

STATEMENT OF MITIGATION MEASURES AND MONITORING PROGRAMS

MARTIN SLOUGH INTERCEPTOR PROJECT

SCH No. 2002082043

The following mitigation measures, together with the associated monitoring programs, are adopted by the City of Eureka (City) as conditions of approval for this project. These measures and associated monitoring programs were identified, or are based on measures identified, in the Final Environmental Impact Report (Final EIR) for the project, and are within the jurisdiction of City for implementation.

The measures identified in this statement reflect the interests of the City in ensuring a project that meets the legal obligations of the City pursuant to Section 15097 of the Guidelines for Implementation of the California Environmental Quality Act. Other mitigation measures may legitimately be required for this project by other responsible agencies with regulatory or trustee authority for the proposed project; any such measures are not within the jurisdiction of the City for implementation, but such measures can be, and should be, implemented by the responsible agencies.

The proposed project incorporates a number of voluntarily included features that have the effect of reducing potential environmental effects. These voluntary features are described fully in the Final EIR, and are specifically identified here as functioning in the manner of mitigation measures, by allowing the project to avoid or reduce significant environmental effects. Should any of those voluntarily included features not be reflected in the final project plans developed by the City for the project, then the City shall incorporate alternative or additional measures (and monitoring programs) which have the same degree of effectiveness in reducing environmental effects as do the voluntarily proposed project components described in the Final EIR.

I. PHYSICAL ENVIRONMENT

A. Soils and Geology

Mitigation Measure 3-1.1 – Geologist to Review Construction Process to Assure a Lack of Adverse Effects from Geological or Geotechnical Hazards

Measure: *The City shall retain the services of a qualified geologist to evaluate the proposed construction process identified by the awarded contractor, to make recommendations to the City regarding the final implementation of any measures or practices included in the contractor's proposed methodology with respect to geological and geotechnical hazards in the project area, and to monitor the implementation of the mitigation measure below.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects. The City Engineering Department or the Community Development Department shall execute a service agreement with a qualified geologist as part of the City's implementation of this project.

Mitigation Measure 3-1.2 – Implement Geologists' Recommendations

Measure: *The consulting geologists' recommendations for soil stability, grading, and other concerns with respect to project trench excavation, pipeline construction, and other components shall be implemented in carrying out any construction for the project. Recommendations for design elements to address or offset geological and geotechnical risks to project elements are identified in the geological and geotechnical report in Appendix C; these general recommendations may be supplemented by additional recommendations during the detailed design process. All of these measures, and any future supplements, are incorporated as if fully set forth in this chapter.*

Monitoring: This measure shall be made a condition of approval for the current project application. Geotechnical recommendations identified in Appendix C, or supplements that may be identified following further study, shall be incorporated into design documents prepared by the City for the project. The City Engineering Department shall conduct field observations during the construction process to assure that the geological and geotechnical recommendations are implemented. The City Engineering Department shall be empowered to direct the contractor to modify implemented construction measures that do not conform to the recommended measures.

Mitigation Measure 3-1.3 – Implement Construction Measures for Environmentally Sensitive Areas

Measure: *The consulting geologists' recommendations for avoiding adverse effects to environmentally sensitive features and water quality shall be implemented in carrying out any construction for the project, including the following:*

- 1. Earthwork and grading for construction of the collector system, the interceptor system, the pump station, and the force main shall require the preparation of an Erosion and Sedimentation Control Plan by the Contractor; this may be the required SWPPP. The Plan shall identify the likely sources of construction-related erosion and shall define specific mitigation measures to prevent the movement of sediment outside the general working area. The Plan shall be reviewed by the City's geotechnical consultant, and the project construction contract shall require the plan's implementation.*
- 2. The proposed collector, interceptor, and force main alignments cross a number of drainages and streams. Project-area streams are generally low-gradient, low-energy streams, and are anticipated to pose low to moderate scour potentials. However, no site-specific scour evaluations have been performed for this project. The pipelines, at those drainage crossings where there is a vertical separation of less than five feet between the stream thalweg and the tops of the pipelines, shall be protected from erosion impacts by effective structural means.*

3. *With respect to pipe jacking, the Contractor shall take care to not mine flowing sands, loose sands, or loose materials from in front of the casing when augering to remove soils from the interior of the casing. If flowing or loose soils are encountered at a jacking site, the Contractor shall consider jacking of the casing across the entire span prior to augering the soils from the interior of the jacked casing. If loose and/or flowing soils are encountered and jacking cannot be performed without creating significant voids along the alignment, alternative trenchless methods shall be considered, more thorough dewatering of the alignment shall be carried out, soil-grouting of the alignment using a weak grouting mixture prior to jacking used, or other means developed subject to approval by the Geotechnical Engineer.*
4. *Because project elements are located in environmentally sensitive areas, dewatering shall be conducted in a controlled manner that minimizes adverse environmental consequences. Sediment delivery to area watercourses and/or Humboldt Bay is the primary concern relative to the dewatering of pipeline excavations. To mitigate the potential adverse effects of sediment delivery, the pumped water shall be discharged into a temporary detention basin at least 100 feet from surface watercourses, unless otherwise directed by the City. Entrained sediment should be removed before the water is allowed to drain from the basin onto adjacent bottomlands. Water from the detention basins shall not be discharged directly into sloughs, cutoff sloughs, streams, or any ditch that discharges to one of these features, unless otherwise directed by the City. The Contractor shall submit dewatering plans to the City for approval prior to installation.*

Monitoring: This measure shall be made a condition of approval for the current project application, and shall be incorporated into design documents prepared by the City for the project. The City Engineering Department shall conduct field observations during the construction process to assure that the geological and geotechnical recommendations are implemented. The City Engineering Department shall be empowered to direct the contractor to modify implemented construction measures that do not conform to the recommended measures.

