

ENVIRONMENTAL INITIAL STUDY

INITIAL STUDY CHECKLIST REFERENCES AND DOCUMENTATION SUMMERFIELD MEADOWS SUBDIVISION, UNIT 2, S-10-01

Prepared by
DEVELOPMENT SERVICES DEPARTMENT
777 Cypress Avenue
Redding, California 96001

ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Tentative Subdivision Map Application S-10-01, Summerfield Meadows Subdivision, Unit 2.
2. **Lead Agency Name and Address:** City of Redding Development Services Department, 777 Cypress Avenue, Redding, CA 96001.
3. **Contact Person and Phone Number:** Terri Thesken, Senior Planner, (530) 225-4392.
4. **Project Location:** Northern terminus of Reflection Street and eastern terminus of Seedling Drive off Creekside Street; AP No. 050-370-35 (see attached location map).
5. **Project Sponsor's Name and Address:** Greg Snow, P.O. Box 493856, Redding, CA 96049-3856.
6. **General Plan Designation:** "Residential, 2 to 3.5 units per acre."
7. **Zoning:** "RS-2" Residential Single Family District.
8. **Description of Project:** The project sponsor is requesting approval of a tentative subdivision map to subdivide 24 acres to create 57 lots for development of single-family residential homes as Unit 2 of Summerfield Meadows Subdivision. Summerfield Meadows Subdivision, Unit 1, has been previously developed with 32 lots. With Unit 2, the entire Summerfield Meadows Subdivision would total 89 single-family residential lots. The typical lot sizes in Unit 2 range between 10,596 and 32,415 square feet, with most lots in the 14,000- to 15,000-square-foot range. The project would include the extension of Seedling Drive easterly to an intersection with Sacramento Drive and a looping of Reflection Street within the subdivision. The project would also include construction of on-site streets, utility, and storm-drainage improvements necessary to serve the lots.
9. **Surrounding Land Uses and Settings:** The property site is located on level topography in the Sacramento River drainage, with elevations ranging from 440 to 446 feet above mean sea level. A low terrace courses through the property in a northeast to southwest direction. The property is bounded on the north by single-family residences fronting on Sacramento Drive, on the west by single-family residences fronting on Creekside Street, on the east by Sacramento Drive and single-family residences, and on the south by single-family residences on Seedling Drive and Corto Street. The project site is currently vacant. The Sacramento River is located over 550 feet east of the site. There is no 100-year floodplain crossing the property.

The project site is characterized by level ground, with a primary vegetation cover of grasses and weedy species, such as star thistle, rigput brome, and Johnson grass. The site was used for agricultural production through the late 1970s and most of the natural vegetation has been removed. The northerly portion of the property, the property perimeters, and a central low terrace support large valley oaks; ash, grey pines; willow; cottonwoods; elderberry; and some nonnative trees, such as mulberry and black locust. There are no areas of 20 percent or steeper slopes on the property.
10. **Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).** The project developer must obtain a Construction Activity Storm Water Permit and prepare a Storm Water Pollution Prevention Plan in accordance with the requirements of the California Regional Water Quality Board (RWQCB).

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Cultural Resources |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Hazards (Fire) & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Noise | <input type="checkbox"/> Agricultural Resources |
| <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Utilities and Service Systems | <input checked="" type="checkbox"/> None After Mitigation Measures |
| <input checked="" type="checkbox"/> Transportation/Circulation | <input type="checkbox"/> Aesthetics | Incorporated |
| <input type="checkbox"/> Biological Resources | | |

DETERMINATION. (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Signature

April 17, 2006

Date

Terri Thesken

(Name)

Senior Planner

(Title)

EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Land Use and Planning
- Population and Housing
- Geology and Soils
- Hydrology and Water Quality
- Air Quality
- Transportation/Circulation
- Biological Resources
- Mineral Resources
- Hazards and Hazardous Materials
- Noise
- Public Services
- Utilities & Service Systems
- Aesthetics
- Cultural Resources
- Recreation

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines and used by the City of Redding in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.
- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- **Potentially Significant Impact Unless Mitigation Incorporated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- **Potentially Significant Impact.** The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

List of attachments:

- A. Location map
- B. Tentative map

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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I. LAND USE AND PLANNING. Would the proposal:

- | | | | | |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a. Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a. The project site is completely surrounded by other fully developed single-family residential lots with the same General Plan designation of "Residential, 2 to 3.5 dwelling units per acre" and zoning of "RS-2" (same as the project site) or "RS-3" (existing smaller lots along Sacramento Drive to the north and east of the project site). The proposed tentative map would reflect the "Residential, 2 to 3.5 du/acre" General Plan designation by providing single-family residential development at a density of 2.36 units per acre, with additional street connections to Sacramento Drive and Seedling Drive and the provision of a dedicated left-turn lane on Eastside Road at the Star Drive intersection. The project and its location do not have the potential to physically divide the established community.

b. Under the City's Zoning Ordinance, the project site is zoned "RS-2" Residential Single Family District and is designated "Residential, 2 to 3.5 units per acre" on the Redding General Plan. The proposed lot sizes exceed the 10,000-square-foot minimum lot-size standard of the "RS-2" District, with most lots in the 14,000- to 15,000-square-foot range. Lot sizes range from 10,956 to 32,415 square feet. The overall project density is approximately 2.36 units per acre. The General Plan density range would allow between 48 and 84 single-family residential units on the site; the project represents 57 homes and is thus consistent with the General Plan in terms of density.

