# TABLE OF CONTENTS

**SUMMARY INFORMATION** ............................................................................................................. 1  
**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED** ................................................................... 13  
**ENVIRONMENTAL CHECKLIST** ....................................................................................................... 14  
  I. AESTHETICS............................................................................................................ 14  
  II. AGRICULTURAL RESOURCES............................................................................. 16  
  III. AIR QUALITY......................................................................................................... 18  
  IV. BIOLOGICAL RESOURCES.................................................................................. 22  
  V. CULTURAL RESOURCES....................................................................................... 32  
  VI. GEOLOGY AND SOILS........................................................................................... 36  
  VII. HAZARDS................................................................................................................ 40  
  VIII. HYDROLOGY AND WATER QUALITY........................................................................ 44  
  IX. LAND USE AND PLANNING................................................................................ 49  
  X. MINERAL RESOURCES.......................................................................................... 51  
  XI. NOISE....................................................................................................................... 52  
  XII. POPULATION AND HOUSING............................................................................. 55  
  XIII. PUBLIC SERVICES................................................................................................ 56  
  XIV. RECREATION....................................................................................................... 57  
  XV. TRANSPORTATION/TRAFFIC............................................................................... 58  
  XVI. UTILITIES AND SERVICE SYSTEMS.......................................................................... 62  
  XVII. MANDATORY FINDINGS OF SIGNIFICANCE................................................ 65  

**REPORT PREPARERS AND REFERENCES** .......................................................................................... 67  

**FIGURES**  

Figure 1: Regional Location ......................................................................................................................... 5  
Figure 2: Site Location................................................................................................................................. 6  
Figure 3: Existing Project Area Conditions .................................................................................................. 7  
Figure 4: Existing Roadway Conditions – Cross Sections........................................................................... 8  
Figure 5: Proposed Roadway Improvements.............................................................................................. 9  
Figure 6: Proposed Roadway Improvements – Cross Sections ................................................................. 10  
Figure 7: Proposed Roadway Improvements – Culvert Cross Section ...................................................... 11  
Figure 8: Proposed Railroad Crossing Improvements.............................................................................. 12
MITIGATED NEGATIVE DECLARATION

Project Name. Hearn Avenue Widening Phase 2 between Dutton Avenue and Dowd Drive

Project Location. The project site is located in the City of Santa Rosa, California on Hearn Avenue between Whitewood Drive to the east and Victoria Drive to the west, approximately 1,500 feet west of U.S. Highway 101.

Description of Project. The City of Santa Rosa proposes roadway improvements along an approximately 620-foot long segment of Hearn Avenue to improve circulation along the eastern Hearn Avenue corridor and to provide additional capacity for vehicle stacking at traffic signals in order to accommodate existing traffic levels. An approximately 150-foot long segment of Hearn Avenue would be widened, and the improvements along the remainder of the project area would consist primarily of roadway resurfacing, pavement reconstruction, and striping. Specifically, the proposed road widening would include the following elements: 1) addition of a west travel lane along the entire project length; 2) addition of bike lanes to the east of the Colgan Creek box culvert; 3) installation of new curbs and gutters on both sides of the roadway; 4) widening of the existing box culvert by approximately 47 feet to accommodate the proposed roadway improvements; 5) upgrade of two pedestrian ramps at Whitewood Drive and the sidewalk and driveway at 637 Hearn Avenue to meet current Americans with Disability Act (ADA) standards; 6) reconstruction of the existing railroad signal and crossing arm foundations; 7) addition of raised median islands on either side of the railroad crossing; and 8) replacement of approximately 170 feet of SMART track and other minor improvements to an additional approximately 380 feet of railroad track.

Findings. It is hereby determined that, based on the information contained in the attached Initial Study, the project would not have a significant adverse effect on the environment.

Mitigation measures necessary to avoid the potentially significant effects on the environment are included in the attached Initial Study, which is hereby incorporated and fully made part of this Mitigated Negative Declaration. The City of Santa Rosa, Public Works Department has hereby agreed to implement each of the identified mitigation measures, which would be adopted as part of the Mitigation Monitoring and Reporting Program.
SUMMARY INFORMATION

1. **Project Title:** Hearn Avenue Widening Phase 2

2. **Lead Agency Name and Address:**
   City of Santa Rosa  
   Public Works Department  
   Capital Project Engineering  
   69 Stony Circle  
   Santa Rosa, CA 95401  
   (707) 543-3854

3. **Contact Person and Phone Number:**
   Lori Urbanek, Assistant Engineer  
   (707) 543-3854

4. **Project Location:** The proposed project is located along Hearn Avenue in Santa Rosa, California, approximately 1,500 feet west of U. S. Highway 101. Project improvements will primarily occur along a 620-foot segment of Hearn Avenue between Whitewood Drive to the east and Victoria Drive to the west. The project site is centered on the Sonoma-Marin Area Rail Transit (SMART) crossing and the Colgan Creek Flood Control Channel box culvert undercrossing of Hearn Avenue. Figures 1 and 2 depict the regional and project vicinity.

5. **Project Sponsor's Name and Address:**
   City of Santa Rosa  
   Public Works Department  
   Capital Project Engineering  
   69 Stony Circle  
   Santa Rosa, CA 95401  
   (707) 543-3854

6. **General Plan Designation:**
   All of the proposed improvements would take place within City of Santa Rosa (City), Sonoma County Water Agency (SCWA), and SMART right-of-way. Adjacent City land use designations along Hearn Avenue include:
   - Low Density Residential (2.0-8.0 units per acre)
   - Medium Low Density Residential (8.0-13.0 units per acre)
   - Medium Density Residential (8.0-18.0 units per acre)
   - Retail and Business Services
7. **Zoning:**
All of the proposed improvements would take place within City, SCWA, and SMART right-of-way. Adjacent City zoning designations along Hearn Avenue include:

   Single Family Residential (R-1), Light Industrial (IL), General Commercial (CG)

8. **Description of Project:**
The City of Santa Rosa proposes roadway improvements along an approximately 620-foot stretch of Hearn Avenue to improve circulation along the eastern Hearn Avenue corridor, and to provide additional capacity for vehicle stacking at traffic signals. Railroad improvements would also occur along an approximately 550-foot long segment of the existing SMART corridor.\(^1\) The existing project area conditions are depicted in Figure 3.

**Existing Conditions.** West of the Colgan Creek box culvert, from just west of Victoria Drive, the existing Hearn Avenue roadway is 62 feet wide from face of curb to face of curb and is striped with a westbound travel lane and bike lane, a two-way left turn lane, and an eastbound travel lane and bike lane (Figure 4). East of the Colgan Creek box culvert, from just east of Whitewood Drive, the existing Hearn Avenue roadway is 67 feet wide from face of curb to face of curb and is striped with a westbound travel lane, a two-way left turn lane, and two eastbound travel lanes (Figure 4). Sidewalks exist on the north side of Hearn Avenue for the full length of the project site, but only occur on the south side of Hearn Avenue east of the box culvert. One bus stop exists on the north side of Hearn Avenue just east of the box culvert and the railroad tracks. No parking is permitted along the roadway segment at any time. Overhead power, telephone and cable TV distribution lines run along the north side of the project behind the existing curb. Existing underground utilities within the Hearn Avenue right-of-way include: street light services and traffic signal interconnect lines; a PG&E gas main; a public sanitary sewer main with individual service laterals; a public water main with individual service laterals; a SCWA aqueduct; and a public storm drain system.

**Proposed Project.** The proposed project includes the widening of approximately 150 feet of roadway along Hearn Avenue, and other improvements within the 620-foot long project area to include an additional westbound travel lane, bike lanes to the east of the Colgan Creek box culvert, raised median islands on either side of the railroad crossing, and new curbs and gutters (Figure 5).

With the implementation of the proposed project, the roadway conditions would consist of:

- **West of the Colgan Creek box culvert.** A 6-foot wide westbound Class II bike lane, two 12-foot wide westbound travel lanes, a 14-foot wide two-way left turn lane, one 12-foot wide eastbound travel lane, and a 6-foot wide eastbound Class II bike lane (Figure 6);

- **East of the Colgan Creek box culvert.** A 6-foot wide westbound Class II bike lane, two 11-foot wide westbound travel lanes, a 11-foot wide two-way left turn lane, two 11-foot wide eastbound

---

\(^1\) The SMART District project, which would be installed between Cloverdale in Sonoma County and Larkspur in Marin County, was evaluated as a separate project under CEQA. The proposed SMART project would provide passenger rail service along approximately 70 miles of the SMART corridor, with 14 rail stations, passing sidings, and a rail maintenance facility. A draft Environmental Impact Report (EIR) was prepared for the project in November 2005. The final EIR was issued in June 2006. As a result of changes in project components and conditions, a Supplemental EIR was prepared in March 2008. The final Supplemental EIR was certified in July 2008. The environmental documentation for this project may be accessed on the Web at [http://www.sonomamarintrain.org/index.php/docs/eir/](http://www.sonomamarintrain.org/index.php/docs/eir/).
travel lanes, and a 5-foot wide eastbound Class II bike lane east of the Colgan Creek box culvert (Figure 6); and

- Approximately 80 feet of new curb and gutter along the north side of Hearn Avenue, and approximately 153 feet of new curb and gutter along the south side Hearn Avenue.

To accommodate the proposed roadway improvements, the existing box culvert would be extended approximately 47 feet (Figure 7), and the existing railroad signal and crossing arm foundations would be reconstructed (Figure 8). The project would also involve the upgrade of two pedestrian ramps at Whitewood Drive and the sidewalk and driveway at 637 Hearn Avenue to meet current Americans with Disability Act (ADA) standards. Since this property is owned by the City, no easements or right-of-way dedication would be required to construct these improvements.

This project also includes improvements to the existing SMART tracks that bisect Hearn Avenue and extend through the project site to the north and south. Approximately 170 feet of railroad track, ballast, signal foundations, and adjacent roadway pavement would be replaced within approximately 85 feet in either direction from the center line of Hearn Avenue. The installation of the new welded track would include new ballast, crossties, rail and other track materials (OTM). A track underdrain system with appropriate outflows would be installed within this segment of improvements. In addition, approximately 380 feet of track outside of this primary replacement area (200.3 feet to the south and 181.6 feet to the north) would be resurfaced and lined. Approximately 50 crossties would be replaced in these areas. Concrete crossing panels and new roadway pavement abutting the crossing panels would be installed. In total, track improvements would occur along a 553.3-foot stretch of the railroad.

The Northwestern Pacific Railroad Company, a freight operator under contract with the North Coast Railroad Authority, is proposing to operate freight service starting in the fall of 2009. The proposed railroad improvements at Hearn Avenue would not conflict with railroad operations if they are completed by July 2009. Otherwise, the tracks would be placed “out-of-service” until the railroad portion of the Hearn Avenue project is completed. The estimated duration of construction for the railroad improvements is approximately four weeks. The railroad improvements would not impact traffic circulation on Hearn Avenue.