B. Air Quality

Mitigation Measures 4-1.1 – Comply with NCAQMD Rules for Particulates

Measure: *The proposed project’s construction contractor shall comply with AQMD Rule 420 (Particulate Matter) and Rule 430 (Fugitive Dust Emissions):*

“RULE 420 - PARTICULATE MATTER

“(a) General Combustion Sources

“A person shall not discharge particulate matter into the atmosphere from any combustion source in excess of 0.46 grams per standard cubic meter (0.20 grains per standard cubic foot) of exhaust gas, calculated to 12 percent carbon dioxide; or in excess of the limitations of NSPS Rule 490, as applicable. ...

“(e) Non-Combustion Sources

“A person shall not discharge particulate matter into the atmosphere from any non-combustion source in excess of 0.46 grams per actual cubic meter (0.20 grains

per cubic foot) of exhaust gas or in total quantities in excess of the amount shown in Table I (omitted), whichever is the more restrictive condition.

“RULE 430 - FUGITIVE DUST EMISSIONS

“(a) The handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne, shall not be permitted.

“(b) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:

“(1) Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.

“(2) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.

“(3) Conduct agricultural practices in such a manner as to minimize the creation of airborne dust.

“(4) The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.

“(5) The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.

“(6) The paving of roadways and their maintenance in a clean condition.

“(7) The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.”

Monitoring: This measure shall be made a condition of approval for the current project application, and shall be incorporated into design and contract documents prepared by the City for the project. The City Engineering Department shall, on the basis of complaints to the City regarding excessive construction dust, smoke, or other particulate matter, be empowered to direct the contractor to undertake additional measures in the field if it appears that the contractor does not follow this measure.

Mitigation Measures 4-1.2 - Water Application for Dust Control

Measure: *Notwithstanding any other adopted measure, the construction contractor shall apply water to disturbed land surfaces during all phases of project construction during which soil material is being moved, at a frequency high enough to maintain soil cohesion and to reduce blowing dust to the extent practicable.*

Monitoring: This measure shall be made a condition of approval for the current project application, and shall be incorporated into design and contract documents prepared by the City for the project. The City Engineering Department shall, on the basis of complaints to the City regarding excessive construction dust, be empowered to direct the contractor to undertake additional measures in the field if it appears that the contractor does not follow this measure.

C. Hydrology, Drainage, and Water Quality

Mitigation Measure 5-1.1 – Implement Best Management Practices and Other Construction Practice Mitigation Measures to Avoid or Minimize Sediment and Other Pollutant Mobilization

Measure: *The City’s construction contractor shall prepare a Stormwater Pollution Prevention Plan (SWPPP) under existing state regulations. This SWPPP shall include best management practices (BMPs) identified in the state’s recommended BMP handbooks (Camp Dresser & McKee and others 1993) or other sources (e.g., Washington State Department of Ecology 1992; CASQA 2003) focused on preventing sediment mobilization. While this measure does not specifically identify all potentially suitable measures, and while the City or the contractor may identify additional appropriate BMPs in consultation with the North Coast Regional Water Quality Control Board, the BMPs in Table 5-3 are BMPs that are applicable during construction of the Martin Slough Interceptor Project (see following measures for additional details). (See Draft EIR, Chapter 16, for references.)*

Table 5-3. Best Management Practices (BMPs) Potentially Useful for Avoiding Sedimentation During Construction of the Martin Slough Interceptor Project.

Best Management Practice	Brief Description of BMP
Preserve Existing Vegetation	Plan construction in advance to protect areas of existing vegetation that should be maintained when project is complete, including identifying the role of the vegetation as a runoff filter.
Seeding and Planting	Restore vegetation to construction area using seeded, planted, or hydroseeded material at completion of construction.
Mulching	Apply straw, wood chips, or other organic material to construction surfaces to protect land surface from effects of flowing or falling water.
Temporary Stream Crossing	Construct a temporary crossing if a project requires access across a stream; restore channel at close of construction.
Silt Fence	Install silt-control or silt-trapping fabric barriers around construction zones.
Straw Bale Barrier	Construct barriers of straw bales, staked to ground, around construction zones.

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 5-1.2 – Restore Pre-Construction Conditions in Diked Former Tidelands and Grassland-Dominated Floodplain Seasonal Wetlands

Measure: *Pipeline construction in diked former tideland and floodplain seasonal emergent marshes shall incorporate practices intended to minimize sediment mobilization to areas outside the construction zone and to restore pre-construction conditions, including but not limited to the following specific elements:*

- A. Backfill within the pipeline trench shall include only the native material excavated from the trench, except where design constraints specifically require engineered backfill, in which case the exotic material shall be limited to the location(s) where it is specifically required. At a minimum, the native backfill material shall extend from the top of the engineered fill to the base of the surface soil material identified in sub-item B.*
- B. The top six inches (6”) of excavated material (which contains the root masses, rhizomes, seeds, and accumulated organic material of the vegetation that dominates these seasonal wetlands) shall be separately stockpiled by the contractor, and the contractor shall assure that this stockpiled soil material is kept moist and that the material is restored to the construction trench location as soon as is feasible. This topsoil material shall be reintroduced as the top fill material in the restored trench section. This material shall not be compacted or treated in any manner that may adversely affect the restoration of pre-project vegetation.*
- C. Following the completion of backfilling and equipment removal, the contractor shall sow the portions of the construction corridor and other disturbed sites that currently have a grassland cover with a commercially available seed mixture composed of the same grass species that dominate the grasslands at the time of construction. Marshland areas that have a pre-project cover other than grasslands shall be re-planted with the same vegetation that exists there at the beginning of construction.*
- D. The contractor shall implement erosion control techniques around temporarily stored spoil material according to an erosion control and revegetation plan implementing the requirements of this chapter, to be developed by the contractor and approved by the City prior to the initiation of project construction. In addition, the contractor shall deploy artificial containment (such as coir rolls or straw bales) around temporary settling or infiltration basins to which water from the trench may be released during slough dewatering activity.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 5-1.3 – Protect Water Quality and Habitat Conditions and Restore Pre-Construction Conditions in Streams and Ditches

