

5.0 ALTERNATIVES

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) describe a range of reasonable alternatives to the proposed project or to the location of the project that could feasibly avoid or lessen any significant impacts while substantially attaining the basic objectives of the proposed project. An EIR should also evaluate the comparative merits of the alternatives. This section sets forth potential alternatives to the proposed Scott Ranch project and evaluates them, as required by CEQA.¹

Key provisions of the *State CEQA Guidelines*² pertaining to the alternatives analysis are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.
- The range of alternatives required in an EIR is governed by a “rule of reason;” therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- The No Project alternative shall be evaluated along with its impacts. The No Project analysis shall discuss the existing conditions at the time the notice of preparation is published. Additionally, the analysis shall discuss what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.
- For alternative locations, only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.
- The range of feasible alternatives should be selected and discussed in a manner intended to foster meaningful public participation and informed decision-making. Among the factors that may be taken into account when addressing the feasibility of alternatives are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations,

¹ This RDEIR also presents the environmental impacts of a proposed regional park trail project. No alternatives to the regional park trail are analyzed in this EIR because it is not the proposed project but a related project. Furthermore, the regional park trail impact analysis shows that the regional trail project would not result in any significant and unavoidable impacts that could be reduced or avoided by the adoption of an alternative.

² California Code of Regulations, Title 14, Division 6, Chapter 3, California Environmental Quality Act Guidelines, Section 15126.6.

jurisdictional boundaries, and whether the project proponent could reasonably acquire, control, or otherwise have access to an alternative site.³

5.2 PROJECT OBJECTIVES

The City of Petaluma has developed the following primary objectives for the proposed project to satisfy the requirements of the CEQA Guidelines Section 15124 (b). The City's objectives are to:

- provide development consistent with the City's long-term development goals, especially as related to the provision of additional housing;
- develop the project site in a manner that preserves the uniqueness and gateway value of the site;
- implement General Plan policies related to establishment of an Urban Separator and the Petaluma ring trail system; and
- provide improved recreational access to the Helen Putnam Regional Park.

The project applicants' key objectives for the proposed project are to:

- promote and maximize new housing opportunities within the urban growth boundary thereby discouraging urban sprawl;
- develop a high-quality residential project on the west side of Petaluma, compatible with existing residential subdivisions in the neighborhood and with rural and park areas to the south and west of the site;
- permanently preserve sensitive biological and geological areas of the site as protected open space;
- preserve and enhance Kelly Creek in its natural state;
- preserve the barn complex;
- provide a public pedestrian/bicycle trail connecting to Helen Putnam Regional Park; and
- provide a large extension of the Helen Putnam Regional Park, incorporating new trails, a restored barn complex, habitat and waterway enhancements, and related features.

5.3 IMPACTS OF THE PROPOSED PROJECT

To develop project alternatives, the City of Petaluma, as Lead Agency, considered the project objectives and reviewed the significant impacts of the proposed project, identified those impacts that could be substantially avoided or reduced through an alternative, and determined the appropriate range of

3 California Code of Regulations, Title 14, Division 6, Chapter 3, California Environmental Quality Act Guidelines, Section 15126.6(f)(1).

alternatives to be analyzed. **Section 4.0, Environmental Impact Analysis**, of this Revised Draft EIR (RDEIR) evaluates the potential for the proposed project to result in significant impacts to the following resource areas: aesthetics; air quality; biological resources; cultural resources; energy, geology and soils; greenhouse gas emissions; hydrology and water quality; land use and planning; noise; population and housing; public services and recreation; transportation; utilities and service systems, wildfire; and all other environmental topics which include agricultural resources, hazards and hazardous materials, and mineral resources. The analysis in **Section 4.0** concludes that implementation of the proposed project would result in significant and potentially significant impacts in ten resource areas: aesthetics; air quality; cultural resources; geology and soils; hydrology and water quality; land use and planning; noise; transportation; utilities; and wildfire. With the exception of significant and unavoidable traffic impacts related to vehicle miles traveled (VMT) and cumulative traffic, all of the significant and potentially significant impacts of the proposed project would be reduced to a less-than-significant level with the incorporation of mitigation measures. A summary discussion of project impacts under each resource area analyzed in the RDEIR is presented below.

Table 5.0-7, Summary Comparison of Project Alternatives, presented at the end of this section, lists all potentially significant and significant impacts of the proposed project. Alternatives that would meet most of the project objectives and would avoid or reduce the project's significant impacts are identified and analyzed in detail below.

5.3.1 Aesthetics

The analysis in **Section 4.1, Aesthetics**, of this RDEIR identified a potentially significant impact associated with scenic vistas (**Impact AES-1**) as a result of project implementation. The analysis found this impact to be reduced to a less-than-significant level with mitigation. The project's impacts on scenic resources within a state scenic highway, visual character and quality, and light and glare were identified to be less than significant.

5.3.2 Air Quality

The analysis in **Section 4.2, Air Quality**, of this RDEIR identified a significant impact associated with violating air quality standards (**Impact AIR-2**). The analysis found this impact to be reduced to a less-than-significant level with mitigation. The impact from exposure of existing sensitive receptors to construction emissions of toxic air contaminants (**Impact AIR-3**) would also be significant but reduced to a less-than-significant impact with mitigation. Less than significant impacts were identified associated with the proposed project's construction and operational emissions of criteria pollutants, carbon monoxide emissions, other emissions such as odors, and conflict with local air quality plan.

5.3.3 Biological Resources

The analysis in **Section 4.3, Biological Resources**, of this RDEIR identified potentially significant impacts of the proposed project on special-status species (**Impact BIO-1**), sensitive natural communities (**Impact BIO-2**), federally protected wetlands (**Impact BIO-3**), and wildlife movement and habitat connectivity (**Impact BIO-4**). In addition, the proposed project was found to have a cumulatively considerable impact on biological and wetland resources (**Cumulative Impact BIO-1**). The analysis found all of these impacts to be reduced to a less-than-significant level with mitigation. The proposed project would not conflict with local policies or ordinances (**Impact BIO-5**) or with an adopted habitat conservation plan (**Impact BIO-6**). No significant and unavoidable biological resource impacts were identified.

5.3.4 Cultural Resources

The analysis in **Section 4.4, Cultural Resources**, of this RDEIR identified potentially significant impacts associated with historical resources (**Impact CUL-1**), archaeological resources (**Impact CUL-2**), and human remains (**Impact CUL-3**). Implementation of mitigation measures were found to reduce all potentially significant impacts to a less-than-significant level. The proposed project would not significantly affect any historical resources. No significant and unavoidable cultural resources impacts were identified.

5.3.5 Energy

The analysis in **Section 4.5, Energy**, of this RDEIR identified less than significant impacts in regard to energy. No significant and unavoidable energy impacts were identified.

5.3.6 Geology and Soils

The analysis in **Section 4.5, Geology and Soils**, of this RDEIR identified potentially significant impacts associated with seismically-induced structural damage (**Impact GEO-1**), erosion from construction activities (**Impact GEO-2**), existing landslides and unstable slopes (**Impact GEO-3**), location on an unstable geologic unit and on expansive soils (**Impact GEO-4**), and paleontological resources (**Impact GEO-6**). The analysis found these potentially significant impacts to be reduced to a less-than-significant level with mitigation. The proposed project would not involve installation of septic tanks. No significant and unavoidable impacts related to geology and soils were identified.

5.3.7 Greenhouse Gas Emissions

The analysis in **Section 4.7, Greenhouse Gas Emissions**, of this RDEIR shows that the proposed project would not generate greenhouse gas (GHG) emissions that have a significant impact on the environment and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing

GHG emissions. No significant and unavoidable impacts related to greenhouse gas emissions were identified.

5.3.8 Hydrology and Water Quality

The analysis in **Section 4.8, Hydrology and Water Quality**, of this RDEIR identified a potentially significant impact associated with a potential for site runoff to violate water quality standards (**Impact HYD-1**). Analysis found this impact to be reduced to a less-than-significant level with mitigation. Additionally, the proposed project would have potentially significant impacts associated with substantial erosion or siltation (**Impact HYD-3**) and increased amount of surface runoff that would result in flooding (**Impact HYD-4**). The proposed project would also have the potential to increase peak flows if not controlled (**Impact HYD-5**). The project proposes three separate pedestrian bridges across Kelly Creek. Piers, abutments, or supports for these crossings could impede and or redirect flood flows within the Kelly Creek corridor (**Impact HYD-6**). Mitigation measures set forth in this RDEIR would reduce these potentially significant impacts to a less than significant level. All other impacts related to hydrology would be less than significant. No significant and unavoidable impacts related to hydrology and water quality were identified.

5.3.9 Land Use and Planning

The analysis in **Section 4.9, Land Use and Planning**, of this RDEIR shows that the proposed project would not physically divide an established community. This RDEIR also found that the proposed project would be generally consistent with Policy 2-P-8, which requires single-loaded streets along riparian corridors (**Impact LU-2**). Though 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. The proposed project would amend the General Plan Policy 2-P-68 to include improvements to the barn complex, trail network, playground, picnic areas, parking, and restrooms that would be within the 100-foot setback from D Street. The proposed project would preserve the barn complex in the same general location and would create a barn center. The proposed amendment to the policy would comply with Policy 2-P-68 by preserving the barns and would allow for the further protection of the barn complex by relocating these structures to the same generally vicinity, as needed, to prevent damage. Therefore, the proposed amendment to Policy 2-P-68 would further protect the barn complex and would not conflict with overall purpose of this policy.

The proposed project would not conflict with any applicable habitat conservation plan or natural community conservation plan. The proposed project would not result in development of land uses that

would be substantially incompatible with existing adjacent residential and regional park land uses or with planned uses.

5.3.10 Noise

The analysis in **Section 4.10, Noise**, of this RDEIR identified potentially significant impacts related to increases in ambient noise from project construction (**Impact NOISE-1**) and groundborne vibration from construction (**Impact NOISE-2**). Mitigation measures were identified to reduce both impacts to a less-than-significant level. All other impacts related to noise would be less than significant. No significant and unavoidable impacts related to noise were identified.