All of the proposed project improvements would take place within City (Hearn Avenue improvements), SCWA (Colgan Creek improvements), and SMART (railroad improvements) right-of-way. No changes are proposed to existing intersections, pedestrian routes, bus stops, driveways or utilities. Traffic control measures would be used during the construction phase to ensure that access to businesses and residences would be maintained.

Construction of the project is anticipated to commence in the spring of 2009.

9. Surrounding Land Uses and Setting:

The project site is relatively flat except for the excavated creek channel and minor grading associated with drainage for Hearn Avenue, the maintenance roads, and the railroad tracks. The site’s vegetation consists of ruderal grasses and forbs, along with native and non-native trees. The project site crosses over the Colgan Creek Flood Control Channel. The channel is a constructed, straight, trapezoidal channel excavated into the surrounding land surface. The SMART tracks cross Hearn Avenue and
run along the eastern side of the channel. An unpaved maintenance road runs along the western side of the channel. The surrounding lands are developed, with commercial buildings to the northwest and southeast, and residences to the southwest and northeast.

10. Permits and Other Agencies Whose Approval Is Required:

- U.S. Army Corps of Engineers – Section 404 Permit
- U.S. Fish and Wildlife Service – Section 7 Consultation
- Regional Water Quality Control Board – Section 401 Water Quality Certification
- California Department of Fish and Game – Section 1602 Streambed Alteration Agreement
FIGURE 1

Hearn Avenue Widening Phase 2

Regional Location


P:\ENG0801\g\Figure1_RegionalLocation.cdr (10/21/08)
FIGURE 2

Hearn Avenue Widening Phase 2

Site Location
FIGURE 3

Hearn Avenue Widening Phase 2

Existing Project Area Conditions
FIGURE 5

Hearn Avenue Widening Phase 2

Proposed Roadway Improvements
**FIGURE 6**

Hearn Avenue Widening Phase 2

Proposed Roadway Improvements - Cross Sections
FIGURE 7

Proposed Roadway Improvements - Culvert Cross Section

NEW SECTION AT BOX CULVERT

NO SCALE

Hearn Avenue Widening Phase 2

SOURCE: CIVIL DESIGN CONSULTANTS, INC. (DECEMBER 2008)
Proposed Railroad Crossing Improvements

Hearn Avenue Widening Phase 2

SOURCE: CIVIL DESIGN CONSULTANTS, INC. (DECEMBER 2008)

P:\ENG0801\g\Initial Study\Figure8.ProposedRailroadCrossingImprovements.cdr (01/19/2009)
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.

- Aesthetics
- Biological Resources
- Hazards & Hazardous Materials
- Mineral Resources
- Public Services
- Utilities/Service Systems
- Agricultural Resources
- Cultural Resources
- Hydrology/Water Quality
- Noise
- Recreation
- Mandatory Findings of Significance
- Air Quality
- Geology/Soils
- Land Use/Planning
- Population/Housing
- Transportation/Traffic

**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 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 that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Lori Urbanek, City of Santa Rosa

Date 1/23/09
ENVIRONMENTAL CHECKLIST

I. AESTHETICS. Would the project:

a) Have a substantial adverse effect on a scenic vista? ☐ ☐ ■ ☐

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? ☐ ☐ ☐ ■

c) Substantially degrade the existing visual character or quality of the site and its surroundings? ☐ ☐ ■ ☐

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ☐ ☐ ■ ☐

Affected Environment
The project site is centered on the Colgan Creek Flood Control Channel box culvert undercrossing of Hearn Avenue, located approximately 1,500 feet west of U. S. Highway 101 between Whitewood Drive to the east and Victoria Drive to the west. The Colgan Creek Flood Control Channel is a constructed, straight, trapezoidal channel excavated into the surrounding land surface. The SMART tracks run along the eastern side of the channel. An unpaved maintenance road runs along the western side of the channel. The surrounding lands are developed, with commercial buildings to the northwest and southeast, and residences to the southwest and northeast.

The project site is relatively flat except for the excavated creek channel and minor grading associated with drainage for Hearn Avenue, the maintenance roads, and the railroad tracks. Two municipal storm drain culverts outfall into the creek channel within the project site.

The site's vegetation communities and habitats consist of unvegetated open water (Colgan Creek Flood Control Channel), freshwater marsh/disturbed riparian scrub, disturbed riparian trees, and ruderal/non-native grassland. Freshwater marsh/disturbed riparian scrub occurs adjacent to the creek channel and primarily consists of Himalayan blackberry (Rubus discolor), with some patches of arroyo willows (Salix lasiolepis), cattail (Typha sp.), tall flat sedge (Cyperus eragrostis), and other wetland plant species. The overstory along the channel is dominated by coast live oak trees (Quercus agrifolia). The ruderal/non-native grasslands on the banks or the creek and in the adjacent uplands include common non-native ruderal species such as Italian rye (Lolium multiflorum), wild oat (Avena fatua), ripgut brome (Bromus diandrus), Harding grass (Phalaris aquatica), spring vetch (Vicia sativa), Himalayan blackberry (Rubus...
discolor), and fennel (Foeniculum vulgare). The only native forb observed in this habitat during the May site visit was California poppy (Eschscholzia californica).

**Discussion**

*a) Have a substantial adverse effect on a scenic vista?*

**Less Than Significant Impact.** The project site is located in a relatively flat area, resulting in a limited viewshed. Roadway improvements would be at-grade and would only minimally impair surrounding views.

*b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?*

**No Impact.** The proposed project is not located within a State Scenic Highway and would not damage scenic resources within such a highway.²

*c) Substantially degrade the existing visual character or quality of the site and its surroundings?*

**Less Than Significant Impact.** The current alignment of Hearn Road within the project boundaries consists of an asphalt road bed with vehicle lanes in both directions, two-way left turn lanes, and bicycle lanes. The proposed project consists of widening the roadway to include additional vehicle and bicycle lanes, as well as new gutters. The visual character of the site would remain similar to existing conditions with implementation of the proposed project. Likewise, the proposed railroad improvements would include replacement of the track and/or other track materials, and would not significantly degrade the existing character or quality of the site and its surroundings. Therefore, the impact on the existing visual character or quality of the site and its surroundings is less than significant.

*d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

**Less Than Significant Impact.** Street lights currently exist along both sides of the roadway. No new street lights would be installed as part of the proposed project. The proposed project is intended to provide additional capacity to accommodate existing traffic levels. Implementation of the proposed project would not significantly increase the number of vehicle trips in the project corridor that could contribute to new sources of nighttime lighting (i.e., vehicle head/tail lights). Therefore, the proposed project would not create a new source of light or glare which would adversely affect day or nighttime views in the area.

II. AGRICULTURAL RESOURCES. 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 a non-agricultural use?

   Potentially Significant Impact  Potentially Significant Impact Incorporated  Less Than Significant Impact  No Impact
   ☐  ☐  ☐  ☐

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

   Potentially Significant Impact  Potentially Significant Impact Incorporated  Less Than Significant Impact  No Impact
   ☐  ☐  ☐  ☐

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?

   Potentially Significant Impact  Potentially Significant Impact Incorporated  Less Than Significant Impact  No Impact
   ☐  ☐  ☐  ☐

Affected Environment

The project site is classified as Urban and Built-Up Land, according to the Farmland Mapping and Monitoring Program of the State Department of Conservation. The project site is not zoned for agricultural uses and is not operated under a Williamson Act Contract.

Discussion

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 a non-agricultural use?

No Impact. The project site is not located on land that is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the California Department of Conservation. The proposed project would not convert any farmland to a non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. All of the proposed improvements would take place within City, SCWA, and SMART right-of-way. The project site is not under a Williamson Act contract.

---

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?**

**No Impact.** No farmland is located in the vicinity of the project site. The proposed project would not result in the extension of infrastructure to an undeveloped area, and would not indirectly result in the development of farmland.
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

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)?

d) Expose sensitive receptors to substantial pollutant concentrations?

e) Create objectionable odors affecting a substantial number of people?

Affected Environment
The proposed project is located in the City of Santa Rosa, which is part of the San Francisco Bay Air Basin and is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQs) for seven air pollutants, including ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀, PM₂.₅), and lead. The Bay Area is currently under non-attainment status for particulate matter (PM₁₀) and ozone.

Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The main purpose of an air quality plan is to bring an area into compliance with the requirements of federal and State air quality standards. Such plans describe air pollution control strategies to be implemented by a city, county, or region. The City of Santa Rosa and the project site are located in the San Francisco Bay Air Basin and are within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The latest air quality plan, the Bay Area 2005 Ozone Strategy, was developed in order to bring the region into compliance with State and federal air quality standards. The proposed Hearn Avenue road widening project would not increase regional vehicle miles traveled (VMT) or result in the generation of additional vehicle trips.
or increase regional emissions. The proposed project would improve circulation and vehicle stacking capacity in order to accommodate existing traffic levels. Therefore the project would not conflict with the *Bay Area 2005 Ozone Strategy*.

Additionally, the air quality plans use the assumptions and projections of local planning agencies to determine control strategies for regional compliance status. Since the plans are based on local General Plans, projects that are deemed consistent with the applicable General Plan are usually found to be consistent with the air quality plans. The proposed project is consistent with the City of Santa Rosa’s General Plan. Therefore, the project would not conflict or obstruct implementation of an air quality plan.

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?**

**Potentially Significant Unless Mitigation Incorporated.** Air pollutant emissions associated with the proposed project would occur over the short term in association with construction activities such as grading and vehicle/equipment use. No increase in long-term emissions would result from the proposed project.

**Long-Term (Operational) Emissions:** Long-term air emissions impacts are associated with any change in permanent use of the project site by on-site stationary and off-site mobile sources that substantially increase vehicle trip emissions. There are no stationary sources associated with the proposed project. As described above in Response III(a), the proposed Hearn Avenue widening project is intended to accommodate existing traffic levels and is not expected to generate any additional traffic. Regional traffic trips would remain similar to what occurs under existing conditions. Therefore, no additional long-term emissions would result from implementation of the proposed project.

**Short-Term (Construction) Emissions:** Air pollutant emissions associated with the proposed project would occur over the short-term in association with construction activities such as grading and vehicle/equipment use. The discussion below describes potential air quality violations that could occur as a result of the following: construction equipment exhaust emissions and fugitive dust.

**Construction Equipment Exhaust Emissions.** Various diesel-powered vehicles and equipment would be in use during construction activities at the site. In 1998, the California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). The ARB has completed a risk management process that identifies potential cancer risks for a range of activities using diesel-fueled engines. High volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as having the highest associated risk. Health risks from TACs are a function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction-related sources are mobile and transient in nature, and the emissions would primarily occur within the project site. Because of its short duration, health risks from construction emissions of diesel particulate would be less than significant.
Construction Dust. Construction dust would affect local air quality at various times during construction of the proposed project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed. Site clearing, grading and earthmoving activities have a high potential to generate dust whenever soil moisture is low and particularly when the wind is blowing.