Measure: Pipeline construction within aquatic features, including ditches, sloughs, flowing streams and other waters, shall incorporate practices intended to maintain ecological functions within the stream ecosystems, minimize sediment mobilization to aquatic ecosystems outside the construction zone, and restore pre-construction conditions, including but not limited to the following specific measures:

- A. The contractor shall isolate stream segments from the effects of construction with temporary barriers. In addition, in flowing streams the contractor shall assure continuation of streamflow by: (1) using a “pumped bypass” to assure that streamflow continues downstream past the construction zone, (2) using oversized, temporary pipelines (culverts), verified by the City to be adequately sized to carry anticipated stream flows, in any stream courses that are not covered by other measures in this section, or (3) using temporary bypass channels around the construction location. The installed culvert, pumped bypass, or bypass channel shall assure the continued flow of the stream below the construction location. Pumped bypasses shall require backup pumps and 24-hour monitoring. Sedimentation shall be avoided to the extent feasible.
- B. Backfill within the pipeline trench at all crossings shall include the native material excavated from the trench, unless design constraints specifically require engineered backfill. At a minimum, the native backfill material shall extend from the top of the engineered fill to the surface. In addition to replacing native material in the streambed and banks, the contractor shall place washed gravel, of sizes adequate to withstand local water velocities, on the bed within the construction zone according to the approved erosion control (SWPPP or other) plan and the approved revegetation plan.
- C. The contractor shall implement erosion control techniques around any temporarily stored spoil material according to the approved erosion control and revegetation plan. In addition, the contractor shall deploy artificial containment (such as coir rolls or straw bales) around temporary settling basins to which water from the trench will be pumped during necessary dewatering activity.
- D. The top six inches (6”) of excavated material (which contains the root masses, rhizomes, seeds, and accumulated organic material of the streambank vegetation) shall be separately stockpiled by the contractor, and the contractor shall assure that this stockpiled soil material is kept moist and that the material is restored to the streambanks as soon as is feasible. The contractor shall restore the original streambed and streambank contours following construction. The streambanks shall be revegetated to restore pre-construction conditions, according to the approved erosion control plan and the approved revegetation plan, using riparian and wetland plant materials native to the project vicinity.

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be

empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 5-1.4 – Protect Water Quality and Habitat Conditions and Restore Pre-Construction Conditions in Swain Slough and Elk River

Measure: *The crossings under Swain Slough and Elk River shall be constructed without trenching or other excavation activities within the aquatic elements of these streams, utilizing construction techniques generally known as “bore-and-jack,” “pipe-ramming,” or “directional drilling.” In conducting the excavations necessary for these crossings, the contractor shall implement the elements identified for construction in diked former tidelands and floodplain seasonal wetlands, identified in mitigation measure 5-1.2. In addition, excavated excess soil material shall be disposed of only at approved locations.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 5-2.1 – Development Shall Incorporate Measures to Reduce Pollution and Runoff Intensification

Measure: *The City of Eureka shall continue to implement the requirements of current General Plan Goal 4.D, including the following specific measures (identified as Policies in the Plan), with respect to new development within City Limits that will be served by the Martin Slough Interceptor Project:*

- A. *The City shall encourage the use of natural stormwater drainage systems in a manner that preserves and enhances natural features.*
- B. *The City shall support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain stream courses in a natural state.*
- C. *The City shall promote sound soil conservation practices and carefully examine the impact of proposed urban developments with regard to water quality and effects on drainage courses.*
- D. *The City shall improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).*
- E. *The City shall require new development that would increase storm drainage runoff in a 10-year storm event by more than one cubic foot per second (1.0 cfs) to provide retention/siltation basins to limit new runoff to prior-to-development levels.*

- F. *The City shall encourage new project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.*
- G. *The City shall require new projects that affect the quantity or quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff. To the maximum extent feasible, new development shall not produce a net increase in peak stormwater runoff.*
- H. *In the Martin Slough drainage, the City shall cooperate with Humboldt County and affected landowners to minimize potential damage and economic loss arising from stormwater runoff, consistent with other policies of this General Plan.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 5-3.1 – Development Shall Incorporate Measures to Reduce Pollution and Runoff Intensification

This is the same measure as Mitigation Measure 5-2.1.

II. BIOLOGICAL ENVIRONMENT

A. Special-Status Aquatic Species

Mitigation Measure 6-1.1 – Fishery Biologist to Review and Monitor Construction Process to Assure a Lack of Adverse Fishery Effects

Measure: *The City shall retain the services of a qualified fisheries biologist to evaluate the proposed construction process identified by the awarded contractor, to make recommendations to the City regarding the final implementation of any measures or practices included into the contractor’s proposed methodology that could adversely affect fish or fish habitat in the project area, and to monitor the implementation of the measures. The fisheries biologist shall assist the City in assuring that all fisheries-related mitigation measures identified in this EIR and any fisheries-related permit conditions imposed by approval agencies are implemented as part of the project’s construction.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects. The City Engineering Department or the Community Development Department shall procure the services of a qualified fisheries biologist as part of the City’s implementation of this project.

Mitigation Measure 6-1.2 – Restore Pre-Construction Conditions in Diked Former Tidelands and Grassland-Dominated Floodplain Seasonal Wetlands

This is the same measures as Mitigation Measure 5-1.2.

Mitigation Measure 6-1.3 – Protect Water Quality and Habitat Conditions and Restore Pre-Construction Conditions in Streams and Ditches

This is the same measures as Mitigation Measure 5-1.3.

