
**Berriman Ranch
Annexation 10PLN-03, Prezone 10PLN-05,
Planned Development 10PLN-04, and
Tentative Map 10PLN-06**

**Initial Study and
Proposed Negative Declaration**

Prepared by
City of Grass Valley
125 East Main Street
Grass Valley, CA 95949

DATE
June 25, 2010

Proposed **Mitigated Negative Declaration**

In accordance with the California Environmental Quality Act, the City of Grass Valley has conducted an Initial Study to determine whether the following project may have a significant adverse effect on the environment. On the basis of that study, the City finds that the proposed project will not have a significant adverse effect on the environment and will not require the preparation of an Environmental Impact Report. Therefore, this Negative Declaration has been prepared.

LEAD AGENCY: City of Grass Valley
125 East Main Street
Grass Valley, CA. 95945

Contact: Thomas Last, Planning Director
(530) 274-4711

PROJECT APPLICANT: SCO Planning and Engineering
140 Litton Drive, Suite 240
Grass Valley, CA 95945
Contact: Rob Wood

PROJECT LOCATION: The 121-acre site is located west of Taylorville Road and east of the Gazebos and Carriage House residential projects (APN 22-140-03 and 22-160-03). The property is located in the County, with the northern property line and portions of the western property lines abutting the City limits.

PROJECT DESCRIPTION: The project consists of the following four applications:

1. An annexation of the entire 121 acres. This includes an amendment to the Sphere of Influence time horizon from 2016-2020 to 2006-2010.
2. A rezoning of the land from the County's R2, C2, and RA 1.5 zoning districts to the City's RE (Estate Residential) zoning district. The RE zoning district is consistent with the City's General Plan Urban Estate Density residential land use designation, which is applied to this property.
3. A tentative map for 30 single-family residential lots on approximately 10 acres located at the northwest corner of the property. The proposed lots range in size from 5,102 to 14,315 square feet. The 10-acre development area includes three common lots (A, B, and C). Lots A and B include landscaped areas, picnic area, benches, raised garden beds, and a small orchard. Lot C includes a buffer area between the homes and the Gazebos development and the commercial shopping center to the north, and includes a 10-foot wide paved path that provides access to the Kmart shopping center.
4. A planned development to allow clustering of the homes, and the reduction in lot sizes and setback standards. The building plans show all the homes as one-story in height with two-car garages.

The remaining 111 acres are not planned for development; however, the proposed zoning would allow a potential 91 additional homes, which is consistent with the City's 2020 General Plan. The proposal includes an extension of Picadilly Lane to the edge of the development, with a loop road providing access to the homes. A 20-foot wide emergency access road will extend from the end of Picadilly Lane to Taylorville Road. A proposed retention pond for storm drainage is shown on the south side of Picadilly Lane.

Since the applicant proposes to develop only 10 acres of the site, this environmental document provides a more detailed analysis of the potential impacts to that area; however, since no development is proposed on the remaining 111 acres, this document considers the potential impacts to the remainder of the property at a program level. This approach requires some degree of forecasting, while avoiding a speculative evaluation of the potential impacts. The applicant has submitted a future opportunity constraints assessment map which identifies potential development pods within the remaining 111 acres. These development pods are located in areas that avoid site constraints such as wetlands, riparian areas, landmark oaks, slopes greater than 30%, cultural resources, and potential hazardous areas.

REVIEW PERIOD: June 28 to July 28, 2010

**CITY OF GRASS VALLEY
INITIAL STUDY ENVIRONMENTAL CHECKLIST**

1. **Application Number(s):** Annexation 10PLN-03, Prezone 10PLN-05, Planned Development 10PLN-04, and Tentative Map 10PLN-06
2. **Applicant's/Representative's Name and Address:** SCO Planning and Engineering
140 Litton Drive, Suite 240
Grass Valley, CA 95945
3. **Lead Agency Name and Address:** City of Grass Valley, Community Development Department
125 East Main Street
Grass Valley, CA 95949
4. **Project Description:** The project consists of the following four applications:
 1. An annexation of the entire 121 acres. This includes an amendment to the Sphere of Influence time horizon from 2016-2020 to 2006-2010.
 2. A rezoning of the land from the County's R2, C2, and RA 1.5 zoning districts to the City's RE (Estate Residential) zoning district. The RE zoning district is consistent with the City's General Plan Urban Estate Density residential land use designation, which is applied to this property.
 3. A tentative map for 30 single-family residential lots on approximately 10 acres located at the northwest corner of the property. The proposed lots range in size from 5,102 to 14,315 square feet. The 10-acre development area includes three common lots (A, B, and C). Lots A and B include landscaped areas, picnic area, benches, raised garden beds, and a small orchard. Lot C includes a buffer area between the homes and the Gazebos development and the commercial shopping center to the north, and includes a 10-foot wide paved path that provides access to the Kmart shopping center.
 4. A planned development to allow clustering of the homes, and the reduction in lot sizes and setback standards. The building plans show all the homes as one-story in height with two-car garages.

The remaining 111 acres are not planned for development; however, the proposed zoning would allow a potential 91 additional homes, which is consistent with the City's 2020 General Plan. The proposal includes an extension of Picadilly Lane to the edge of the development, with a loop road providing access to the homes. A 20-foot wide emergency access road will extend from the end of Picadilly Lane to Taylorville Road. A proposed retention pond for storm drainage is shown on the south side of Picadilly Lane.
5. **Project Location:** The 121-acre site is located west of Taylorville Road and east of the Gazebos and Carriage House residential projects (APN 22-140-03 and 22-160-03). The property is located in the County, with the northern property line and portions of the western property lines abutting the City limits.
6. **General Plan Designation:** Urban Estate Density
7. **Zoning:** Proposed RE (Residential Estate)
8. **Other public agencies whose approval is, or may be, required (e.g. permits, financing approval, or participation agreement):** Northern Sierra Air Quality Management District, Nevada County Environmental Health Department, United States Army Corps of Engineers, Regional Water Quality Control Board, California Department of Fish and Game.