Construction activities would result in increased dustfall and locally elevated levels of particulates downwind of construction activity. Construction dust has the potential to create a nuisance at nearby properties. In addition to nuisance effects, excess dustfall can increase maintenance and cleaning requirements and could adversely affect sensitive electronic devices.

Implementation of the following mitigation measure would reduce impacts to air quality associated with construction to a less than significant level:

Mitigation Measure AIR-1: Consistent with guidance from the BAAQMD, the following measures shall be implemented on the project site throughout the construction period:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.
- The contractor shall be responsible for ensuring that all construction equipment and vehicles are maintained in good operating order and that all factory-installed emission control devices are installed and functioning properly. All vehicles and construction equipment shall be turned off when not in use to minimize emissions. (LTS)

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)?

Potentially Significant Unless Mitigation Incorporated. Please refer to Section III.(b).

d) Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Unless Mitigation Incorporated. Sensitive receptors are facilities or land uses that included members of the population that are particularly sensitive to the effects of air pollutants, such as young children, the elderly, and people with illnesses. As described in Response III(a) and III(b) above, implementation of the proposed project is not expected to result in an increase in the number of vehicle trips in the project area. Air pollutant emissions are anticipated to
be the same as currently occurs and potential exposure of sensitive receptors to substantial pollutant concentrations is considered less than significant.

Residential areas in the vicinity of the project site may be exposed to airborne particulates and fugitive dust during project construction, as well as a small quantity of pollutants associated with the use of construction equipment (e.g., diesel-fueled vehicles and equipment). Control measures provided in Mitigation Measure AIR-1 would minimize the exposure to substantial pollutant concentrations. Therefore, the project is not expected to expose sensitive receptors to substantial pollutant concentrations.

e) Create objectionable odors affecting a substantial number of people?

**Less than Significant Impact.** Implementation of the proposed project would not result in permanent objectionable odors affecting a substantial number of people. During project construction, emissions from diesel-driven equipment and vehicles may result in odors on the project site and immediate vicinity. However, construction is short-term in nature and these emissions would cease to occur after construction is completed. In addition, odors from construction equipment and vehicles on the project site would be dispersed quickly and would not likely subject sensitive receptors to objectionable odors. Long-term operation of the proposed project would not generate objectionable odors. Therefore, no significant impacts related to objectionable odors would result from the proposed project.
IV. BIOLOGICAL RESOURCES. Would the project:

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?

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?

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?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State habitat conservation plan?

---

Affected Environment

LSA conducted the following biological field investigations of the project site in April and May 2008:

- LSA wetland delineation specialist Chip Bouril conducted a formal wetland delineation of the project site on April 7, 2008. A wetland delineation report, under Section 404 of the Clean Water Act, was submitted to the Corps on June 17, 2008. The extent of jurisdictional Waters of the Unites States was field verified by the Corps on July 11, 2008.
• LSA wildlife biologist Dan Sidle conducted a reconnaissance-level site assessment of the project site for steelhead and other wildlife species on May 27, 2008.

• LSA botanist Michele Lee conducted a reconnaissance-level survey of the project site for special-status plant habitat and vegetation communities on May 27, 2008.

The information contained in this section of the Initial Study was obtained from the Biological Assessment (BA) prepared by LSA for the project in September 2008.

The project site includes Hearn Avenue, the Colgan Creek Flood Control Channel and box culvert, an unpaved maintenance road, the SMART tracks, freshwater marsh/disturbed riparian scrub, disturbed riparian trees, and ruderal/non-native grassland. The following sections describe the existing vegetation communities and habitats of the project site and the wildlife associated with these habitats.

The Corps field verified the extent of jurisdictional waters of the United States in the project site on July 11, 2008 (LSA 2008b). Waters of the United States in the project site consist of 4,600 square feet (0.11 acre) along the Colgan Creek Flood Control Channel. This jurisdictional area includes the unvegetated channel (open water) and associated freshwater marsh/disturbed riparian scrub that occurs in the channel and adjacent to the channel.

Vegetation

Developed. Developed portions of the project site include Hearn Avenue, Colgan Creek Flood Control Channel box culvert, rip-rapped banks adjacent to the box culvert, and the unpaved maintenance road.

Ruderal/Non-Native Grassland. Non-native annual grasslands in the project site occur along both banks of the channel and in the flat area from the top of the eastern bank to the railroad tracks. This habitat is dominated by non-native grasses and ruderal plant species. Non-native grasses observed on the project site during LSA’s May 27, 2008 site visit include ripgut brome (*Bromus diandrus*), Italian rye (*Lolium multiflorum*), Harding grass (*Phalaris aquatica*), foxtail barley (*Hordeum murinum ssp. leporinum*), annual bluegrass (*Poa annua*), and wild oat (*Avena fatua*).

Non-native forbs include spring vetch (*Vicia sativa*), California bur clover (*Medicago polymorpha*), white stem filaree (*Erodium moschatum*), fiddle dock (*Rumex pulcher*), English plantain (*Plantago lanceolata*), prickly lettuce (*Lactuca serriola*) and bristly ox-tongue (*Pieris echioides*). The only native forb observed was California poppy (*Eschscholzia californica*). Invasive non-native plants observed in this habitat include fennel (*Foeniculum vulgare*), Himalayan blackberry (*Rubus discolor*), wild radish (*Raphanus sativus*), Italian thistle (*Carduus pycnocephalus*), and black mustard (*Brassica nigra*). A small non-native acacia (*Acacia sp.*) tree and a native coyote brush (*Baccharis pilularis*) also occur in the project site.

Colgan Creek Flood Control Channel (Open Water). Unvegetated portions of the channel on the project site consist of open water. The Colgan Creek Flood Control Channel is a constructed, straight, trapezoidal channel excavated into the surrounding land surface. The channel contained standing or flowing water in the low flow channel during the April 7 and May 27, 2008 site investigations. The channel substrate in the study site consists of cobbles, rocks, and fine-grain sediments.
The entire site drains into the Colgan Creek which is mapped as an un-named intermittent stream on the USGS quadrangle map that originates in the hills east of Santa Rosa, approximately 2 miles east of the project site. The central portion of Colgan Creek has been channelized and is shown as a solid double line and named Colgan Creek Flood Control Channel on the USGS map. The downstream reach of Colgan Creek have a natural appearing meandering channel. Colgan Creek is tributary to the Laguna de Santa Rosa approximately 4 miles west-southwest of the project site. The Laguna de Santa Rosa is tributary to Mark West Creek approximately 7 miles west-northwest of the project site, and Mark West Creek is tributary to the Russian River, approximately 3 miles farther to the west-northwest.

Colgan Creek, both upstream and downstream of the Colgan Creek Flood Control Channel, is mapped as an intermittent blue-line stream on the Santa Rosa, California 7.5 minute quadrangle map. The watershed for the Colgan Creek Flood Control Channel upstream from the project site consists of flat, developed urban lands within the City of Santa Rosa and undeveloped hill slopes east of Santa Rosa, with a total area of approximately 3 square miles. The Colgan Creek Flood Control Channel is a third order stream reach based on headwater tributaries deduced from contours on the Santa Rosa quadrangle map.

**Freshwater Marsh/Disturbed Riparian Scrub.** Freshwater marsh habitat occurs in the channel and adjacent to the channel in the northern portion of the project site. This habitat is dominated by cattail (*Typha* sp.); other associated species include Himalayan blackberry, water plantain (*Alisma plantago-aquatica*), willow (*Salix* sp.), water cress (*Rorippa nasturtium-aquatica*), and Harding grass. Riparian scrub occurs along the channel in the southern portion of the project site. This area is dominated by Himalayan blackberry and also supports arroyo willow (*Salix lasiolepis*), Harding grass, horsetail (*Equisetum* sp.), and tall flat sedge (*Cyperus eragrostis*).

**Disturbed Riparian Trees.** Along the banks of the channel and above the top of the bank occur small zones of coast live oak trees (*Quercus agrifolia*) with Himalayan blackberry in the understory. These trees as well as the freshwater marsh/disturbed riparian scrub vegetation provide shade over the channel.

**Wildlife**

Wildlife species that have the potential to occur within the project site include aquatic organisms associated with Colgan Creek and resident and migratory terrestrial species associated with the trees and grassland plants located along or near the banks of the project site. The marsh and woody vegetation in and along the channel probably provide a source of detritus from streamside vegetation that helps support aquatic and semi-aquatic invertebrates. These, in turn, are likely to provide food for amphibians and insectivorous birds such as warblers, vireos, and other birds. Urban-adapted mammals such as raccoons, foxes and skunks may utilize the creek for food and shelter. The trees and shrubs may provide foraging habitat for birds, snakes, lizards, and small mammals, such as mice, moles, shrews, and gophers.

Wildlife species observed during the May 27, 2008 reconnaissance-level survey consisted of unidentified fish fry, crayfish (*Procambarus clarkia* or *Pacifastacus leniusculus* – both invasive exotic species), Northern Pacific treefrog (*Pseudacris regilla*), western fence lizard (*Sceloporus occidentalis*), great egret (*Casmerodius albus*), barn swallow (*Hirundo rustica*), Anna’s hummingbird (*Calypte anna*), California towhee (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), and house finch (*Carpodacus mexicanus*). No evidence of nesting birds was observed near the creek channel box culvert below Hearn Avenue. No steelhead (*Oncorhynchus mykiss*) or salmon were observed in the channel. Fish species known to occur in Colgan Creek consist of western mosquitofish (*Gambusia affinis*), threespine stickleback (*Gasterosteus*...
aculeatus), California roach (*Lavinia symmertricus*), sculpin (*Cottus* sp.), and fathead minnow (*Pimephales promelas*) (Fawcett 2000). Fry of an unidentified species were observed in the channel during the site visit.

**Discussion**

*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?*

**Potentially Significant Unless Mitigation Incorporated.** A records search using the California Natural Diversity Data Base (CNDDB) and field surveys conducted on May 27, 2008 resulted in the conclusion that special-status plant species are not likely to occur on the project site because of the lack of suitable habitat. Approximately half of the site is developed and the remainder of the site contains habitats that are disturbed. The project site is surrounded by development, including residential and commercial buildings. The Colgan Creek Flood Control Channel is a constructed, straight channel that was excavated into the surrounding land surface and is not likely to support special-status plants. Although freshwater marsh and disturbed riparian scrub habitat are present along the channel, this habitat on the site is disturbed and was artificially created when the channel was constructed. The upland ruderal/non-native grasslands on the site are highly disturbed areas that support an abundance of weedy non-native plants species and do not provide suitable habitat for special-status plants.

Fifteen special-status wildlife species (that are not federally-listed as Threatened, Endangered or Proposed for Listing) inhabit the region and were considered in the evaluation of the project site. None of the 15 species are likely to occur in the project site because of the lack of suitable or high quality habitat. A pair of white-tailed kites was observed in 2003 just south of the project site, but this area has been developed since then and is now considered less likely to support nesting kites. Although recorded in Santa Rosa Creek and Matanzas Creek within 2 miles of the project site, western pond turtles have not been recorded in Colgan Creek (CDFG 2008). Fawcett (2000) also did not observe pond turtles during his assessment of Colgan Creek. The lack of dense riparian vegetation along the project site’s portion of Colgan Creek further reduces the possibility of pond turtles to occur in the project site. The only other special-status species known to occur within close proximity of the project site is the American badger, which was observed in the Wright Preserve more than 3 miles from the project site and separated from the site by urban development.

