

DEPARTMENT OF FISH AND GAME

CENTRAL COAST REGION

(707) 944-5520

Mailing address:

POST OFFICE BOX 47

YOUNTVILLE CALIFORNIA 94599

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7329 SILVERADO TRAIL

NAPA CALIFORNIA 94558



June 19, 2006

Notification Number: 1600-2006-0059-3

Ron Kiaaina / California Department of Transportation
Post Office Box 23660
Oakland, CA 95623-0660

1602 LAKE AND STREAMBED ALTERATION AGREEMENT

This agreement is issued by the Department of Fish and Game pursuant to Division 2, Chapter 6 of the California Fish and Game Code:

WHEREAS, the applicant Ron Kiaaina / California Department of Transportation, hereafter called the Operator, submitted a signed NOTIFICATION proposing to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of, or use material from the streambed or lake of the following water: various streams, located near State Route 84, in the County of Alameda, State of California; and

WHEREAS, the Department has determined that such operations may substantially adversely affect existing fish and wildlife resources including water quality, hydrology, aquatic or terrestrial plant or animal species; and

WHEREAS, the project has undergone the appropriate review under the California Environmental Quality Act; and

WHEREAS, the Operator shall undertake the project as proposed in the signed PROJECT DESCRIPTION and PROJECT CONDITIONS (attached). If the Operator changes the project from that described in the PROJECT DESCRIPTION and does not include the PROJECT CONDITIONS, this agreement is no longer valid; and

WHEREAS, the agreement shall expire on December 31, 2010; with the work to occur between May 1 and October 31; and

WHEREAS, nothing in this agreement authorizes the Operator to trespass on any land or property, nor does it relieve the Operator of the responsibility for compliance with applicable Federal, State, or local laws or ordinances. Placement, or removal, of any material below the level of ordinary high water may come under the jurisdiction of the U. S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act;

THEREFORE, the Operator may proceed with the project as described in the PROJECT DESCRIPTION and PROJECT CONDITIONS. A copy of this agreement, with attached PROJECT DESCRIPTION and PROJECT CONDITIONS, shall be provided to contractors and subcontractors and shall be in their possession at the work site.

Failure to comply with all conditions of this agreement may result in legal action.

This agreement is approved by:

A handwritten signature in black ink, appearing to read "R. W. Floerke".

Robert W. Floerke
Regional Manager
Central Coast Region

cc: Warden Garrett
Lieutenant Christensen

DEPARTMENT OF FISH AND GAMECENTRAL COAST REGION
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Pigeon Pass, Alameda CountyRon Kiaaina / California Department of Transportation
Post Office Box 23660
Oakland, CA 95623-0660**PROJECT DESCRIPTION and PROJECT CONDITIONS****Description**

The project is located southwest of Livermore on SR 84 in Alameda County beginning near the Ruby Hills Drive/Kalthoff and SR 84 intersection and continues west to Post Mile 23.0. The project is necessary to correct existing horizontal and vertical alignment deficiencies. The purpose of the project is to improve safety and traffic operations by realigning and adding truck climbing lanes through the Vallecitos Hills/Pigeon Pass area. Below is a description of each project identified by and described by Caltrans.

Project 1 (Water 1A)

This project affects an unnamed ephemeral creek (labeled as Water 1A on the maps) which runs parallel to State Route 84 (SR 84) on the south side. This water is a tributary of Arroyo del Valle. The drainage in this area is shallow and characterized by indistinct banks vegetated with nonnative annual grasses typical for the area. See the attached habitat description for annual grassland. The area is devoid of a woody riparian overstory.

Placement of fill for construction of the new alignment will result in permanent impacts totaling approximately 63 square feet (0.001 ac; 10 linear ft) and associated temporary impacts totaling approximately 528 sq. ft (0.01 ac).

Access to the location will be via the adjacent existing highway or by driving across the upland. No access roads within the streambed are planned.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs could include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, Caltrans proposes to reseed the temporarily disturbed area.

Project 2 (Wetland 1A)

This project affects a seasonal wetland (labeled as Wetland 1A on the maps), which is tributary to the Arroyo del Valle. In the past, check dams made of rock were placed within the ephemeral creek (Water 1A) at this location. This has created a bottleneck, allowing wetland characteristics to evolve within the creek. The wetland is heavily vegetated with cattails. The area is devoid of woody riparian overstory.