DETERMINATION

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 revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to the earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

Printed Name _____

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be significantly affected by this project as indicated by the checklist in the following sections:

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Agriculture and Forest Resources |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology / Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | |
| <input checked="" type="checkbox"/> Hydrology/Water Resources | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance | | |

CEQA GUIDANCE

Appendix I of the State CEQA Guidelines was used in answering the checklist questions:

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

Identification of the potential for residual significant adverse environmental impacts would trigger the need for preparation of an EIR. For issue areas in which no significant adverse impact would result or impacts would be reduced to a less-than-significant level by mitigation, further analysis is not required.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS				
Would the proposal:				
a. Have a substantial adverse effect on a scenic vista?			X	
b. Substantially damage scenic resources, including, but not limited to, tree, rock outcroppings, and historic buildings within a scenic state highway?			X	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in this area?			X	

Discussion of Checklist Answers:

The project site consists of rolling to steep terrain, generally draining towards the southwest. Wolf Creek borders the southwest portion of property. This is a Ponderosa pine woodland and forest area dominated by ponderosa pines, incense cedars, and black oaks. The property also contains annual grasslands, with several wetland and riparian habitats. The property has one house, several farm buildings, and remnants of an orchard and other agricultural activities. Highway 49 is located just east of the project site. Urban residential development is located to the northwest, and rural residential uses are located to the south. A commercial shopping center and industrial uses exist to the north.

The City of Grass Valley's General Plan includes objectives for the protection of major views in the planning area, including hillsides, ridgelines and forested areas. The General Plan's Conservation/Open Space Element includes a discussion about the 1972 and 1982 General Plans establishing Highway 49/20 as a scenic highway. The 1972 General Plan proposed policies prohibiting billboards and off-premise signs, and encouraged landscaping and tree planting along scenic corridors. The 1982 General Plan reinforced those policies and efforts through new policies designed to enhance City "entryways". The plan also identified the need to address viewsheds, specifically, prominent hills and ridgelines. The 2020 General Plan states the City has implemented some aspects of scenic highway/entryway and hillside/ridgeline provisions through the zoning and design guidelines. However, the adopted policies focus on further implementing viewshed protection measures. Caltrans has noted that the Highway 49/20 corridor is on the eligibility list to become a State Scenic Highway. The entire length of Highway 49, from Madera to Sierra Counties, is on the "eligibility list", with only a small section in Sierra County being "officially designated". To become "officially designated" as a State Scenic Highway, each local jurisdiction must conduct a substantial amount of research, adopt a scenic corridor protection program, and comply with the State's process and obtain the State's approval for the designation.

The proposed development area will require grading to accommodate the 30 homes and road network. This will result in the need to remove approximately 110 trees with a diameter of 8" or greater. The applicant estimates the removal of approximately 110 trees and preservation of 115 trees. This represents a preservation rate of approximately 50%, which exceeds the City's goal of 20% tree retention. Additionally, the plan does provide for the protection of the trees around the perimeter of the houses, which will provide screening and preserve much of the forested environment as viewed from offsite. The proposed project will also result in the new light sources created from the street lights and security lights on the new homes. The applicant's plans show light fixtures will be shielded and designed to be directed downwards. This is consistent with the City's lighting standards.

Development on the remaining portions of the property could impact the visual character of the existing site, primarily due to the potential loss of trees. However, until the City receives development plans for the remaining property, it is speculative to determine the level of potential impact on aesthetics. The applicant's Future Opportunity and Constraints Assessment Map shows several potential building areas (pods) and large areas of open space. The two areas with the greatest potential to create a visual impact, as viewed from Highway 49, are located at the western end of the project site. These pods can be screened with appropriate site planning and by

planning and by utilizing and preserving the existing hills and trees at the edge of the property. The northern pod, where the emergency access road connects to Taylorville Road, is screened from a small hill adjacent to Highway 49. The southern pod also contains a large hill. If development takes place on the western side of the hill, the hill and trees will provide a buffer and screen from Highway 49. There are also opportunities to retain and plant additional trees along Taylorville Road and the Highway 49 frontage. These measures will reduce potential visual impacts to a level that is less than significant.

Conclusion:

The property is not designated as a scenic vista, and with mitigation, will not substantially degrade the visual character of the area. Additionally, the property is not within a scenic highway corridor. The proposed lighting plan demonstrates the project will not have a significant adverse impact on aesthetics if it is developed as planned.

Mitigation:

1. Any future development on the remaining 111 acres shall include measures that retain and/or replant native trees along Taylorville Road and the western edge of the property adjacent to Highway 49. The project shall incorporate a minimum 100 foot "No Development Zone" from the Highway 49 right-of-way.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>2. AIR QUALITY</p> <p>Where available, the significance criteria established by the applicable air quality management or pollution control district may be relied upon to make the following determinations.</p> <p>Would the project:</p>				
<p>a. Conflict with or obstruct implementation of the applicable air quality plan?</p>				X
<p>b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</p>		X		
<p>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)?</p>		X		
<p>d. Expose sensitive receptors to substantial pollutant concentrations?</p>				X
<p>e. Create objectionable odors affecting a substantial number of people?</p>				X

Discussion of Checklist Answers:

The overall air quality in Nevada County is good but two known air quality problems exist, Ozone and Suspended Particulate Matter (PM-10). Nevada County is considered to be "non-attainment" for both pollutants. PM-10 in Grass Valley meets federal ambient ozone standards but exceeds more stringent State standards in the winter, primarily due to smoke created from wood stoves and fireplaces. Violations in the summer months have been noted during forest fires or periods of open burning. The PM-10 is usually associated with burning and dust generated during construction.

The project will require excavation work to accommodate the building pads and roadways. Dust generated by grading and construction activities could have a potential to create short-term air quality impacts. In the long-term, the proposed project will increase local vehicle emissions. The project is located within the Northern Sierra Air Quality Management District (NSAQMD). The NSAQMD has

NSAQMD has adopted standard regulations and mitigation measures for projects that exceed certain air quality threshold levels to address and mitigate both short- and long-term emissions. The NSAQMD threshold levels are divided into three levels (A, B, and C). Depending on which of the tiers the project falls within, the NSAQMD applies that level of mitigation. NSAQMD relies on the air quality program, URBEMIS 2007, version 9.2.4, to estimate criteria pollutants created by a project. Projects that generate 136 tons per day of Reactive Organic Gases (ROG), Oxides of Nitrogen (NOx), or Particulate Matter (PM₁₀) are considered significant impacts. The URBEMIS modeling indicates this project will generate Level A emissions for ROG and PM₁₀, and Level B emissions for NOx. The NOx emissions reach the Level B during construction only. Therefore the applicant is required to meet Level A and B mitigation standards for this project.

The project area is not located near any land uses that may expose future residents to substantial pollution concentrations. The proposed residential uses will not result in any activities that create objectionable odors. There are no sensitive receptors (schools, parks, health care, or care facilities) in the immediate area. The residents to the west could be exposed to construction-related dust. However, the standard dust mitigation measures will reduce this potential impact to a level that is less than significant.