The project’s Biological Assessment states that the following federally-listed species have the potential to occur downstream of the project site: steelhead (*Onchorhynchus mykiss*), Chinook salmon (*Oncorhynchus tshawytscha*), and coho salmon (*Oncorhynchus kisutch*). However there are no records of historic or current occurrences by these species in the creek. The portion of Colgan Creek within the project site is considered too warm to support steelhead or coho salmon rearing (Fawcett 2000). An LSA biologist conducted a salmonid habitat assessment of Colgan Creek within the project site on May 27, 2008. Field observations verified that the creek is slow flowing with mud bottoms full of sediment overlying cobbles. The creek did not contain suitable spawning, rearing, or migration habitat for steelhead, coho salmon, or Chinook salmon.

The Biological Assessment also addresses California Tiger Salamander, a federally listed amphibian that occurs in the Santa Rosa vicinity. No records of California Tiger Salamander (CTS)
(Ambystoma californiense) exist within or near to the project site. The CNDDDB lists numerous occurrences within 2 miles west and southwest of the project site; however these are all separated from the site by urban development. The closest breeding site is approximately 0.8 mile west of the project site, but it also is separated from the site by urban development.

The project is unlikely to affect any special-status plant or animal species due to lack of suitable habitat. However, the project site includes Colgan Creek, which is a tributary within the Russian River hydrological unit. As such, it may be considered to be Essential Fish Habitat (EFH) for the Pacific salmon fishery (coho and Chinook salmon) and is designated as critical habitat for coho salmon. Therefore, although the creek lacks suitable habitat for salmonids in the vicinity of the project site and the probability of salmonid occurrence is low, the following mitigation measures (BIO-1 and BIO-2) are nevertheless recommended to reduce the potential for impacts to these species to a less than significant level.

In addition, the project has the potential to disturb nests or nesting behavior of migratory birds or birds of prey if site disturbance activities commence during the nesting season, and are situated in close proximity to occupied nests. Implementation of Mitigation Measure BIO-3 would reduce the potential for project-related impacts to a level below significance.

Mitigation Measure BIO-1: The project shall implement the following avoidance and minimization measures for listed salmonids and other fish:

- In-stream work in Colgan Creek will be allowed only during specified work windows from June 15 to October 15 during low flow conditions.
- No fill material, including concrete, will be allowed to enter any waterways. Any concrete piers, footings, or other structures will be poured in tightly sealed forms and will not be allowed contact with surface waters until the cement has fully cured. This process takes a minimum of 14 to 28 days.
- Channel disturbance will be kept to a minimum, no material will be left in the channel, and if the culvert is to be protected by rip-rap, the channel bottom elevation will not be elevated above the natural channel bottom.
- During construction no depressions will be left in the channel where old structures are removed, and any depressions will be filled in with clean, river rock/gravel of an appropriate size (approximately 0.5-4 inches).
- The culvert design will avoid impacting channel hydraulics. No new stormdrain outfalls into Colgan Creek will be created.
- Use construction Best Management Practices (BMP) and erosion control methods, including revegetation of all bare soil prior to the rainy season to ensure that there is no increase in sediment entering waterways.
- Materials used will be non-toxic to aquatic life.
- All equipment refueling and maintenance will occur outside the creek channel and appropriate measures will be taken to prevent the discharge of fuels or other contaminants to the stream in the event of spills.
- Water that contacts wet concrete and has a pH greater than 9.0 will be pumped out and disposed of outside the creek channel.

- A United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) approved biologist will be present during dewatering (if dewatering is needed) to salvage and move any native fish species trapped in the area being dewatered. Native fish trapped in the dewatering area will be captured with dip nets or seines and released immediately into the creek downstream of the work area.

- If coffer dams are to be used, turbid water pumped out of the dam will not be allowed to re-enter the channel unless sediment has settled out so that there is no increase in turbidity in downstream waters. (LTS)

**Mitigation Measure BIO-2:** Construction work in and along Colgan Creek will be designed and implemented using BMPs in a way that minimizes new disturbances to prevent erosion, off-site degradation, increased sedimentation, and reduces overall impacts. BMPs include, but are not limited to:

- Construction work outside the stream channel will be accomplished between April 15 and October 15. When necessary, extensions of this time period may be granted by the CDFG on a case-by-case basis.

- Disturbance to existing grades and vegetation will be limited to the actual site of the project and necessary access routes. Placement of all roads, staging areas, and other facilities will avoid and limit disturbance to stream bank or stream channel habitat as much as possible. When possible, existing ingress or egress points shall be used and/or work performed from the top of the creek banks. Following completion of the work, the contours of the creek bed and creek flows shall be returned to pre-construction condition or better.

- Every reasonable precaution to protect Colgan Creek from pollution with fuels, oils, bitumens, calcium chloride, and other harmful materials shall be exercised. Construction by-products and pollutants such as petroleum products, chemicals, fresh cement, or deleterious materials will not be discharged into Colgan Creek, and will be collected and transported to an authorized disposal area.

- A plan for the emergency clean up of any spills of fuel or other material will be available.

- Water containing mud or silt from construction activities shall be treated by filtration, or retention in a settling pond, adequate to prevent muddy water from entering live streams.

- Equipment will be refueled and serviced at designated construction staging areas. All construction material and fill will be stored and contained in a designated area that is located away from Colgan Creek to prevent transport of materials into the creek. A silt fence will be installed to collect any discharge, and adequate materials for spill cleanup will be maintained onsite.

- Construction vehicles and equipment will be maintained to prevent contamination of soil or water (from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease).
• Building material storage areas containing hazardous or potentially toxic materials will have an impermeable membrane between the ground and the hazardous material and will be bermed to prevent the discharge of pollutants to ground water and runoff water.

• Good housekeeping practices, use of safer alternative products, such as biodegradable hydraulic fluids, where feasible, and implementation of employee training programs will be utilized. Employees will be trained to prevent or reduce the discharge of pollutants from construction activities to waters and of the appropriate measures to take should a spill occur.

• If the work site is to be temporarily de-watered by pumping, intakes will be completely screened with wire mesh not larger than 5 millimeters to prevent native fish and amphibians from entering the pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow will be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

• Erosion control and sediment detention devices (e.g., well anchored sandbag cofferdams, certified weed free straw bales, or silt fences) will be incorporated into the project design and implemented at the time of construction. These devices will be in place during construction activities, and after if necessary, for the purposes of minimizing fine sediment and sediment/water slurry input to flowing water, and detaining sediment-laden water on-site. These devices will be placed at all locations where the likelihood of sediment input exists. A supply of erosion control materials will be kept on hand to cover small sites that may become bare and to respond to sediment emergencies.

• Inspection of in-stream habitat and performance of sediment control devices will occur at least once each day during construction to ensure the devices are functioning properly.

• Sediment will be removed from sediment controls once the sediment has reached 1/3 of the exposed height of the control. Sediment collected in these devices will be disposed of away from the collection site at approved disposal sites. These devices will be inspected at least once a day to ensure they are functioning properly. Should a control measure not function effectively, the control measure will be immediately repaired or replaced. Additional controls will be installed as necessary.

• All disturbed soils at each site will undergo erosion control treatment prior to October 15 and after construction is terminated. Treatment includes temporary seeding and sterile straw mulch. Any disturbed soils on a gradient of over 30 percent will have erosion control blankets installed. Permanent revegetation and tree replanting will take place in small openings in the erosion control blanket, with native species.

• Any stockpiles of soil used for fill material during construction will be covered with a tarp or erosion control blanket and silt fences will be installed appropriately to contain soils from moving into the creek. If there is a greater than 50 percent chance forecast of rain, the project site will be “rain-proofed” with erosion control measures so that no sediment or turbidity enters the stream.

• All debris, sediment, rubbish, vegetation, or other material removed from the channel banks or channel bottom will be disposed of at an approved disposal site. All petroleum products chemicals, silt, fine soils, and any substance or material deleterious to listed fish
species will not be allowed to pass into, or be placed where it can pass into the stream channel. There will be no sidecasting of material into any waterway.

- All materials placed in the creek, such as pilings and bulkheads, will be nontoxic. Any combination of wood, plastic, cured concrete, steel pilings or other materials used for in-channel structures will not contain coatings or treatments or consist of substances deleterious to aquatic organisms that may leach into the surrounding environment in amounts harmful to aquatic organisms.

- Erosion in excess of natural levels will be prevented and riparian vegetation will be protected utilizing the following basic standards:
  - Ground disturbance will be limited to the minimum amount necessary.
  - Where trees and/or riparian shrubs are present, ground disturbance will avoid the dripline of the trees/shrubs.
  - Disturbed areas will be hydromulched or stabilized by other erosion control measures prior to October 15. When necessary, extensions of this deadline may be granted by the CDFG on a case-by-case basis.
  - Excess drainage will be routed away from sensitive areas including around the outside canopy of trees/shrubs. (LTS)

Mitigation Measure BIO-3: Preconstruction surveys will not be required for construction work carried out in the non-breeding season August 15 through February 28/29. If construction work is scheduled during the breeding season (prior to August 15), a qualified wildlife biologist shall conduct a pre-construction survey to determine if nesting birds are present in or in the vicinity of any vegetation to be removed. The pre-construction survey shall be conducted within 15 days prior to the start of work from March 1 through May 31 (since there is higher potential for birds to initiate nesting during this period), and within 30 days prior to the start of work from June 1 through August 15. If active nests are found in the work area, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the CDFG, and will be based on the nesting species, its sensitivity to disturbance, and the expected types of disturbance. (LTS)

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?

Less than Significant Impact. The project site includes Hearn Avenue, the Colgan Creek Flood Control Channel and box culvert, an unpaved maintenance road, the SMART tracks, disturbed riparian trees, freshwater marsh/disturbed riparian scrub and ruderal/non-native grassland.

Although a Streambed Alteration Agreement will be required for outfall improvements, as described below in Section IV.(c), the proposed project will not impact any of the trees in the disturbed riparian habitat adjacent to the channel. Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community.
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?

Potentially Significant Unless Mitigation Incorporated. The jurisdictional area (Waters of the U.S./State of California) of the Colgan Creek Flood Control Channel located within the study site is 4,600 square feet (0.11 acre). This area consists of the unvegetated open water of the creek channel and associated freshwater marsh/disturbed riparian scrub in and adjacent to the channel. The jurisdictional length of the Colgan Creek Flood Control Channel on the study site is approximately 225 feet.