Placement of fill for construction of the new alignment will result in permanent impacts totaling approximately 7,866 sq ft (0.18 ac) and associated temporary impacts totaling approximately 1,159 sq ft (0.03 ac). Three natural bottom ponds will be constructed at the toe of slope of the new alignment from approximately station number 80+40 to 82+40 (see maps) to direct the upstream flow. A ditch will connect the three ponds. The ditches will be lined with rock slope protection (RSP) at the outfalls of each pond to slow water velocity. Construction of the pond and ditch complex, as opposed to a straight channel, will reduce velocity through the area.

Access to the location will be via the adjacent existing highway or by driving across the upland.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs could include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, Caltrans proposes to reseed the temporarily disturbed area, as well as the newly created ponds.

Project 3 (Water 1B)

This ephemeral drainage (labeled as Water 1B on the map) is located upstream of the Wetland 1A along the southern edge of SR 84, and is tributary to Arroyo del Valle. It is a heavily incised, oak riparian stream corridor with steep banks leading to the channel bed at the toe of slope of SR 84. This drainage is connected to the adjacent, upstream wetland 1C by a culvert that passes under a residential driveway.

Placement of fill for construction of the new alignment will result in permanent impacts totaling approximately 4,081 sq ft (0.09 ac; 895 linear ft) and associated temporary impacts totaling approximately 982 sq ft (0.02 ac). The temporary impacts include the installation of a temporary culvert which will provide access between the east and west sides of the creek. Construction activities will also result in 0.36 acre of temporary impacts, and 1.46 acre of permanent impacts to oak riparian habitat.

Access to the location will be via the adjacent existing highway, driveways, or by driving across the upland.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs could include, but are not limited to, use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, the temporary culvert will be removed and the ground recontoured to its pre-project condition. Caltrans proposes to reseed the temporarily disturbed area and to replant the riparian corridor areas.

Project 4 (Wetland 1B)

This is a 0.01 acre seasonal wetland, labeled as Wetland 1B on the map, within the Water 1 system. It forms at the inlet of a culvert that passes under SR 84 and can best be described as a vegetated channel. The channel is devoid of woody riparian overstory.

Placement of fill or construction of the new alignment will result in permanent impacts totaling approximately 55 sq ft (0.001 ac) and associated temporary impacts totaling approximately 13 sq ft (0.0003 ac). Access to the location will be via the adjacent existing highway.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs could include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, Caltrans proposes to reseed the temporarily disturbed area.

Project 5 (Wetland 1C)

This is a 0.67 acre seasonal wetland (labeled as Wetland 1C on the map) south of SR 84. This wetland is a combination of flow from Water 1C and the nearby hills. It can best be described as a combination of swale and wet meadow. There is a small area of oak riparian habitat associated with the west end of this wetland. The riparian habitat is part of the riparian corridor that runs along Water 1C described below.

Placement of fill for the construction of the new alignment and installation of a 48-inch culvert and a 12-inch culvert to facilitate drainage under the new alignment will result in permanent impacts to wetlands totaling approximately 18,297 sq ft (0.42 ac) and associated temporary impacts totaling approximately 4,150 sq ft (0.10 ac). Construction activities will also result in 0.12 acre of temporary impacts to riparian habitat.

Access to the location will be via the adjacent existing highway or a farm road.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, Caltrans proposes to restore the temporarily disturbed area.

Project 6 (Water 1C)

This heavily incised, ephemeral drainage (labeled as Water 1C on the map) receives flow from the bermed Wetland 1D via a spillway/culvert. This drainage, which has an associated dense oak

riparian corridor, discharges into the downstream Wetland 1C. It is a tributary of Arroyo del Valle.

There will be no impacts to the bed and bank of this drainage; however, there is the potential to temporarily impact 0.15 acre of the outer edge of the oak riparian habitat due to construction equipment and work activities associated with adjacent roadwork.

Access to the location will be through the adjacent upland areas. No access roads within the stream zone are planned.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, Caltrans proposes to restore the temporarily disturbed riparian area.

Wetland 1D

This 0.35 acre seasonal wetland (labeled as Wetland 1D on the map) is south of SR 84. It is fed by Water 1D and drained by Water 1C. A wet meadow-type wetland has formed where Water 1D has braided out in this area behind a man-made berm. This area will be avoided during the construction therefore there will be no impacts.