Mitigation Measure 6-1.4 – Protect Water Quality and Habitat Conditions and Restore Pre-Construction Conditions in Swain Slough and Elk River

This is the same measures as Mitigation Measure 5-1.4.

Mitigation Measure 6-1.5 – Protect Sensitive Fish Species in Martin Slough, Swain Slough, and Elk River

Measure: *If in-the-water construction is used for crossings in Martin Slough, Swain Slough, or the Elk River, the City shall utilize the following techniques to avoid creating direct adverse effects on fish:*

- A. A preliminary evaluation will be conducted to identify the maximum extent of waterway and channel-bottom disturbance necessary. The City will inform the Department of Fish & Game, the U. S. Fish & Wildlife Service, and NOAA Fisheries of the extent of waterway and channel-bottom disturbance required.*
- B. The locations at which channel-bottom disturbance will be carried out will be separated from the stream by methods satisfactory to the Department of Fish & Game, the U. S. Fish & Wildlife Service, and NOAA Fisheries. The water column within the area affected by construction will be seined by the City’s fisheries biologist to capture and removed any trapped fish, which would be transferred to a “live bucket” and transported to a location in the same water body distant from the construction site.*
- C. After the crossing construction has been completed, all introduced equipment will be removed and the bed and banks restored to the original contours.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 6-2.1 – Development Shall Incorporate Measures to Reduce Pollution and Runoff Intensification

This is the same measure as Mitigation Measure 5-2.1.

The City of Eureka will continue to implement the requirements of its adopted General Plan (see Section 5.1.3, as well as Chapter 8) with respect to runoff intensification and water quality effects resulting from facilitated development within land areas subject to City jurisdiction. The cumulative, indirect contribution to significant effects arising within the City will be reduced below a threshold of significance by these measures. While other potential effects, including potential cumulative effects, may indirectly emerge as a consequence of implementing the Martin Slough Interceptor Project in areas subject to the jurisdiction of the County of Humboldt, the mitigation for these effects is not within the City’s jurisdiction, and mitigation measures cannot be specified in this EIR for those effects. However, the City believes that appropriate agencies (the County of Humboldt and the North Coast RWQCB) can, and should, require similar measures with respect to development outside of the region subject to City jurisdiction.

B. Special-Status Terrestrial Species and Ecological Communities

Mitigation Measure 7-1.1 – Botanist to Review Construction Process to Assure a Lack of Adverse Effects on Sensitive Species

Measure: *The City shall retain the services of a qualified botanist to evaluate the proposed construction process identified by the awarded contractor, to make recommendations to the City regarding the final implementation of any measures or practices included in the contractor’s proposed methodology that could adversely affect sensitive plant species or their habitats in the project area, and to monitor the implementation of the mitigation measures. The botanist shall assist the City in assuring that all sensitive species-related mitigation measures identified in this EIR and any sensitive-species-related permit conditions imposed by approval agencies are implemented as part of the project’s construction.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects. The City Engineering Department or the Community Development Department shall execute a service agreement with a qualified botanist as part of the City’s implementation of this project.

Mitigation Measure 7-1.2 – Avoid Impacts in, and Restore Pre-Construction Conditions in, Areas that Serve as Habitat for Sensitive Plant Species

Measure: *The City’s contractor shall avoid construction activities within areas identified as habitat for sensitive plant species to the greatest extent possible. Prior to construction a qualified botanist employed by the City shall delineate and flag the extent of the occurrences of all known occurrences of sensitive plant species or habitats in the vicinity of the known construction locations. The botanist shall monitor the contractor’s activities in proximity to known occurrences of sensitive species throughout the construction process to verify compliance with adopted mitigation measures. Pipeline construction in diked former tideland and floodplain seasonal emergent marshes shall*

incorporate practices intended to minimize direct effects to and loss of habitat values for sensitive plant and wildlife species and to restore pre-construction conditions, including the following measures:

- A. Backfill within the pipeline trench shall include only the native material excavated from the trench, unless design constraints specifically require engineered backfill, in which case the exotic material shall be limited to the location(s) where it is specifically required. At a minimum, the native backfill material shall extend from the top of the engineered fill (that is, beginning no higher than one foot above the top of the buried pipeline) to the base of the surface soil material identified in sub-item B.*
- B. The top six inches (6") of excavated material (which contains the root masses, rhizomes, seeds, and accumulated organic material of the vegetation that dominates these seasonal wetlands) shall be separately stockpiled by the contractor, and the contractor shall assure that this stockpiled soil material is kept moist and that the material is restored to the construction trench location as soon as is feasible. This topsoil material shall be reintroduced as the top fill material in the restored trench section. This material shall not be compacted or treated in any manner that may adversely affect the restoration of pre-project vegetation.*
- C. Following the completion of backfilling and equipment removal, the contractor shall enact species-specific restoration measures that are identified for sensitive plant species in the biological report in Appendix D. (Areas with a riparian forest cover, and upland spruce forests, shall be restored as described in Chapter 8.)*
- D. If construction must occur within areas occupied by sensitive plant species, and it is evident that restoration of pre-project conditions will not avoid a significant adverse effect of one or more sensitive plant species or habitat for such species, then the City's consulting botanist shall develop specific recommendations for construction that will avoid or offset the potential direct and indirect effects to these species.*

[This measure is a partial restatement of mitigation requirements identified previously in Appendix B and in Chapter 5. The applicability in this section reflects a requirement to restore the habitat conditions that serve the sensitive plant and wildlife species.]

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

For sensitive plant species, the City shall create and implement a follow-up monitoring program to assure that any restoration actions adopted for sensitive plant species meet success criteria that are identified in the biological study in Appendix D. If the success criteria fail to be met the City shall implement remediation actions until the criteria are met.