Conclusion:

The project will be required to comply with NSAQMD standard mitigation measures. The project area is not located near any land uses that may expose future residents to substantial pollution concentrations. The proposed residential uses will not result in any activities that create objectionable odors. With the incorporation of the following mitigation measures and compliance with NSAQMD standards, the impacts on air quality are less than significant.

Mitigation:

2. Prior to issuance of a grading permit, the applicant shall submit a Dust Mitigation Plan shall for review and approval by the Northern Sierra Air Quality Management District and City Engineer. Dust mitigation measures shall be implemented in accordance with the approved Dust Mitigation Plan. The dust mitigation plan shall include the following:

- a. The applicant shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
- b. All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent dust from leaving the property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering should occur at least twice daily, with complete site coverage.
- c. All land clearing, grading, earth moving, or excavation activities on the project shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
- d. All inactive portions of the development site shall be covered, seeded, or watered until a suitable cover is established. Alternatively, the applicant shall be responsible for applying City approved non-toxic soil stabilizers (according to manufactures specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours) in accordance with the local grading ordinance.
- e. All areas with vehicle traffic shall be watered or have dust palliative applied as necessary for regular stabilization of dust emissions.
- f. All material transported off-site shall be either sufficiently watered or securely covered to prevent public nuisance.
- g. Paved streets adjacent to the project shall be swept or washed at the end of each day, or as required to remove excessive accumulations of silt and/or mud which may have resulted from activities at the project site.
- h. No burning of waste material or vegetation shall take place on-site unless deemed infeasible by the District. Alternatives to burning include chipping, mulching or converting to biomass.

- 3. Grid power shall be used (as opposed to onsite diesel generators) for job site power needs where feasible during construction.
- 4. Construction activities shall be scheduled to direct traffic flow to off-peak hours as much as practicable.
- 5. No wood burning fireplace shall be installed in any residence. Gas stoves and fire places, or EPA Phase II certified wood burning appliances may be installed.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AGRICULTURE AND FOREST RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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 nonagricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			X	
d. Result in the loss of forest land or conversion of forest land to non-forest use?			X	
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Discussion of Checklist Answers:

According to the California Farmland Mapping and Monitoring Program, the property is classified as "Other Land". The property is not under a Williamson Act contract. Since it is not classified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance, this project will not impact farmland. The County's zoning for this property is for commercial and residential uses and is not designated as a timberland production zone. The City of Grass Valley's General Plan designates this property for estate residential purposes.

Conclusion:

Since the property is not classified as prime farmland and not designated by the City or County for timberland production, impacts associated with agricultural and forest resources are considered less than significant.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. 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?		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?		X		
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?		X		
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native residents or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f. Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Discussion of Checklist Answers:

The project site consists of rolling to steep terrain, generally draining towards the southwest. Wolf Creek borders the southwest portion of property. This is a Ponderosa pine woodland and forest area dominated by ponderosa pines, incense cedars, and black oaks. The property also contains annual grasslands, with several wetland and riparian habitats. The property has one house, several farm buildings, and remnants of an orchard. Highway 49 is located just east of the project site. Urban residential development is located to the northwest, and rural residential uses are located to the south. A commercial shopping center and industrial uses exist to the north. According to the biological survey prepared by EcoSynthesis, the site supports the following biological communities: Ponderosa Pine, Orchard, Orchard/Wetland, Annual Grassland, Montane Hardwood woodland, Foothill Riparian habitat, and Fresh Emergent Wetland.

The biological study notes the property provides suitable habitat for three special-status wildlife species (Foothill yellow-legged frog, Cooper's hawk, Yellow warbler), and three special-status plants (Brandegee's clarkia, Scadden Flat checkerbloom, and brownish beaked rush). This study, and subsequent special-status plant survey, concludes the proposed development avoids the suitable habitat

habitat for the Foothill yellow-legged frog, Yellow warbler, Brandegee's clarkia, brownish beaked rush, and Scadden Flat checkerbloom. Since a large number of trees will be removed, there is a potential the project could impact nesting raptors, including Cooper's hawk. Therefore, a mitigation measure is included to reduce any impacts on these birds.

The project site contains several landmark oak trees and groves, but the project is designed to preserve these areas. The proposed development of the thirty (30) homes will preserve approximately 50 percent of the trees, which exceeds the City's goal of 20 percent retention. The project could impact the movement of deer and other small wildlife; however, the plan shows clusters of potential future development with large open spaces and corridors to allow for the unobstructed movement of wildlife species. The site does not contain, nor is it near, any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

There are no water courses or wetland features in the area proposed for the thirty homes. However, development of the emergency access road and development on the rest of the site could impact wetlands and riparian areas. No development is proposed within 250 feet from Wolf Creek. However, future development will likely result in the need to fill and/or disturb wetland features associated with two intermittent tributaries. In order to develop on less sensitive areas of the property it is necessary to create road crossings over these tributaries. The biological study includes a mitigation, which will reduce this impact to a level that is less than significant. The biological study notes if future roads are designed to cross at the narrowest parts, and the project will disturb less than ½ acres of wetlands. Since the project could impact less than ½ acre of wetlands, the applicant will need to obtain a Nationwide Permit from the U.S. Army Corps of Engineers and a 401 permit from the Regional Water Quality Control Board. However, should the roads be designed to avoid the wetlands (e.g. by spanning the wetlands), no impact will occur and the applicant will not need to obtain said permits.

Conclusion:

The project has the potential to create a significant impact on one special-status species and fill wetland features. With the incorporation of the following mitigation measures, these impacts will be less than significant.

Mitigation:

6. Future development on the remaining 111 acres shall occur within the areas identified as potential future building areas so as to avoid and/or minimize impacts on the sensitive habitats as shown on the applicant's Future Opportunity and Constraints Assessment Map.

7. If tree removal takes place within the nesting season for Cooper's hawk or yellow warbler (between April 1 and July 31), the applicant, prior to issuance of a tree removal permit, shall have a qualified biologist conduct field surveys for active nests. The survey should be conducted during this time frame to determine if nests are present, if juveniles are seen or heard begging, and if courtship behaviors are observed. If no raptor nests are detected, construction activities may proceed with no further mitigation. If active raptor nests are identified within 500 feet of the proposed project, they will be mapped, and a report stating the survey results will be submitted to the Grass Valley Planning Department prior to grading activities. The appropriate buffer zones shall be established in consultation with CDFG. Construction activities shall be prohibited within this buffer zone until the end of the nesting season (April through July) or until the young have fledged. A qualified biologist shall monitor the nest site(s) to determine when the young have fledged and submit weekly reports to CDFG throughout the nesting season.