5.3.11 Population and Housing

The analysis in **Section 4.11, Population and Housing**, of this RDEIR identified less-than-significant impacts related to substantial unplanned population growth and displacement of substantial numbers of housing or people. No significant and unavoidable impacts were identified for population and housing.

5.3.12 Public Services

The analysis in **Section 4.12, Public Services**, of this RDEIR identified less-than-significant impacts related to fire, police, schools, parks and recreation, and library services. No significant and unavoidable impacts were identified for public services.

5.3.13 Transportation

The analysis in **Section 4.13, Transportation**, of this RDEIR identified potentially significant impacts from temporary disruption to the transportation network due to construction (**Impact TRANS-5**). Proposed mitigation was found to reduce the impact to a less-than-significant level. This RDEIR identifies significant project impact on VMT (**Impact TRANS-1**) and VMT impact under cumulative conditions (**Cumulative Impact TRANS-1**). No mitigation is available to reduce these impacts which would therefore be significant and unavoidable. All other traffic-related impacts would be less than significant or have no impact.

5.3.14 Utilities and Service Systems

The analysis in **Section 4.14, Utilities and Service Systems**, of this RDEIR identified a potentially significant impact related to wastewater conveyance capacity (**Impact UTL-3**). This impact was found to be reduced to a less-than-significant level with mitigation. Less than significant impacts were identified to water supply and infrastructure, wastewater treatment capacity, and solid waste. No significant and unavoidable impacts on utilities were identified.

5.3.15 Wildfire

The analysis in **Section 4.15, Wildfire**, of this RDEIR found project impacts related to wildfire risk, evacuation, and emergency plans (**Impact WDF-1** and **Impact WDF-2**) to be less than significant. The analysis identified a potentially significant impact related to landslide, runoff, post-fire slope instability, or drainage changes. This impact was found to be reduced to a less-than-significant level with mitigation.

5.3.16 Other Resource Topics

Section 4.0, Environmental Impact Analysis, addresses other resource topics. This RDEIR identified no impacts or less than significant impacts related to agricultural resources, hazards and hazardous materials, and mineral resources. No significant and unavoidable impacts were identified for these resources.

5.4 ALTERNATIVES CONSIDERED BUT NOT EVALUATED IN DETAIL

5.4.1 Project Background

As noted in **Section 1.2, Project History**, in 2004, the project applicant for Davidon Homes put forth a Vesting Tentative Map for a residential development project that would subdivide the 58.66-acre project site into 93 single-family residential lots.

The Davidon Homes Vesting Tentative Subdivision Map and Rezoning Project Draft EIR prepared for the proposed 93 single-family residential lots completed, in February 2013, received approximately 300 written comments from agencies and the public during the public review period and during the Planning Commission and City Council meetings. Most of the comments expressed concerns about the merit of the project and presented concerns about its implementation. The decision makers found the 2013 Draft EIR inadequate and this project did not move forward. In response to the comments the project applicant for Davidon Homes put forth a reduced development proposal of 66 single-family homes at the project site. The proposed 66 single-family homes proposal was analyzed in a new Draft EIR released for public review in 2017 and circulated for public review. Approximately, 157 written comments were received providing opinions related to the project merit, expressing concerns regarding the project analysis, and requesting clarification to CEQA topics especially those related to open space and aesthetics, biological and cultural resources, geology and soils, hydrology and water quality, public utilities, and traffic. The proposed reduced development of 66 single-family homes also faced substantial community opposition and the City Council rejected the 2017 Draft EIR finding it inadequate. The 2013 EIR identified significant and unavoidable impacts related to greenhouse gas emissions and noise. The 2017 EIR identified significant and unavoidable impacts related to aesthetics, biological resources, land use and planning, and

transportation. The proposed project was previously proposed as an alternative to reduce the level of identified significant impacts.

5.4.2 Alternatives Found Infeasible

An EIR must briefly describe the rationale for selection and rejection of alternatives. The lead agency may make an initial determination as to which alternatives are feasible, and therefore merit in-depth evaluation, and which alternatives are infeasible. The two alternatives identified below were found by the City to be infeasible for reasons presented below. In addition, during the preparation of this RDEIR, the City considered a project alternative with increased housing density to reduce the significant VMT impact identified for the proposed project. However, this alternative was found to be infeasible for reasons similar to those described above for the projects analyzed in the 2013 and 2017 Draft EIRs. This alternative would have increased impacts related to ground disturbance and grading; therefore, it would have resulted in potentially significant impacts related but not limited to aesthetics, biological resources, and geology and soils. In addition, the increased density at the project site would have resulted in an increased demand on public services and utilities. Therefore, an alternative with increased housing density was found to result in increased level of impacts as compared to the proposed project and was not evaluated further in this RDEIR.

5.4.2.1 Reduced Project Alternative

A Draft EIR was previously published in 2013 for a larger 93-lot residential development project on the project site and a Draft EIR was circulated in 2013. 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 project was analyzed in a Draft EIR in 2017.

The 66 single-family homes project included private and public open space, a public park with multi-use trail, a Class I trail section along D Street, trailhead parking lots, and other infrastructure such as sidewalks, a roundabout, sewer, water, and storm drainage. The Draft EIR for the 66-single family homes project was circulated in 2017. In June 2018, following the publication of 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 15 acres of the project site. Only if the City approves both components under the proposed project (Davidon (28-Lot) Residential

Project component and the Putnam Park Extension Project component), the 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, and it is not feasible to reduce the residential density of the project more than currently proposed. That said, this chapter analyzes two alternatives that represent a reduction in overall project size: the 28-Lot Residential Project and the Putnam Park Extension Project.

5.4.2.2 Off-Site Alternative

CEQA does not require analysis of an infeasible off-site alternative (CEQA Guidelines Section 15126.6). The key question is whether an off-site alternative is available that would feasibly attain most of the basic objectives of the proposed project. Under the Scott Ranch project, the primary objectives of the City are to provide development consistent with the City's long-term development goals— especially as related to the provision of additional housing; develop the site while preserving its gateway value; establish the Urban Separator as a growth boundary, and provide improved access to Helen Putnam Regional Park. The project Applicants' objectives are to develop a high-quality residential project within the Urban Growth Boundary on the west side of Petaluma— compatible with existing residential subdivisions in the neighborhood and with rural and park areas to the south and west of the site, provide a large extension of the Helen Putnam Regional Park, incorporate new trails, preserve and restoring the barn complex, and enhance the site habitat and waterway. The Scott Ranch project would be located within western Petaluma surrounded by existing single-family subdivisions to the north (The Summit above Petaluma subdivision), northwest (Victoria subdivision), and east (Pinnacle Heights subdivision). The proposed project would also provide the Putnam Park Extension Project component which would include multi-use trails and other recreational facilities. No off-site alternative project location would meet these key project objectives of creating a high quality residential development in western Petaluma within the Urban Growth Boundary, providing an extension to Helen Putnam Regional Park, and preserving and restoring the barn complex and the gateway value of the site. Thus, no off-site alternative was evaluated in this RDEIR.

5.5 ALTERNATIVES EVALUATED

Alternatives considered for detailed evaluation in this RDEIR include potential alternate projects that meet most of the project's objectives while eliminating or reducing the significant and unavoidable impact related to traffic, along with other significant environmental impacts identified in **Section 4.0, Environmental Impact Analysis**. Alternatives considered in this RDEIR for detailed evaluation include:

- No Project/No Development
- Davidon (28-Lot) Residential Project (No Park Extension)
- Putnam Park Extension Project (No Residential)

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 110 single-family homes⁴ 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.

The analysis of the No Project/No Development Alternative assumes the continuation of existing conditions on the project site, as well as development of the cumulative projects listed in **Table 4.0-1** of this RDEIR.

⁴ The net acreage of the site is 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 28 and 110 dwelling units.

The potential environmental impacts associated with the No Project/No Development Alternative are described below and are compared to the significant environmental impacts associated with the proposed project.

Aesthetics

Under the No Project/No Development Alternative, no construction, grading, tree and vegetation removal, or development would occur on the project site and the existing aesthetic characteristics would remain unchanged. As such, the No Project/No Development Alternative would avoid all of the project's significant and less than significant impacts related to aesthetics.

Air Quality

Under the No Project/No Development Alternative, no grading or construction would occur on the project site. Thus, this alternative would not generate any fugitive dust or other pollutant emissions associated with construction activities at the site. Under the No Project/No Development Alternative, a single-family residential subdivision would not be developed on the site, and no new vehicle trips would be generated. As such, the No Project/No Development Alternative would avoid all of the project's significant and less than significant air quality impacts.

Biological Resources

Because the project site would not be developed under the No Project/No Development Alternative, no trees or vegetation would be removed from the project site. Thus, this alternative would avoid all impacts of the proposed project related to native grasslands, protected trees, special-status wildlife species, and wetlands. This alternative would not preserve open space in a conservation easement or through dedication to the Sonoma Regional Parks.

Cultural Resources

In the event of a failure or soil instability of the Kelly Creek bank, the barn structures, located at the top of the bank, would not be relocated under this alternative for stabilization. Therefore, potential impact to these structures planned for local designation as historic buildings, would be significant. However, the City could pursue mitigation measures to preserve and protect this locally recognized historical resource, similar to those recommended under the proposed project. No ground-disturbing activities, which could affect undiscovered cultural resources, would occur on the project site under this alternative. As such, the No Project/No Development Alternative would avoid the project's significant and less than significant impacts associated with archaeological resources and human remains.

Energy

As the No Project/No Development Alternative would not generate any additional energy use, this alternative would avoid the less than significant impacts of the proposed project related to the consumption of energy resources.

Geology and Soils

Under the No Project/No Development Alternative, no development would occur on the site but the existing structures would remain in place. The risk from seismic hazards and geologic and soil instabilities to the existing structures on the site would remain unchanged. As such, the No Project/No Development Alternative would avoid all of the project's significant and less than significant geology and soil impacts.