Colgan Creek has jurisdictional characteristics that include the year round presence of water and the presence of hydrophytic vegetation. Based on these characteristics, it is considered to be waters of the United States and waters of the State. As such, it falls under the jurisdiction of Section 404 of the Clean Water Act administered by the United States Army Corps of Engineers (Corps) and under state regulations administered by the Regional Water Quality Control Board (RWQCB). The California Department of Fish and Game (CDFG) will also have jurisdiction over any activities below the top of the banks of the creek under Section 1602 of the Fish and Game Code. Alterations of the bed and/or bank of Colgan Creek would require approvals/permits from one or more of these agencies depending on the proposed work.

To accommodate the proposed roadway improvements, the existing box culvert would be extended approximately 47 feet in a southward direction (downstream) along Colgan Creek. With the new wing walls, the total extension would be approximately 55 feet. In addition, grouted riprap would be placed in the channel approximately 5 feet beyond the wing wall, and the channel would be regraded to match the existing grade for approximately 10 feet beyond the riprap. Grouted riprap would also be installed on the re-graded channel slopes adjacent to the new culvert. This activity would result in less than 0.1 acre of permanent impacts (fill) in jurisdictional waters of the United States.

The area to be filled is dominated by Himalayan blackberry and includes unvegetated open water, scattered willows, and patches of wetland vegetation along the channel. A coffer dam and a pump would be placed in the channel north of Hearn Avenue (upstream) of the southern work area near the existing box culvert, and water in the channel would be temporarily diverted downstream of the southern limits of work. The temporarily disturbed area includes the culvert under Hearn Avenue and a small area of open water in the channel. Mitigation Measure BIO-4 would reduce impacts to jurisdictional waters to a less than significant level.

Mitigation Measure BIO-4: A Streambed Alteration Agreement shall be acquired prior to any work within the bed and banks of Colgan Creek. A 404 Nationwide Permit from the U.S. Army Corps of Engineers and a 401 certification from the Regional Water Quality Control Board shall also be acquired prior to construction within the creek channel for impacts to jurisdictional waters of the United States.

In addition to the general BMPs that would be implemented during the construction of the project, as described in Mitigation Measure BIO-2, all permanent impacts to jurisdictional
waters of the United States shall be compensated for at a 2:1 mitigation ratio through a riparian vegetation planting plan. Native red and arroyo willow (*Salix laevigata* and *S. lasiolepis*) poles, collected from near the project site, shall be planted in sono tubes in the slopes adjacent to the new box culvert in any disturbed areas within the grouted riprap. Willow poles in sono tubes shall be planted at approximately 4 foot centers. Any Himalayan blackberry removed during construction shall be disposed of off-site to prevent the spread and establishment of it on-site.

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?*

**Potentially Significant Unless Mitigation Incorporated.** As discussed in Section IV.(a) above, the project site includes Colgan Creek, which is a tributary within the Russian River hydrological unit. As such, it may be considered to be EFH for the Pacific salmon fishery (coho and Chinook salmon) and is designated as critical habitat for coho salmon. Implementation of Mitigation Measures BIO-1 and BIO-2, above, would reduce impacts related to the interference with the movement of wildlife through wildlife corridors to a less than significant level.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**No Impact.** The City of Santa Rosa does have a tree protection ordinance (City Ord. 2858, Ch. 17-24 of the City Code) that regulates the preservation and proper maintenance of trees within the City. The proposed project would not involve any improvements that would require the alteration or removal of trees within the project site. The proposed project would not conflict with any local policies or ordinances protecting biological resources.

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?*

**No Impact.** The project would not conflict with the provisions of an adopted or in-progress Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Also, as described in the Biological Assessment, the project will also not conflict with the provisions and recommendations of the U.S. Fish and Wildlife Service *Final Santa Rosa Plan Conservation Strategy for the Santa Rosa Plain.*
V. CULTURAL RESOURCES. Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?  

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?  

- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?  

- d) Disturb any human remains, including those interred outside of formal cemeteries?  

Affected Environment:
A cultural resources investigation was conducted of the project site by LSA in June 2008. The investigation consisted of a literature review, a records search at the Northwest Information Center (NWIC), contact with the Native American Heritage Commission, and a field survey. No cultural resources were identified in the project site by the background research. One cultural resource, a late 19th-century historic-period farmhouse complex, was identified immediately adjacent to the project site (Johnson and Eastman 1995). This complex is over 50 years old and thus could be eligible for the California Register of Historical Resources. The California Office of Historic Preservation, however, has determined that the complex is not eligible for listing in the National Register of Historic Places. Cultural resources that are not eligible for the National Register are generally not eligible for the California Register. The Historical Architectural Survey Report for the South-West Santa Rosa Master Environmental Assessment (Harris and Clark 1991) identified the complex as appearing eligible for listing as a local landmark, however, as of October 1995 it is not included on the City of Santa Rosa’s Designated Landmark’s List (City of Santa Rosa 1995). A portion of the Northwestern Pacific Railroad is located within the project site. Although the railroad is over 100 years old, it has been found to be not eligible for the National Register of Historic Places (Garcia and Associates 2004). Several other cultural resource surveys of and adjacent to the project site identified no cultural resources (Flynn 1990, Newland 1999, Cartier 2001, Beard 2002).

Discussion:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Potentially Significant Unless Mitigation Incorporated. The project site contains no historical resources listed in the National Register of Historic Places or the California Register of Historical Resources. The project site is adjacent to one cultural resource listed on the California Office of Historic Preservation’s Historic Properties Directory, which has been determined not eligible for
listing in the National Register of Historic Places because it lacks architectural integrity. It is also not eligible for listing in the *California Register of Historical Resources*. A records search at the Northwest Information Center (NWIC) of the State of California Historical Resources Information System, an affiliate of the State of California Office of Historic Preservation, did not identify any cultural resources within the project site. It is LSA’s opinion that the project site is of low archaeological resource sensitivity. Cultural resources are not anticipated to be discovered during project activities. If, however, such resources are discovered, implementation of the following mitigation measure would reduce impacts to a less than significant level.

**Mitigation Measure CULT-1:** If archaeological deposits are discovered during project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist shall be contacted to evaluate the situation and provide recommendations for the treatment of the archaeological resources in accordance with CEQA and the California Register of Historical Resources. Project personnel should not collect or move any cultural resources. Adverse effects to archaeological deposits should be avoided by project activities. If such deposits cannot be avoided, they shall be evaluated for their California Register of Historical Resources eligibility. If the resource is not eligible, a determination shall be made as to whether it qualifies as a “unique archaeological resource” under CEQA (see V.b). If the deposit is neither a historical nor unique archaeological resource, avoidance is not necessary. If the deposit is eligible for the California Register, it shall be protected from adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City of Santa Rosa and the Northwest Information Center. (LTS)

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

**Potentially Significant Unless Mitigation Incorporated.** There have been no archaeological resources, as defined by §21083.2, identified in the project site. There is always the possibility of encountering undiscovered archaeological cultural resources that may qualify as archaeological resources pursuant to §21083.2.

Archaeological resources are not anticipated to be discovered during project activities. If, however, such resources are discovered, implementation of the following mitigation measure would reduce impacts to a less than significant level.

**Mitigation Measure CULT-2:** If archaeological deposits are identified during project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist shall be contacted to determine whether such deposits are historical resources as defined in §15064.5. If these deposits do not qualify as historical resources a determination shall be made if they qualify as unique archaeological resources, pursuant to §15064.5(3)(c). If the deposit qualifies as a unique archaeological resource it shall be protected from adverse effects or such
effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the City of Santa Rosa and the Northwest Information Center.

(LTS)

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**Potentially Significant Unless Mitigation Incorporated.** LSA conducted a geologic and paleontological review to assess the presence of fossil resources and unique geologic features in the project area. Review of soil and geologic maps indicates that the project area consists of moderately developed soils from the Zamora silty, clay, loam series that extend approximately 5-feet below ground surface (U.C. Davis Soil Resource Laboratory 2008). This soil is underlain by Holocene alluvium (10,000 years B.P. to present) to a depth of zero to 12-feet (Wagner and Bortugno 1999, Helley et al. 1979). Holocene alluvium is not unique geologically and is not anticipated to contain unique geologic features.

A fossil locality search was conducted at LSA’s request by Dr. Pat Holroyd of the University of California Museum of Paleontology (UCMP), Berkeley. The search indicated no recorded fossil localities within or adjacent to the project site.

The maximum depth of ground disturbance by the proposed project is approximately 3-feet and all project ground disturbance will occur within the soils and Holocene deposits, which are not paleontologically sensitive. In the event that paleontological resources are encountered, implementation of the following mitigation measure would reduce impacts to a less than significant level.

**Mitigation Measure CULT-3:** If paleontological resources are encountered during grading or construction activities, work shall be halted immediately at the location of the resources. Project personnel should not collect or move any paleontological resources and a qualified paleontologist should be contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If found to be significant, and project activities cannot avoid the paleontological resources, adverse effects to paleontological resources should be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City of Santa Rosa, and, if paleontological materials are identified, a paleontological repository, such as the University of California Museum of Paleontology. (LTS)
d) Disturb any human remains, including those interred outside of formal cemeteries?

Potentially Significant Unless Mitigation Incorporated. Section 7050.5 of the California Health and Safety Code states that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined whether or not the remains are subject to the coroner’s authority. There is no indication that human remains are present within the proposed project site. Implementation of the following mitigation measure would ensure that potential impacts to human remains, should they be encountered, would be reduced to a less than significant level.

Mitigation Measure CULT-4: In the event that human remains are encountered, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, a qualified archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel should not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the City and the Northwest Information Center. (LTS)
VI. GEOLOGY AND SOILS. Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
   
   ii) Strong seismic ground shaking?
   
   iii) Seismic-related ground failure, including liquefaction?
   
   iv) Landslides?
   
   b) Result in substantial soil erosion or the loss of topsoil?
   
   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?
   
   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?
   
   e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Affected Environment:
The project site is located within the Coast Ranges Geomorphic Province, a relatively geologically young and seismically active region on the western margin of the North American plate. In general, the Coast Ranges are composed of sedimentary bedrock with layers of recent alluvium filling the intervening valleys.

The site soils are mapped as Zamora silty clay loam, 0 to 2 percent slopes (Soil Survey of Sonoma County, California 1972). Zamora silty clay loam is described as well drained to somewhat poorly drained and as having moderately slow permeability in the subsoil.
Discussion:
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Potentially Significant Unless Mitigation Incorporated. The project site does not lie within an Alquist-Priolo Special Studies Zone. However, the region surrounding the project site is considered seismically active (Seismic Zone 4) and strong ground shaking can be expected during the life of the project. The closest known active faults are the Healdsburg-Rodgers Creek Fault Zone, located approximately 1 mile to the west, and the San Andreas Fault, located approximately 24 miles to the southwest of the project site. These faults are considered capable of generating earthquakes with magnitudes of 7.0 and 7.9, respectively.