8. Prior to construction of the emergency access road or development on the remaining 111 acres, the applicant shall complete a wetlands delineation. If the wetlands cannot be avoided through project design, the applicant shall submit pre-construction notification for use of a nationwide Section 404 permit or permits from the U.S. Army Corps of Engineers. The applicant shall also obtain Section 401 water quality certification from the Regional Water Quality Control Board and a Section 1602 streambed alteration agreement from the Department of Fish and Game. The project shall implement mitigation as approved by the agencies. Such mitigation actions shall include appropriate temporary and permanent BMP's to protect water quality, as well as compensatory mitigation for the loss of habitat by means of payment of in-lieu fees, construction or enhancement of habitat, or a combination of these actions.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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5. CULTURAL RESOURCES				
Would the proposal:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			X	
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?		X		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d. Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion of Checklist Answers:

The project area is located within the ethnographic territory of the Nisenan, also referred to as Southern Maidu. Much of the Grass Valley area was then subjected to historic mining, ranching and logging activities. The City's General Plan identifies portions of the property within the high to moderate cultural sensitivity categories. As noted in the archaeological survey prepared for this site, the property has been subjected to past farming activities, which included graded roads, cleared fields, fences and irrigation features, a residence and several farm buildings. There are also several mine shafts located on the property. The survey identified one prehistoric site consisting of bedrock mortars, lithic scatter, and midden. These resources are located within the landmark oak grove south of the house. The applicant's Future Opportunity and Constraints Assessment Map shows this area as being retained. The survey also evaluated the residence, which was constructed around 1928, and related farm buildings as it relates to CEQA's significance criteria. The survey concludes the buildings were not significant under any relevant evaluative criteria.

The CEQA guidelines does require, as part of the objectives, criteria and procedures required by section 21082 of Public Resources Code, a lead agency should make provisions if historical or unique archaeological resources accidentally discovered during construction. A mitigation measure has been added should cultural resources be discovered during construction consistent with the cultural and historic element of the General Plan.

Conclusion:

Impacts associated with cultural resources are considered less than significant.

Mitigation:

9. If grading or other construction operations unearth archeological or historical artifacts or resources, construction activities shall cease. The Planning Department shall be notified of the extent and location of discovered materials so that they may be recorded by a qualified archaeologist. Disposition of artifacts shall comply with state and federal laws. A note of this requirement shall be clearly delineated on the grading and building plans of the project. If human burial or scattered human remains are inadvertently encountered during construction activities, the applicant shall inform the County Coroner pursuant to state law.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS				
Would the project:				
a. Expose people or structure to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i. Rupture of a known earthquake fault, as delineated in 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.			X	
ii. Strong seismic ground shaking?			X	
iii. Seismic-related ground failure, including liquefaction?				X
iv. Landslides?				X
b. Result in substantial soil erosion or loss of topsoil?		X		
c. Be located on a geologic unit or soil that is unstable, or that would become unstable because of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
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?			X	
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?				X

Discussion of Checklist Answers:

The Soil Survey of Nevada County identifies a majority of the soils on the project site as Musick sandy loam with some Musick-Rock outcrop along Wolf Creek. These are well drained soils with medium to rapid runoff, a moderate to high erosion hazard potential, and moderately slow permeability. The north, east, northwest, and central portions of the site have grades between 5 and 15%. The southwestern and southern portions contain slopes ranging from 20 to 40%. The proposed project avoids development on any of the steeper slopes. The City of Grass Valley is located in the low intensity zone for earthquake severity. The application material includes a Preliminary Geotechnical Report dated December 13, 2006. The preliminary geotechnical report includes several recommended conditions for this project. These are standard conditions that the applicant will need to comply with. Therefore the following mitigation will reduce any potential geologic impacts to levels that are less than significant. The project will be required to comply with the City's erosion control standards and Storm Water Management program during construction.

Conclusion:

With the incorporation of the following mitigation measure, impacts associated with geology and geologic hazards are considered less than significant.

Mitigation:

10. Prior to issuance of a grading permit, a detailed engineering plan shall be prepared that incorporates recommendations identified in the Preliminary Geotechnical Report dated December 13, 2006. Geotechnical measures shall be incorporated into project grading and construction. A Geotechnical Engineer shall review the grading for implementation of those recommendations and design criteria.

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		X		
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion of Checklist Answers:

Greenhouse gases (GHG) include gases that can affect the earth's surface temperature. The natural process through which heat is retained in the troposphere is called the greenhouse effect. The greenhouse effect traps heat in the troposphere through process of absorbing different levels of radiation. GHG are effective in absorbing radiation which would otherwise escape back to space. Therefore, the greater the amount of radiation absorbed, the greater the warming potential of the atmosphere. GHG are created through natural process and/or industrial processes. These gases include water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), Perfluorocarbons (PFcs), and sulfur hexafluoride (SF₆).

The United States Environmental Protection Agency (EPA) identifies the following four primary constituents that represent the greenhouse gas emissions of most importance:

- Carbon Dioxide (CO₂): CO₂ is primarily generated by the burning of fossil fuels. Other sources include burning of solid waste and wood products.
- Methane (CH₄): CH₄ is emitted from the incomplete combustion of forest fires, landfills, livestock and animal land uses, and leaks in natural gas lines.
- Nitrous Oxide (N₂O): N₂O is produced by agricultural and industrial activities.
- Fluorinated Gases (HFCs and PFCs): These gases are emitted from industrial activities and refrigerants used in both stationary refrigeration and mobile air conditioning.

The US EPA estimates nearly 85% of the nation's GHG emissions are comprised of carbon dioxide. For most nonindustrial development projects, motor vehicles make up the bulk of GHG emissions. According to the California Air Resources Board, the primary GHG emitted by vehicles are CO₂, CH₄, N₂O, and HFCs.

Since 2005, the California legislator has adopted several bills, and the Governor has signed several Executive Orders, in response to the impacts related to global warming. Assembly Bill 32 states global warming poses a serious threat to California and directs the Air Resources Board to develop and adopt regulations that reduce GHG emissions to 1990 levels by the year 2020. Senate Bill 97 requires an assessment of a project's GHG emissions as part of the CEQA process. SB 97 also required the Office of Planning and Research to develop guidelines to analyze GHG emissions.

