacts of the proposed project to determine to what extent this alternative would reduce or avoid the proposed project's significant impacts.

Page 5.0-16, Aesthetics:

Aesthetics

The Davidon (28-Lot) Residential Project Alternative would not include the Putnam Park Extension Project of the project site and the barn complex would not be renovated. However, it would include an approximately 4.8 ~~3~~-acre open space north of Kelly Creek. As there would be the same number of single-family homes constructed in the same orientation, this alternative would have a similar impact on scenic vistas compared to the proposed project and the impact would still be potentially significant. Similar to the proposed project, **Mitigation Measures AES-1a** and **AES-1b** would be required to reduce the impact to a less-than-significant level.

This alternative would have a slightly reduced impact on scenic resources as only 19 ~~18~~ protected trees (includes 16 trees onsite and up to 3 trees off-site for the proposed improvements of 800-foot sidewalk) would be removed compared to approximately 30 protected trees under the proposed project. Therefore, this alternative would further reduce the proposed project's less-than-significant impact on scenic resources at the project site.

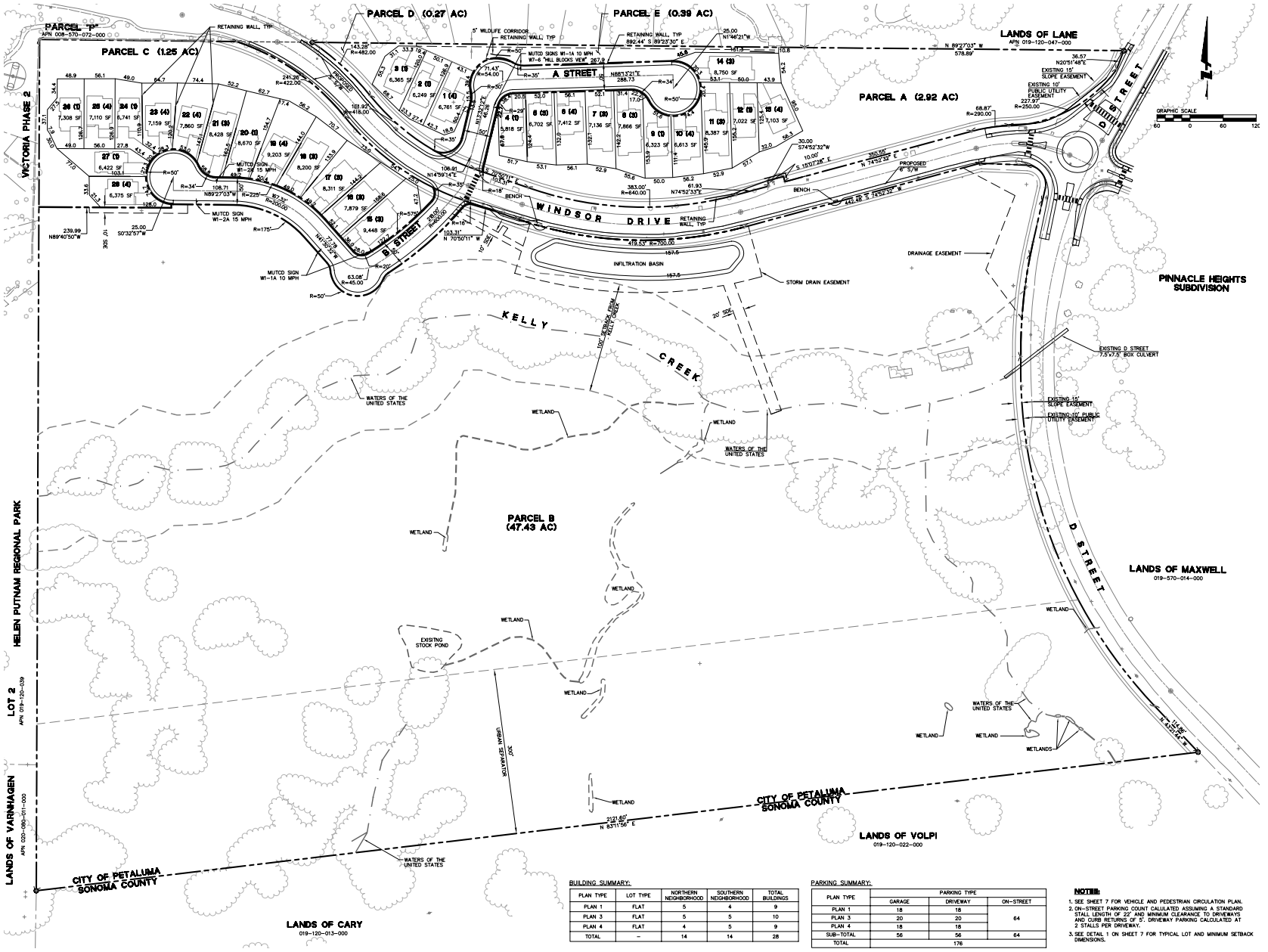
The Davidon (28-Lot) Residential Project Alternative would have similar impacts as the proposed project's impact on the visual character of the project site. The construction related impacts, including the installation of infrastructure, grading of hillside to place building pads, and removal of 19 ~~18~~ trees associated with the residential development, would still occur as part of this alternative. However, these construction impacts to visual character would be temporary and therefore less than significant. Construction would also take place on a smaller portion of the site, as none of the park extension components would occur. **Mitigation Measure AES-3,** which would require that construction equipment staging areas utilize appropriate screening, would still apply and reduce construction impacts from the residential development even further. Once construction is completed, the developed area would appear similar to other single-family subdivisions that are located north and west of the project site. The southern portion of the project site where the Putnam Park Extension Project component and barn restoration would take place would remain unaltered under this alternative. Impacts on visual character under this alternative would be similar to those identified for the proposed project.