Mitigation Measure 7-1.3 – Minimize Impacts to Sitka Spruces in Upland or Wetland Spruce Forests

Measure: *Construction in forested habitats shall avoid removing spruce trees whenever possible. Contractors shall excavate trench sections and emplace pipe sections by digging soil materials from under the roots of large trees when doing so will allow the trees to be retained and worker safety is not compromised. Herbaceous vegetative cover and topsoil within forested uplands will be stockpiled and then replaced, using approximately the same approach identified for construction in wetlands. However, the City does not anticipate replacing all woody vegetation removed as a necessity of pipeline construction in forested upland areas.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 7-2.1 – Wildlife Biologist to Review Construction Process to Assure a Lack of Adverse Effects on Sensitive Species

Measure: *The City shall retain the services of a qualified wildlife biologist to evaluate the proposed construction process identified by the awarded contractor, to make recommendations to the City regarding the final implementation of any measures or practices included in the contractor’s proposed methodology that could adversely affect sensitive wildlife species or their habitats in the project area, and to monitor the implementation of the mitigation measures. The biologist shall assist the City in assuring that all sensitive species-related mitigation measures identified in this EIR and any sensitive-species-related permit conditions imposed by approval agencies are implemented as part of the project’s construction.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects. The City Engineering Department or the Community Development Department shall execute a service agreement with a qualified wildlife biologist as part of the City’s implementation of this project.

Mitigation Measure 7-2.2 – Protect and Restore Sensitive Wildlife Species and Habitats

Measure: *The City’s contractor shall avoid construction activities within areas identified as habitat for sensitive wildlife species to the greatest extent possible. Prior to construction a qualified biologist, employed by the City, shall delineate and flag the extent of the occurrences of all known occurrences of sensitive wildlife species or habitats in the vicinity of the known construction locations. The biologist shall monitor the contractor’s activities with respect to potential construction effects to sensitive wildlife species throughout the construction process to verify compliance with adopted mitigation measures.*

The following specific requirements shall apply to the project:

- A. Construction within 264 feet (80 meters) of the identified Osprey nest location should take place outside of the period March 1 – August 15 if the nest is occupied, in order to avoid harassment of the Osprey as a result of noise and activity associated with construction. Surveys shall be conducted early in the breeding season to determine whether this species is present if operations must take place during the nesting period.
- B. To minimize the risk of disturbance to nesting Cooper’s hawks, sharp-shinned hawks, and white-tailed kites, operations should take place outside of the general nesting period (March 1 – August 15) in the vicinity of coniferous forest habitats that could be occupied by these species. Surveys shall be conducted early in the breeding season to determine whether any of these species is present if construction operations must take place during the nesting period.
- C. Any construction activities in potential breeding habitat (“willow riparian” forests) should be conducted outside of the breeding season of these species (April 15 – July 15) to insure that any nesting individuals are not adversely impacted by construction: willow flycatcher, black-capped chickadee, yellow warbler, yellow-breasted chat, tricolored blackbird. Surveys shall be conducted early in the breeding season to determine whether any of these species is present if construction operations must take place during the nesting period.
- D. If construction must occur during the sensitive periods for these wildlife species, the City’s consulting biologist shall develop additional, specific recommendations for construction that will avoid or offset the potential direct and indirect effects to these species.

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

C. Wetlands

Mitigation Measure 8-1.1 – Wetland Scientist to Review Construction Process to Assure a Lack of Adverse Effects on Wetland Areas and Functions

Measure: The City shall retain the services of a qualified wetland scientist to evaluate the proposed construction process identified by the awarded contractor, to make recommendations to the City regarding the final implementation of any measures or practices included in the contractor’s proposed methodology that could adversely affect wetlands or wetland functions in the project area, and to monitor the implementation of the adopted mitigation measures. The wetland scientist shall assist the City in assuring that all wetland-related mitigation measures identified in this EIR and any wetland-

related permit conditions imposed by approval agencies are implemented as part of the project's construction.

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects. The City Engineering Department or the Community Development Department shall procure the services of a qualified wetland scientist as part of the City's implementation of this project.

Mitigation Measure 8-1.2 – Restore Pre-Construction Conditions in Diked Former Tidelands and Grassland-Dominated Floodplain Seasonal Wetlands

This measure is the same as Mitigation Measure 5-1.2.

Mitigation Measure 8-1.3 – Prevent Wetland Drainage Using Trench Baffles

Measure: *When conditions within the trench section in which project pipelines are emplaced indicate a significant likelihood that groundwater may be redirected along the trench alignment by flow through the pipeline bedding or other material introduced into the trench, the construction contractor shall install transverse baffles that prevent such groundwater drainage along the pipeline.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 8-2.1 – Wetland Scientist to Review Construction Process to Assure a Lack of Adverse Effects on Wetland Areas and Functions

This measure is the same as Mitigation Measure 8-1.1.

Mitigation Measure 8-2.2 – Restore Pre-Construction Conditions in Riparian Forest-Dominated Floodplain Wetlands

Measure: *Pipeline construction in forested floodplain wetlands shall incorporate practices intended to minimize sediment mobilization to areas outside the construction zone and to restore pre-construction conditions, including the following measures:*

- A. *Large trees or other woody vegetation within riparian wetlands shall be avoided to the greatest extent possible. The consulting wetland scientist shall, at the City's direction, inventory woody plants in these areas that will be affected by construction, and shall identify, by species and by size, all individuals greater than three inches in diameter at breast height (3" dbh) that will be removed. Individuals of each woody plant species removed during construction that exceed 3" dbh shall be replaced by the project contractor with new individual plants of the same species, at a*

replacement planting ratio of 2:1 (i.e., two individuals planted for each individual removed) to allow for mortality effects in the planted materials.