Neither the NSAQMD, nor any air district in the state, have adopted thresholds of significance for GHG emissions. Additionally, CARB has not yet adopted any tools to measure the impact of a project on global warming. Due to the nature of global climate change, it is not anticipated that a single project would have substantial impact on the global climate change. Although it is possible to estimate a project's CO₂ emissions, it is not possible to determine whether or how an individual project's relatively small incremental contribution might translate into physical effects on the environment. Specifically, the URBEMIS model indicates this project would emit approximately 1,976 metric tons of CO₂ annually. This number does not consider the project design and mitigation measures which will reduce this number. The project's emissions represent less than 0.0000037 percent of the projected statewide GHG emissions in the year 2010. Given the complex interactions between various global and regional-scale physical, chemical, atmospheric, terrestrial, and aquatic systems, it is not possible to determine whether the project's CO₂ emissions would result in any altered conditions. Therefore, an individual project's GHG emissions must be considered in the global and statewide context. This requires GHG emissions to be considered in a cumulative context.

Even though we are unable to quantify the level of impact a project may have on global climate changes, an applicant and the City can take steps to reduce GHG emissions on a project by project basis. The applicant has incorporated a number of energy efficient measures and designed the project to include many smart growth principles. Within the Project Summary document, the applicant also identifies other measures which will reduce GHG emissions. These measures are consistent with the California State Attorney General's Office, which provides guidance on methods for reducing GHG emissions. The Attorney General's document titled "Addressing Climate Change at the Project Level" includes recommendations for energy efficient buildings, appliances, heating and cooling systems, passive solar, energy efficient lighting, water conservation and landscaping, and many other design and operational measures that can reduce GHG emissions. Specific examples this project incorporates include a site design providing good southern exposure for most of the buildings, clustering buildings to reduce impacts on the land and preserve trees and native vegetation, and providing a trail system for easy walking access to commercial services. Furthermore, Section 10 of this study discusses the City's General Plan and Development Code policies and standards that support the AG's guidelines.

Conclusion:

Given there are no state, regional, or local threshold to objectively determine the level of impact created by an individual project, and that this project would generate less than a 0.0000037 percent unmitigated increase in GHG emissions, the project is expected to result in an impact that is less than significant. Additionally, some air districts have estimated a CO₂ reduction factor for specific project design features and mitigation measures. With the project design and the following mitigation measures, the City expects at least a 10% reduction in GHG emissions.

Mitigation:

11. All homes shall include energy efficient indoor and outdoor lighting and light colored "cool" roofs.
12. The applicant shall add, and/or modify, the following bullet points into the Chapter titled Berriman Ranch, Greenhouse Gas Mitigations from the Berriman Ranch Project Summary document, date stamped March 3, 2010:
 - a. Third bullet page 2 - At least 75% of the landscaping within the open space and common areas shall include native and/or drought tolerant landscaping. All trees along the southern exposure of homes shall be deciduous.
 - b. Second bullet page 3 - Size & orientation of windows & doors shall be designed to take advantage of sun, shade & wind conditions to minimize the home's requirement on mechanical heating and cooling systems. Site buildings to take advantage of solar orientation. Proper building orientation facilitates the use of natural daylight.
 - c. Third bullet page 3 - The CC&R's shall specify all homes will be provided with recycling and greenwaste containers provided by Waste Management or other provider of solid waste disposal.
 - d. Fifth bullet page 3 - Incorporate Natural Cooling by utilizing shading from tree canopies (for east & west facing glass), window overhangs and awnings and radiant heat-reflective barriers installed in attic spaces. Use deep window overhangs and/or trellises primarily on south and west facing glass to provide a balance between summer cooling and winter heating through solar gain. Use landscaping to shade east and west-facing windows. Any combination of natural cooling techniques can be used to reduce overheating in homes, reduce the need for air conditioning and reduce energy.
 - e. Seventh bullet page 3 - Provide a minimum 15% of the homes with Pre-Plumbing for Solar Water Heating. Insulated copper pipes may be pre-installed from the attic to a hot water closet or mechanical room for future solar installation. This option allows the homeowner to install an active solar system at a later date. Provide south-facing roof area for collectors and access for piping to a mechanical room.
 - f. Tenth bullet page 3 - All homes shall install Energy Star Certified Appliances. At a minimum, the following appliances are required to be Energy Star rated: dishwashers, refrigerator & washers/dryers. Energy Star heating and cooling equipment such as air conditioners, furnaces, boilers, heat-pumps and thermostats are also encouraged.
 - g. Eleventh bullet page 3 - All windows shall be Energy Star rated.
 - h. Twelfth bullet page 3 - Upgrade insulation to exceed California Title 24 requirements. Preference should be given to loose and spray cellulose insulation products that are made out of 100% recycled newspaper and that are treated with borates for fire and insect resistance.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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8. HAZARDS AND HAZARDOUS MATERIAL				
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?		X		
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
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?				X
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?				X
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?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
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?			X	

Discussion of Checklist Answers:

The proposed residential project does not use hazardous materials. The property is not listed as a hazardous materials site. There are no school sites within ¼ mile of the project site. The Nevada County Airport is located to the northeast of the property; however, the project site is not located within the flight path or approach zone. The project will not physically interfere with an adopted emergency response plan or emergency evacuation plan. The property contains significant vegetation, which could expose people and structures to wildland fire hazards. The project will be required to reduce ladder fuels and dead vegetation within the undeveloped portions of the site as part of the standard Fire Department requirements. Holdredge and Kull prepared a Phase I Environmental Site Assessment and soil characterization on the property. This assessment identified several remnants of placer and hard rock mining, and noted arsenic, lead, and mercury concentrations within the spoils. However, these concentrations are within the range of regional background concentrations and therefore not likely to pose a significant health risk. Furthermore, the spoil areas are located outside the proposed 30 housing units and potential future building areas. The assessment also identified a large area in the central portion of the site containing a layer of white sediment. The subsequent soil testing noted concentrations of arsenic and mercury that exceed site and regional background concentrations; therefore, presenting a potential health risk in the case of ingestion, dermal contact, or

dermal contact, or inhalation of dust. The proposed 30 homes are not located within the white sediment area; however, portions of the potential future development areas would be in this area.

Conclusion

With the inclusion of the following mitigation measures, the impacts associated with hazards and hazardous materials are considered less than significant.