Figure 5.0-1:

Figure number has been updated as follows: **Updated Figure 5.0-1**

Figure has been updated to show the revised footprints of Alternative 2 that reflect the revised residential component as updated in Chapter 3.0, Project Description.

Figure source has been updated as follows: BKF Engineers, July 2021 ~~BKF, 2020~~



BUILDING SUMMARY:

PLAN TYPE	LOT TYPE	NORTHERN NEIGHBORHOOD	SOUTHERN NEIGHBORHOOD	TOTAL BUILDINGS
PLAN 1	FLAT	5	4	9
PLAN 3	FLAT	5	5	10
PLAN 4	FLAT	4	5	9
TOTAL	–	14	14	28

PARKING SUMMARY:

PLAN TYPE	PARKING TYPE		
	GARAGE	DRIVEWAY	ON-STREET
PLAN 1	18	18	64
PLAN 3	20	20	
PLAN 4	18	18	
SUB-TOTAL	56	56	64
TOTAL		176	

NOTES:
1. SEE SHEET 7 FOR VEHICLE AND PEDESTRIAN CIRCULATION PLAN.
2. ON-STREET PARKING COUNT CALULATED ASSUMING A STANDARD STALL LENGTH OF 22' AND MINIMUM CLEARANCE TO DRIVEWAYS AND CURB RETURNS OF 5'. DRIVEWAY PARKING CALCULATED AT 2 STALLS PER DRIVEWAY.
3. SEE DETAIL 1 ON SHEET 7 FOR TYPICAL LOT AND MINIMUM SETBACK DIMENSIONS.

SOURCE: BKF Engineers, July 2021 ~~BKF, 2020~~

UPDATED FIGURE **5.0-1**

Davidon (28-Lot) Residential Project Alternative Site Plan

IMPACT SCIENCES

Page 5.0-19, Table 5.0-2:

Table 5.0-2
Average Daily Operational Emissions
Davidon (28-Lot) Residential Project Alternative Compared to Proposed Project

Emissions Source	Estimated Emissions (lbs/day)			
	ROG	NOx	PM10	PM2.5
Davidon (28-Lot) Residential Project	3.01	2.36	0.11	0.11
Proposed Project	3.31	2.79	0.11	0.11

Source: Impact Sciences, 2019.
Note: As described in **Section 3.5.1, Davidon (28-Lot) Residential Project Component**, no natural gas would be used under the revised project in compliance with the City Ordinance: *All-Electric Construction in New Constructed Buildings*, adopted in 2021. Therefore, estimated operational emissions of Alternative 2 and the proposed project would be less than those presented in this table.