The Community Development and Design Element of the General Plan encourages the preservation of existing community character and the development of livable, safe, and cohesive neighborhoods. In particular, Goal CDD16 encourages the improvement of pedestrian safety on collector streets. Within the Summerfield Meadows Subdivision, Unit 2, streets will have sufficient right-of-way and sidewalks. However, the main route of access to the subdivision is Sacramento/Star Drive, which operates as a residential collector street with 30 feet of paving in a 60-foot-wide right-of-way, with residences fronting on the collector. Sacramento/Star Drive has no sidewalks or other pedestrian amenities. In order to slow the traffic in residential neighborhoods, Goal CDD17 encourages the narrowing of street widths and/or the installation of appropriate "traffic calming" mechanisms to reach this goal. In order to reduce the potential impact to neighborhood livability on Sacramento/Star Drive, the applicant for this project has proposed a number of traffic-calming measures that will be included as conditions of the project approval subject to review by the residents on Sacramento/Star Drive as to the acceptable measures for the sections of Sacramento/Star Drive. The traffic-calming measures are listed below under Mitigation Measures. Implementation of traffic-calming measures would reduce the potential impact to land use/neighborhood livability to a level less than significant.

c. There are no habitat conservation or natural community conservation plans that are applicable to the site.

Documentation

- City of Redding General Plan Community Development and Design Element
- City of Redding General Plan Final Environmental Impact Report
- City of Redding Zoning Ordinance
- Summerfield Meadows Traffic Impact Study, prepared by Omni-Means, dated March 14, 2006

Mitigation

Some or all of the following traffic-calming measures will be incorporated into the conditions of approval for the Summerfield Meadows Subdivision, Unit 2, tentative map subject to determination of appropriateness by the affected residents for each section of Sacramento/Star Drive:

1. Construction of four speed cushions to reduce speeds
2. Construction of four mid-block chokers (raised, landscaped, or hardscaped islands in the parking zone) to reduce speeds
3. Revised striping to narrow the traffic lanes and to reduce speeds
4. Reset and raise the existing "chevron" warning signs at the horizontal curve on Sacramento Drive just east of Balaton Road to improve safety

5. Trim existing vegetation at the horizontal curve on the north side of Wortley Lane just west of Riverside Drive to improve visibility
6. Install new bridge railing warning object markers and golf-cart warning signs at each end of the Olney Creek bridge on Sacramento Drive to improve safety

Implementation of these mitigation measures, or a combination of the mitigation measures, would reduce the potential land use/neighborhood livability impact to a level less than significant.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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II. POPULATION AND HOUSING. Would the proposal:

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a, b, c. The project would create opportunity for the construction of new single-family homes as planned and anticipated by the Redding General Plan. As previously noted, the project is similar in character to that in surrounding subdivisions. The project would not induce unplanned population growth and does not propose the extension of any new roads or utilities not anticipated by the General Plan. The project does not displace substantial numbers of people or any existing housing.

Documentation

- City of Redding General Plan Housing Element, 2000
- City of Redding Transportation Element, 2000
- Field visits to the project site by Terri Thesken

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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III. GEOLOGY AND SOILS. Would the proposal:

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| (1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (2) Strong seismic ground-shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (3) Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (4) Landslides? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | | <input checked="" type="checkbox"/> |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Discussion

a, c, d. There are no Alquist-Priolo Earthquake Faults designated in the Redding area of Shasta County. There are no other documented earthquake faults in the vicinity that pose a significant risk, and the site is located in an area designated in the Health and Safety Element of the General Plan as having a low ground-shaking potential. The project is not located on or near any documented landslide hazard areas, and there is no evidence of ground slippage or subsidence occurring naturally on the site. The type of soils, the lack of slopes, and underlying geology are identified as having no potential for liquefaction. No portion of the site falls within the 100-year floodplain of the Sacramento River.

b. The project site contains five primary soil classifications: Reiff fine sandy loam (RgA); Reiff loam, seeped (RmA); and Reiff loam (RIA) over the majority of the site, as well as Anderson gravelly sandy loam (Ad) and Cobbly alluvial land (Ch) over small portions of the site. The Reiff classifications are characterized by slopes of 0 to 3 percent, are well-drained with slow runoff, and have none to slight erosion potential. The other two classifications are very well-drained with slow runoff and slight to moderate erosion potential. There are no substantial impacts anticipated in relation to erosion.

The project is subject to certain erosion-control requirements mandated by existing City and State regulations. These requirements include:

- ▶ *City of Redding Grading Ordinance.* This ordinance requires the application of "Best Management Practices" (BMPs) in accordance with the City Erosion and Sediment Control Standards Design Manual (Redding Municipal Code Section 16.12.060, Subsections C, D, E). In practice, specific erosion-control measures are determined upon review of the final subdivision grading plan and are tailored to project-specific grading impacts.
- ▶ *California Regional Water Quality Control Board "Construction Activity Storm Water Permit."* This permit somewhat overlaps the City's Grading Ordinance provision by applying State standards for erosion-control measures during construction of the project.
- ▶ *California Regional Water Quality Control Board "Project Storm Water Pollution Prevention Plan (SWPPP)."* This plan emphasizes storm water best management practices and is required as part of the Construction Activity Storm Water Permit. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of storm water discharges and to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges.

e. The project does not involve the use of septic tanks or alternative wastewater disposal.