Mitigation:

13. Any proposed development plans on the remaining property (Potential Future Building Areas) shall either: 1) avoid development within the white sediment area, or 2) the applicant shall submit adequate information, as part of a subdivision map, that the soils within the areas of potential development can be safely removed. Prior to issuance of grading permit, the applicant shall submit a work plan and obtain a permit from the Nevada County Environmental Health Department and/or the Department of Toxic Substance Control for the excavation, transportation, and disposal of the arsenic- and lead-affected soils. The City shall be provided with a copy of the approved permit prior to issuance of grading permits.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HYDROLOGY AND WATER QUALITY Would the project:				
a. Violate any water quality standards or waste discharge requirements?			X	
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 pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
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?			X	
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?			X	
f. Otherwise substantially degrade water quality?			X	

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				X
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
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?				X

Discussion of Checklist Answers:

The project site, as with a majority of the City, is located within the Wolf Creek Drainage Basin. Wolf Creek is on the west side of the project site. The property also has two intermittent tributaries and several wetland features. There are no water courses or wetland features in the area proposed for the thirty homes. However, development of the emergency access road and development on the remaining portions of the site could impact wetlands and riparian areas. No development is proposed within 250 feet from Wolf Creek. However, future development will likely result in the need to fill and/or disturb wetland features associated with two intermittent tributaries. In order to develop on less sensitive areas of the property it is necessary to create road crossings over these tributaries.

The FIRM map produced by the Federal Emergency Management Agency identifies the western portion of the project site, along Wolf Creek, as being located in the 100-year floodplain. However, no development is proposed near the floodplain. The project will not utilize ground water and therefore should not impact the flow, quality, or loss of ground water. The project will result require a significant amount of grading and the addition of new impervious surfaces to accommodate the proposed development. The project proposes to collect all storm water runoff and divert it to a retention pond in the southeast side of the 30-lot development. As noted in the preliminary drainage report, the storm water retention facilities would be designed so as to maintain or be reduced below pre-development storm water runoff. Since the applicant proposes a retention pond, the project could result in a beneficial impact by increasing ground water recharge. A Notice of Intent will be required for this project. The runoff from the site may contain grease, oil and other petroleum by-product, as well as other sediments that may have the potential of impacting the Wolf Creek watershed. The City will require grease, oil and other petroleum by-product separators to be installed at the drainage inlets to prevent the pollutants from entering the storm water detention area and Wolf Creek. The project may have short term impacts associated with sediment and run off during grading and construction. The developer of the property will be required to incorporate and implement "Best Management Practices" (BMP's) during the construction phases of the development.

Conclusion:

With the inclusion of the City's standard conditions for storm water management, impacts associated with hydrology and water quality are considered less than significant.

Mitigation:

None required

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
10. LAND USE PLANNING Would the project:				
a. Physically divide an established community?				X
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 Land Use Code) adopted for the purpose of avoiding or mitigating an environmental effect?			X	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
d. Affect agricultural resources or operations (e.g. impacts to soils or farmland from incompatible uses)?			X	

Discussion of Checklist Answers:

The project site is currently located within the unincorporated area of Nevada County. The 121 acre site is located adjacent to the City of Grass Valley city limits and it is within the City's Sphere of Influence. The project includes an application to prezone the land from the County's R2, C2, and RA 1.5 zoning districts to the City's RE (Estate Residential) zoning district. The RE zoning district is consistent with the City's General Plan Urban Estate Density residential land use designation, which is applied to this property. The proposal represents a logical, and planned for, expansion of the City limits and will not therefore divide an established community. The area is not near, nor subject to, any habitat conservation plan or natural community conservation plan. Even though portions of the site have been used for agricultural purposes, the land does not contain prime soils nor is it near any farming area. Listed below are applicable General Plan goals and policies related to the avoidance of, or mitigation of, environmental effects, and references to key sections in the Development Code:

Land Use Element:

- 12-LUP permit increases in density (clustering) on portions of development sites while maintaining overall density.
- 24-LUP On large parcels, encourage clustering of residential units on the most developable portions of the site in order to reduce infrastructure and other housing-related construction costs.
- 25-LUP Utilize clustering and other land use techniques to protect environmentally sensitive resources, such as heritage trees and wetlands.

Circulation Element:

- 5-CO Convenient, safe and functional facilities for pedestrians, bicyclists, and equestrians.
- 10-CO Protection of stream courses, riparian areas, and other natural features.

Conservation/Open Space Element:

- 1-COSG Provide and balance between development and the natural environment, protecting and properly utilizing Grass Valley's sensitive environmental areas/features, natural resource and open space lands. COSO objectives 1, 2, 3, 4, 5, and 6-COSO include statements for minimizing impacts to sensitive and natural resources.
- 2-COSG Protect, enhance and restore hydrologic features, including stream corridors, flood plains, wetlands, and riparian zones.
- 3-COSG Ensure the protection of Grass Valley's trees and forested areas.
- 6-COSG Assure compliance with and understanding of air and water quality regulations and standards.
- 3-COSP Encourage clustering, density averaging, and other techniques in larger-scale new developments, as a means of preserving open space and natural systems.
- 5-COSP Carefully regulate development on steep slopes.

Safety Element:

- 6-SP Incorporate fire hazard reduction considerations into land use plan/patterns, both public and private.
- 4-SI encourage continuity and linkages within the circulation system. Require future developments to provide multiple ingress/egress points, to facilitate emergency vehicle access and mobility, and to facilitate emergency evacuation movements.
- 8-SI require new developments to utilize on-site storm water detention techniques.

Community Design Element:

15-CDP Provide internal pedestrian and bicycle connections and connections to the broader planning area in all major new development.

Besides the development standards for the RE Zoning District, the Grass Valley Development Code includes several other chapters that apply to this project. Chapter 17.34 contains standards for landscaping and irrigation systems. This Chapter includes specific requirements for solar access, use of native vegetation, and water-efficient irrigation systems. Chapter 17.50 includes provisions for Creek and Riparian Resource Protection. Specifically, the code requires a 100' setback from Wolf Creek. Chapter 17.62 includes standards for grading and erosion control. This project is designed to meet these standards.

Conclusion:

In response to the General Plan goals, objectives, and policies related to avoiding or mitigating environmental effects, and the key sections in the Development Code, the project is designed to comply with these measures. The proposed development of the 30 homes are clustered in an area that avoids sensitive habitats, steep slopes, and other site constraints, and the applicant's Future Opportunity and Constraints Assessment Map shows several potential building areas (pods) that allow clustering to avoid sensitive habitats. Therefore, impacts associated with land use and planning are considered less than significant.

Mitigation:

No mitigation is required for the land use section.