Page 5.0-19, Biological Resources:

Biological Resources

The Davidon (28-Lot) Residential Project Alternative would not develop a Putnam Park Extension Project component at the southern portion of the project site and the barn complex would not be renovated or relocated. Similar to the proposed project, no impacts to special-status plant species would occur under this alternative, as no known populations of special-status plant species have been reported or were encountered in systematic surveys, and no populations are expected to occur on the site. Impacts to special-status wildlife species, including the California red-legged frog (CRLF), nesting birds, and roosting bats, would be slightly reduced under this alternative as compared to the proposed project. Although this alternative would not include the protection measures for these species—such as the stock pond enhancements—less pedestrian activity would occur in the southern portion of the project site as compared to the proposed project. Construction phase mitigation measures (**Mitigation Measures BIO-1a** through **1-d**) would apply to this alternative and further reduce impacts on special-status wildlife species to a less-than-significant level.

Under this alternative, impacts to sensitive natural communities, including riparian habitat, native grasslands, and regulated seasonal wetlands would be similar to those of the proposed project. Since this alternative would not develop the southern portion of the site as the Putnam Park Extension Project component, installation of the pedestrian bridge crossings, livestock crossing, and drainage outfalls on the southern portion of the project site would not occur. Although 19 ~~18~~ trees would still be removed for the

residential development under this alternative, the 11 ~~12~~ additional trees planned to be removed for the development of the Putnam Park Extension Project component would not occur. This alternative would include planting 112 oak trees of various sizes. However, the proposed project would plant approximately 327 trees, ~~Putnam Park Extension Project component would include considerably~~ which would include more native tree plantings for habitat enhancement purposes that would not occur under this alternative. Although compared to the proposed project this alternative would plant less trees, it would still meet and exceed the City's tree ordinance requirement of tree replacement. ~~Compliance with the City's tree ordinance would be required under this alternative and the 19 18 trees to be removed would be replaced.~~

Page 5.0-21, Energy:

Energy

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes and consequently the demand for electricity and natural gas would be similar to that of the proposed project. PG&E would also be able to provide ~~natural gas and~~ electricity to the project site using existing infrastructure. Only minor modifications to the on-site distribution system would be required to connect the on-site development to the existing off-site electrical system. Similar to the proposed project, the same sustainable design features would be included in the residential development and the consumption of energy under this alternative would not be wasteful, inefficient or unnecessary, and the impact would be less than significant.

Page 5.0-22, Geology and Soils:

Geology and Soils

Similar to the proposed project, the Davidon (28-Lot) Residential Project Alternative could result in potential impacts related to seismic ground shaking. Compliance with the California Building Code (CBC) would be similarly required for this alternative and this impact would be less than significant.

This alternative would develop the 28 single-family homes on the project site. Therefore, similar to the proposed project, this alternative would result in potentially significant impacts related to seismic hazards, bedrock shear zones, soil erosion/loss of topsoil, expansive soils, flooding, foundations and settlement, and bridge foundations would remain the same. Under this alternative, large l~~L~~andslides A through H ~~and D~~ as well as small landslides (I through R) would be avoided as this alternative would not construct the multi-use trails along Kelly Creek nor the footbridge. ~~Nonetheless, development under this alternative would still occur in areas of landslides (Landslides E and F) and areas of expansive soils.~~ Therefore, **Mitigation Measures GEO-1** through **GEO-4** set forth for the proposed project would not be required for ~~apply to~~ this

alternative. Therefore, compared to the proposed project, impact related landslides would be reduced under this alternative. ~~which would reduce the impacts to a less than significant level (similar to the proposed project).~~

Similar to the proposed project, there could be unknown paleontological resources and **Mitigation Measure GEO-6** would be applied to this alternative to reduce the impact to a less-than-significant level. Overall, impacts to geology and soils would be the slightly less under this Davidon (28-Lot) Residential Project Alternative than under the proposed project.