Documentation

- City of Redding Health & Safety Element, 2000
- City of Redding Grading Ordinance (RMC Chapter 16.12)
- City of Redding Standard Specifications, Grading Practices
- City of Redding General Plan Background Report, 1998
- Soil Survey of Shasta County Area, United States Department of Agriculture, Soil Conservation Service and Forest Service, August 1974
- Letter from California Regional Water Quality Control Board, dated April 4, 2005

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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IV. HYDROLOGY AND WATER QUALITY. Would the proposal:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Violate any water quality standards or waste-discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood-hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a, c, f. Since future homes in the subdivision would be served by City sanitary sewer service, the project would not involve any permitted discharges of waste material into ground or surface waters. With the application of the standard erosion-control measures mentioned in the category above, construction activities would not be expected to contribute silt or sediment into the Sacramento River by way of the proposed 24-inch-diameter storm-drain pipe to the lagoon located between Sacramento Drive and Riverside Drive.

b. The project would utilize City water service for domestic uses and fire protection. The proposed project would not impact groundwater supplies.

d, e. Storm-water runoff from the project site currently drains to the Sacramento River and to the Bonnyview Drain south of the project site. Storm water after development would drain to an existing storm drain at the northern terminus of Reflection Street and to the southeast by way of an improved storm-drain to the lagoon located between Sacramento Drive and Riverside Drive, which adjoins the Sacramento River at its south end. The project applicant has provided a hydrological analysis indicating that improvements, including the upsizing of an existing 12-inch-diameter storm-drain pipe to 24 inches, would adequately handle postdevelopment runoff from the project during a 100-year-storm event. Storm-drain detention is not required at this location because of its proximity to the Sacramento River (the lagoon). Hydrology impacts would be considered less than significant.

g, h, i. There are no floodplains crossing the property; therefore, there is no anticipated impact in regard to losses related to flooding.

j. The threat of a tsunami wave is not applicable to inland, central valley communities such as Redding. Seiches could potentially be generated in either Shasta or Whiskeytown Lakes during an earthquake. However, neither lake has been identified in the Health and Safety Element of the General Plan as having any risk to the city under such circumstances. There is no documented threat of mudflows affecting the project site.

Documentation

City of Redding Health and Safety Element, 2000
 Federal Emergency Management Agency Floodplain Regulations, FIRM map 060360-0025D, dated 3/2/98.
 City of Redding Storm Drain Master Plan, Montgomery-Watson Engineers 1993
 Preliminary Grading Plan, PACE Civil, Inc., dated September 14, 2005

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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V. AIR QUALITY. Would the proposal:

a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a, b, c. Shasta County, including the far northern Sacramento Valley, currently exceeds the State’s ambient standards for ozone (smog) and particulates (fine, airborne particles). Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning. Even with application of measures to reduce emissions for individual projects, cumulative impacts are unavoidable when ozone and/or particulate emissions are involved. For example, the primary source of emissions contributing to ozone is from vehicles. Any project that generates vehicle trips has the potential of contributing incrementally to the problem. The Environmental Impact Report for the General Plan acknowledged this dilemma; and as a result, Findings and a Statement of Overriding Considerations were adopted by the City Council for impacts to air quality resulting from growth supported under the General Plan.

Nevertheless, the Air Quality Element of the General Plan incorporates strategies to reduce emissions associated with new and modified indirect sources of pollution in an effort to accurately determine and mitigate project-related impacts to the extent feasible. Emission-reduction goals of 20 to 25 percent are established depending on the projected level of unmitigated emissions for a project. Mitigation thresholds are established for the important regional/local pollutants, including: Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx), which are ozone precursors, and Inhalable Particulate Matter, 10 Micron (PM₁₀). The mitigation thresholds for these pollutants are tiered at two levels as follows:

Level "A"	Level "B"
25 pounds per day of NOx	137 pounds per day of NOx
25 pounds per day of ROG	137 pounds per day of ROG
80 pounds per day of PM ₁₀	137 pounds per day of PM ₁₀

If a project has unmitigated emissions less than the Level "A" threshold, then it is viewed as a minor project (from an air quality perspective) and only application of Standard Mitigation Measures (SMM) is required to try to achieve at least a 20 percent reduction in emissions, or the best reduction feasible otherwise. Land uses that generate unmitigated emissions above Level "A" require application of appropriate Best Available Mitigation Measures (BAMM) in addition to the SMM in order to achieve a net emission reduction of 20 percent or more. If, after applying SMM and BAMM, a use still exceeds the Level "B" threshold, then a minimum of 25 percent of the unmitigated emissions exceeding 137 pounds per day must be offset by reducing emissions from existing sources of pollution; otherwise, an Environmental Impact Report is required.

Under policy of the Air Quality Element, a project has the potential to impact air quality primarily in two ways: (1) the project would generate vehicle trip emissions (with NOx, ROG, and PM₁₀) that contribute cumulatively to local and regional air quality conditions and (2) fugitive dust (particulate/PM₁₀) emissions are possible during construction activities. As a residential development, a project

does not have the potential to generate significant emission concentrations of other pollutants subject to State and Federal ambient air quality standards.