Greenhouse Gas Emissions

The No Project/No Development Alternative would not involve any construction. The single-family residential subdivision would not be developed on the site under this alternative, and therefore, long-term GHG emissions associated with this development would not occur. As such, there would be no increase in greenhouse gas emissions from the project site. The project's less than significant GHG impacts would be avoided.

Hydrology and Water Quality

Under the No Project/No Development Alternative, no development would occur on the site. Therefore, this alternative would eliminate impacts to soil erosion and downstream sedimentation that would have potentially occurred during construction of the proposed project. In addition, impacts that may have resulted from the proposed project during operation on water quality degradation from increase in impervious surface, stormwater runoff, as well as flooding, would not occur under this alternative. As such, the No Project/No Development Alternative would avoid all of the project's significant and less than significant hydrology and water quality impacts. However, untreated runoff from Windsor Drive that is currently occurring would continue to flow into Kelly Creek because the water detention facility proposed on the southwest corner of Windsor Drive and D Street to capture existing, untreated runoff from Windsor Drive would not be constructed under this alternative.

Land Use and Planning

The No Project/No Development Alternative would not have any impacts related to division of a community or conflicts with a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP), similar to the proposed project. However, because it would not develop the project site, the No

Project/No Development Alternative would not be consistent with the City of Petaluma General Plan that designates the site for development of low-density housing and a park. The land use conflict of this alternative would be greater than that of the proposed project.

Noise

No construction would occur on the project site under the No Project/No Development Alternative. There would be no temporary construction noise or an increase in operational noise under this alternative. As such, the No Project/No Development Alternative would avoid the project's significant and less than significant noise impacts.

Population and Housing

The No Project/No Development Alternative would not involve the development of housing on the project site and therefore, would not change the amount of population or housing on the project site or in the City of Petaluma. As such, the No Project/No Development Alternative would avoid all of the project's less-than-significant population and housing impacts.

Public Services

Police and Fire Services

Under the No Project/No Development Alternative, there would be no development of residential land uses and no additional residents would be added to the area. Thus, this alternative would not create an additional demand for police or fire services. As such, the No Project/No Development Alternative would avoid the project's less than significant impact related to police and fire services.

School Services and Libraries

Under the No Project/No Development Alternative, there would be no development of residential land uses and no additional residents and students would be added to the area. Thus this alternative would not create additional demand for school services or libraries. As such, the No Project/No Development Alternative would avoid the project's less-than-significant impacts related to schools and library services.

Parks and Recreation

Under the No Project/No Development Alternative, there would be no development of residential land uses. Thus, this alternative would not create additional demand for recreation and park services. This alternative would also not provide the Putnam Park Extension Project component for the project site. The

No Project/No Development Alternative would avoid the project's less-than-significant impacts on parks and recreation facilities.

Transportation

Under the No Project/No Development Alternative, no development on the project site would occur. As such, no new vehicle trips would be generated. There would be no impacts related to vehicle miles traveled (VMT) per capita, conflicting with a congestion management plan freeway traffic, hazards, emergency access, parking, transit services, temporary construction, or pedestrian and bicycle facilities. As such, the No Project/No Development Alternative would avoid the project's significant and less-than-significant impacts related to traffic, including the significant and unavoidable traffic impacts (project-specific and cumulative) associated with VMT.

Utilities and Service Systems

As the No Project/No Development Alternative would not generate a demand for utilities and service systems, this alternative would avoid the project's less than significant-impacts regarding the provision of utilities. However, the water detention facility proposed on the southwest corner of Windsor Drive and D Street to capture existing, untreated runoff from Windsor Drive would not be constructed under this alternative.

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 *Fuel Management Plan* Report (**Appendix 4.15**) have shown, wildfire risk under this alternative would be higher than that under the proposed project.

Other Resource Topics

Similar to the proposed project, the No Project/No Development Alternative would not affect agricultural resources, expose people to hazards or hazardous materials, or result in loss of availability of known mineral resources.

Conclusion and Relationship to Project Objectives

The No Project/No Development Alternative would avoid the proposed project's impacts related to aesthetics, air quality, biological resources, archaeological resources and human remains, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, noise, population and housing, public

services, transportation, utilities and service systems, and wildfire. However, this alternative would not relocate the barn structures within the same general area for their preservation. Therefore, it would not reduce potential impact to the barn structures in the event of soil instability. In addition, this alternative would not achieve any of the objectives of the proposed project, and would not be consistent with the General Plan 2025 objectives and land use designations, and would not provide housing that is needed in Petaluma to meet the City's Regional Housing Need Allocation (RHNA) obligation. This alternative would not provide public trails or preserve lands as undeveloped open space at the limits of City boundaries including land within the urban separator.

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 (**Figure 5.0-1, Davidon [28-Lot] Residential Project Site Plan**). Development of this alternative would be on approximately 15 acres of the project site, north of Kelley Creek, with 12 acres for the residences and approximately 3 acres of open space. This alternative would not include the 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.

Aesthetics

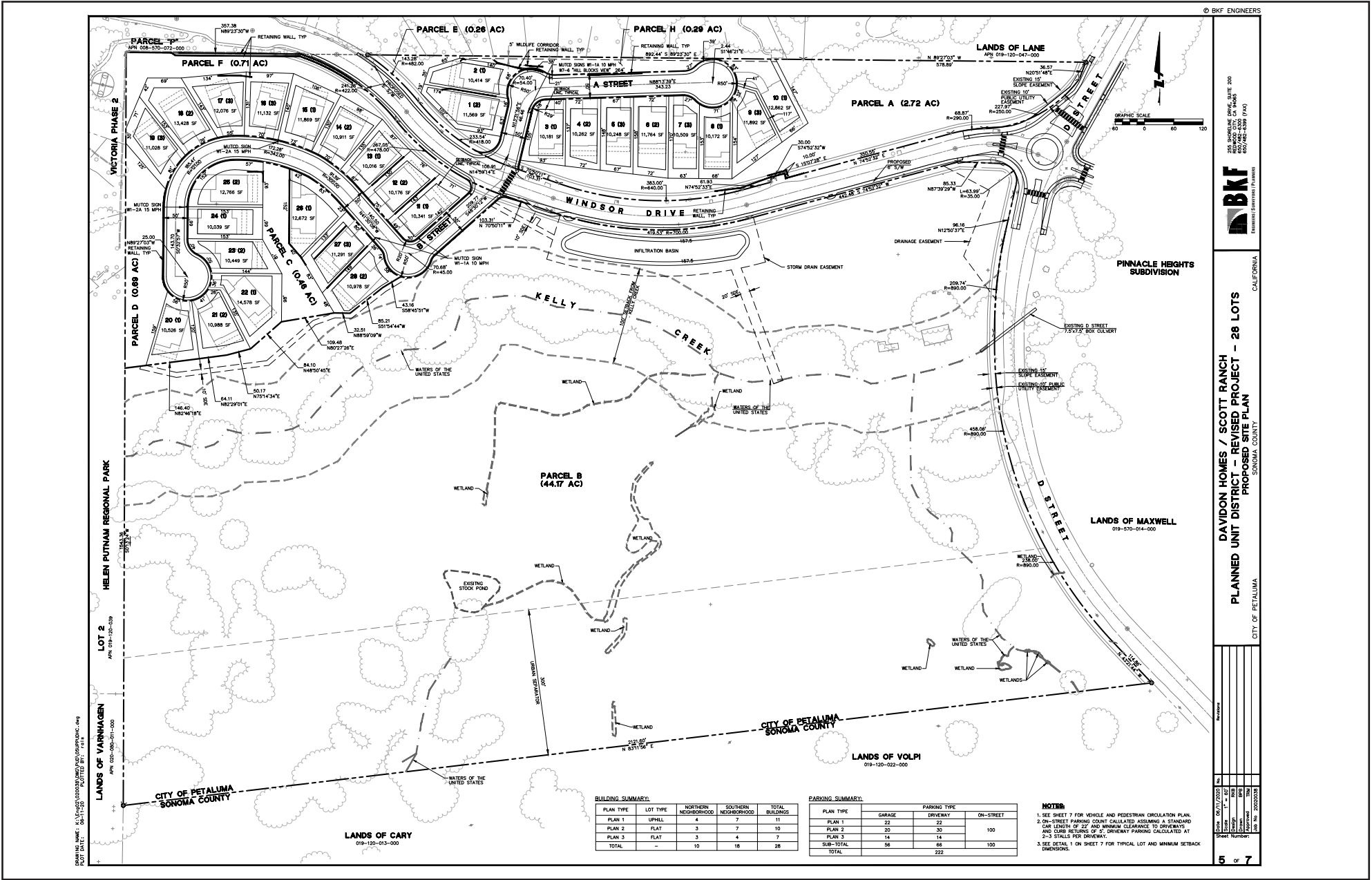
The Davidon (28-Lot) Residential Project Alternative would not include the Putnam Park Extension Project of the project site and the barn complex would not be renovated. However, it would include an approximately 3-acre open space north of Kelly Creek. As there would be the same number of single-family 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 18 protected trees 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 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.

Air Quality

Criteria air pollutant emissions from construction of the Davidon (28-Lot) Residential Project Alternative would be smaller than those analyzed for the proposed project as none of the Putnam Park Extension Project component elements would be constructed. Specifically, the barn complex would remain in place



SOURCE: BKF, 2020



1222.001-12/20

FIGURE 5.0-1

Davidon (28-Lot) Residential Project Alternative Site Plan

and demolition of the mobile home and remnants of the farm house would not occur. **Table 5.0-1, Average Daily Construction Emissions Davidon (28-Lot) Residential Project Alternative Compared to Proposed Project** shows the reduction in construction emissions that would result from the Davidon (28-Lot) Residential Project Alternative compared to the proposed project.

As shown in **Table 5.0-1**, construction emissions from this alternative would further reduce the less than significant impact from construction emissions. However, similar to the proposed project, fugitive dust emissions generated during construction could result in a significant air quality impact unless mitigated. Similar to the proposed project, **Mitigation Measure AIR-1** would be required to reduce the impact from fugitive dust emissions under this alternative to a less than significant level.