Page 5.0-23, Table 5.0-3:

Table 5.0-3
GHG Emissions
Davidon (28-Lot) Residential Alternative Compared to Proposed Project

Source	Emissions (MT CO2e)
Davidon (28-Lot) Residential Project	
Construction (Amortized)	31.6
Operational	431
Total	463
Proposed Project	
Construction (Amortized)	39.8
Operational	552
Total	591.8

Source: Impact Sciences, 2019.

Note: As described in **Section 3.5.1, Davidon (28-Lot) Residential Project Component**, no natural gas would be used under the revised project in compliance with the City Ordinance: *All-Electric Construction in New Constructed Buildings*, adopted in 2021. Therefore, estimated emissions of Alternative 2 and the proposed project would be less than those presented in this table.

Page 5.0-25, Parks and Recreation:

Parks and Recreation

The Davidon (28-Lot) Residential Project Alternative would develop the same number of single-family homes as the proposed project. This alternative would require a dedication of 0.28-acre public park as required by Section 20.34.090.[10] As with the proposed project, this alternative would include approximately 4.8 ~~3~~ acres of private open space ~~in the northeastern portion of the project site~~. In addition,

10 Calculated using 0.0099 acres per single-family dwelling unit as required by Section 20.34.090.

it would improve an 800-foot sidewalk along the east side of D Street between Windsor Drive and Sunnyslope Avenue, by replacing the asphalt pavement with City Standard concrete. The demand for parkland from the development of the single-family homes and associated increase in population in the City of Petaluma would be compensated by private open space within the residential component and the 4.8 ~~3~~-acre open space that would be located within the footprints of the residential project alternative ~~to the east of the proposed residences~~ (see **Updated Figure 3.0-3).** Therefore, this alternative would be consistent with Section 20.34.090 and General Plan Policy 2-P-68. This alternative would not include the Putnam Park Extension Project component and therefore would not include any construction within the 100' setback from D Street. Therefore, amendment of the General Plan Policy 2-P-68 would not be required under this alternative. As with the proposed project, this alternative would result in a less-than-significant on parks.

Page 5.0-26, Transportation:

Transportation

This alternative would not include the Putnam Park Extension Project component. As discussed in **Section 4.13, Transportation**, of the estimated 356 daily vehicle trips associated with the proposed project, 34 trips (9.5 percent) would be associated with the Putnam Park Extension Project component. Therefore, given the similarities in the land uses of the Davidon (28-Lot) Residential Project to those of the surrounding land uses (e.g., location that generates higher than average VMT for the City and similarly sized single-family dwelling units), similar to the proposed project, this alternative would result in significant impact associated with VMT per capita. As with the proposed project, the Davidon (28-Lot) Residential Project Alternative would result in a significant and unavoidable impact. No feasible mitigation was found to reduce the level of significance of this impact. ~~even with implementation of **Mitigation Measure Trans-1**~~.

Because this alternative does not include the Putnam Park Extension Project component, no left-turn ingress would be required along D Street for the parking lot included in the proposed project. ~~Therefore, **Improvement Measure Trans-1** would not be applicable to this alternative. However, **Improvement Measure Trans-4** could be implemented to this alternative to enhance the design of pedestrian facilities in manner consistent with the recommended features in the General Plan. However~~ Further**,** this alternative would not include trails that would connect to the Helen Putnam Regional Park. Therefore, would not result in a shift of traffic to access the regional park from the project site. Overall, impacts to traffic and circulation would be less under the Davidon (28-Lot) Residential Project Alternative than under the proposed project.

Under this alternative, the Putnam Park Extension Project component would not be constructed and less construction vehicle traffic would be added to the street network. However, similar to the proposed project,

during construction, additional heavy vehicle traffic would be added to the street network in the vicinity of the project site, and this alternative would have the potential to result in potentially significant temporary impacts on the transportation network. **Mitigation Measure TRANS-5** would similarly be implemented to reduce the impact to a less than significant level.