Project 7 (Water 1D)

This ephemeral drainage (labeled as Water 1D) is located upstream of Wetland 1D and flows parallel to SR 84. This segment of the Water 1 system receives drainage from the upstream Wetland 1E, is moderately incised and has a dense oak/willow riparian habitat. It is a tributary of Arroyo del Valle.

Placement of fill for construction of the new alignment will result in permanent impacts totaling approximately 5,952 sq ft (0.14 ac; 917 linear feet) and associated temporary impacts totaling approximately 718 sq ft (0.02 ac). Work activities will also result in 0.24 acre of temporary impacts and 1.18 acre of permanent impacts to riparian habitat. The creek channel will be realigned from its existing location to the north toe of the new slope from approximately station numbers 69+65 to 72+80. This new channel will have a combination of natural bottom and some rock protection in areas where the additional erosion protection is needed, with rock weirs placed at appropriate locations along the new channel to create seasonally ponded wetland areas to mitigate impacts to Wetlands 1C, 1D, and 1E.

Access to the location will be via the adjacent existing highway or upland areas. There are no access roads within the stream zone planned.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, Caltrans proposes to restore the temporarily disturbed waters and riparian areas using the wetland/waters and riparian species and the mitigation strategy proposed in the previously submitted Revegetation Plan. The recreated channel will, at minimum, be seeded with the wetland/waters species proposed in the submitted Revegetation Plan. If conditions are suitable to support riparian vegetation after construction, the area will also be augmented with riparian species proposed in the Revegetation Plan.

Project 8 (Wetland 1E)

This 0.12 acre seasonal wetland (labeled as Wetland 1E) is located above the origin of Water 1E in a low-lying area that slopes towards Water 1D. It receives water from sheet flow runoff from the adjacent hills and from a culvert under SR 84. Under heavy storm conditions, it has the potential to receive water from Wetland 1F. It is vegetated with wetland grasses and has no woody overstory.

This wetland will be completely filled by the construction project. Placement of fill for construction of the new alignment will result in permanent impacts totaling approximately 5,365 sq ft (0.12 ac).

Project 9 (Water 1E)

This drainage, labeled as Water 1E on the map, connects the headwaters Wetland 1F with all downstream jurisdictional features. It is a very shallow, indistinct drainage that has no associated riparian overstory and is vegetated only with nonnative annual grasses. It is a tributary of Arroyo del Valle.

This drainage will be completely filled by the construction project. Placement of fill necessary to construct the new alignment will result in permanent impacts totaling approximately 557 sq ft (0.01 ac; 277 linear ft). This drainage area will be recreated and vegetated as described in the Project 8, as the two projects are connected and will be similarly impacted.

Project 10 (Wetland 1F)

This large 1.2 acre seasonal wetland (labeled as Wetland 1F on the maps) forms in a low area immediately adjacent to the existing roadway on the east side of the Pigeon Pass saddle, and accepts roadway runoff and sheet flow from the surrounding uplands. Wet season observation, topography, and drainage patterns indicate that this system is not typically hydrologically connected to a jurisdictional water body, except possibly during heavy storm conditions, when it may overflow into Wetland 1E. The edges are populated with wetland plants such as *Eleocharis* sp., *Carex* sp., and *Juncus* sp. during the growing season with open water comprising the remaining inner portion. The area is devoid of a riparian overstory.

Placement of fill necessary to construct the new alignment will result in permanent impacts to wetlands totaling approximately 33,971 sq ft (0.78 ac) and associated temporary impacts totaling approximately 5,799 sq ft (0.13 ac).

Access to the location will be via the adjacent existing highway, driveway, or by driving across the upland.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction Caltrans proposes to reseed the temporarily disturbed area.

Project 11 (Wetland 2)

This 0.07 acre wetland (labeled as Wetland 2 on the map) is the result of a spring at the beginning of a seasonal drainage, at the top of a hill. A small plateau at the spring creates an area for water to saturate the ground, and sometimes pool, before it overflows down the hill during the wet season. The wetland is vegetated with *Juncus* sp., *Eleocharis* sp., *Cyperus* sp., and *Rumex* sp. This wetland will be completely filled by the new alignment. Placement of fill necessary to construct the new alignment and installation of a 750 mm (29.5 inch) culvert to facilitate drainage will result in permanent impacts to wetlands totaling approximately 3,162 sq ft (0.07 ac).