Table 5.0-1
Average Daily Construction Emissions
Davidon (28-Lot) Residential Project Alternative Compared to Proposed Project

Scenario	Estimated Emissions (lbs/day)			
	ROG	NOx	PM10	PM2.5
Davidon (28-Lot) Residential Project Alternative ^a	3.59	11.66	0.64	0.64
Proposed Project ^b	3.75	12.82	0.70	0.72

Source: Impact Sciences, 2019.

^a Assumed a construction duration of 909 days.

^b Total Project emissions include construction emissions from the Davidon (28-Lot) Project component and Putnam Park Extension Project component (Phase 1). As noted in the Project Description, Putnam Park Extension Project component (Phase 1 and 2) would not occur until after the other phases.

TAC emissions from construction activities for the Davidon (28-Lot) Residential Project Alternative would be lower than those analyzed for the proposed project as the health risk assessment provided in **Section 4.2, Air Quality**, evaluated the health risk posed to nearby receptors as a result of DPM emissions from the Davidon (28-Lot) Residential Project component and the Putnam Park Extension Project component. The Davidon (28-Lot) Residential Project Alternative would not include the DPM emissions resulting from the Putnam Park Extension Project component, including hauling truck trips from demolition and diesel off-site construction equipment during that phase of construction. Therefore, the risk posed from TAC emissions would be reduced under this alternative.

Criteria air pollutant emissions from operation of the Davidon (28-Lot) Residential Project Alternative would be less than those of the proposed project as this alternative would not include the park extension component and associated parking lot and vehicle trips. **Table 5.0-2, Average Daily Operational Emissions Davidon (28-Lot) Residential Project Alternative Compared to Proposed Project (lbs/day)**,

shows the reduction in air quality impact under this alternative related to ROG, NO_x, PM₁₀, and PM_{2.5} emissions during operation as compared to the proposed project.

As shown in **Table 5.0-2**, criteria air pollutant emissions from operation under this alternative would further reduce the less-than-significant impact of the proposed project from operational emissions. However, these emissions would remain less than significant under this alternative.

This alternative would not generate any odors and would not locate sensitive receptors adjacent to odor sources. There would be no impact, similar to the proposed project.

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	NO _x	PM ₁₀	PM _{2.5}
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.

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 18 trees would still be removed for the residential development under this alternative, the 12 additional trees planned to be removed for the development of the Putnam Park Extension Project component would not occur. However, the Putnam Park Extension Project component would include considerably more native tree plantings for habitat enhancement purposes that would not occur under this alternative. Compliance with the City's tree ordinance would be required under this alternative and the 18 trees to be removed would be replaced.

Impacts to native grasslands under this alternative would be similar to those under the proposed project, as most of the direct impacts would result from the residential development in the northwestern portion of the site. Temporary impacts to native grasslands from the Putnam Park Extension Project component would be avoided under this alternative, as no such development would take place. However, the proposed project also includes riparian corridor and stock pond enhancements that would not take place under this alternative. **Mitigation Measures BIO-2a through 2e** would still apply to this alternative and would reduce impacts to a less-than-significant level.

Impacts on state and federally protected wetlands would be slightly reduced under this alternative since most of the impacts to wetlands, identified under the proposed project, would result from the development of the Putnam Park Extension Project component, including the construction of three new pedestrian bridge crossings, the livestock crossing, the drainage outfalls, and tributary drainage crossings associated with the multi-use trail. Furthermore, the proposed project would include enhancements of the freshwater marsh and seasonal wetlands along the two ephemeral drainages and seasonal wetlands south of the Kelly Creek corridor as well as riparian habitat enhancements, which would not occur under this alternative. Similar to the proposed project, this alternative would result in indirect impacts that could include the increased potential of erosion and water quality degradation from increased urban runoff volumes and velocities. Similar to the proposed project, **Mitigation Measure BIO-3** would apply to this alternative and would require the preparation of a Wetland Replacement and Enhancement Program in consultation with the City, the RWQCB, the USACE, and the CDFW, which would reduce potential impacts on jurisdictional wetlands and other waters to a less-than-significant level.

As with the proposed project, under this alternative, terrestrial wildlife movement through the northwestern portion of the project site would be limited, although narrow 5-foot wide movement corridors would be provided along the west and northern edges of the site. Kelly Creek and the D Street tributary would continue to function as wildlife movement corridors across the site. This alternative would not develop a multi-use trail along Kelly Creek or other recreational amenities, which would result in less pedestrian activity near Kelly Creek and less disruption to the wildlife movement as compared to the

proposed project. Therefore, impacts to wildlife movement under this alternative would be less than significant and **Mitigation Measures BIO-4a** through **4d** identified for the proposed project would not be required for this alternative.

Similar to the proposed project, impacts regarding conflict with a local policy for protecting biological resources, such as a tree preservation policy or ordinance, would apply to this alternative. The residential development, through compliance with mitigation measures mentioned above, would ensure conformance with the City's tree ordinance. Similar to the proposed project, this alternative would comply with the City's General Plan, which 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. No major conflicts with the General Plan policies or relevant ordinances related to biological resources are anticipated in this alternative, and potential impacts would be less than significant.

Under this alternative, cumulative contribution to impacts on biological resources, in particular those related to protected wetlands and wildlife movement, would be slightly reduced from those resulting from the proposed project. Mitigation Measures BIO-1a through 1d and BIO-3 would reduce cumulative contribution of this alternative to a less-than-significant level.

Cultural Resources

The Davidon (28-Lot) Residential Project Alternative would include grading of northern portions of the site and development of the site with 28 single-family homes and associated roadways, landscaping, and common open space. Under this alternative, the barn complex would remain on-site and would not be renovated. Similar to the proposed project, **Mitigation Measures CUL-1a** and **CUL-1b** would apply under this alternative and impact to historic resources would be similar to those under the proposed project. Similar to the proposed project, during the construction of this alternative, known and unknown historic and pre-historic archaeological resources, human remains, and tribal cultural resources could be damaged or destroyed, and impacts to archaeological resources would be significant. **Mitigation Measures CUL-2** through **CUL-4** identified for the proposed project would apply to this alternative and would reduce significant impacts on archaeological resources to a less-than-significant level.

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.

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. Landslides A and D would be avoided as this alternative would not construct the multi-use trails along Kelly Creek. Nonetheless, development under this alternative would still occur in areas of landslides (Landslides E and F) and areas of expansive soils. **Mitigation Measures GEO-1 through GEO-4** set forth for the proposed project would apply to 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.

Greenhouse Gas Emissions

Construction-related GHG emissions under this alternative would be reduced compared to the proposed project because construction would not include any demolition or any improvements for the Putnam Park Extension Project component. Therefore, the less-than-significant impact of the proposed project would be further reduced under this alternative.

The GHG emissions that would be generated during operation of this alternative would be less than those of the proposed project, as this alternative would not include the operation activities that would result from the Putnam Park Extension Project component. **Table 5.0-3, GHG Emissions Davidon (28-Lot) Residential Project Alternative Compared to Proposed Project** compares the GHG emissions of this alternative with those of the proposed project.

The GHG total emissions under this alternative would be approximately 463 MT CO₂e/year, which is lower than the total GHG emissions of 591.8 MT CO₂e/year under the proposed project. Therefore, the less-than-significant GHG impacts of the proposed project would be further reduced under this alternative.

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

Source	Emissions (MT CO ₂ e)
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.

Hydrology and Water Quality

The Davidon (28-Lot) Residential Project Alternative would result in similar impermeable surfaces and associated runoff compared to the proposed project. As such, impacts related to flooding, soil erosion and downstream sedimentation, runoff, and water quality would be similar under this alternative than under the proposed project. However, impacts of this alternative would still remain potentially significant and similar mitigation measures as the ones set forth for the proposed project (**Mitigation Measures HYD-1a** through **1d**, **HYD-3**, and **HYD-4** through **4c**) would be required to reduce impacts under this alternative related to hydrology and water quality to a less-than-significant level. Under this alternative, the Putnam Park Extension Project component that includes pedestrian bridges crossing Kelly Creek would not be developed. Therefore, there would be no potential impediments and or redirection of flood flows within the Kelly Creek corridor and mitigation to reduce this impact would not be required. All other hydrology impacts would be less than significant, similar to the proposed project.

Land Use and Planning

Similar to the proposed project, this alternative would not result in any impacts related to division of a community or conflicts with a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP), and the development would be compatible with existing surrounding land uses. The Davidon (28-Lot) Residential Project Alternative would not require revisions to General Plan Policy 2-P-68, and

development would be consistent with this policy. This alternative would include a 3-acre park consistent with the General Plan Policy 2-P-68 and would require the amendment of this policy. Similar to the proposed project, **Improvement Measure LU-2** could similarly be implemented under this alternative to improve views of the riparian corridor so views are not obscured from new public streets. As with the proposed project, the residential density under this alternative would be 0.63 dwelling units per acre, which is within the density range of 0.6 to 2.5 dwelling units per acre under the Very Low-Density Residential land use designation and R1 zoning designation for the project site. Therefore, this alternative would be consistent with the General Plan in terms of residential density. However, under this alternative, the multi-use trails would not be developed. Therefore, this alternative would not meet the requirements of the General Plan Policy 2-P-68 and 1-P-21 with regard to a connection to Helen Putnam Regional Park and trailhead facilities. Therefore, unlike the proposed project, this alternative would result in several conflicts with the General Plan. However, the conflict would not result in a significant impact to the environment, surroundings, or health and safety of people. Therefore, impacts related to land use and planning under this alternative would remain less than significant.

Noise

The Davidon (28-Lot) Residential Project Alternative would construct the same number of single-family homes on the project site but would not include facilities associated with the Putnam Park Extension Project component such as, the new parking lots, multi-use trails, pedestrian bridges, cattle crossings, the barn center, the amphitheater, and picnic areas. Therefore, construction-related noise for this alternative would be reduced compared to the proposed project. However, similar to the proposed project, the nearest sensitive receptors are located to the north of the project site and homes would be built along the northern property line. **Mitigation Measure NOISE-1** would apply to this alternative and would reduce construction noise impacts to a less-than-significant level.