- B. Backfill within the pipeline trench shall include only the native material excavated from the trench, unless design constraints specifically require engineered backfill, in which case the exotic material shall be limited to the location(s) where it is specifically required. At a minimum, the native backfill material shall extend from the top of the engineered to the base of the surface soil material identified in sub-item C.
- C. The top six inches (6") of excavated material (which contains the roots, rhizomes, seeds, and accumulated organic material of the vegetation that dominates these riparian wetlands) shall be separately stockpiled by the contractor, and the project contractor shall assure that this stockpiled soil material is kept moist and that the material is restored to the construction trench location as soon as is feasible. This topsoil material shall be reintroduced as the top fill material in the restored trench section. This material shall not be compacted or treated in any manner that may adversely affect the restoration of pre-project vegetation.
- D. The project contractor shall implement erosion control techniques around temporarily stored spoil material according to the adopted SWPPP and a revegetation plan implementing the requirements of this measure, to be developed by the project contractor with assistance from the City's consulting wetland scientist; this plan shall be approved by the City prior to the initiation of project construction. In addition, the contractor shall deploy artificial containment (such as coir rolls or straw bales) around any settling basins to which water resulting from construction operations will be discharged.

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 8-3.1 – Wetland Scientist to Review Construction Process to Assure a Lack of Adverse Effects on Wetland Areas and Functions

This measure is the same as Mitigation Measure 8-1.1.

Mitigation Measure 8-3.2: Exercise Right to Mitigation Credit at Fay Slough Wildlife Area

Measure: The City shall enable its prior agreement with the County of Humboldt to use 1.4 acres of wetland mitigation credit at the Fay Slough Wildlife Area. The agreement to exercise the credit shall be confirmed prior to the construction of the Martin Slough Interceptor Project.

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects. Representatives of the City, in consultation with the Community Development and Engineering Departments, shall execute an agreement with the County of Humboldt and the California Department of Fish & Game, confirming the use of the mitigation credits, prior to awarding the contract to construct the Martin Slough Interceptor Project.

Mitigation Measure 8-4.1 – Wetland Scientist to Review Construction Process to Assure a Lack of Adverse Effects on Wetland Areas and Functions

This measure is the same as Mitigation Measure 8-1.1.

Mitigation Measure 8-4.2 – Development Shall Incorporate Measures to Reduce Pollution and Runoff Intensification

This measure is the same as Mitigation Measure 5-2.1.

The City of Eureka will continue to implement the requirements of its adopted General Plan (see Section 5.1.3, as well as Chapter 6) with respect to water quality effects and runoff intensification resulting from facilitated development within land areas subject to City jurisdiction. The cumulative, indirect contribution to significant effects arising within the City will be reduced below a threshold of significance by these measures. While other potential effects, including potential cumulative effects, may indirectly emerge as a consequence of implementing the Martin Slough Interceptor Project in areas subject to the jurisdiction of the County of Humboldt, the mitigation for these effects is not within the City's jurisdiction, and mitigation measures cannot be specified in this EIR for those effects. However, the City believes that appropriate agencies (the County of Humboldt and the North Coast RWQCB) can, and should, require similar measures with respect to development outside of the region subject to City jurisdiction.

III. HUMAN ENVIRONMENT

A. Planning and Land Use

Mitigation Measure 9-1.1 – Restore Pre-Construction Conditions on Residential Properties, in Commercial-use Areas, and in the Municipal Golf Course.

Measure: *Project design elements described in Chapter 2 and Appendix B shall be implemented to restore pre-project surface conditions in residential areas and in the commercial region near Highway 101. In addition, these elements shall be enacted to restore the disturbed areas within the Eureka Municipal Golf Course to pre-construction conditions.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be

empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 9-1.2 – Prepare Traffic Management Plans

This mitigation measure is the same as Mitigation Measure 11-1.1.

The Traffic Management Plan will identify the locations at which nighttime construction will occur, and will identify measures to be taken by the City's contractor to avoid or minimize potential effects of light and glare on residential and commercial land uses.

Mitigation Measure 9-1.3 – Avoid Inappropriate Lighting During Construction

Measure: *The construction contractor shall inform the City no less than 72 hours prior to the beginning of any scheduled nighttime construction that will use intense lighting. Upon City direction the contractor shall notify any commercial, institutional, or residential land uses that may be affected by the lighting that intense night-lighting will be in use, identifying the location(s) and duration(s) of use. The contractor shall avoid directing construction-related lighting into residential neighborhoods to the greatest extent feasible.*

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 9-2.1 – Take appropriate planning actions to conform the project with land-use planning documents and zoning classifications.

Measure: *The City and/or the Humboldt Community Services District shall prepare and submit to appropriate land use authorities (e.g., the City of Eureka, the County of Humboldt, and/or the California Coastal Commission) any applications necessary to conform the project with Plan designations and/or zoning classifications for the pump station and any other elements of the Martin Slough Interceptor Project.*

Monitoring: This measure shall be initiated during the project design phase and made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District.

Mitigation Measure 9-3.1 – Work Cooperatively with the County of Humboldt and the Humboldt Community Services District to Address Development Timing and

Scheduling Implications within the Project's Service Area During the County General Plan Update.

Measure: *The City will work with the County to incorporate the implementation of the Martin Slough Interceptor Project into the planning context included in the County General Plan Update. The City suggests that the County review and consider possible modification of the Urban Limit line as it now appears in the Eureka Community Plan. Areas that are logical for residential development, particularly those directly adjacent to similarly situated land area with similar physical characteristics, should be considered for possible inclusion. The Urban Limit line should be reconciled with boundaries for adjoining districts and spheres of influence.*

The City will work with the County in planning for the logical and appropriate development of the Martin Slough basin. Issues that the City considers to be desirable for discussion include: (1) the timing of development and the nexus with potential impacts on traffic and circulation, water quality, and habitat issues that are identified in the City's General Plan, as well as other effects that result directly or indirectly from development in the Eureka Community Plan area; and (2) the need for methodologies to enact future cumulative impact assessments for cumulative effects that affect City areas as well as County areas and to develop mitigation programs as part of the County's General Plan.