Project 12 (Wetland 3A)

This 0.06 acre seasonal wetland (labeled as Wetland 3A on the map) is partially within a creek bed and a backwater area of a creek (Water 2). It is sparsely vegetated with wetland plants such as *Rumex* sp., *Cyperus* sp., *Eleocharis* sp. and *Juncus* sp., but is devoid of a riparian overstory. This wetland will be partially filled by the new alignment, with a portion also being temporarily disturbed during construction. Placement of fill necessary to construct the new alignment and installation of a 28-inch culvert to facilitate drainage will result in permanent impacts to wetlands totaling approximately 2,323 sq ft (0.05 ac) and associated temporary impacts to wetlands totaling approximately 88 sq ft (0.002 ac).

Access to the location will be via the adjacent existing highway or by driving across the upland.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction Caltrans proposes to reseed the temporarily disturbed area. The submitted Revegetation Plan outlines the proposed mitigation strategy and identifies the wetland/waters species to be used.

Project 13 (Wetland 3B)

This 0.60 acre seasonal wetland (labeled as Wetland 3B on the map) accepts both roadway runoff and sheet flow from the adjacent hills. It is a combination of a wet meadow, man-made stock pond, and vegetated channel. It drains into a natural, ephemeral drainage (Water 2), which then drains into Wetland 3A. This wetland has a woody willow riparian overstory around its eastern

edge.

This wetland will be partially filled by the new alignment, with a portion also being temporarily disturbed during construction. Placement of fill for construction of the new alignment will result in permanent impacts to wetlands totaling approximately 10,071 sq ft (0.23 ac) and associated temporary impacts totaling approximately 1,595 sq ft (0.04 ac). Construction activities will also result in .04 acre of temporary and .19 acre of permanent impacts to riparian habitat. Access to the location will be by driving across the adjacent upland.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction Caltrans proposes to restore the temporarily disturbed wetland and riparian areas using the wetland/waters and riparian species and the mitigation strategy proposed in the submitted Revegetation Plan. The Revegetation Plan also proposes to create riparian habitat along the edges of the wetland where it is presently lacking.

Project 14 (Water 2)

This water, labeled as Water 2 on the map, includes the heavily incised ephemeral drainage which flows from Wetland 3B into Wetland 3A. This drainage system eventually flows into the San Antonio Reservoir. It does not have an associated riparian corridor.

Placement of fill necessary to construct the new alignment will result in permanent impacts totaling approximately 447 sq ft (0.01 ac; 106 linear ft). This drainage will be completely filled by the project.

Project 15 (Water 3)

This water (labeled as Water 3 on the map) includes the ephemeral creek, which runs perpendicular to SR 84 and terminates in the San Antonio Reservoir. It is heavily incised and the associated oak riparian habitat includes approximately 4-5 oaks growing at the top of the banks. There are two impact areas along this drainage. Impact Area 1 involves the temporary placement of fill necessary to accommodate the relocation of a Pacific Gas & Electric pipeline. This relocation will result in temporary impacts totaling approximately 58 sq ft (0.001 ac). Impact Area 2 includes partially filling the drainage for the new alignment. This activity will result in permanent impacts totaling approximately 3,759 sq ft (0.09 ac; 570 linear ft) and associated temporary impacts totaling approximately 755 sq ft (0.02 ac). Construction activities will also result in 0.17 acre of permanent impacts to riparian habitat.

Access to the location will be by driving across the adjacent upland or along a farm road. Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction Caltrans proposes to restore the temporarily disturbed drainage areas.

Project 16 (Wetland 4)

This 0.16 acre seasonal wetland (labeled as Wetland 4 on the map) can best be described as a heavily incised, vegetated channel. It is located on both sides of SR 84. It receives water from the surrounding hills northwest of SR 84, travels under the highway through a culvert and transitions into Water 3. This wetland has an associated oak riparian corridor along the top of its banks.

This wetland will be partially filled by the new alignment, with a portion also being temporarily disturbed during construction. Placement of fill for the construction of the new alignment will result in permanent impacts to wetlands totaling approximately 141 sq ft (0.003 ac) and associated temporary impacts totaling approximately 693 sq ft (0.01 ac). Construction activities will also result in .05 acre of temporary impacts to riparian habitat.