Similar but slightly less than the proposed project, this alternative and the regional park trail could generate VMT per capita greater than the significance threshold under cumulative conditions. ~~**Mitigation Measure TRANS-1** would improve the attractiveness of transit service in Petaluma; however, the effect of this measure on reducing Citywide VMT is unknown. Therefore, this mitigation measure cannot guarantee that the impact of the project under this alternative on VMT would be reduced to a less than significant level.~~ No ~~other~~ feasible mitigation measures are available to reduce the level of significance of this impact. Similar to the proposed project, contribution of this alternative to cumulative vehicular traffic impacts would be significant and unavoidable.

Since this alternative does not include the Putnam Park Extension Project component, traffic generated under this alternative would be less than under the proposed project. Therefore, the Davidon (28-Lot) Residential Project Alternative effects on intersection LOS would be reduced as compared to the proposed project. As the LOS analysis was conducted for informational purposes only, this would not affect the conclusions of the RDEIR.

Page 5.0-28, Electric Power, Natural Gas, and Telecommunications:

Electric Power~~, Natural Gas,~~ and Telecommunications

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes and consequently the demand for electricity ~~and natural gas~~ would be similar to that of the proposed project. Similar to the proposed project, it is anticipated that PG&E would be able to provide natural gas and electricity to the project site using existing infrastructure. As with the proposed project, all new electric power infrastructure installed onsite would be undergrounded. Only minor modifications to the on-site distribution system would be required to connect the project under this alternative to the existing off-site electrical system. This alternative would not result in the relocation or construction of new or expanded electric power ~~or natural gas~~ facilities and similar to the proposed project, the impact would be less than significant.

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes as the proposed project and the development of the project site would create a similar increase in demand for cable television and telephone services. Telecommunication providers regularly construct cell towers to provide coverage for the continuously growing demand. The addition of the proposed residential

development under this alternative would be consistent with typical growth patterns and developments. Similar to the proposed project, the impact related to the expansion of telecommunication facilities under this alternative would be less than significant.

Page 5.0-29, Wildfire:

Wildfire

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes as the proposed project. However, it would not develop the southern portion of the project site, which would remain unaltered. Similar to the proposed project, this alternative would have to comply with the City's Fire Code. Building materials, systems, and methods of construction would comply with the wildfire protection requirements contained in the California Building Standards Code, including California Building Code, Chapter 7A, which establishes minimum standards for new buildings located in any or wildland-urban interface by requiring fire prevention building standards that cover all buildings materials including roofs, walls, structure projections such as porches, decks, balconies, and eaves.

In addition, this alternative would be required to maintain hazardous vegetation and fuel management in accordance with the amended Section 4907.1 of the California Fire Code, which requires the establishment of a defensible space as a key point of defense from any approaching fire for development within Fire Hazard Severity Zones. In addition, the Fuel Management Program described in **Section 3.0, Project Description,** would be implemented under this alternative to meet the requirements established by the City of Petaluma to maintain vegetative fuels in a fire-safe condition. Similar to the proposed project, under this alternative, D Street and Western Avenue would have sufficient capacity to accommodate evacuating vehicles while maintaining one lane along those streets for emergency access during the worst-case traffic assumptions and fire scenarios identified and analyzed in the Wildfire Analysis Report (**Appendix RTC-D**). Therefore, the risk of the spread of wildfire in the project area under this alternative would be similar to that under the proposed project.

Similar to the proposed project, the potential for landslide movement, post-fire instability and drainage alteration would be significant under this alternative. **Mitigation Measures GEO-1a, GEO-1b, GEO-3a,** and **GEO-3b, HYD-4a, HYD-4b,** and **HYD-6**, would apply to this alternative and would reduce the potential risk to expose people or structures to landslide, slope instability, flooding, or drainage changes to a less-than-significant level.