In addition, there are numerous other faults in the wider region that are capable of generating ground shaking that could affect the project site. The U.S. Geological Survey's Working Group on California Earthquake Probabilities estimated that there is a 62 percent probability that one or more Moment Magnitude (MW) 6.7 or greater earthquakes will occur in the San Francisco Bay Area between 2002 and 2031. The Group estimated the probability of a MW6.7 magnitude or greater earthquake to be 21 percent along the San Andreas Fault, 27 percent along the Hayward-Rodgers Creek Fault, eleven percent along the Calaveras Fault, four percent along the Concord-Green Valley Fault, ten percent along the San Gregorio Fault, three percent on the Greenville Fault, and three percent for the Mt. Diablo Thrust fault.

Implementation of the following mitigation measures would reduce the risk of loss, injury of death due to the rupture of a known fault to a less than significant level.

Mitigation Measure GEO-1a: Prior to plan approval, a geotechnical study shall be completed by an engineering geologist or equivalent to evaluate surface and subsurface soil conditions. This report shall include performance of a geotechnical review of final design documents and provision of oversight by a geotechnical engineer (as appropriate). Construction methods for the project shall incorporate all specifications and recommendations contained in the geotechnical report. (LTS)

Mitigation Measure GEO-1b: Project activities associated with grading, foundations, placement and compaction of fill materials, and design values for the roadway and railroad shall be in accordance with recommendations contained in the geotechnical report prepared for the project site. (LTS)
ii) Strong seismic ground shaking?

**Potentially Significant Unless Mitigation Incorporated.** See VI(a)(i), above.

iii) Seismic-related ground failure, including liquefaction?

**Potentially Significant Unless Mitigation Incorporated.** According to mapping conducted by the Association of Bay Area Governments (ABAG 2007), the possibility for hazard from ground failure or liquefaction is very low to moderate within the project site. Implementation of Mitigation Measure GEO-1a and GEO-1b, described above, would reduce potential impacts related to exposure of people and/or structures to risks related to liquefaction.

iv) Landslides?

**No Impact.** The project site is level and is not subject to landslides.

b) Result in substantial soil erosion or the loss of topsoil?

**Potentially Significant Unless Mitigation Incorporated.** Implementation of the proposed road widening project would include grading activities that could result in short-term soil erosion during the construction period. Exposed soils are considered erodible when subjected to concentrated surface flow or wind. Soil erosion and loss of topsoil would be minimized through implementation of Mitigation Measure AIR-1 (BAAQMD fugitive dust control measures) and compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements (Mitigation Measure HYDRO-1). See Responses III(b) and VIII(a) for further discussion of soil erosion and loss of topsoil.

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?

**Potentially Significant Unless Mitigation Incorporated.** As described above, the possibility for hazard from landslide is low and the possibility for hazard from liquefaction is very low to moderate within the project area [Section VI(a)(iii) and VI(a)(iv)]. The conditions related to lateral spreading, subsidence or collapse are not known at this time. The potential for these conditions to occur would be considered prior to final approval and construction of the proposed project. Implementation of Mitigation Measures GEO-1a and GEO-1b, described above, would ensure that unstable soil conditions would be remediated as part of the design and construction of the proposed project.
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?**

**Potentially Significant Unless Mitigation Incorporated.** Soils at the project site consist primarily of Zamora silty clay loam and are considered moderately expansive in nature. Expansive soils shrink and swell as a result of moisture changes that can cause heaving and cracking of slab-on-grade, pavements, and structures founded on shallow foundations. Implementation of Mitigation Measures GEO-1a and GEO-1b would ensure that potential impacts related to expansive soils would be reduced to less than significant.

e) **Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

**No Impact.** No septic sewer systems are proposed as part of the project. The proposed project would have no impacts to soil conditions related to septic tanks or alternative wastewater treatment systems.
VII. HAZARDS. Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 3/4 mile of an existing or proposed school?

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?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

f) For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

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?

Affected Environment:
The project site is located in a commercial and residential area of Santa Rosa. Adjacent properties are commercial to the east and southeast, and residential to the north, west and south of the project site. The Northwestern Pacific Railroad tracks bisect Hearn Avenue and extend through the project site to the north and south.
A Phase I Environmental Site Assessment (ESA) prepared for the proposed project (Bauer Associates 2008) identified numerous off site properties that have been or are currently being investigated by the State of California Regional Water Quality Control Board (RWQCB) and/or the County of Sonoma Environmental Health Division for contamination to soil and/or groundwater, including:

- The Mead Lumber Company, Inc., located adjacent to the project site to the east, has two 550 gallon above ground storage tanks (ASTs) that contain diesel;
- The Arco Gasoline Station and AM/PM Mini-Mart, located 750 feet east of the project site at 440 Hearn Avenue, currently has underground storage tanks (USTs) and is listed on the Geotracker database as being a leaking underground fuel tank (LUFT);
- The Shell Gasoline Station, located approximately 750 feet east of the project site at 2575 Corby Avenue, currently operates USTS and is listed on the Geotracker database as a LUFT site.
- Ray’s Food Center, located approximately 500 feet west of the project site at 2423 Dutton Avenue, is currently under investigation by the Sonoma County Environmental Health Division; and
- Fouche Auto Wreckers, located approximately 650 feet northwest of the project site at 2290 Dutton Avenue, is currently under investigation by the RWQCB.

However, the authors of the Phase I ESA were of the opinion that the potential for residual contamination from these sites to have impacted shallow soils at the project site is low, based on the distance from the source property and/or the groundwater gradient direction from the source property to the project site.

The Phase I ESA also concluded that the Colgan Creek channel was likely impacted by contaminated surface water runoff from surrounding urban streets. These contaminants could include petroleum products (e.g. gasoline, diesel, motor oil and MTBE), heavy metals (including lead), polynuclear aromatics (PNA’s), and other compounds. Typical surface runoff in urban areas into drainage channels and/or creeks, such as the Colgan Creek Channel, is considered a Recognized Environmental Condition, as defined by the American Society for Testing and Materials (ASTM) Practice E 1527-05 (Bauer Associates 2008).

**Discussion:**

a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Potentially Significant Unless Mitigation Incorporated.** Construction of the proposed project would require the use of heavy equipment and the installation of new pavement. Hazardous materials such as fuel, asphalt, and solvents would be used during construction. These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose an environmental hazard. The use of hazardous materials would be confined to the project construction period. The proposed project would not include a permanent use or source of hazardous materials. Implementation of Mitigation Measure HAZ-1 would reduce impacts related to the transport, use, or disposal of hazardous materials to a less than significant level.

**Mitigation Measure HAZ-1:** Project construction plans shall include emergency procedures for responding to hazardous materials releases for materials that will be brought onto the site...
as part of construction activities. The emergency procedures for hazardous materials releases shall include the necessary personal protective equipment, spill containment procedures, and training of workers to respond to accidental spills/releases. All use, storage, transport and disposal of hazardous materials (including any hazardous wastes) during construction activities shall be performed in accordance with existing local, state, and federal hazardous materials regulations. (LTS)

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?

Potentially Significant Unless Mitigation Incorporated. The Phase I ESA concluded that there are Recognized Environmental Conditions at the subject site and in the nearby area that may adversely impact the safety of workers exposed to the soils during the expansion of Hearn Avenue. The project, after implementation, would not create a significant hazard to the public or the environment as a result of the release of hazardous materials into the environment. Implementation of Mitigation Measures HAZ-1 and HAZ-2 would reduce impacts during the construction period to a less than significant level.

Mitigation Measure HAZ-2: In order to ensure the safety of workers completing the Hearn Avenue project, and to ensure the proper and safe disposal of soils, the sediments and shallow soils at the project site shall be sampled and tested for contaminants of potential concern related to urban street runoff prior to implementation of the proposed project. The sampling shall be performed as part of a Phase II Environmental Site Assessment. Any recommendations contained in the Phase II ESA shall be implemented by the proposed project. (LTS)

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?

No Impact. The project site is not located within ¼ mile of an existing school. The closest schools to the project site are Roseland School and South Park School, located approximately 1 mile north of the project site, and Bellevue Union School, approximately 1 mile south of the project site.

The proposed project would not result in the use or emission of substantial qualities of hazardous materials that would pose a human or environmental health risk. Use of commercially-available hazardous materials during the construction period would be confined to the project site. Therefore, implementation of the proposed project would not result in the use or emission of hazardous materials that would adversely affect an existing or proposed school.

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?

Potentially Significant Unless Mitigation Incorporated. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.
However, typical surface water runoff in urban areas into drainage channels and/or creeks, such as the Colgan Creek Channel, is considered a Recognized Environmental Condition, as defined by the American Society for Testing and Materials (ASTM) Practice E 1527-05 (Bauer Associates 2008). This REC could impact the safety of construction workers exposed to the soils during the expansion of Hearn Avenue. Mitigation Measure HAZ-2, above, would reduce potential impacts to worker health and safety during the construction phase of the proposed project to a less than significant level.

e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?**

**No Impact.** The project site is not located within 2 miles of a public airport or public use airport. The closest airport to the project site is the Sonoma County Airport, located approximately 10 miles north of the project site. Therefore, implementation of the proposed project would not expose persons to airport-related hazards.

f) **For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?**

**No Impact.** The project site is not in the vicinity of a private airstrip. Therefore, implementation of the proposed project would not expose persons to airport-related hazards.

g) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**No Impact.** Hearn Road would operate more efficiently as a result of the widening and related improvements. The project would improve circulation of traffic in the vicinity of the project site, thereby potentially improving access for emergency response or emergency evacuation.

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?**

**No Impact.** The proposed project is located in a low to moderate fire hazard area (ABAG 2007) and would not expose people to significant risk due to wildland fires.
### VIII. HYDROLOGY AND WATER QUALITY.

Would the project:

<table>
<thead>
<tr>
<th>Would the project:</th>
<th>Potentially Significant Impact</th>
<th>Potentially Significant Unless Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>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)?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>❌</td>
</tr>
<tr>
<td>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?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>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?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>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?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>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?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>❌</td>
</tr>
<tr>
<td>h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>❌</td>
</tr>
<tr>
<td>i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>❌</td>
</tr>
<tr>
<td>j) Inundation by seiche, tsunami, or mudflow?</td>
<td>♠</td>
<td>●</td>
<td>○</td>
<td>❌</td>
</tr>
</tbody>
</table>
**Affected Environment:**
The entire site drains into the Colgan Creek Flood Control Channel. Colgan Creek is mapped an unnamed intermittent stream on USGS Quad map that originates in the hills east of Santa Rosa approximately 2 miles east of the project site. The central portion of Colgan Creek has been channelized and is shown as a solid double line and named Colgan Creek Flood Control Channel on the USGS Quad map. The downstream reaches of Colgan Creek have a natural appearing meandering channel. Colgan Creek is tributary to the Laguna de Santa Rosa approximately 4 miles west-southwest of the project site. The Laguna de Santa Rosa is tributary to Mark West Creek approximately 7 miles west-northwest of the project site, and Mark West Creek is tributary to the Russian River, a traditional navigable water of the United States, approximately 3 miles further to the west-northwest.