This alternative would construct the same number of single-family homes as the proposed project. Therefore, impacts from construction vibration would be similar. The closest sensitive receptors would still be 50 feet away to the north and west of the project site and the residential vibration exposure (human annoyance) threshold of 75 VdB would still be exceeded. Therefore, the same mitigation measure (**Mitigation Measure NOISE-2a**) identified for the proposed project would apply to this alternative and would reduce construction vibration impacts to a less-than-significant level.

The noise generated during operation under this alternative would be slightly reduced compared to the proposed project because it would not include operational activities associated with the Putnam Park Extension Project component. Similar to the proposed project, the traffic noise impact on off-site receptors under this alternative would be less than significant.

Population and Housing

This alternative would construct the same number of single-family homes as the proposed project and would result in the same number of additional residents (77). The project site is identified in the City's 2015-2023 Housing Element Land Inventory as site 46, with a capacity for 66 residential units. This alternative would result in the same number of homes and associated residents as the proposed project. Therefore, impacts related to population and housing under this alternative would be less than significant, as with the proposed project.

Public Services

Police and Fire Services

Under the Davidon (28-Lot) Residential Project Alternative, the 28 single-family units would result in the same demand for police services and fire protection as compared to the proposed project. However, as this alternative does not include the Putnam Park Extension Project component, the less-than-significant impact to fire and police services would be slightly reduced.

School Services and Libraries

The development and associated residents under the Davidon (28-Lot) Residential Project Alternative would result in the same demand for schools and libraries compared to the proposed project. Therefore, impacts related to school services and libraries would be less than significant, as with the proposed project.

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 20.34.090.⁵ As with the proposed project, this alternative would include approximately 3 acres of open space in the northeastern portion of the project site. In addition, 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 3-acre open space that would be located to the east of the proposed residences (See 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

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

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.

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 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, 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. 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.

Utilities and Service Systems

Water

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes and consequently the demand for water would be similar to the proposed project. However, this alternative would reduce the proposed project's water demand by approximately 0.2 feet per year (AFY) because it would not develop the Putnam Park Extension Project component. However, this reduction is minimal and the project would still demand approximately 8 AFY for the residential units and associated landscaping. Based on the City of Petaluma 2015 UWMP, there is an adequate water supply, under normal and multiple-dry year scenarios, available to serve the City of Petaluma through 2040, including development of this alternative. However, during the single-dry year, Citywide water use including this alternative would be subject to water conservation efforts. Therefore, this alternative would not result in the need for expanded water supply entitlements. Impacts of the alternative related to water supply and infrastructure would slightly reduce the less-than-significant impact of the proposed project.

Wastewater

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes and consequently the wastewater generated would be the same as the proposed project. The Ellis Creek Water Recycling Facility (WRF) has adequate capacity to treat the wastewater generated under this alternative. As with the proposed project, off-site sewer infrastructure upgrades would be necessary to accommodate development on the project site. **Mitigation Measure UTL-3** would apply to this alternative and would reduce impacts related to wastewater facility capacity and infrastructure to a less-than-significant level, similar to the proposed project.

Stormwater

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes as the proposed project, and therefore, would have similar impacts associated with stormwater. Similar to the proposed project, **Mitigation Measure HYD-1c** would apply to this alternative to control runoff from a 2-year storm event, by developing stormwater quality treatment measures (i.e., swales) once final designs are completed. In addition, **Mitigation Measure HYD-4a through 4c** would similarly apply to this alternative such that final detention design shows appropriate controls to ensure that the post-development 10- and 100-year peak flows would not exceed pre-development peaks; that maintenance of all detention facilities would be provided as necessary to continuously provide the required volume storage in a 10-year storm and in a 100-year storm; and any release of runoff temporarily detained on-site would not contribute to an increase in peak flood periods on the Petaluma River.

Solid Waste

The Davidon (28-Lot) Residential Project Alternative would construct the same number of homes as the proposed project. Therefore, demand for solid waste disposal capacity would be similar under this alternative to that of the proposed project. However, there would be slightly less solid waste generation as the Putnam Park Extension Project component would not be constructed under this alternative. Therefore, similar to the proposed project, this alternative's impacts related to solid waste would be less than significant.

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.

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 4.15**). 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.

Other Resource Topics

The Davidon (28-Lot) Residential Project Alternative would not affect agricultural resources, expose people to hazards or hazardous materials, or result in loss of availability of known mineral resources. Similar to the proposed project, there would be no impacts associated with agricultural resources and mineral

resources, and less than significant impacts associated with hazards and hazardous materials. No mitigation would be required.

Conclusion and Relationship to Project Objectives

With the exception of similar significant and unavoidable traffic impacts, the Davidon (28-Lot) Residential Project Alternative would reduce all other impacts of the proposed project, because it would not develop the Putnam Park Extension Project component. This alternative would achieve the project objective of promoting development within the established urban growth boundary, thereby discouraging urban sprawl. It would also achieve the objectives of developing a high-quality residential project on the west side of Petaluma, preservation of Kelly Creek in its natural state, and providing new housing opportunities while minimizing neighborhood impacts. However, this alternative would not implement General Plan policies related to the Petaluma ring trail system and would not improve recreational access to Helen Putnam Regional Park. This alternative would not achieve the objective of permanently preserving sensitive biological and geological areas of the site as protected open space.

5.5.3 Alternative 3: Putnam Park Extension Project

Description and Analysis

The Putnam Park Extension Project Alternative would only include the features of the Putnam Park Extension Project component and no residential homes would be developed. As shown in **Figure 5.0-2, Putnam Park Extension Project Alternative Site Plan**, this alternative would construct multi-use trails and the upper and main parking lots. The barn complex under this alternative would be preserved and may be relocated for purposes of stabilization and preservation. The barn center would include the renovation of the existing barn complex and the cleaning shed (one of the barns would be converted into an agricultural museum), pathways between the structures (surfaced with ADA-compliant material), bike parking, information kiosks, vegetable gardens, demonstration and working corrals, antique farm equipment with a hand pump, and an amphitheater for outdoor learning activities. Under this alternative, a playground and picnic areas would be constructed south of Kelly Creek. This alternative would also include a multi-use loop trail circling the north and south sides of Kelly Creek. A short trail from the loop trail that connects to the upper parking lot would also be installed. A Class I trail would be constructed from the southeast corner of the project site along D Street that travels northerly through the park, along the west side of the main parking lot, through a proposed playground area, over a footbridge crossing Kelly Creek, and through the barn center. A Class I trail would also be constructed at the project frontage along D Street. This alternative would include pasture improvements, stock pond enhancements, and features to protect and conserve habitat for the California red-legged frog. A stormwater treatment facility may be required

to treat runoff from the proposed main parking lot (south of Kelly Creek). The potential environmental impacts associated with this alternative are described below and are compared to the significant environmental impacts associated with the proposed project.

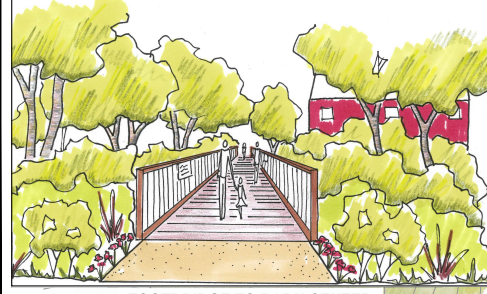
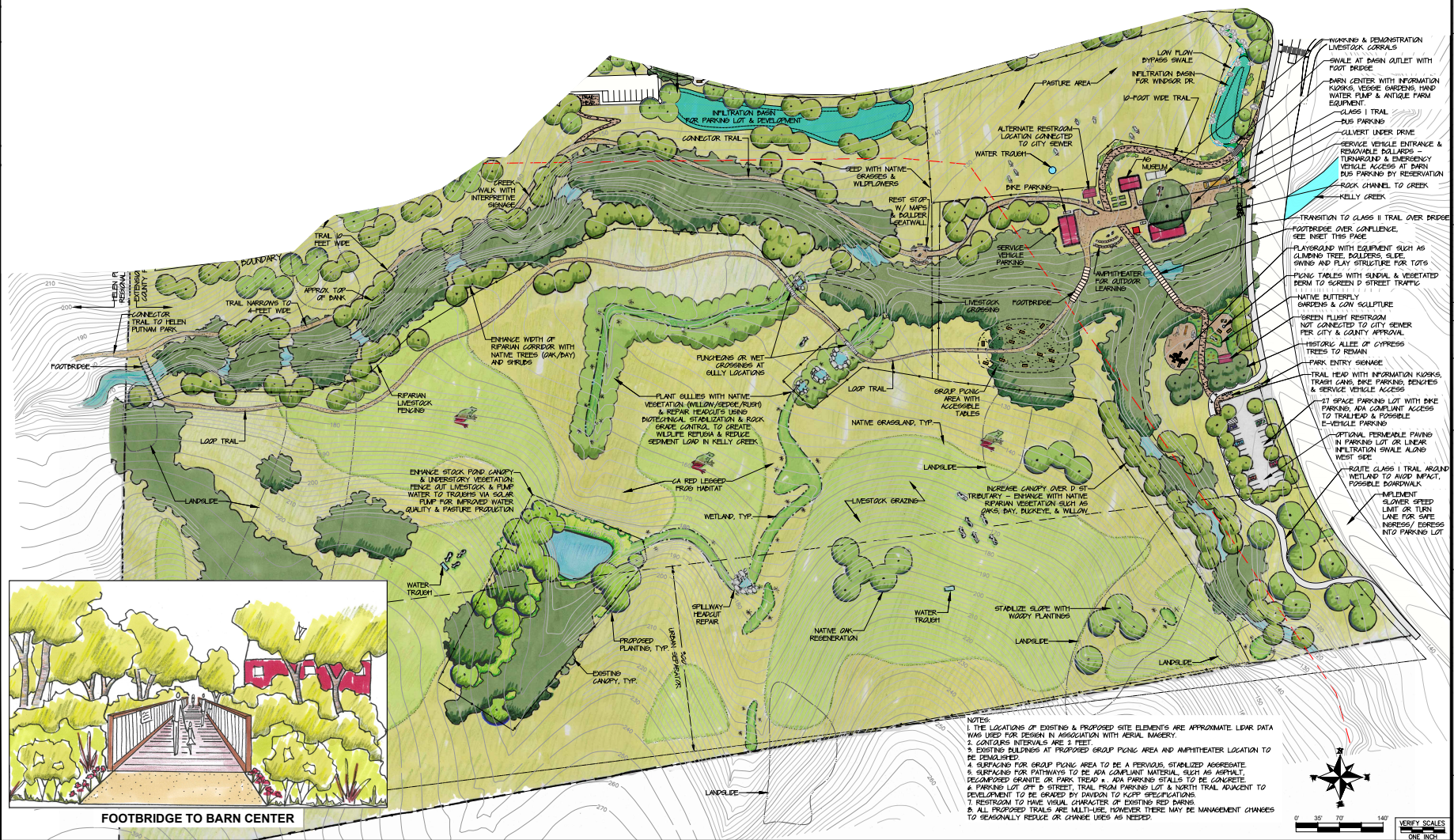
Aesthetics

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 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 159 oak trees of various sizes. Therefore, this alternative would further reduce the proposed project's less-than-significant impact on scenic resources 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 18 trees associated with the residential component, would not occur as part of this alternative. However, construction impacts would still occur under this alternative, 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 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.