Page 5.0-31, Aesthetics:

Aesthetics

The Putnam Park Extension Project Alternative would only include the improvements of the Putnam Park Extension Project component and no residential homes would be developed. Therefore, this alternative would not develop the northwest portion of the project site with single homes and would have a significantly reduced impact on scenic vistas compared to the proposed project. Since no single-family residential development would occur, no mitigation would be required and this alternative would result in a less-than-significant impact on scenic vistas.

This alternative would have a reduced impact on scenic resources as only 11 ~~12~~ protected trees would be removed under this alternative compared to approximately 30 protected trees under the proposed project. In addition, this alternative would include planting at least 215 ~~159 oak~~ trees of various sizes. However, a total of 327 trees would be planted under the proposed project including 112 oak trees. Therefore, compared to the proposed project, although this alternative would further reduce the proposed project's less-than-significant impact on scenic resources, with the absence of residential development, it would plant less trees. ~~it would at the project site~~.

This alternative would have significantly lower impacts on the visual character of the project site compared to the proposed project. Construction-related impacts, including the installation of infrastructure, grading of hillside to place building pads, and removal of 19 ~~18~~ trees (16 trees onsite and 3 trees for off-site sidewalk improvements) associated with the residential component, would not occur as part of this alternative. However, construction impacts would still occur under this alternative as a result of the proposed improvements to the park extension component, although these would be temporary and changes at the project site would be similar to those commonly observed on construction sites in urban areas. **Mitigation Measures AES-3a,** which would require that construction equipment staging areas utilize appropriate screening would apply to this alternative. In addition, **Mitigation Measure AES-3b** would apply to ensure that the landscape plan which includes planting 215 ~~159 oak~~ trees would preserve the existing scenic view of the barn complex. Once construction is completed, the developed area would appear similar in character, as no residential development would take place. The northwestern portion of the project site would remain unaltered under this alternative. Overall, this alternative would reduce the proposed project's less-than-significant impact on visual character relative to the proposed project.

Figure 5.0-2:

Figure number has been updated as follows: **Updated ~~Figure~~ Figure 5.0-2**

Figure has been updated to show more detailed components of the park extension.

Figure source has been updated as follows: Prunuske Chatham, Inc., July 2021 ~~Prunske Chatham, Inc., 2020~~

SOURCE: Prunuske Chatham, Inc., July 2021~~Prunske Chatham, Inc., 2020~~

UPDATED FIGURE **5.0-2**

IMPACT SCIENCES

Putnam Park Extension Project Alternative Site Plan

Page 5.0-34, Table 5.0-5:

Table 5.0-5
Operational Average Daily Emissions Putnam Park Extension Project Alternative and Proposed Project

Emissions Source	Estimated Emissions (lbs/day)			
	ROG	NOx	PM10	PM2.5
Putnam Park Extension Project Alternative	0.30	0.44	0.003	0.003
Proposed Project	3.31	2.79	0.11	0.11

Source: Impact Sciences, 2019.
Note: As described in **Section 3.5.1, Davidon (28-Lot) Residential Project Component**, no natural gas would be used under the revised project in compliance with the City Ordinance: *All-Electric Construction in New Constructed Buildings,* adopted in 2021. Therefore, estimated emissions of the proposed project would be less than those presented in this table.

Page 5.0-34, last paragraph:

Under this alternative, impacts to sensitive natural communities, including riparian habitat, native grasslands, and regulated seasonal wetlands would be similar to the proposed project. Although 11 ~~12~~ trees would still be removed for this alternative, the 19~~8~~ additional trees proposed to be removed for the residential component (includes up to 3 trees for the off-site sidewalk improvements) would not occur. In addition, this alternative would include planting at least 215 ~~159 oak~~ trees of various sizes, which would exceed the compliance requirements of the City's tree ordinance. This alternative would have significantly less impacts on native grasslands than the proposed project, as most of the direct impacts would result from the residential development in the northwestern portion of the site. However, **Mitigation Measures BIO-2a** through **2e** would still be required for this alternative and would reduce impacts on sensitive natural communities to a less-than-significant level.