**Discussion:**

_a) Violate any water quality standards or waste discharge requirements?_

**Potentially Significant Unless Mitigation Incorporated.** The proposed project could potentially result in both long-term (operational) and short-term (construction) water quality impacts, as described below.

**Long-Term Operational Impacts.** The proposed project would widen and expand the existing roadway system. Roadways may contain oil, grease, petroleum products, zinc, copper, lead, cadmium, iron, or other trace metals. These pollutants could enter Colgan Creek through the storm drain system during periods of heavy precipitation. The increase in impervious surface would not be substantial compared to existing conditions. Pollutant levels in storm water runoff entering the existing drainage system would be similar to existing conditions and are considered less than significant.

**Short-Team Construction Impacts.** Construction of the proposed project would cause disturbances to the ground surface from earthwork, including excavating and grading. These activities could potentially increase the amount of sediments in site runoff that flows into Colgan Creek. Sediments suspended in runoff could be carried downstream, where, if not controlled, could accumulate in downstream water courses, potentially harming downstream aquatic resources and water quality. Because expansion of the existing box culvert would involve construction in the bed of the Colgan Creek Flood Control Channel, Water Quality Certification from the Regional Water Quality Control Board (RWQCB) would be required pursuant to Section 401 of the Clean Water Act.

Materials used during construction of roadways may have chemicals that are potentially harmful to aquatic resources and water quality. Accidents or improper use of these materials could release contaminants to the environment. Additionally, oil and other petroleum products used to maintain and operate construction equipment could be accidentally released.

Implementation of the following mitigation measure would ensure compliance with the requirements of the NPDES General Permit and reduce potential impacts during project construction to a less than significant level.
Mitigation Measure HYDRO-1: A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared prior to beginning construction. The project developer or contractor shall submit the SWPPP to the City and file a Notice of Intent with the Regional Water Quality Control Board (RWQCB). All construction contractors shall retain a copy of the approved SWPPP on the construction site. The SWPPP shall include BMPs to reduce potential impacts to surface water quality through the construction and life of the project. The SWPPP shall adhere to the following requirements:

- The SWPPP shall include measures to avoid creating contaminants, minimize the release of contaminants, and water quality control measures to minimize contaminants from entering surface water or percolating into the ground.
- The water quality control measures shall address both construction and operations periods.
- Fluvial erosion and water pollution related to construction shall be controlled by a construction water pollution control program that shall be filed with the appropriate agency and kept current throughout any site development phase.
- The water pollution prevention program shall include BMPs, as appropriate, given the specific circumstances of the site and project.
- A spill prevention and countermeasure plan shall be incorporated into the SWPPP.

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)?**

**No Impact.** Grading activities would not affect an aquifer or the local water table. The proposed project would not require the use of groundwater supplies or interfere substantially with groundwater recharge.

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?**

**Less Than Significant Impact.** The proposed project would involve the widening of the existing road crossing over the Colgan Creek box culvert. The widening of the road crossing would include extension of the existing box culvert by 47 feet. Culvert expansion work would be conducted according to current engineering standards and would not substantially alter the drainage patterns in upstream or downstream areas. Therefore, implementation of the proposed project would not alter the existing drainage patterns of the site or result in substantial erosion or siltation on- or off-site.
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?

**Less Than Significant Impact.** Construction of the roadway widening segment and expansion of the box culvert within the Colgan Creek Flood Control Channel would not substantially alter the existing drainage pattern of the site or alter the course of Colgan Creek. Storm water runoff would be handled by the existing storm drain system.

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?

**Less Than Significant Impact.** The proposed project would require the construction of a new roadway surface and removal of the existing Hearn Avenue pavement. Runoff resulting from rainfall on the proposed impervious roadway surface would be collected in the existing drainage system and discharged. The project would not contribute significantly more runoff or polluted water than that produced by the existing roadway.

f) Otherwise substantially degrade water quality?

**Potentially Significant Unless Mitigation Incorporated.** Construction of the proposed project, which would result in the removal of vegetation and the exposure of soils to erosional forces, would result in a temporary increase in the sediment load of Colgan Creek. These potential impacts would be reduced to a less than significant level through implementation of Mitigation Measure HYDRO-1, described above.

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?

**No Impact.** No housing units are proposed as part of the project.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

**No Impact.** The project site is not within a FEMA 100-year flood zone and the proposed project does not include the construction of any structures that could impede or redirect flood flows.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam?

**No Impact.** No buildings are proposed as part of the proposed project and the project would not expose people to a new significant risk of loss, injury, or death involving flooding.
j) **Inundation by seiche, tsunami, or mudflow?**

**No Impact.** The proposed project is not at risk of inundation by seiche, tsunami, or mud flow.
IX. LAND USE AND PLANNING. Would the project:

a) Physically divide an established community?

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?

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Affected Environment:

The proposed project is located along Hearn Avenue in Santa Rosa, California, approximately 1,500 feet west of U. S. Highway 101. Project improvements will primarily occur along a 620-foot segment of Hearn Avenue between Whitewood Drive to the east and Victoria Drive to the west. The project site is centered on the SMART crossing and the Colgan Creek Flood Control Channel box culvert undercrossing of Hearn Avenue. The project site is located in an area of residential and commercial land uses. The surrounding lands are developed, with commercial buildings to the northwest and southeast and residences to the southwest and northeast.

All of the proposed improvements would take place within City, SCWA, and SMART right-of-way. Adjacent City land use designations along Hearn Avenue include: Low Density Residential (2.0-8.0 units per acre); Medium Low Density Residential (8.0-13.0 units per acre); Medium Density Residential (8.0-18.0 units per acre); and Retail and Business Services. Adjacent City zoning designations along Hearn Avenue include: Single Family Residential (R-1), Light Industrial (IL), and General Commercial (CG). Unincorporated County residential parcels are located along the northern boundary of Hearn Avenue.

Discussion:

a) Physically divide an established community?

No Impact. The proposed project consists of widening and other roadway improvements along an approximately 620 foot-long segment of an existing street and improvements to a segment of the SMART corridor. The parcels adjacent to the project site contain residential and commercial development. However, the proposed project would not reduce access in the vicinity of the project site and would not bisect any existing development or physically divide an established community.
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?

No Impact. All of the proposed improvements would take place within City, SCWA, and SMART right-of-way. The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project would not conflict with any habitat conservation plan or natural community conservation plan.
X. 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? ☐ ☐ ☐ ☑

  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? ☐ ☐ ☐ ☑

Affected Environment:
The State Mining and Reclamation Act of 1975 (SMARA) identifies and protects California’s mineral resources. Though various minerals have been mined in Sonoma County during the past century, mining operations at the current time consist almost exclusively of the extraction and processing of rock, sand and earth products for use in construction and landscaping (Sonoma County 2008). No mining operations and no known mineral resources areas are located within the project area.

Discussion:
  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?

     No Impact. No known mineral resources are present at the project site.

  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?

     No Impact. See X(a), above.
XI. 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?

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

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?

<table>
<thead>
<tr>
<th>Potential Impact</th>
<th>Potentially Significant Unless Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>□</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>□</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Affected Environment:
Primary noise sources within the project area include traffic along Hearn Avenue, Highway 101, and on neighborhood roadways. Sensitive receptors along the roadway alignment include single-family and multi-family residences.

Discussion:
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?

Potentially Significant Unless Mitigation Incorporated. The long-term operational and short-term construction noise impacts of the proposed project are described below.

Long-Term Operational Impacts. As described above, sensitive receptors in the vicinity of the project include single-family and multi-family residential development adjacent to the project site. The proposed project provides roadway improvements to enhance traffic circulation to accommodate existing traffic levels. As described in Response III(a), implementation of the proposed project is not expected to generate additional vehicle trips, thus changes to ambient noise
levels along Hearn Avenue are not expected. Therefore, traffic related noise at the project site would be similar to existing conditions after project implementation, and the long term operational noise impacts of the proposed project are less than significant.

**Short-Term (Construction) Impacts.** Construction of the proposed project would require grading and earthwork activities that could generate noise levels that exceed established standards. Although these activities could result in infrequent periods of high noise, this noise would not be sustained and would occur only during the temporary construction period. Pile driving or other construction activity that would generate very high noise levels or ground borne vibration, if necessary, would not be sustained and be of a short duration. Compliance with applicable provisions of the City of Santa Rosa Noise Ordinance (Chapter 17-16 of the City Code) and implementation of the following mitigation measure would reduce potential impacts related to construction noise to a less than significant level.

Mitigation Measure NOISE-1: The Contractor shall implement the following measures to reduce short-term construction related noise impacts from the proposed project:

- Noise-generating activities, including truck traffic coming to and from the site for any purpose, shall be limited to daytime, weekday, non-holiday hours (7:00 a.m. to 5:00 p.m.). Any special circumstances that necessitate performance of construction work outside the hours and days specified shall require that the contractor request and the City’s project manager approve such work.
- During all project site excavation and on-site grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers’ standards.
- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. (LTS)

**b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?**

**Potentially Significant Unless Mitigation Incorporated.** See XI(a), above.

**c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less Than Significant Impact.** See XI(a), above.
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

**Potentially Significant Unless Mitigation Incorporated.** Construction of the proposed project would require the use of construction equipment and would generate temporary periodic increases in ambient noise levels in the vicinity of the project site. Implementation of Mitigation Measure NOISE-1 would reduce this impact to less than significant levels.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

**No Impact.** The proposed project is not located within an airport land use plan area or within 2 miles of an airport.

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?

**No Impact.** The proposed project is not located within the vicinity of a private airstrip.
**XII. POPULATION AND HOUSING.** Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Potentially Significant Impact Unless Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

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)?

No Impact. The proposed project would result in the widening of Hearn Avenue between Whitewood Drive to the east and Victoria Drive to the west. Railroad improvements are also proposed. No new housing, commercial, or industrial space would be developed as part of the proposed project. New infrastructure would not be extended to an undeveloped site that would allow for new development. Therefore, the proposed project would not directly or indirectly induce substantial population growth.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. No housing would be displaced as a result of the proposed project.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. See XII(b), above.
XIII. 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:

<table>
<thead>
<tr>
<th>Public Service</th>
<th>Potentially Significant Impact</th>
<th>Potentially Significant Unless Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Police protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Schools?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Parks?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Other public facilities?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Affected Environment:
The proposed project site is located in an urban area that is already served by public service systems. Fire protection and emergency response services for the project site are provided by the Santa Rosa Fire Department, located at 955 Sonoma Avenue. Police protection services are provided by the Santa Rosa Police Department, located at 965 Sonoma Avenue. The closest schools to the project site are Roseland School and South Park School, located approximately 1 mile north of the project site, and Bellevue Union School, approximately 1 mile south of the project site. The closest parks to the project site are Southwest Community Park, approximately 3/4 mile to the west, and College Creek Park, approximately 1 mile to the northeast.

Discussion:

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: Fire protection, police protection, schools, parks, other public facilities?