In order to calculate the unmitigated emissions for the key pollutants noted above, the current URBEMIS air quality computer model was used for the proposed Summerfield Meadows Subdivision, Unit 2, as prescribed in the Air Quality Element. The results were as follows:

	ROG	NO_x	PM₁₀
Total Emissions (lbs./day)	9.35	11.00	10.03

These results indicate that the project would result in ROG, Nox and PM₁₀ emissions below the Level "A" threshold. Application of Standard Mitigation Measures (SMM) is required in order to strive toward the General Plan policy of a 20 percent reduction in emissions to address small-scale cumulative effects. SMMs applicable to this project address primarily short-term impacts related to construction and are identified below. With the application of the Standard Mitigation Measures, the project's potential air quality impacts would be considered less than significant.

1. Nontoxic soil stabilizers shall be applied according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for ten days or more).
2. All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.
3. Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow (e.g., flag person).
4. Construction activities that could affect traffic flow shall be scheduled in off-peak hours.
5. Active construction areas, haul roads, etc., shall be watered at least twice daily or more as needed to limit dust.
6. Exposed stockpiles of soil and other backfill material shall either be covered, watered, or have soil binders added to inhibit dust and wind erosion.
7. All trucks hauling soil and other loose material shall be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of CVC Section 23114. This provision is enforced by local law enforcement agencies.
8. All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads. Wheel washers shall be used where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment shall be washed off leaving the site with each trip.
9. Open burning of cleared vegetation shall be prohibited. Cleared vegetation shall be treated by legal means other than open burning, such as chipping, shredding, or grinding. Such methods shall be noted on improvement plans. At no time shall open burning of materials generated by this project occur at another site.

d. Potential impacts to neighboring homes (sensitive receptors) from fugitive dust caused during construction are mitigated by application of the SMM discussed above.

e. The project does not involve land use that could generate objectionable odors affecting a substantial number of people.

Documentation

- Shasta County APCD Air Quality Maintenance Plan and Implementing Measures
- City of Redding General Plan Air Quality Element, 2000
- City of Redding General Plan Final Environmental Impact Report, Chapter 8.6, Air Quality, 2000
- CEQA Findings of Fact and Statement of Overriding Considerations for the City of Redding, General Plan, Final Environmental Impact Report, as adopted by the Redding City Council on October 3, 2000, by Resolution 2000-166
- City of Redding General Plan Background Report, Chapter 9.7, Natural Resources and Air Quality, 1998
- Project Calculations of Unmitigated Operational Emissions using URBEMIS 2002 for Windows, V 7.5.0, report prepared September 6, 2005

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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VI. TRANSPORTATION/CIRCULATION. Would the proposal:

- a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a, b, d. Access to the subdivision would be derived from Sacramento Drive or Creekside Street by way of the extension of Seedling Drive and Reflection Street. Star Drive to Sacramento Drive and Girvan Road to the south serve as the two entry points to the proposed and existing subdivisions between Highway 273 on the west, the Sacramento River on the east, Crown Estates Subdivision on the south, and Sacramento Drive on the north. A traffic study was prepared in December 2002 for the Summerfield Meadows Subdivision, Unit 2, to address the potential impacts from the subdivision on the adjacent roadway access points. A second traffic study was prepared in March 2006 to update traffic numbers; evaluate more road sections and intersections; and to review speed, safety, and collision concerns along the Star/Sacramento Drive corridor. New 24- to 48-hour weekday counts were conducted in October, November, and December 2005. The traffic study also evaluated similar residential collector streets in the city and provided "traffic calming" and improved safety recommendations for the Star/Sacramento Drive corridor. Prior to preparing the conditions of approval for the tentative map, the residences along Star and Sacramento Drive that will be affected by traffic-calming measures will be surveyed to determine the acceptability of the measures listed under Mitigation Measures in Section 1 of this Initial Study.

The traffic studies prepared by Omni-Means revealed that the existing street system within the project site's immediate vicinity is currently operating at acceptable conditions on a daily basis. With the second traffic study, traffic counts were updated and the following street sections were analyzed:

- Eastside Road from South Bonnyview Road to Star Drive (currently operating at Level of Service LOS "C")
- Eastside Road from Star Drive to Girvan Road (currently operating at LOS "A")
- Sacramento Drive west of Creekside Street (currently operating at LOS "B")
- Hemlock Street south of Sacramento Drive (currently operating at LOS "B")
- Creekside Street south of Sacramento Drive (currently operating at LOS "A")
- Creekside Street north of Girvan Road (currently operating at LOS "A")
- Star Drive east of Eastside Road (currently operating at LOS "C")
- Girvan Road east of Eastside Road (currently operating at LOS "A")
- Island Drive east of Creekside Street (currently operating at LOS "A")

The proposed 57-lot subdivision would be expected to generate 620 average daily trips, with approximately 49 AM peak-hour trips and 65 PM peak-hour trips. It is estimated that up to 80 percent of the project trips would travel north on Eastside Road to get to South Bonnyview Road for accomplishing regional travel on Interstate 5 or State Route 273. The remaining 20 percent would be expected to use Creekside Street to Girvan Road to SR 273 (16 percent Creekside Street to Girvan Road to SR 273, and 4 percent Sacramento Drive to Girvan Road to SR 273). The traffic study also includes projections for traffic and traffic distribution from the Crown Meadow Estates Subdivision south of Girvan Road. The Summerfield Meadows Subdivision, Unit 2, project is consistent with the General Plan designation of "Residential Single Family" development for the property, as assumed for the Transportation Element of the General Plan.