Asset File Name: C:\Users\David\Desktop\Putnam Park Extension\Putnam Park Extension Concept Design.dwg
Plot Date: 12/27/2020 10:14 AM, Layout: 001



- NOTES:
1. THE LOCATIONS OF EXISTING & PROPOSED SITE ELEMENTS ARE APPROXIMATE LIDAR DATA WAS USED FOR DESIGN IN ASSOCIATION WITH RESUAL IMAGERY.
 2. CONTOUR INTERVALS ARE 2 FEET.
 3. EXISTING BUILDINGS AT PROPOSED GROUP PLOING AREA AND AMPHITHEATER LOCATION TO BE DEMOLISHED.
 4. SURFACING FOR GROUP PLOING AREA TO BE A PERVIOUS, STABILIZED AGGREGATE.
 5. SURFACING FOR PATHWAYS TO BE ADA COMPLIANT MATERIAL, SUCH AS ASPHALT, DECOMPOSED GRANITE OR PARK TREAD #. ADA PARKING STALLS TO BE CONCRETE.
 6. PARKING LOT OFF D STREET, TRAIL FROM PARKING LOT & NORTH TRAIL ADJACENT TO DEVELOPMENT TO BE GRADED BY DAVIDON TO KEEP SPECIFICATIONS.
 7. RESTROOM TO HAVE VISUAL CHARACTER OF EXISTING RED BARN.
 8. ALL PROPOSED TRAILS ARE MULTI-USE, HOWEVER THERE MAY BE MANAGEMENT CHANCES TO SEASONALLY REDUCE OR CHANGE USES AS NEEDED.



PREPARED FOR:
**KELLY CREEK
PROTECTION PROJECT**

DATE:	SCALE:	DESIGNED BY:	DRAFTED BY:	CHECKED BY:
12/2/20	1"=50'	JMM	JMM	JMM

REVISIONS	DATE	BY

**PUTNAM PARK EXTENSION PLAN
CONCEPT DESIGN**

SOURCE: Prunskke Chatham, Inc., 2020



1222.001-12/20

FIGURE 5.0-2
Putnam Park Extension Project Alternative Site Plan

Air Quality

Criteria air pollutant emissions from construction of the Putnam Park Extension Project Alternative would be less than those analyzed for the proposed project as the residential component would not be constructed.

Table 5.0-4, Average Daily Construction Emissions Putnam Park Extension Project Alternative Compared to Proposed Project in compares construction emissions of this alternative with those of the proposed project.

Table 5.0-4
Average Daily Construction
Emissions Putnam Park Extension Project Alternative Compared to Proposed Project

Scenario	Estimated Emissions (lbs/day)			
	ROG	NOx	PM10	PM2.5
Putnam Park Extension Project ^a	1.85	12.22	0.59	0.67
Proposed Project ^b	3.75	12.82	0.7	0.72

Source: Impact Sciences, 2019.

As shown in **Table 5.0-4**, construction emissions from the Putnam Park Extension Project Alternative would further reduce the proposed project's less-than-significant impact from construction emissions. However, similar to the proposed project, fugitive dust emissions generated during construction could result in a significant air quality impact unless mitigated. As with the proposed project, **Mitigation Measure AIR-1** would be required to reduce the impact from fugitive dust emissions. Implementation of **Mitigation Measure AIR-1** would reduce construction emissions impacts of this alternative to a less-than-significant level, similar to the proposed project.

TAC emissions from construction activities for the Putnam Park Extension Project Alternative would be lower than those of the proposed project as construction of the residential component constituted the bulk of exhaust emissions generated under the proposed project. Therefore, the risk posed from TAC emissions under this alternative would be reduced, compared to the proposed project.

Criteria air pollutant emissions from operation of the Putnam Park Extension Project Alternative would be smaller than those of the proposed project as this alternative would not include the residential component and the associated vehicle trips. Similar to the proposed project, operational emissions of this alternative would not exceed applicable thresholds and the impact would be less than significant. **Table 5.0-5, Operational Average Daily Emissions Putnam Park Extension Project Alternative and Proposed Project**,

shows that Alternative 3 would further reduce the less-than-significant air quality impact of the proposed project during operation.

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

Emissions Source	Estimated Emissions (lbs/day)			
	ROG	NO _x	PM ₁₀	PM _{2.5}
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.

This alternative would not generate any odors and would not locate sensitive receptors adjacent to odor sources. There would be no impact, similar to the proposed project.

Biological Resources

The Putnam Park Extension Project Alternative would only include the features of the Putnam Park Extension Project component and would not include the residential component. Similar to the proposed project, this alternative would have no impacts on special-status plant species, 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 project site. Impacts to special-status wildlife species, including the CRLF, nesting birds, and roosting bats, would be substantially reduced, as the northwestern portion of the project site would remain undisturbed by the residential component development and construction-related disturbance. There would be fewer indirect impacts from project occupancy as there would be no residences developed under this alternative. However, the development of the Putnam Park Extension Project Alternative would increase the number of people at the project site relative to existing conditions. As with the proposed project, the proposed multi-use trails under this alternative would place trail users in the likely path of dispersing CRLF attempting to access the creek and the hillside slopes to the north. Although construction impacts under this alternative would be significantly lower than under the proposed project, construction phase mitigation measures (**Mitigation Measures BIO-1a through 1-d**) would apply and would reduce this alternative's 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 the proposed project. Although 12 trees

would still be removed for this alternative, the 18 additional trees proposed to be removed for the residential component would not occur. In addition, this alternative would include planting 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.

This alternative would include enhancements to the freshwater marsh and seasonal wetlands along the two ephemeral drainages and seasonal wetlands south of the Kelly Creek corridor as well as the riparian habitat, while preserving the northwestern portion of the site in its undeveloped state. However, impacts on state and federally protected wetlands would be similar to the proposed project under this alternative, since most of the impacts would be associated with the park extension component, including the construction of three new pedestrian bridge crossings, the livestock crossing, the drainage outfalls, and tributary drainage crossings associated with the multi-use trail on the south side of Kelly Creek. Similar to the proposed project, this alternative would result in indirect impacts including the increased potential for erosion and water quality degradation from increased urban runoff volumes. However, these indirect impacts would be slightly reduced as this would not include any of the hardscapes associated with the residential component. Similar to the proposed project, **Mitigation Measure BIO-3** would apply to this alternative and would require the preparation of a Wetland Replacement and Enhancement Program in consultation with the City, the RWQCB, the USACE, and the CDFW, which would reduce potential impacts on jurisdictional wetlands and other waters to a less-than-significant level.

Under this alternative, impacts due to the movement of native resident, migratory fish, wildlife species with established native resident, migratory wildlife corridors, or impediment of the use of native wildlife nursery sites would be slightly reduced compared to the proposed project. This alternative includes enhancements to Kelly Creek and the D Street tributary that would improve habitat connectivity and limit livestock access to sensitive habitats. The northwestern portion of the site would remain undeveloped and allow more opportunities for terrestrial wildlife movement through this area than would occur under the proposed project. However, the potential impacts to wildlife movement would still be potentially significant, since there would be trail improvements north and south of Kelly Creek. Similar to the proposed project, **Mitigation Measures BIO-4a** through **4d** would apply to this alternative and would reduce potential impact on habitat connectivity and wildlife corridors under this alternative to a less-than-significant level.

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 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.

Under this alternative, cumulative contribution to impacts on biological resources, in particular those related to native grasslands would be slightly reduced from those resulting from the proposed project. Mitigation Measures BIO-1a through 1d and BIO-2a through 2e, BIO-3, and BIO-4a through 4d would reduce cumulative contribution of this alternative to a less-than-significant level.

Cultural Resources

The Putnam Park Extension Project Alternative would include limited grading where trail improvements are proposed. However, grading activities would be significantly less than those under the proposed project because the residential component is not included under this alternative. The barn complex would be preserved and renovated under this alternative. Relocation of the barn complex within the same general area may occur for stabilization and preservation purposes. **Mitigation Measures CUL-1a and CUL-1b** identified for the proposed project would be required for this alternative and would reduce potentially significant impacts to historical resources to a less than significant level. This RDEIR concludes that during construction of the proposed project, known and unknown historic and pre-historic archaeological resources could be damaged or destroyed, and impacts of the proposed project to archaeological resources would be significant. Although this alternative would include significantly less grading than the proposed project, there is potential to damage or destroy known and unknown historic and pre-historic archaeological resources similar to the proposed project. As with the proposed project, implementation of the mitigation measures set forth in this RDEIR (**Mitigation Measures CUL-2 through CUL-4**) would be required for this alternative and would reduce potentially significant impacts to a less-than-significant level. Overall, impacts to cultural resources would be reduced under the Putnam Park Extension Project Alternative compared to the proposed project.