Monitoring: The City of Eureka, at both the staff level and through elected and appointed officials, shall consult with appropriate counterparts from the County of Humboldt regarding collaborative meetings with County staff and decision-makers concerning the implementation of the County's General Plan and the Martin Slough Interceptor Project.

Mitigation Measure 9-3.2 – Development Shall Incorporate Measures to Reduce Pollution and Runoff Intensification

This is the same measure as Mitigation Measure 5-2.1.

Mitigation Measure 9-3.3 – Limit Connections to Martin Slough Interceptor Pending the Implementation of Traffic Impact Fee Program

This is the same measure as Mitigation Measure 11-3.1.

B. Transportation and Circulation

Mitigation Measure 11-1.1 – Prepare Traffic Management Plans

Measure: *The City's selected contractor shall prepare Traffic Management Plans pursuant to County of Humboldt, City of Eureka, and Caltrans Standards, as appropriate for a given construction location. Traffic control measures consistent with Institute of Transportation Engineers standards shall be implemented during construction. The Traffic Management Plan shall include the following elements:*

- A. Truck routes: *travel routes for trucks delivering construction materials or removing material from the construction area shall be specified, and only those routes shall be used.*

- B. Nighttime construction: in critical circulation areas or locations (e.g., the Highway 101 corridor) the hours during which the contractor may operate may be scheduled to occur during the night, if daytime construction operations conducted under the Traffic Management Plan are judged by the affected government to be insufficient to avoid significant traffic flow restrictions.
- C. Lane closures: temporary lane closures and other changes in roadway conditions shall be identified in the Traffic Management Plan.
- D. Warnings: signs, lights, or other traffic control measures required to inform the traveling public of the project shall be posted in the construction area.
- E. Notification: potentially affected residences and businesses shall be notified of possible access disruptions at least 72 hours (i.e., three working days) prior to construction activities that would affect such access.
- F. Essential services: emergency service providers and school districts shall be notified of expected construction timing and duration, and of probable travel restrictions within the construction area. Emergency vehicles will be given priority at traffic control stations during construction. Delays for school buses will be minimized to the extent feasible.

Monitoring: This measure shall be made a condition of approval for the current project application, and shall be incorporated into design documents prepared by the City for the project. The City Engineering Department shall review the Traffic Management Plan(s) prepared by the contractor, and shall conduct field observations during the construction process to assure that the Traffic Control Plan(s) are implemented. The City Engineering Department shall be empowered to direct the contractor to modify implemented traffic control measures that do not conform to the approved Traffic Management Plan(s).

Mitigation Measure 11-1.2 – Assure Access to Pine Hill Road Residences

Measure: The City Engineering Department shall, to the extent necessary, direct the contractor in the field to assure access through the construction zone to each Pine Hill Road residence for a period no less than 12 hours in length during each 24-hour day.

Monitoring: This measure shall be made a condition of approval for the project, as well as any future implementation projects, and shall be incorporated into design and contract documents prepared for all projects by the City and the District. The City Engineering Department or the Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities on any City project if evidence is presented to either department that the contractor is not in compliance with this measure, pending the development of specific actions to regain compliance.

Mitigation Measure 11-2.1 – Prepare Traffic Management Plans

This is the same measure as Mitigation Measure 11-1.1.

Mitigation Measure 11-3.1 – Limit Connections to Martin Slough Interceptor Pending the Development of a Memorandum of Agreement to Identify Mitigation for Cumulative Traffic Impacts, and the Implementation of a Circulation Improvement Fund Program

Measure: *The City shall cooperate with local governments in the project area to enter into a Memorandum of Agreement (MOA) to develop and implement a suitable “Cumulative Traffic Impact Assessment and Mitigation Program” (Program). The aim of the MOA, and of the resulting Program, will be to formally identify indirect or cumulative traffic and circulation impacts, and the required improvements necessary to offset indirect or cumulative circulation impacts, within the areas of the City of Eureka and the County of Humboldt that will be served, whether directly or indirectly, by the Martin Slough Interceptor Project.*

The City shall prohibit connections to the Martin Slough Interceptor, or to any part of the City’s wastewater collection system that will develop additional conveyance capacity as a result of the Martin Slough Interceptor Project, until the MOA and the Program are in place and appropriate funding has been secured for improvements identified in the Program. The methodology for creating the Circulation Improvement Fund Program shall be identified as part of the MOA and the Program. Payments to the circulation improvement fund shall be secured for each connection to the wastewater collection system prior to the authorization by the City of that connection.

Monitoring: This measure shall be made a condition of approval for the current project. The City of Eureka will identify programmatic elements required in a regional transportation planning approach that includes the City and other parts of the project service area. Upon the implementation of the MOA, and following the delivery of an appropriate payment to the circulation improvement fund for any affected parcel under the Program, the City shall authorize a connection to the Martin Slough Interceptor.

C. Noise

Mitigation Measure 12-1.1 - Restrict Noise-Generating Activities

Measure: *The operating periods of equipment used in project construction within 1000 feet of residentially developed areas of the City of Eureka or County of Humboldt shall be limited to the hours between 7:00 AM and 7:00 PM Monday through Friday, and the hours between 9:00 AM and 5:00 PM on Saturday (this restriction need not be applied in construction along South Broadway (Highway 101)).*

Construction personnel shall conduct all work activities in a manner that minimizes noise generation. A variety of contractor actions are available which will reduce construction noise, including: (i) turning off engines in all equipment not in active use, (ii) avoiding using equipment near occupied structures as much as possible, (iii) shielding noisy equipment with less-noisy equipment, and (iv) avoiding high-RPM engine operation whenever possible.

All construction equipment used in developed areas shall be equipped with sound-control/muffling devices in good working order that comply with adopted state and federal standards.