The traffic study indicates that all the street sections above will continue to operate at both LOS "A" and LOS "C" with the proposed project. Sacramento Drive west of Creekside Street is the only street section that changes LOS from "B" to "C" with Summerfield Meadows Subdivision, Unit 2, completion. The traffic study indicates that Eastside Road will experience the relatively highest increase in average daily trip demands, but still less than the LOS "C" capacity threshold of 9,000 vehicles. The traffic collision analysis in the

second traffic study showed that the increase in traffic on Star/Sacramento Drive with the proposed project could potentially increase the number of collisions over a five-year period. From a traffic-safety viewpoint, it will be necessary to improve the intersection of Eastside Road and Star Drive to accommodate the increase in average daily trips from this subdivision. The City Engineering Division conducted an analysis of the Eastside Road/Star Drive intersection in 2003 and 2005/2006, with site visits during AM and PM peak hours, traffic counts at the intersection, the review of traffic accident reports, and an intersection analysis and field measurements for the southbound Eastside Road to Star Drive left-turn movement. The applicant will be conditioned to improve the intersection with a dedicated southbound left-turn lane from Eastside Road onto Star Drive. The improvement will include the widening of pavement on Eastside Road by approximately 10 feet, left-turn pocket channelization and striping, transitions and tapers to existing pavement, utility box and pole location on the west side of Eastside Road, gravel shoulders, and relocation of the Star Drive stop bar and stop sign. With these improvements, any potential impacts to circulation or street safety risks associated with this intersection would be reduced to a level less than significant. Studies show a potential 35 percent reduction in total collisions with the addition of the left-turn lane.

The traffic analysis concluded that roadways in the project vicinity and out to Eastside Road will continue to experience average daily trip demands at less than the LOS "C" capacity threshold. The extension of Creekside Street north to South Bonnyview Road will not be required with construction of Summerfield Meadows Subdivision, Unit 2. The Creekside Street extension, as envisioned by the City General Plan, would be constructed in the future with development of the Michiels/McConnell property south of South Bonnyview Road.

The traffic analysis also evaluated the effect on adjacent roadways when Creekside Street is extended in the future. Eastside Road traffic from South Bonnyview Road to Girvan Road would improve to LOS "A." Star Drive east of Eastside Road would improve to LOS "B." Creekside Street from Sacramento Drive to Girvan Road would see an increase in traffic (2.2 times), with a change in LOS to LOS "B." Sacramento Drive west of Creekside Street would see a reduction in traffic and would remain at LOS "B." Hemlock Street south of Sacramento Drive would also see an increase in traffic, but would remain at LOS "B." The extension of Creekside Street is not proposed with the Summerfield Meadows Subdivision, Unit 2.

c. The project site is located outside the Approach Zones for both the Redding Municipal Airport and Benton Airpark and therefore has no potential to interfere with Airport operations.

e. Access to the subdivision would be provided by way of street connections to Sacramento/Star Drive and Creekside Street/Girvan Road to Eastside Road as anticipated under the Redding General Plan. There would be adequate emergency access to the proposed subdivision.

f. All homes within the subdivision will be required to provide a minimum of two on-site covered parking spaces in accordance with the City's Parking Ordinance (RMC Chapter 18.41).

g. In 1998, the City of Redding prepared, and the City Council adopted, a Bikeway Plan in compliance with the California Bicycle Transportation Act and in order to be eligible for funding for bikeway improvements. The Bikeway Plan does not indicate a bike route within the boundaries of the subdivision area. The project would not conflict with the Plan.

The Redding Area Bus Authority (RABA) currently operates a fixed route (Route 3) in the neighborhood of the proposed subdivision. The route travels south on Eastside Road from South Bonnyview Road to Girvan Road to Sacramento Drive in a northerly direction along the subdivision's east boundary and back out to Eastside Road along Sacramento/Star Drive. A bus stop currently exists on the east side of Sacramento Drive just north of Corto Street, across the street from the southerly portion of Summerfield Meadows Subdivision, Unit 2. The proposed subdivision would not conflict with the operation of the bus stop or the bus route.

Documentation

City of Redding General Plan Transportation Element, 2000

City of Redding General Plan Background Report, 1998

Comprehensive Impact Fee Study by MuniFinacial, May 2000

Redding Area Bus Authority System Map & Route Guide, October 2000

City of Redding Bikeway Plan, December 1998

Summerfield Meadows Traffic Study, prepared by Omni-Means, dated December 26, 2002

Summerfield Meadows Traffic Impact Study, prepared by Omni-Means, dated March 14, 2006

Mitigation

1. The applicant will be conditioned to improve the Eastside Road/Star Drive intersection with a dedicated southbound left-turn lane from Eastside Road onto Star Drive. The improvement will include the widening of pavement on Eastside Road by approximately 10 feet, left-turn pocket channelization and striping, transitions and tapers to existing pavement, utility box and pole location on the west side of Eastside Road, gravel shoulders, and relocation of the Star Drive stop bar and stop sign.
2. The project developer will pay the Redding Citywide Traffic Impact Fee (TIF) as required by the Redding Municipal Code.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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VII. BIOLOGICAL RESOURCES. Would the proposal:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a, b, c, d. The project site is characterized primarily by nonnative grassland and weedy species, since the site was used for agricultural production through the late 1970s. Several large willows, cottonwoods, and valley oaks occupy the north portion of the subdivision site and also line the edge of a low terrace that courses the subdivision site in a northeast to southwest direction, ending at the northerly terminus of Reflection Street. A mature, multi-storied valley oak riparian forest is present at the south boundary of the subdivision site.