Access to the location will be by the existing highway or a farm road.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes.

After construction, Caltrans proposes to restore the temporarily disturbed wetland and oak riparian areas using the wetland/waters and riparian species and the mitigation strategy proposed in the submitted Revegetation Plan. The Revegetation Plan also proposes to create riparian habitat along the edges of the wetland where it is presently lacking.

Project 17 (Wetlands 5A-5D)

These seasonal wetlands (0.20 ac, 0.30 ac, 0.01 ac, and 0.04 ac, respectively) are found along drainages that originate outside of the project area, north of SR 84 (5A and B), with 5C extending into the project area north of SR 84, then traveling under the highway through a culvert, and emerging again as 5D, outside the construction project area, south of SR 84. They are best described as a channel vegetated with wetland plants such as *Juncus* sp and *Carex* sp. They do not have an associated riparian corridor.

Portions of Wetland 5B will be temporarily disturbed during construction due to roadwork. The roadwork will temporarily impact 1,909 sq ft (0.04 ac).

Access to the location will be via the existing highway.

Erosion control and soil stabilization measures will be implemented in accordance with Caltrans' Best Management Practices (BMP). These BMPs shall include, but are not limited to, the use of silt fences, fiber rolls, and the application of fiber matrix on unfinished slopes. After construction Caltrans proposes to restore the temporarily disturbed wetland area.

Water 4

This ephemeral drainage, which runs parallel to SR 84 on the north side, connects two wetlands,

which are outside of the construction project area. This system eventually drains into the San Antonio Reservoir. This water will not be impacted by the project.

Wetlands 6A-6C

These seasonal wetlands (0.01 ac, 0.001 ac, and 0.03 ac, respectively) originate along a wetland drainage (6A) north of SR 84, and travel under the highway through a culvert, emerging again as Wetlands 6B and 6C, south of SR 84. This wetland drainage is tributary to the San Antonio Reservoir, located about 1 mile downstream. This system is described by Caltrans as a swale-like drainage. This area will not be impacted by the project.

Total Impacts

Total impacts related to the proposed project include 2.21 acres of waters of the State including 1.87 acres of fresh seasonal wetlands and 2,775 linear feet (0.34 acres) of freshwater seasonal creeks. Project activities will temporarily disturb 0.42 acres of jurisdictional waters of the U.S comprised of 0.35 acres of freshwater seasonal wetlands, and 440 linear feet (0.07 acres) of freshwater seasonal creeks. The project will also permanently impact 3.0 acres of permanent riparian habitat and 0.96 acres of temporary impacts.

Listed Species

Portions of the waters on the Project site serve as habitat for several special status species, the California red-legged frog (*Rana aurora draytonii*; CRLF), California tiger salamander (*Ambystoma californiense*; CTS) and vernal pool fairy shrimp (*Branchinecta lyuchi*, hereinafter VPFS).

Conditions

1. Work within the stream/riparian corridor shall be confined to the period May 1 to October 31. Revegetation work is not confined to this time period.
2. If the Operator needs more time to complete the authorized activity, the work period may be extended on a day-to-day basis by Marcia Grefsrud at mgrefsrud@dfg.ca.gov, or the Yountville office at (707) 944-5520.
3. Work within the stream bed shall be restricted to periods of no stream flow and dry weather. Construction activities shall be timed with awareness of precipitation forecasts and likely increases in stream flow. Construction activities shall cease and all reasonable erosion control measures shall be implemented prior to the onset of precipitation. Construction activities halted due to precipitation may resume when precipitation ceases and the 72-hour weather forecast from the National Weather Service indicates a 20% or less chance of precipitation, provided no work occurs in the stream bed if water is flowing.
4. If a construction phase may cause the introduction of sediments into the stream, no phase of the project shall be started in May or in October or any year, unless all work for that phase and all associated erosion control measures are completed prior to the onset of precipitation. If a construction phase may cause the introduction of sediments into the

stream, no phase of the project shall be started unless all equipment and materials are removed from the channel at least 12 hours prior to the onset of precipitation and all associated erosion control measures are in place prior to the onset of precipitation. After any storm event, the Operator shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sedimentation problems and take corrective action as needed. Seventy-two-hour weather forecasts from the National Weather Service shall be consulted prior to start up of any phase of the project that may result in sediment runoff to the stream, and construction plans made to meet this condition.