Monitoring: This measure shall be made a condition of approval for the current project, and shall be incorporated into design and contract documents prepared by the City for the project. The City Engineering Department shall, on the basis of complaints to the City regarding excessive construction noise, be empowered to direct the contractor to undertake additional measures in the field if it appears that the contractor does not follow this measure.

Mitigation Measure 12-1.2 - Notify Neighbors

Measure: *When activity involving heavy construction equipment is scheduled to occur within 250 feet of occupied structures, construction personnel shall provide written notification to the residents in the potentially affected properties prior to using the heavy construction equipment. The written notification shall be provided to each affected property at least 72 hours prior to the start of the activity, and shall indicate the approximate duration of time (dates and hours) during which the noise-generating activity is expected to occur.*

Monitoring: This measure shall be made a condition of approval for the current project, and shall be incorporated into design and contract documents prepared by the City for the project. The City Engineering Department shall be empowered to direct the contractor to undertake additional measures in the field if it appears that the contractor does not follow this measure, on the basis of complaints to the City regarding excessive construction noise that was not preceded by 72 hours written notice.

Mitigation Measure 12-2 – Design and Construct Martin Slough Pump Station to Limit Sound Intensity to 65 dBA at Property Lines

Measure: *The Martin Slough pump station shall be designed and constructed to provide acoustic shielding for the emergency generator and any other element that may generate substantial sound levels. The shielding shall effectively reduce sound from the Martin Slough pump station to a level that does not exceed 65 dBA, measured at the exterior property line of each adjacent parcel.*

Monitoring: This measure shall be made a condition of approval for the current project, and shall be incorporated into design and contract documents prepared by the City for the project.

D. Odor

Mitigation Measure 13-1.1 – Project Design Shall Incorporate Odor-Control Measures that Prevent the Release of Odorous Gasses

Measure: *Project design documents shall identify potential sources of odorous gasses within the project elements, and shall incorporate measures to prevent the release of such substances. The design shall consider the expected lifetimes of odor-control agents*

and techniques, and shall identify measures for odor control that remain effective for long durations while requiring little maintenance by City staff or other technical staff. The goal for odor control shall be to prevent the release of odorous gasses from system elements completely.

Monitoring: This measure shall be made a condition of approval for the current project, and shall be incorporated into design and contract documents prepared by the City for the project.

E. Cultural Resources

Mitigation Measure 14-1.1: Specified Procedures Shall Be Followed in the Event of Inadvertent Discovery of Archaeological Material.

Measure: *If, during construction, concentrations of subsurface archaeological resources (or materials that may be considered to be archaeological resources) are encountered, City staff shall be notified immediately and all ground-disturbing work in the immediate area shall temporarily cease and not resume until a qualified archaeologist has been contacted to evaluate the materials and recommend appropriate action. If buried human remains are discovered, they shall be treated in a manner consistent with Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code. The County Coroner shall be contacted to determine whether further investigations are warranted, and the remains will be turned over to the Coroner, who may contact the Native American Heritage Council and Native American representatives as required or appropriate.*

Monitoring: This measure shall be made a condition of approval for any required project permit, and shall be incorporated into design documents prepared by the City for the project. The City Engineering Department or Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities if culturally significant resources are detected and judged to be at risk, pending the development of necessary alterations to the construction process.

Mitigation Measure 14-1.2: Cultural Resources Construction Monitor Required.

Measure: *Because of the archaeological sensitivity of the portion of the force main alignment alternative in the vicinity of Highway 101, a cultural resources specialist shall monitor construction activities within this area. The monitor shall evaluate and, if necessary, record and scientifically remove any buried significant cultural resources identified during construction operations.*

Monitoring: This measure shall be made a condition of approval for any required project permit, and shall be incorporated into design documents prepared by the City for the project. The City Engineering Department or Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities if culturally significant resources are detected and judged to be at risk, pending the development of necessary alterations to the construction process.

Mitigation Measure 14-2.1: Project Construction Shall Not Adversely Affect the “Lorensen Ranch” House or its Immediate Surroundings and Accessory Elements.

Measure: *Project construction activities in the vicinity of the Lorensen Ranch House, located on the hill above the private roadway at the corner of Pine Hill Road and Meyers Avenue (AP# 301-201-007), shall be conducted in such manner as to avoid adverse effects on the existing house, the adjacent hillslope, and the accessory residential improvements (such as the fence and stairway) between the house and the roadway. If an open-trench method is proposed in this location; the contractor shall submit a proposed construction plan for project-related work in this area, demonstrating to the satisfaction of the City Engineering Department and Community Development Department that the specific construction technique proposed by the contractor shall fully protect the house and related improvement from damage related to project construction.*

Monitoring: This measure shall be made a condition of approval for any required project permit, and shall be incorporated into design documents prepared by the City for the project. The City Engineering Department or Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities if culturally significant resources are detected and judged to be at risk, pending the development of necessary alterations to the construction process.

Mitigation Measure 14-2.2: Relocate “Lorensen Ranch” Garage-Workshop.

Measure: *Project construction activities in the vicinity of the Lorensen Ranch garage-workshop structure, located directly adjacent to a private roadway near Meyers Avenue and Pine Hill Road (AP# 301-211-007), shall be conducted in such manner as to avoid adverse effects on this structure. If the final pipeline alignment cannot avoid this structure, then the garage-workshop shall be physically relocated, without damage, at least the minimum distance required to be outside of the project construction zone. Property owners shall be consulted as to the relocation of this structure and, as directed by City staff, the structure shall be moved a reasonable distance to the desired location on the property. The alternative location shall be chosen so as to provide long-term protection while maintaining the historical integrity of the Lorensen Ranch.*

Monitoring: This measure shall be made a condition of approval for any required project permit, and shall be incorporated into design documents prepared by the City for the project. The City Engineering Department or Community Development Department shall be empowered to direct the contractor to temporarily suspend construction activities if culturally significant resources are detected and judged to be at risk, pending the development of necessary alterations to the construction process.