No Impact. The proposed project would not result in an increase in population or facilities that would require the provision of fire or police services, schools, parks, or other public facilities, or result in the need for physically altered facilities.
XIV. RECREATION.

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?  

No Impact. Implementation of the proposed project would not result in a population increase or a corresponding increase in the use of recreational facilities in Santa Rosa or other adjoining communities.

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?  

No Impact. See XIV(a), above.

Affected Environment:

Neighborhood and community parks are an important component of Santa Rosa, both as recreational and aesthetic resources that contribute to the City’s character. In 2001, the City of Santa Rosa had a total of 468 acres of neighborhood and community parks, 222 acres of undeveloped parkland, and 12 additional community and/or recreation facilities. In addition to the established older parks in the east side of the City, new parks are being developed to meet the diverse needs of a growing community. The closest parks to the project site are Southwest Community Park, approximately 3/4 mile to the west, and College Creek Park, approximately 1 mile to the northeast.
XV. TRANSPORTATION/TRAFFIC. Would the project:

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)?

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or designated roads or highways?

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?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

f) Result in inadequate parking capacity?

g) Conflict with adopted polices, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Potentially Significant Unless Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☀</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☀</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Affected Environment:
Roadway facilities that provide access to and around the project site include: Highway 101, Santa Rosa Avenue, Dowd Drive and Dutton Avenue. Highway 101 is the major north-south route of the North San Francisco Bay Area providing regional connection to the project site. Santa Rosa Avenue, Dowd Drive and Dutton Meadow are city streets providing local access to the project site.

Bicycle and pedestrian services within the project site include Class II bike lanes west of the Colgan Creek box culvert along Hearn Avenue, and sidewalks on both sides of the roadway along the entire project length.

Santa Rosa CityBus is the principal transit service within Santa Rosa. Operated by the City, CityBus provides regularly scheduled fixed-route service to residential neighborhoods, major activity centers, and facilities that serve transit-dependent populations (i.e., the elderly and disabled). An existing bus stop is located within the project site on the north side of Hearn Avenue just east of the box culvert and railroad tracks.
Discussion:

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)?

Potentially Significant Unless Mitigation Incorporated. The proposed project is a roadway project rather than a land-use project; therefore, it is not assumed to add new trips to the street network. Rather, it would enhance traffic circulation in order to accommodate existing traffic levels. Implementation of the proposed project would not generate additional vehicle trips and would not affect the existing or future traffic load of local roadways. The proposed project would provide additional capacity to accommodate existing traffic levels.

During construction activities, lane closures and delays could occur. Portions of the roadway that would be normally used for traffic circulation and/or parking could be temporarily unavailable in order to accommodate construction vehicles. Construction activities within the roadway could block travels lanes and/or the adjacent shoulder/parking area. In addition, construction could temporarily block access to and for adjacent businesses, residences or other properties. In addition, construction activities could generate additional traffic on the roadways in the project area as construction workers, equipment delivery trucks, and construction equipment travel to and from the construction zone. As compared to existing traffic volumes on Hearn Avenue, the temporary increase in traffic generated by project construction would be minimal.

The Northwestern Pacific Railroad Company, a freight operator under contract with the North Coast Railroad Authority, is proposing to operate freight service starting in the fall of 2009. The proposed railroad improvements at Hearn Avenue would not conflict with railroad operations if they are completed by July 2009. Otherwise, the tracks would be placed “out-of-service” until the railroad portion of the Hearn Avenue project is completed. The estimated duration of construction for the railroad improvements is approximately four weeks. The railroad improvements would not impact traffic circulation on Hearn Avenue.

Implementation of the following mitigation measures would reduce potential impacts to roadway blockage during project construction to a level below significance.

Mitigation Measure TRAF-1: The contractor shall develop and implement a Traffic Control Plan (TCP). Input and approval of the TCP shall be obtained from the City of Santa Rosa. Temporary speed limit restrictions shall be considered within the construction zone. The TCP shall define the use of flaggers, warning signs, lights, barricades, cones, etc. according to standard guidelines required by the City. Further, the contractor shall maintain the work site, including traffic control, in a safe condition at all times, even outside of normal work hours. (LTS)

Mitigation Measure TRAF-2: Notices shall be posted along the construction right-of-way that explain the specific location and duration of the construction activities in advance of
construction. The City shall identify any potential obstructions to property access and shall make alternative access provisions for each landowner, if necessary. (LTS)

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency or designated roads or highways?

**Potentially Significant Unless Mitigation Incorporated.** See XV(a), above.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

**No Impact.** The proposed project is not located in the vicinity of an airport and would not affect air traffic patterns.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

**No Impact.** The proposed project would improve safety conditions along Hearn Avenue by providing an additional westbound travel lane and by extending the existing bicycle lanes east of the Colgan Creek box culvert. The project would not increase hazards due to design features.

e) Result in inadequate emergency access?

**Potentially Significant Unless Mitigation Incorporated.** Project construction activities could interfere with emergency response traffic (ambulance, fire, paramedic, and police vehicles). In addition, there is a possibility that emergency services may be needed at a location where access is temporarily blocked by the construction zone. Implementation of Mitigation Measure TRAF-3 would reduce potential emergency response impacts to a level below significance.

**Mitigation Measure TRAF-3:** The contractor shall coordinate in advance of construction with any emergency service providers to avoid restricting movements of emergency vehicles. Police departments, ambulance services, and paramedic services shall be notified in advance of the proposed locations, nature, timing, and duration of construction activities and advised of any access restrictions that could impact their effectiveness. At locations where access to nearby property is blocked, provisions shall be ready at all times to accommodate emergency vehicles, such as plating over excavations, short detours, and alternate routes in conjunctions with local agencies. The TCP (Mitigation Measure TRAF-1) shall include details regarding emergency service provider coordination and procedures, and copies of the plans shall be provided to all relevant service providers. (LTS)
f) Result in inadequate parking capacity?

**No Impact.** The proposed project would not generate the need for parking. The proposed project would not result in inadequate parking capacity.

g) Conflict with adopted polices, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks?)

**Less Than Significant Impact.** The proposed project would include Class II bike lanes along the entire project length and would not impact existing sidewalks or bus stops. The existing road has bicycle lanes only to the west of the Colgan Creek box culvert. Therefore, implementation of the proposed project would improve access for alternative transportation modes.
**XVI. UTILITIES AND SERVICE SYSTEMS.** Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? [☐] [☐] [☐] [☐] [☐]

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? [☐] [☐] [☐] [☐]

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? [☐] [☐] [☐] [☐]

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? [☐] [☐] [☐] [☐]

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? [☐] [☐] [☐] [☐]

f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs? [☐] [☐] [☐] [☐]

g) Comply with federal, State, and local statutes and regulations related to solid waste? [☐] [☐] [☐] [☐]

**Affected Environment:**
Existing utilities within the Hearn Avenue project area consist of: overhead power, telephone and cable TV distribution lines along the north side of the project behind the existing curb; underground street light services, and traffic signal interconnect lines; a PG&E gas main; a public sanitary sewer main with individual service laterals; a public water main with individual service laterals; a SCWA aqueduct; and a public storm drain system.
Discussion:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

**No Impact.** The proposed project entails extension and realignment of an existing roadway and associated roadway improvements. No wastewater would be generated by the proposed project. Therefore, the proposed project would not exceed any wastewater treatment requirements of the Regional Water Quality Control Board.

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?

**Less Than Significant Impact.** The proposed project does not involve wastewater treatment and would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities.

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?

**Less Than Significant Impact.** The proposed project consists of the widening of Hearn Avenue and other associated improvements, which would result in an increase of impervious surface. This increase in impervious surface would not be substantial when compared to existing conditions. However, in order to accommodate the widening of Hearn Avenue over Colgan Creek, the existing box culvert would be extended approximately 47 feet. As described in Sections IV and VIII, *Biological Resources and Hydrology and Water Quality,* BMPs would be implemented during construction to reduce erosion and sedimentation, all required regulatory permits would be obtained, preconstruction surveys for special-status species would be conducted, and a riparian vegetation planting plan would be implemented after construction is completed. The post-construction storm drainage facilities would be sufficient to accommodate the demands of the proposed project, and the expansion of the existing facilities would not result in significant environmental effects.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

**Less Than Significant Impact.** See XVI(b), above.

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?

**No Impact.** See XVI(a), above.
f) **Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?**

**Less Than Significant Impact.** Operation of the proposed project would not generate solid waste. Construction of the proposed project would generate construction waste, railroad track materials, and asphalt due to proposed roadway and railroad improvements. Asphalt from the existing roadway would be recycled. The project would generate a minimum amount of construction waste and would not result in a substantial reduction in the capacity of a landfill.

g) **Comply with federal, State, and local statutes and regulations related to solid waste?**

**No Impact.** The project would comply with all federal, State, and local statutes and regulations related to solid waste.
XVII. 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 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?

Potentially Significant Unless Mitigation Incorporated.

Implementation of the mitigation measures recommended in this Initial Study would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory. Section IV, Biological Resources, includes mitigation measures to minimize impacts to nesting birds and listed salmonids and other fish. Best Management Practices will be required to minimize erosion, degradation, and/or sedimentation of Colgan Creek. Mitigation is provided in Section V, Cultural Resources, in the event that unanticipated archeological or paleontological resources and/or human remains are identified in the project area during construction.

Potentially Significant Unless Mitigation Incorporated. Implementation of the mitigation measures recommended in this Initial Study would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory.
b) Does the project have impacts that are individually limited, but cumulatively considerable? 
("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact. The impacts of the proposed project are individually limited and not cumulatively considerable. The City of Santa Rosa proposes roadway improvements along an approximately 620-foot long segment of Hearn Avenue to improve circulation along the eastern Hearn Avenue corridor and to provide additional capacity for vehicle stacking at traffic signals in order to accommodate existing traffic levels. All environmental impacts that could occur as a result of the proposed project would be reduced to a less than significant level through implementation of the mitigation measures recommended in this Initial Study and, when viewed in conjunction with other closely related past, present or reasonably foreseeable future projects, would not be significant.

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

Less Than Significant Impact. The proposed project would be constructed and operated in accordance with all applicable regulations governing air quality, hazardous materials, noise, and geotechnical considerations. Therefore, implementation of the proposed project would not result in significant human health risks.
REPORT PREPARERS AND REFERENCES

A. REPORT PREPARERS

LSA Associates, Inc.

157 Park Place
Point Richmond, CA 94801

Kristin Granback, Environmental Planner
Megan Heileman, Assistant Planner

132 W. Mountain Avenue
Fort Collins, CO 80524

Shanna Guiler, AICP, Senior Planner

B. REFERENCES


City of Santa Rosa Cultural Heritage Board. 1995. Designated Landmarks. Santa Rosa, California.


Inc., Point Richmond, California


Johnson, Katherine and Bright Eastman. 1995. *Historical Architectural Survey Report, Hearn Avenue Road Widening Project, located in Santa Rosa, Sonoma County, California*. Anthropological Studies Center, Sonoma State University, Rohnert Park, California.