Page 5.0-35, last paragraph:

Under this alternative, impacts related to a conflict with a local policy for protecting biological resources, such as a tree preservation policy or ordinance, would be similar to those under the proposed project. This alternative, would plant at least 215 ~~159 oak~~ trees and would comply and exceed the requirement of the City's tree ordinance. The City's General Plan contains Policy 2-P-68 that specifically applies to the project site and requires that development on the project site "Maintain a minimum of a 100' setback along Kelly Creek and its tributaries." This alternative would include park improvements within this setback distance such as pedestrian bridge crossings and segments of multi-use trails. However, if approved, this alternative

would amend Policy 2-P-68 to allow for small accessory structures as part of the public park amenities. No other major conflicts with the General Plan policies or relevant ordinances related to biological resources are anticipated under this alternative, and similar to the proposed project, potential impacts would be less than significant.

Page 5.0-37, Geology and Soils:

Geology and Soils

Under the Putnam Park Extension Project Alternative, no single-family homes would be constructed and there would be no impact related to seismic ground shaking.

Since this alternative would not include the construction of the residential component, the potentially significant impacts identified under the proposed project related to seismic hazards, bedrock shear zones, soil erosion/loss of topsoil, expansive soils, flooding, and foundations and settlement, ~~and bridge foundations~~ would be reduced or avoided. ~~With regards to landslides, Landslides E and F would be avoided as no single family homes would be built.~~ Nonetheless, the multi-use loop trail under this alternative would still occur in areas of landslides (Landslides A and D). Additionally, Landslides B, L, N, O, and R could adversely impact the proposed loop trail, potentially resulting in damage to the paved surface and non-compliance with ADA requirements**. Mitigation Measures GEO-1a, GEO-1b, GEO-3a, and GEO-3b** set forth for the proposed project, would apply for this alternative and would reduce the impact to a less-than-significant level, similar to the proposed project.

Similar to the proposed project, there could be unknown paleontological resources and **Mitigation Measure GEO-6** would be implemented to reduce the impact to a less-than-significant level. Overall, impacts to geology and soils would be the slightly less under this alternative than under the proposed project.

Page 5.0-41, Parks and Recreation:

Parks and Recreation

The Putnam Park Extension Project Alternative would provide a 47 ~~44~~-acre public park extension. No new parkland or recreational demand would be generated by this alternative. Therefore, there would be no impacts to parks and recreation under this alternative.

Page 5.0-43, Electric Power, Natural Gas, and Telecommunications:

Electric Power~~, Natural Gas,~~ and Telecommunications

The Putnam Park Extension Project Alternative would not construct any homes and consequently the demand for electricity ~~and natural gas~~ would be greatly reduced or avoided. The Putnam Park Extension Project Alternative would not require the use of natural gas and the electricity use would be minimal. This alternative would not result in the relocation or construction of new or expanded electric power or natural gas facilities, and the impact would be less than significant.

The Putnam Park Extension Project Alternative would not construct any homes and there would be no increased demand for cable television and telephone services. This alternative would have no impact to cable television and telephone services.

Page 5.0-43, Wildfire:

Wildfire

The Putnam Park Extension Project Alternative would not include a residential component and therefore would have a lower risk of exposing people to potential risks associated with the ignition and spread of wildfires. With no added residences in the project area, this alternative would not affect existing emergency access or emergency response plans. However, under this alternative, the increase in pedestrians and visitors to the recreational facilities at the project site would have similar risk of wildfire impact as that identified for the Putnam Park Extension Project component under the proposed project. In addition, the Fuel Management Plan described in **Section 3.0, Project Description**, would be implemented under this alternative to meet the requirements established by the City of Petaluma to maintain vegetative fuels in a fire-safe condition.

This alternative would not build new residences at the project site. Therefore, identified mitigation measures that would address project impact associated with landslides and landslide movement would not apply to this alternative.

The less than significant wildfire impact under this alternative would be reduced as compared to the proposed project. ~~Therefore, the two large landslides E and F at the project site would not be removed under this alternative and the~~ <u>The</u> risk of landslide movement and post-fire soil instability under this alternative would be similar to existing conditions. However, with no residents at the site and the implementation of the Fuel Management Program, overall wildfire risks at the project site under this alternative would be less than significant.