Issues	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
11. MINERAL RESOURCES.				
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
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?				X

Discussion of Checklist Answers:

The General Plan Mineral Management Element states a good portion of the City is classified as having significant mineral deposits; but it also notes there is limited opportunity to mine these areas because of the existing incompatible urban development. Since this property is surrounded by development on three sides, including residential homes to the west and south, above ground mining in this area would not be compatible. Additionally, this property is not located in one of the two areas identified in the Mineral Management Element as being targeted for mining conservation.

Conclusions

Impacts associated with mineral resources are considered less than significant. No mitigation is required.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
12. NOISE. Would the project 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?		X		
b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?			X	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
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?				X
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?				X

Discussion of Checklist Answers:

To prevent undue noise exposure to its citizens, the General Plan establishes maximum allowable noise levels for different types of land uses. The project site is primarily vacant, but does contain a house and several farm buildings. Surrounding uses include a commercial center to the north and residential uses to the west and south. Highway 49, located to the east, represents the only significant noise generating source in the area. The loading docks at the rear of the shopping center to the north can also create noise impacts on residents. This project will create temporary noise during construction to accommodate site grading and building activities. The City has established hours for construction which will minimize the neighbors expose to the construction noise. Once completed, the project can be expected to generate traffic and other common residential related noise. The project site is not located within an airport land use plan or within two miles of a public or private airport.

The Noise Element states the maximum noise expose for residential land uses as being 60dB for outdoor activities and 45 dB for interior spaces. The Noise Element notes loading docks are used three to four hours a day and are not a major noise source since the 60dB L_{dn} contour is located approximately 20 feet from the loading dock or service road. Furthermore, the proposed homes would be located at least 25 feet below the service road and there is a small berm, which buffers a portion of the loading area from the new homes. The City's General Plan EIR shows the 60 dB noise contour for Highway 49 at about 444 feet parallel from the highway. The General Plan EIR year 2020 projections for the 60dB contour extend to 574 feet from Highway 49. The proposed 30 homes are approximately 600 feet from the highway. A small portion of the outdoor activity area for the closest of the 30 residential lots, lot 25, appears to encroach into this contour. In general, noise barriers such as solid walls and fences can reduce noise levels by over 5dB. Since the plans include a six foot tall wall or fence at the property line, the noise impacts on lot 25 will be reduced to a level that is less than significant. While portions of the potential future development areas are within both the existing and projected 60 dB noise

contours, there are no plans for building locations to evaluate potential impacts. Since building location (setbacks), orientation, construction techniques, barriers, and the existing hills and topography can play a significant role in reducing the noise exposure, it is speculative to assume a significant noise impact to potential future residences in the remaining area. However, since there is a potential for an impact, the mitigation measure listed below will ensure future residents will not be exposed to a significant impact.

Conclusion:

With the following mitigation measure, impacts associated with noise are considered less than significant.

Mitigation:

14. The applicant shall submit an acoustical analysis for any subdivision map within 600 feet from Highway 49. If the acoustic analysis shows the outdoor activity area within the 60dB or greater, the applicant shall mitigate the impact to a level that is less than 60dB. Some specific mitigation includes, but not limited to: 1) a redesign or reorientation of the lots (which allows the home to create a barrier between the outdoor area and noise source), 2) the addition of solid fencing or wall, 3) an increased setback, or 4) a redesign of the project to utilize the existing hills and vegetation to reduce the impact to an acceptable level.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
13. POPULATION AND HOUSING. Would the project:				
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)?			X	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Discussion of Checklist Answers:

The project includes a proposal to add new homes to the area; however, residential uses are planned for this property in the City's 2020 General Plan, and therefore would not affect regional or local population or housing projections. The project includes the development of potentially 121 single family residential units. This density is consistent with the City's standards. The project will not displace any existing housing or affect the affordability of housing. Therefore, the project will not impact population or housing in the area or City.

Conclusion:

Impacts associated with population and housing are considered less than significant.

Mitigation:

No mitigation measures would be required

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
14. 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:				
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?			X	
iv. Parks?			X	
v. Other Public Facilities?			X	

Discussion of Checklist Answers:

The project is located adjacent to the City limits of Grass Valley, and within the service boundaries of the City. The project would be served by the City of Grass Valley Fire and Police Departments. With proper fire prevention measures as required under the Uniform Building Code and Uniform Fire Code, the project is not expected to significantly impact Fire Department services. The project provides an emergency access road, which will not only benefit this project, but provide a secondary access for the Gazebos and Carriage House residential projects. Payment of new development fees will address the project's impact on City Fire and Police Department Services. As noted by local school districts, student enrollment has been in decline in the Grass Valley area over the past few years. Since, the project will be required to pay the adopted school impact fees, the project will not impact schools. The Park and Recreation Plan does not identify any park facilities in this area; however, the plan does show a trail along Wolf Creek. The application materials note the open space areas to be maintained by a homeowners association and potential to link trails to Wolf Creek. The project will require the need for maintenance of new public facilities and roads. No significant impact on public services is anticipated with this project. No mitigation measures would be required for the public services section.

Conclusion:

Impacts associated with public services are considered less than significant.

Mitigation:

No mitigation measures would be required

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
15. RECREATION. Would the Project:				
a. 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?			X	
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Discussion of Checklist Answers:

New residents in this development will likely use some of the existing parks in the City. The City's Parks and Recreation Master Plan does not show any planned park on the property, but it does show a trail along Wolf Creek. This project sets aside large areas of open space and provides trails throughout the development. This provides linkages to adjacent properties, as well as, regional areas. Other amenities include a garden and orchard area and opportunities for other passive outdoor activities. As it relates to parks, the project will be required to pay the appropriate Quimby Act fees as part of the subdivision process and development impact fees as part of the building permit process. With the payment of fees, proposed trails and open space, the development of proposed project would not have a significant impact on the recreational opportunities or demand in the City of Grass Valley.

Conclusion:

Impacts associated with recreation are considered less than significant.

Mitigation:

No mitigation measures would be required for the recreation section.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION/TRAFFIC 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)?		X		
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
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?				X

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Substantially increase hazards due to a design feature (e.g., sharp curves of dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e. Result in inadequate emergency access?			X	
f. Result in inadequate parking capacity?				X
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

Discussion of Checklist Answers:

The proposed project will extend Picadilly Lane approximately 650 feet from its current terminus. Picadilly Road will then transition to an emergency access road from this point to Taylorville Road. The project also includes a loop road to be dedicated as a City road.