A wetland delineation completed for the site in September 1996 revealed that no wetlands or other Waters of the United States are present within the subdivision site. The terrace edge crossing the site with a number of valley oaks was tested in regards to wetland characteristics, and no indicators of hydric soils or indicators of wetland hydrology were identified.

The subdivision site was also surveyed for the presence of special-status plant species and wildlife species in 1996 (ENPLAN) and 2005 (Miriam Green). The only special-status species potentially dependent on the subdivision site is the valley elderberry longhorn beetle (VELB). VELB surveys were conducted in August and September 1996 and April 2005. Nineteen clusters of blue elderberries—the habitat for VELB—were located on the subdivision site in 1996. VELB did not appear to occupy the elderberry clusters. In 2004, the project applicant adjusted the property lines of his proposed subdivision, placing 12 of the 19 elderberry clusters on adjacent properties to the north and south. At the time of the April 2005 survey, only 7 occurrences of elderberry existed on the subdivision property as a result of the property-line adjustments. A letter from the U.S. Fish & Wildlife Service (USFWS) dated July 13, 2005, determined that the elderberry shrubs located within the subdivision site are not likely to be suitable habitat for the Federally listed valley elderberry longhorn beetle. The USFWS determined that the shrubs were located within upland grassland habitat, almost completely surrounded by residential development and isolated from other elderberries and riparian habitat. The USFWS determined that no further action was necessary pursuant to the Endangered Species Act. No significant impacts would occur to special-status species and thus no mitigation would be necessary.

As noted under Section 3, Geology and Soils, and Section 4, Hydrology and Water Quality, the project site is tributary to the Sacramento River by way of a lagoon that adjoins the river. The Sacramento River hosts four special-status fish species: winter-run chinook salmon (Federal endangered), Central Valley steelhead (Federal threatened), Central Valley spring-run chinook salmon (Federal-threatened and State-endangered), and Central Valley fall/late fall run chinook salmon (Federal candidate). As discussed previously under Sections 3 and 4, measures will be provided to minimize potential sediment and soil-erosion activities resulting from construction that could emigrate to the Sacramento River by way of the off-site lagoon and affect the fishery.

e. The City has adopted a Tree Preservation Ordinance (Chapter 18.45 of the Redding Municipal Code) that promotes the conservation of mature, healthy trees in the design of new development. The ordinance recognizes that the preservation of trees will sometimes conflict with normal land development consideration. A tree survey was submitted by the applicant as part of the grading plan for the subdivision proposal. Of the 57 lots proposed for single-family residential development, approximately 21 lots would not be graded, and 36 lots would be graded. Within the area to be graded and within the street alignments and individual house pads, approximately 110 trees, measuring 6 inches or greater in diameter, would be removed. Within the area that would not be graded or used as streets or house pads, approximately 93 trees would be retained. The tree retention on the proposed subdivision is consistent with the City's Tree Preservation Ordinance in that trees outside the development areas would be retained.

f. There are no habitat conservation plans adopted in this area.

Documentation

- City of Redding General Plan EIR, April 19, 2000, SCH #1998072103
- City of Redding Municipal Code 18.45, Tree Preservation Ordinance
- Preliminary Wetland Delineation Report for Summerfield Meadows Subdivision, prepared by ENPLAN, dated September 1996
- Biological Survey Report for Summerfield Meadows Subdivision, prepared by ENPLAN, dated September 1996
- Letter Report for Federally threatened valley elderberry longhorn beetle, prepared by Miriam Green, dated June 14, 2005
- U.S. Fish & Wildlife letter concerning valley elderberry longhorn beetle habitat, dated July 13, 2005
- Tree Removal and Preservation Plan, PACE Civil, Inc., dated September 14, 2005

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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VIII. MINERAL RESOURCES. Would the proposal:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a, b. The project site is not identified in the General Plan as having any known mineral resource value or as being located within any "Critical Mineral Resource Overlay" area.

Documentation

- City of Redding Natural Resources Element, 2000

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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IX. HAZARDS AND HAZARDOUS MATERIALS. Would the proposal:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a, b, c, d. The nature of the project as a low-density, single-family subdivision does not present a significant risk related to hazardous materials or emissions. There are no documented hazardous material sites located on or near the project.

e, f. The project is located outside the established approach/departure clear zones for Redding Municipal Airport and Benton Airpark. The project's land use of low-density residential would not present a safety hazard to people residing in the subdivision. There are no private airstrips in the project vicinity.

g. The project does not involve a use or activity that could interfere with emergency-response or emergency-evacuation plans for the area.

h. The project site has no wildland-fire-hazard potential due to the location of the site in an area surrounded by other residential lots with no open space or steep, vegetated slopes. The City Fire Marshal has reviewed the proposal and has identified project-specific measures, such as the clearing or trimming of highly combustible native vegetation at the northerly portion of the subdivision site adjacent to Lots 32–34, within a distance of 100 feet from the proposed residences. These measures would reduce the potential fire-hazard risk to a level less than significant. Fire hydrants would also be installed as part of the subdivision project as required by the Fire Marshal and as indicated in the conditions of approval on the tentative map.