Energy

The Putnam Park Extension Project Alternative would not construct any residences and consequently the demand for electricity and gasoline would be minimal, with no demand for natural gas. This would be a significant reduction from the energy demand under the proposed project. It is anticipated that PG&E would be able to provide electricity to the project site using existing infrastructure. The consumption of energy under this alternative would not be wasteful, inefficient, or unnecessary and the impact would be less than significant.

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, 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). **Mitigation Measure GEO-3a**, 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.

Greenhouse Gas Emissions

Construction-related GHG emissions under this alternative would be reduced compared to the proposed project because it would not include the residential component. The less-than-significant GHG construction impact of the proposed project would be further reduced.

The GHG emissions generated during operation under this alternative would also be less than the proposed project as the alternative would not include the residential component and associated vehicle trips. **Table 5.0-6, GHG Emissions Putnam Park Extension Project Alternative and Proposed Project**, presents GHG emissions of the Putnam Park Extension Project Alternative and the proposed project.

As shown in **Table 5.0-6**, GHG emissions under this alternative would be approximately 129 MT CO₂e/year, which is significantly lower than the 591.8 MT CO₂e/year under the proposed project. Therefore, the less-than-significant GHG impact of the proposed project would be further reduced under this alternative.

Table 5.0-6
GHG Emissions Putnam Park Extension Project Alternative and Proposed Project

Source	Emissions (MT CO ₂ e)
Putnam Park Extension Project Alternative	
Construction (Amortized)	8.2
Operational	121
Total	129
Proposed Project	
Construction (Amortized)	39.8
Operational	552
Total	591.8

Source: Impact Sciences, 2019.

Hydrology and Water Quality

Although less grading would occur under this alternative, construction activities of the park would exceed 1 acre and would still have the potential of on-site erosion, leading to increased turbidity and sedimentation in Kelly Creek on the project site and in downstream reaches (including the Petaluma River). Similar to the proposed project, a Stormwater Pollution Prevention Plan would be required per the National Pollution Discharge Elimination System (NPDES) general construction permit requirements through the State Water Resource Control Board. **Mitigation Measure HYD-1a** is set forth for the proposed project and would apply to this alternative to guide the SWPPP development process and ensure that surface-water quality impacts during construction are minimized. In addition, **Mitigation Measure HYD-1b** would also apply to minimize impacts to sensitive wetland and riparian areas. Similar to the proposed project, implementation of **Mitigation Measures HYD-1a** and **HYD-1b** would reduce this alternative's impact during construction on surface water quality and sensitive wetland and riparian areas to a less-than-significant level.

This alternative would not include a residential component and therefore would have less impervious surfaces than the proposed project. Therefore, it would not include the water retention facilities identified under the proposed project. However, a stormwater treatment facility may be required to treat runoff from the proposed main parking lot (south of Kelly Creek). If this parking lot is paved with impermeable

pavement, a linear bio-swale or other bio-treatment facility would be installed along the edge of that parking lot to meet NPDES stormwater quality standards. In addition, the 27-space main parking lot would be set back 50 feet from the D Street tributary to provide additional protection against stormwater quality impacts to Kelly Creek. However, this alternative would still have the potential to change the natural hydrologic processes and runoff characteristics. **Mitigation Measure HYD-1c** is set forth for the proposed project would apply to this alternative to address the post-construction impact on surface water quality and potential hydromodification. In addition, if the stormwater treatment facility was determined to be required to treat runoff from the proposed main parking lot, **Mitigation Measure HYD-3** would apply to this alternative to guide the design of stormwater outfalls and reduce potential impacts of stormwater outfalls to Kelly Creek and the D Street tributary to a less-than-significant level, similar to the proposed project. In addition, **Mitigation Measure HYD-4a** through **4c** would also apply to this alternative to ensure maintenance of the detention facility, guide final detention design so that peak flows from the project site would remain at or below existing levels and do not add to the peaks in Petaluma River. With implementation of **Mitigation Measures HYD-1c, HYD-3, and HYD-4a through 4c**, this alternative's impacts to existing drainage patterns would be reduced to a less-than-significant level.

In addition, stormwater runoff from the trails proposed, under this alternative, could result in erosion and discharge of sediment into the creek. **Mitigation Measure HYD-1d**, which requires that trail paths be designed to drain runoff into pervious areas not susceptible to erosion would apply to this alternative. Similar to the proposed project, implementation of **Mitigation Measures HYD-1c and HYD-1d** would reduce this alternative's post-construction impact on surface water quality to a less-than-significant level.

Given that this alternative would not include the residential component, it would result in significantly less impermeable surfaces and associated runoff. As such, impacts related to flooding, soil erosion and downstream sedimentation (construction), and water quality would be less than significant. Similar to the proposed project, this alternative proposes three separate pedestrian bridges across Kelly Creek. Piers, abutments, or supports for these crossings could impede and or redirect flood flows within the Kelly Creek corridor. **Mitigation Measure HYD-6** would similarly apply to this alternative to reduce this potential impact to a less-than-significant level.

Land Use and Planning

Similar to the proposed project, this alternative would not result in any impacts related to division of a community or conflicts with a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP) and the development would be compatible with existing surrounding land uses. The Putnam Park Extension Project Alternative would require the same revisions to General Plan Policy 2-P-68 as the proposed project. Similar to the proposed project, this alternative, if approved, would amend the Policy 2-

P-68 to allow for small accessory structures as part of the public park amenities and to relocate the barn complex within the same general area for preservation and stabilization purposes. Under this alternative, no residential units would be introduced (the residential density would be 0.00 dwelling units per acre), which is inconsistent with the density range of 0.6 to 2.5 dwelling units per acre under the Very-Low Density Residential land use designation and R1 zoning designation for the project site. Therefore, because this alternative would not include a residential component, it would not be consistent with the City of Petaluma General Plan that designates the site for development of low-density housing. The Putnam Park Extension Project Alternative would present a greater land use inconsistency relative to the proposed project. However, the conflict would not result in a significant impact to the environment, surroundings, or health and safety of people. Therefore, impacts related to land use and planning under this alternative would remain less than significant.

Noise

The Putnam Park Extension Project Alternative would not construct any single-family homes on the project site. Therefore, construction-related noise under this alternative would be significantly reduced compared to the proposed project. The nearest sensitive receptors are located to the north of the project site (on Oxford court) and no construction would occur within 300 feet of the nearest resident. Therefore, this alternative's impact related to construction noise would be less than significant and no mitigation would be required. Furthermore, as no single-family homes would be constructed under this alternative, there would be no impact from construction vibration.

The noise generated during operation of this alternative would be significantly reduced compared to the proposed project, because it would not include a residential component. Operational noise for the Putnam Park Extension Project Alternative would be minimal and the less-than-significant impact from traffic noise under this alternative would be reduced as compared to the proposed project.

Population and Housing

This alternative would not construct any single-family homes, and thus, would not add any additional residents on the project site. However, this alternative would not induce growth in population and would not result in displacing existing population or housing. Therefore, no impact to population and housing would occur under this alternative.

Public Services

Police and Fire Services

Under the Putnam Park Extension Project Alternative, the 28 single-family homes would not be constructed and the demand for police services and fire protection would be significantly reduced as compared to the proposed project. The proposed project's less-than-significant impact to fire and police services under this alternative would be significantly reduced.

School Services and Libraries

The Putnam Park Extension Project Alternative would not include a residential component, and therefore would not result in an increased demand for schools and libraries. Under this alternative, there would be no impact to schools and libraries.

Parks and Recreation

The Putnam Park Extension Project Alternative would provide a 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.

Transportation

Under this alternative, 34 daily trips would be generated, which accounts for approximately 10 percent of the trips generated under the proposed project. Therefore, the significant and unavoidable impacts to VMT identified under the proposed project would not occur under this alternative. Under this alternative generated VMT per capita would not exceed the significance threshold under project conditions or cumulative conditions. Therefore, impacts related to vehicular traffic would be less than significant and no mitigation measures would be required.

As with the proposed project, this alternative would provide left-turn ingress from D Street; therefore, **Improvement Measure Trans-1** could be implemented to further reduce the less than significant impact associated with sight distance. Because this alternative would not add new residents to the project area, the increase in recreational activities of trail users is not expected to result in an increased demand for pedestrian crossings at the intersection of D Street and Windsor Drive. Therefore, **Improvement Measure TRANS-4** identified for the proposed project would not be applicable to this alternative. Under this alternative, the Davidon (28-lot) Residential Project component would not be constructed and significantly less construction vehicle traffic would be added to the street network. However, additional heavy vehicle traffic during construction would be added to the street network in the vicinity of the project site. Similar

to the proposed project, this alternative would have the potential to result in potentially significant temporary impacts on the transportation network during construction. **Mitigation Measure TRANS-5** would similarly be implemented to reduce the traffic impact during construction to a less than significant level.

Overall impacts to traffic and circulation would be less under the Putnam Park Extension Project Alternative than under the proposed project.

Since this alternative does not include the 28 single-family homes, traffic generated under this alternative during operation would be less than under the proposed project. Therefore, Putnam Park Extension 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.

Utilities and Service Systems

Water

The Putnam Park Extension Project Alternative would not construct any homes and consequently the demand for water would be significantly reduced as compared to the proposed project. This would equate to a reduction in water demand of 8.1AFY. The Putnam Park Extension Project component would demand 0.2 AFY. Based on the City of Petaluma 2015 UWMP, there is an adequate water supply, under normal and multiple-dry year scenarios, available to serve the City of Petaluma through 2040, including development of the proposed site. Therefore, this alternative would not result in the need for expanded water supply entitlements. Similar to the proposed project, the existing water wells on the project site could be used for temporary and permanent irrigation demand of the park extension plantings. Usage of the water from the wells would be within the City's maximum allowed water allocation for this alternative. The less-than-significant impact of this alternative related to water supply and infrastructure would be greatly reduced as compared to the proposed project.

Wastewater

The Putnam Park Extension Project Alternative would not construct any homes and consequently the wastewater generated would be significantly less than the proposed project. In addition, the permanent restroom under this alternative would be a "green flush" restroom that would not be connected to the sewer system. If the proposed permanent restroom is required to be connected to the City sewer system, similar to the proposed project, the Ellis Creek Water Recycling Facility (WRF) has adequate capacity to treat the wastewater generated by this alternative. Differing from the proposed project, off-site sewer

infrastructure upgrades would not be necessary to accommodate development on the project site and no mitigation would be required. Impacts related to wastewater facility capacity and infrastructure would be less than significant.