Fehr and Peers prepared a traffic impact study for this project. Pursuant to direction provided by the City, the consultant addressed the proposed project (30-lot subdivision) and the potential future project (additional 91-single family homes). The proposed project would generate 30 P.M. peak hour trips and 287 daily trips. The future project could generate 92 P.M. peak hour trips and 871 daily trips. The combined project is expected to generate 122 P.M. peak hour trips and 1,158 daily trips. The study analyzed three scenarios for the proposed 30-lot residential project, including existing plus proposed project, 2016 plus proposed project, and the 2030 plus proposed project traffic. The study analyzed two scenarios for the 91-lot project including, the 2016 plus project plus potential future development conditions, and the 2030 plus project plus potential future development conditions. The study concludes the 30-lot project will not impact any of the intersections, since the delays are less than 2 seconds. However, the McKnight Way/La Barr Meadows Road/South Auburn Road intersection is impacted under the 2016 plus project plus potential future development conditions. Furthermore, the McKnight Way/Freeman Lane intersection falls to an unacceptable level of service under the 2030 plus project plus potential future development conditions. The study notes the Nevada County Regional Transportation Plan includes improvements to the McKnight Way/La Barr Meadows Road/South Auburn Road intersection. Since the intersection of McKnight Way/La Barr Meadows Road/South Auburn Street is identified as a priority funded project, this project is subject to the payment of the Regional Transportation Mitigation Fee and no further mitigation is required. Either a traffic signal or roundabout is needed for the McKnight Way/Freeman Lane intersection. The study includes a mitigation measure which will reduce the traffic impacts to this intersection to a level that is less than significant.

There are no airports in this area so the project will not change air traffic patterns. The roads will be designed to meet City standards and therefore will not result in a design hazard. The proposed emergency access road is expected to result in a positive impact since it will provide secondary access to a large developed area currently with only one access. The application demonstrates the project provides two-car garages for each house, which complies with the City parking standard. The project provides a trail system to commercial areas, which supports the City's goals of providing transportations and connectivity with the community.

Conclusion:

With the addition of the following mitigation measures, traffic-related impacts will be mitigated to a level that is less than significant.

Mitigation:

15. The applicant shall complete and submit a signal warrant analysis for the McKnight Way/Freeman Lane intersection as part of any application to subdivide the remaining 111 acres. As a result of this analysis, the applicant will be required to comply with one of the following:

1. If the intersection improvement is warranted, the applicant shall install the traffic signal and enter into a reimbursement agreement with the City.
2. If the intersection improvement is not warranted prior to the completion of the future development, the developer will need to enter into an agreement with the City to pay the project's fair share cost of the improvements.
3. If the intersection improvement is included in the Regional Traffic Mitigation Fee or the local traffic impact fee program, and considered funded, the applicant shall pay the adopted traffic impact fees.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
17. UTILITIES AND SERVICE SYSTEMS.				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
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?			X	
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could have significant environmental effects?			X	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements necessary?			X	
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?			X	
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X
g. Comply with federal, state, and local statutes and regulations related to solid waste?				X

Discussion of Checklist Answers:

The project will require the extensions and connections to the existing water, sewer, storm drainage power, and communication systems. All these systems and utilities are available to the site. The project will be connected to the City's sewer system. The City has approved development projects involving potential increased demands on the City's waste water treatment plant, recognizing the potential limits on sewer availability. A recent expansion of the sewer plant capacity from 1.72 to 2.78 MGD (million gallons per day), provides adequate sewer capacity for the proposed project. However, specific approval to connect to the sewer system must be obtained from the City at the time of building permit issuance. At the request of the City, the applicant prepared a sewer study to address the Carriage House lift station. This study concludes the lift station has adequate capacity to serve the project. However, the Engineering Department notes the need to upgrade the lift station and may include a condition of approval for this work.

The property is within the Nevada Irrigation District (NID) service area. However, the City has the ability to provide water and is working with NID to determine the most efficient and cost effective way to provide water service. The project will be required to provide for on-site storm water detention pursuant to the City's standard conditions of approval. The Preliminary Drainage Plan concludes the proposed retention pond will provide adequate storm drainage capacity. Waste Management provides solid waste service to the City. Waste Management collects and hauls solid waste to the McCourtney Road Transfer Station. The solid waste is then transferred to Ostrom Road Landfill in Yuba County. The landfill is expected to reach capacity in approximately 2066.

Conclusion:

No significant impact on utilities is anticipated with this project.

Mitigation:

No mitigation measures would be required for the utility services section.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
18. MANDATORY FINDINGS OF SIGNIFICANCE				
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 species 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?		X		
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, and the effects of probable future projects)		X		
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion of Checklist Answers:

As discussed in sections 1 through 17 above, the project, as mitigated, will not create a significant environmental impact on habitat of a fish, wildlife or plant species, nor will it create substantial adverse impacts on human beings. The project is consistent with the City's General Plan and, as mitigated, it is not expected to create significant impacts on the environment. No short-term impacts were noted that could lead to potential long-term impacts. Since the project is consistent with the General Plan the project can rely on established impact fees to address any potential cumulative impacts created by this development.

Conclusion:

This project will incorporate mitigation measures, which will eliminate impacts or reduce them to a level that is less than significant.

REFERENCES: The following references used in preparing this report have not been attached to this report. The reference material listed below is available for review upon request of the Grass Valley Community Development Department, 125 East Main Street, Grass Valley, CA 95945 (530) 274-4330.

- City of Grass Valley 2020 General Plan and General Plan EIR
- Background Report, City of Grass Valley General Plan Update, November 1998
- City of Grass Valley Development Code
- Soil Survey of Nevada County, United States Department of Agriculture, Soil Conservation Service,

- Preliminary Geotechnical Report, prepared by Holdredge and Kull, dated December 13, 2006
- Phase I Environmental Assessment, prepared by Holdredge and Kull, dated August 2007
- Archaeological Survey, prepared by Sean Jenson, dated September 2006
- Biological Inventory Report, prepared by EcoSynthesis, dated November 2006
- Special Status Plant Survey, prepared by EcoSynthesis, dated September 2008
- Sewer Study, prepared by SCO Planning and Engineering, dated February 2010
- Preliminary Drainage Report, prepared by SCO Planning and Engineering, dated February 2010
- Flood Insurance Rate Maps, Nevada County, FEMA, Map # 06057C0633E, dated February 3, 2010
- Greenhouse Gas information comes from several sources available at City Hall, including environmental documents prepared for other projects in the state or local area, materials from APA courses, and materials from state websites (Attorney General's Office, OPR)
- Traffic Impact Study, prepared by Fehr and Peers, June 2010

ATTACHMENTS:

1. Tentative Map with Location Map
2. Future Opportunity & Constraints Assessment Map