Documentation

- City of Redding General Plan Health and Safety Element, 2000
- City of Redding General Plan Final Environmental Impact Report, Chapter 8 (Health and Safety)
- City of Redding General Plan Background Report, Chapter 10, Health and Safety Element, 1998
- Memo dated March 10, 2005, from Bruce Becker, Redding Deputy Chief/Fire Marshal

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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X. NOISE. Would the proposal result in:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a, b, c. The project site is not located adjacent to any significant noise-generating roadways or sources of groundborne vibration or groundborne noise. The proposed subdivision of single-family residences would also not result in a substantial permanent increase in ambient noise levels in the project vicinity.

d. During the construction of subdivision improvements, there will be a temporary increase in noise in the project vicinity above existing ambient noise levels. The most noticeable construction noise would be related to grading, utility excavation, and land-clearing activity. The City’s Grading Ordinance (RMC Chapter 16.12.120.H) limits grading-permit-authorized activities to between the hours of 7 a.m. and 7 p.m., Monday through Saturday. No operations are allowed on Sunday. Since the heavy construction work associated with the project is limited in scope and by existing regulation, the anticipated noise impact to neighboring residents is considered less than significant.

e, f. The proposed subdivision site is not located within any of the noise contours of Redding Municipal Airport or Benton Airpark. There are no private airstrips in the vicinity of the project site.

Documentation

- City of Redding General Plan Noise Element, 2000
- Redding Municipal Code Chapter 16.12.120
- City of Redding General Plan Transportation Element, 2000

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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XI. PUBLIC SERVICES.

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

(1) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(3) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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- | | | | | |
|------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| (4) Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| (5) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a (1) & a (2). The City would provide police and fire protection to the project from existing facilities and under existing service levels. The size of the project (57 lots) would not mandate the need for additional police or fire facilities.

a (3). The project is located in the Redding Elementary School District and Shasta Union High School District and would ultimately contribute to the total student enrollment in these districts. However, a school-facility impact (in-lieu) fee exists, as provided under State law, that is paid prior to the issuance of a building permit for each new single-family residence to address school-facility funding necessitated by the effects of growth citywide.

a (4). The project will not overburden existing community parks.

a (5). See discussion under Item 12 (Utilities and Service Systems) below.

Documentation

City of Redding General Plan Public Facilities Element, 2000

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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XII. UTILITIES AND SERVICE SYSTEMS. Would the proposal:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g. Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a. Wastewater generated from the project would be that associated with low-density domestic use (from single-family homes) discharged into the City’s sanitary sewer system, as anticipated by the City’s General Plan. This type and intensity of land use activity does not generate wastewater demands that would exceed treatment requirements of the Regional Water Quality Control Board.
- b. The proposed development does not generate the need for the construction of new water or wastewater treatment facilities. Water and sewer will be provided throughout the subdivision with connections to existing lines on Reflection Street, Seedling Drive, and Sacramento Drive.
- c. Storm-water runoff collected from the project’s storm-drain system would be discharged from the southeast portion of the property into a storm-drain pipe to be 24 inches in diameter, discharging all peak flows directly to a lagoon that leads to the Sacramento River or to the existing storm drain at the north terminus of Reflection Street. Potential impacts associated with the construction, operation, and maintenance of the storm drain are related to soil erosion and sedimentation and are discussed with measures provided under Items 3 and 4 above.
- d. Potable water is available from the City to serve the project, with adequate pressure for domestic use and flows for fire suppression. The demands of the project can be accommodated within the City’s existing water allotments.
- e. As noted, the project will utilize the City’s sanitary sewer system to dispose of wastewater. Adequate sewer capacity is available in the City’s existing system to accommodate the 57 single-family homes that would result from the project.
- f, g. The City provides solid waste disposal (curbside pick-up) service, which homes in the subdivision would use. Adequate capacity is available to serve the needs of the project without need of special accommodation. The City regulates and operates programs that promote the proper disposal of toxic and hazardous materials from households, including those created by the project.

Documentation

- City of Redding General Plan Housing and Public Facilities Elements, 2000
- City of Redding Grading Ordinance (RMC Chapter 16.12)
- City of Redding Standard Specifications, Grading Practices
- Letter from California Regional Water Quality Control Board, dated April 4, 2005
- Water, sewer, and storm-drain atlases, City of Redding Engineering Division
- Preliminary Grading Plan, PACE Civil, Inc., dated September 14, 2005

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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XIII. AESTHETICS. Would the proposal:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a, c. The homes constructed as a result of development of the project would be consistent in height with homes in adjacent neighborhoods and would not obstruct any documented scenic vistas. The proposed subdivision would not represent a significant change to the overall scenic quality of the area.

b. The project site is not located adjacent to a State-designated scenic highway.

d. Use of homes constructed in the subdivision would generate light that is customary for single-family residential neighborhoods. The project alone would not generate substantial light or glare beyond that typically expected from the lighting of homes and property for domestic activities and streetlighting. There would not be an adverse effect on day or nighttime views in the area.