Section 6.0, Other CEQA Considerations

Page 6.0-2, Section 6.3.1, Commit Future Generations to Similar Uses:

Implementation of the proposed project would require demolition of mobile home and the remnants of the farm house at the project site and would result in the construction of a Davidon (28-Lot) Residential Project component and a Putnam Park Extension Project component. The development would occur on a primarily undeveloped open space. Therefore, the proposed project would result in the commitment of the approximately 11.2 ~~15~~-acre Davidon (28-Lot) Residential Project component of the project site to urban development, which would exclude other uses of the project site for the lifespan of the project. Restoration of the Davidon (28-lot) Residential Project component project site to pre-developed conditions would not be feasible given the level of disturbance required to construct single-family homes. The approximately 47 ~~44~~-acre Putnam Park Extension Project component would consist of the loop trail, Barn Center and related facilities, the remainder of the Putnam Park Extension Project component would be dedicated to the Sonoma County Regional Parks and retained as open space and protected habitat. Therefore, other uses of the project site for the lifespan of the project would not be feasible.

Page 6.0-5, first paragraph:

All utilities needed to serve development allowed by the proposed project would be extended into the main project site from existing utility mains and infrastructure already existing along Windsor Drive and D Street. As discussed in **Section 4.14,** wastewater infrastructure improvements would include extending the existing public sanitary sewer mains along Windsor Drive to serve the proposed residences at the project site. Sewer lines and other utilities would run to a stub out located near the service vehicle entrance to the barn center along D Street to facilitate the provision of wastewater to the Putnam Park Extension Project component. Furthermore, the 300-foot band along the southern boundary of the project site that is designated Urban Separator on the General Plan Land Use map would be part of the approximately 47 ~~44~~ acres dedicated to the Sonoma County Regional Parks and retained as open space and protected habitat. Extension of utilities through the open space area would not be allowed. Therefore, the proposed project would not induce growth since it would not provide an essential public service or roadway access to a new area, and would not change the zoning or general plan designation of the project site to allow for growth.

Page 6.0-5, III. Urbanization of Land in Isolated Localities (Leap Frog Development), first paragraph:

There are adjacent residential developments to the north, northwest, and east of the project site. The residential development proposed as part of the project would align with residential uses adjacent to the project site. A larger portion of the project site would be developed as a park extension and preserved as open space. The ~~he~~ project site is located within an area designated as Very Low Density Residential.

Page 6.0-7, second bullet:

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

> As shown by the analysis in this RDEIR, the proposed project would have a less than significant impact or less than significant impact with incorporation of mitigation measures for all resource topics except for VMT under transportation impacts. Mitigation measures detailed in **Section 4.2 Air Quality**, **Section 4.7 Greenhouse Gas Emissions**, and **Section 4.10, Noise,** include measures to reduce the impact on construction phase impacts to nearby receptors. As detailed in **Section 4.13, Transportation**, there are few, if any, feasible strategies for reducing project-generated VMT due to the location and characteristics of the proposed project and project site. ~~However, there are measures proven effective at reducing VMT for people living, working, and visiting in other areas of Petaluma. The proposed project would help the City and State meet their GHG goals by contributing to measures consistent with these strategies elsewhere in the City (**Mitigation Measure TRANS-1)**. This concept could include VMT impact fees, VMT mitigation exchange, and VMT mitigation bank. As a component of the City of Petaluma's on-going SB 743 implementation, the City is currently engaged in a process to develop a mitigation program that would address the transportation system impacts of discretionary projects, including those for which there is no feasible mitigation measure for VMT impacts. Implementation of **Mitigation Measure TRANS-1** would improve the attractiveness of transit service in Petaluma; however, the effect of this measure on reducing Citywide VMT is unknown. Therefore, this mitigation measure cannot guarantee that the impact of the proposed project on VMT would be reduced to a less than significant level. Although the level of reduction of this significant VMT impact is unknown, all possible measures would be taken to lessen the impact and reduce adverse direct or indirect effect to human beings.~~