Stormwater

The Putnam Park Extension Project Alternative would not construct any homes and consequently the stormwater generated under this alternative would be significantly reduced as compared to the proposed project. Under this alternative, a stormwater treatment facility south of Kelly Creek may be required to treat runoff from the proposed main parking lot before it discharges into Kelly Creek. Impacts of this alternative related to stormwater are analyzed under Hydrology and Water Quality above. However, the less-than-significant impact related to stormwater facilities under this alternative would be reduced as compared to the proposed project.

Solid Waste

The Putnam Park Extension Project Alternative would not construct any homes and there would be negligible demand for solid waste disposal capacity. Therefore, the less-than-significant impact related to solid waste under this alternative would be reduced when compared to the proposed project.

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.

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 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.

Other Resource Topics

As with the proposed project, the Putnam Park Extension Project Alternative would not affect agricultural resources, expose people to hazards or hazardous materials, or result in loss of availability of known mineral resources. No mitigation would be required.

Conclusion and Relationship to Project Objectives

The Putnam Park Extension Project Alternative would reduce or avoid all of the proposed project's impacts, because no residential units would be constructed and disturbance on the project site would be minimal. This alternative would achieve the objective of implementing General Plan policies related to establishment of an Urban Separator and the Petaluma ring trail system and would provide improved recreational access to the Helen Putnam Regional Park. The Putnam Park Extension Project Alternative would also achieve the objectives of permanently preserving sensitive biological and geological areas of the site as protected open space; preserving and enhancing Kelly Creek in its natural state; preserving the barn complex; providing a public pedestrian/bicycle trail connecting to Helen Putnam Regional Park; and providing a large extension of the Helen Putnam Regional Park, with new trails, a restored barn complex, habitat and waterway enhancements, and related features. However, this alternative would not meet the project's objectives to develop a high-quality residential project on the west side of Petaluma and provide new housing opportunities while minimizing neighborhood impacts. Furthermore, this alternative would not promote and maximize new housing opportunities within the urban growth boundary thereby

discouraging urban sprawl. This alternative would not provide housing units and, therefore, would not assist the City in meeting its RHNA obligation as effectively as the proposed project.

5.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires the identification of the environmentally superior alternative among the alternatives to the proposed project. The environmentally superior alternative must be an alternative to the proposed project that reduces some of the environmental impacts of the proposed project, regardless of the financial costs associated with this alternative. Identification of the environmentally superior alternative is an informational procedure and the alternative identified as the environmentally superior alternative may not be that which best meets the goals or needs of the proposed project. Additionally, if the No Project/No Development Alternative is determined to reduce most impacts, CEQA requires that the EIR identify an environmentally superior alternative among the other alternatives (*State CEQA Guidelines* Section 15126.6(e)).

Based on the analysis above, the no project alternative would be the environmentally superior alternative. This alternative would avoid all the impacts identified for the proposed project. The environmentally superior alternative among the remaining alternatives is the Putnam Park Extension Project Alternative. This alternative would avoid the proposed project's significant and unavoidable transportation impacts. In addition, this alternative would reduce the potentially significant impacts identified for the proposed project related aesthetics; air quality; biological resources; cultural resources; energy, geology and soils; greenhouse gas emissions; hydrology and water quality; noise; population and housing; public services and recreation; transportation; utilities and service systems, and wildfires. For these reasons, the Putnam Park Extension Project Alternative is the environmentally superior alternative.

**Table 5.0-7
Summary Comparison of Project Alternatives**

Project Impact		Scott Ranch: Proposed Project (Before and After Mitigation)	No Project/No Development Alternative	Davidon (28- Lot) Residential Project Alternative	Putnam Park Extension Project Alternative
AES-1	Development of the project would have a substantial adverse effect on a scenic vista.	PS/LTS	NE	PS=/LTS	LTS
AES-3	Development of the project site would substantially degrade the visual character and quality of public views of the site and its surroundings.	PS/LTS	NE	PS=/LTS	PS-/LTS
AIR-2	Construction and operation of the proposed project would generate emissions that would result in a cumulatively considerable net increase of any critical pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	PS/LTS	NE	PS-/LTS	PS-/LTS
AIR-3	Construction and operation of the proposed project would expose sensitive receptors to substantial pollutant concentrations.	PS/LTS	NE	S-/LTS	S-/LTS
BIO-1	The proposed project would not affect special-status plant species but would result in substantial adverse effects on special-status wildlife species, including California red-legged frog, nesting birds, and roosting bats.	PS/LTS	NE	PS+/LTS	PS-/LTS
BIO-2	The proposed project would affect sensitive natural communities, including riparian habitat, native grasslands, and regulated seasonal wetlands.	PS/LTS	NE	PS+/LTS	PS-/LTS
BIO-3	The proposed project would have a substantial adverse effect on state and federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	PS/LTS	NE	PS-/LTS	PS-/LTS
BIO-4	The proposed project would interfere substantially with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	PS/LTS	NE	PS-/LTS	PS-/LTS
BIO-5	The proposed project would conflict with a local policy for protecting biological resources, such as a tree preservation policy or ordinance.	PS/LTS	NE	PS=/LTS	PS=/LTS
CUM BIO-1	The proposed Scott Ranch project and the regional park trail project, in conjunction with other past, present and reasonably foreseeable future development, would result in significant cumulative impacts on biological resources.	PS/LTS	NE	PS-/LTS	PS-/LTS

Project Impact		Scott Ranch: Proposed Project (Before and After Mitigation)	No Project/No Development Alternative	Davidon (28- Lot) Residential Project Alternative	Putnam Park Extension Project Alternative
CUL-2	The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5.	PS/LTS	NE	PS=/LTS	PS-/LTS
CUL-3	The proposed project could disturb any human remains, including those interred outside of formal cemeteries.	PS/LTS	NE	PS=/LTS	PS-/LTS
CUL-4	The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource.	PS/LTS	PS	PS=/LTS	PS-/LTS
GEO-1	The proposed project would not directly or indirectly cause potential substantial adverse effects related to fault rupture but would cause potential substantial adverse effects related to seismic ground shaking and/or seismic-related ground failure.	PS/LTS	NE	PS=/LTS	NE
GEO-2	The proposed project would result in substantial soil erosion or the loss of topsoil.	PS/LTS	NE	PS=/LTS	LTS
GEO-3	The proposed project would expose people and structures to substantial adverse effects from landslides and unstable slopes.	PS/LTS	NE	PS-/LTS	PS-/LTS
GEO-4	The proposed project would be located on a geologic unit that could become unstable as a result of the project, and on expansive soils creating direct or indirect risk to life or property.	PS/LTS	NE	PS=/LTS	LTS
GEO-6	The proposed project could directly or indirectly destroy a unique paleontological resource or site or unique geologic features.	PS/LTS	NE	PS=/LTS	PS-/LTS
HYD-1	The proposed project would result in the discharge of stormwater that could violate water quality standards, degrade surface or ground water quality, and cause hydromodification.	PS/LTS	NE	PS=/LTS	PS-/LTS
HYD-3	The proposed project would substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial alteration of stream or river or through the addition of impervious surfaces in a manner that would result in erosion or siltation on- or off-site.	PS/LTS	NE	PS=/LTS	PS-/LTS
HYD-4	The proposed project would substantially alter the existing drainage pattern of the site or area in a manner that would substantially increase the rate or amount of surface runoff that would result in flooding on- or off-site.	PS/LTS	NE	PS=/LTS	PS-/LTS
HYD-6	The proposed project would substantially alter the existing drainage pattern of the site or area in a manner that would redirect flood flows.	PS/LTS	NE	LTS	PS-/LTS

Project Impact		Scott Ranch: Proposed Project (Before and After Mitigation)	No Project/No Development Alternative	Davidon (28- Lot) Residential Project Alternative	Putnam Park Extension Project Alternative
LU-2	The proposed project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	NE	LTS	LTS
NOISE-1	Noise generated by construction activities on the project site would result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	PS/LTS	NE	PS-/LTS	LTS
NOISE-2	Construction of the proposed project would result in the generation of excessive groundborne vibration or groundborne noise levels.	PS/LTS	NE	PS=/LTS	LTS
TRANS-1	Development of the proposed project would generate VMT per capita greater than the project threshold.	S/SU	NE	S-/SU	LTS
TRANS-5	The proposed project would cause temporary disruption to the transportation network due to construction.	PS/LTS	NE	PS=/LTS	PS-/LTS
CUM TRANS-1	Development of the proposed project and the regional park trail could generate VMT per capita greater than the project threshold under cumulative conditions.	S/SU	NE	S-/SU	LTS
UTL-3	Development of the proposed project would require the construction of new or expanded wastewater conveyance systems. The construction of new or expanded wastewater conveyance systems would result in significant environmental effects.	PS/LTS	NE	PS=/LTS	LTS
UTL-4	Development of the proposed project would require the construction of new storm water drainage facilities on site. The construction of new storm water drainage facilities would not result in significant environmental effects.	PS/LTS	NE	PS=/LTS	PS-/LTS
WDF-4	The proposed project could expose people or structures to significant risks, including downslope or downstream flooding or landslide, as a result of landslide, runoff, post-fire slope instability, or drainage changes.	PS/LTS	NE	PS=/LTS	LTS

Notes: This table lists only the significant or potentially significant impacts of the proposed project and not the less than significant impacts.

Key:

SU Significant and unavoidable

PS Potentially significant impact

LTS Less than significant impact

NE No Effect

= Impact similar to proposed project

- Impact less than proposed project

+ Impact greater than proposed project

5.7 REFERENCES

City of Petaluma. September 2006. Petaluma General Plan 2025 Environmental Impact Report.

City of Petaluma. June 2008. Petaluma General Plan 2025.

City of Petaluma. December 2014. 2015-2023 Housing Element.