Documentation

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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XIV. CULTURAL RESOURCES. Would the proposal:

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a, b, d. The project site was considered to have a potential for the presence of historic or prehistoric cultural resources due to its location in relation to the Sacramento River. Consequently, an archaeological study was completed for the project by Trudy Vaughan on September 9, 2005. The study, which included a record search and field survey, establishes the following findings:

1. A record search with the Northeast Information Center (NEIC) at CSU Chico, and other sources, indicated that no historic or prehistoric sites have been formally recorded within the project site.
2. During the pedestrian field survey of the project site, no archaeological sites were identified; however, three isolated artifact locations were identified. The isolates were all prehistoric lithic flakes. The isolated occurrences of prehistoric artifacts are not considered significant and do not qualify as potential historic properties under the California Environmental Quality Act.
3. No evidence of significant historic-period sites were documented on the project site.
4. The study concluded that in view of the results of both the record search and field survey, it is reasonable to find that proposed development of the project site would not affect historic or archaeological sites deemed significant pursuant to CEQA Guidelines Section 15064.5.
5. While no significant historic or archaeological features were discovered, the study indicates that its findings are based on an inventory-level surface survey only; and there is always the possibility that significant, unidentified cultural materials could be unearthed during construction. This being the case, it is recommended that a condition be included that documents the potential presence of cultural materials on the site and, if discovered during construction, that work stop and archaeological consultation be obtained immediately to determine the significance of the find.

c. No unique geologic features, fossil-bearing strata, or paleontological sites are known to exist on the project site.

Documentation

- Archaeological Reconnaissance for Summerfield Meadows Project, Trudy Vaughan, dated September 12, 2005
- City of Redding General Plan Background Report, 1998
- City of Redding General Plan Final Environmental Impact Report, 2000

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant	Potentially Significant	Less Than Significant	No
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	Impact	Unless Mitigation Incorporated	Impact	Impact
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XV. RECREATION. Would the proposal:

- | | | | | | |
|----|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. | Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a, b. The nearest park to the proposed site is Creekside Park, an 0.88-acre small neighborhood park at the northwest corner of Mullen Parkway and Creekside Street, approximately 800 feet southwest of the subdivision site. The park has a half-court basketball court, drinking fountain, and playground equipment. Adjoining Creekside Park is approximately 1.5 acres of undeveloped park site that was dedicated to the City with the construction of Summerfield Meadows Subdivision, Unit 1 (32 single-family residential lots). The City may develop the park as an extension of Creekside Park sometime in the future.

The nearest large developed park to the proposed site is Cascade Community Park, located approximately one-half mile to the south and across Girvan Road. Cascade Community Park is a community park comprised of 4 developed acres on a 27.63-acre site at the confluence of the Sacramento River and Olney Creek. The park is developed with a full-court basketball court, playground equipment, drinking fountains, picnic areas, restrooms, a walking trail, a BMX track, and pedestrian access to the Sacramento River. This park is intended to serve area residents on the southwest side of Redding and would not be overburdened by the future residents of the subdivision.

Chapter 17.42 of the City's Subdivision Ordinance, *Park and Recreational Land Dedications and In-Lieu Fees*, requires that as a condition of approval of a tentative map, a subdivider shall either dedicate land or pay a fee in lieu thereof for park or recreational purposes. In accordance with State subdivision law, only projects containing 50 or more lots may be *required* to dedicate land for park development. The City's Community Services Department is not recommending the dedication of parkland for this subdivision because of the proximity of Creekside Park, Cascade Community Park, and the undeveloped park site dedicated with Summerfield Meadows Subdivision, Unit 1. The developer proposes the payment of in-lieu park fees for this Unit 2 of the Summerfield Meadows Subdivision.

Documentation

- City of Redding General Plan Natural Resources, Recreation, and Public Facilities Elements, 2000
- City of Redding Subdivision Ordinance, Chapter 17.42
- City of Redding Parks, Trails, & Open Space Master Plan, 2004
- Memo from Community Services Department, dated March 23, 2005

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVI. AGRICULTURAL RESOURCES. Would the proposal:

- | | | | | | |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Conflict with existing zoning for agricultural use, or a Williamson act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

a, b, c. The project site has been historically used intermittently for dryland agricultural purposes, but has not been in agricultural use since the 1970s. The site is not located within an area of Prime Farmland as identified by the California Department of Conservation's Important Farmland Series Mapping and Monitoring Program. The past use of the property does not represent consistent prime suitability for agricultural use; therefore, development of the property would not result in a significant impact to agricultural resources.

Documentation

- City of Redding General Plan Natural Resources Element, 2000
- City of Redding General Plan Background Report, Chapter 9.4: Agricultural Lands
- United States Department of Agriculture, Soil Conservation Service and Forest Service, Soil Survey of Shasta County Area, California, August 1974

Mitigation

None necessary

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVII. MANDATORY FINDINGS OF SIGNIFICANCE.

- | | | | | |
|---|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| <p>a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| <p>c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Discussion

- a. The project does not have the potential to degrade wildlife habitat or eliminate important examples of California prehistory or history.
- b. As discussed in Item 1, the project will contribute to traffic on the Star/Sacramento Drive street section, and contribute to existing cumulative land use/neighborhood livability impacts. With the implementation of traffic-calming measures as called out under Item 1, this potential cumulative impact is reduced to a level less than significant. As discussed in Item 5, the project will contribute to regionwide cumulative air quality impacts. However, under policy of the General Plan, application of Standard Mitigation Measures (SMM) will reduce potential impacts from this project to a level less than significant.
- c. The project does not have characteristics which could cause substantial adverse effects on human beings, either directly or indirectly.

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