5. To protect and maintain riparian wetland systems and to ensure a "No Net Loss" in wildlife value or acreage or wetlands, the Operator shall submit to the Department a Mitigation Plan by December 31, 2006, which amounts to a 3:1 ratio for the acreage of bed and bank permanently impacted by the construction (0.34 x 3=1.02 acres), a 1:1 ratio for the acreage of bed and bank temporarily impacted by the construction (0.07), a 3:1 ratio for the acreage of wetlands permanently impacted (1.87x3=5.61 acres), a 1:1 ratio for the acreage of wetlands temporarily impacted (0.35 acres), and a 3:1 ratio for the acreage of riparian habitat permanently impacted (3x3=9 acres), and 1:1 ratio for the acreage of riparian habitat temporarily impacted by the project activities (0.96 acres). The mitigation can include a combination of on-site creation or restoration, off-site restoration or creation, or purchase and donation of wetlands/riparian land to an Alameda County non-profit organization along with funding and a restoration plan for the site to be protected in perpetuity. The Mitigation Plan and location of the mitigation must be approved in writing by the Department of Fish and Game prior to the start of construction. The mitigation area must be as close to the work site as is possible, preferably in the same drainage. Restoration of the stream bank and riparian zone shall include site preparation/earth movement, revegetation with native locally occurring riparian species. Work on the waterway shall not begin until the Department has approved the off-site mitigation location and Mitigation Plan or receipt of the donation has been provided.
6. The Final Mitigation Plan shall describe all both off site and on-site mitigation, design and construction plans, and survival performance criteria based on conditions #8-11.
7. Mitigation implementation shall be completed by January 31, 2008. On site temporary impacts shall be restored immediately following that portion of construction. If mitigation is not complete during the required time period, additional mitigation will be required for the additional temporal loss of habitat. The additional mitigation shall increase at a 1:5 ratio for each year the mitigation is not completed.
8. All trees and shrubs installed have an 80% survival performance criterion during the 3-year plant establishment period. In Year 5, two years after the completion of plant establishment, survival should not be lower than 70% or all failed plantings on the mitigation site should be replanted with live plantings and monitored an additional 3 years to achieve at least 80% total survival. In Year 5, species richness will be the same as the as-built condition. If a particular species suffers 100% mortality at any point in the

monitoring, it will be replaced in totality, unless a more appropriate substitution is recommended and approved by the Department based on specific environmental factors of the site conditions.

9. All disturbed slopes around and on the banks shall be seeded, mulched and fertilized with a blend of a minimum of three local grass species from the following list: California brome: 6# per acre, Purple needle grass (*Nasella pulchra*): 3# per acre, California wildflower mix or shrub seed: 5# per acre. If hydroseeding, extra tackifier and mulch shall be added. Erosion control seeding shall be at a rate of at least 25 pounds per acre, pure live seed. Monofilament shall not be used.
10. For erosion control cover there shall be a minimum of 80% cover with no bare areas larger than 3 feet x 3 feet.
11. If the survival and/or cover requirements are not meeting these goals, the Operator is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for five years after planting. An annual status report on the mitigation shall be provided to the Department of Fish and Game by December 31 of each year. This report shall include the survival, percent cover, and height of both tree and shrub species. The number by species of plants replaced, an overview of the revegetation effort, and the method used to assess these parameters shall also be included. Photos from designated photo stations shall be included.
12. If construction, grading, or other project-related activities are scheduled during the nesting season of protected raptors and migratory birds (February 1 to July 31), a focused survey for active nest of such birds shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) within 15 days prior to the beginning to project-related activities. The results of the survey shall be faxed to (707)944-5595. Refer to Notification Number 1600-2006-0059-3 when submitting the survey to the Department. If nesting birds are found a 50-foot radius buffer should be established around the nest, a 300-foot radius buffer in the case of hawks and owls. The area should be fenced and avoided until the young have fledged, as determined by a qualified biologist. If a lapse in project-related work of 15 days or longer occurs, another focused survey and if required, consultation with the Department and United States Fish and Wildlife Service, will be required before project work can be reinitiated.
13. The project site has been identified as an area that is potentially inhabited by a listed species, the California red-legged frog, California tiger salamander, and San Joaquin kit fox and by a species of special concern, the Western burrowing owl. The Operator is required to comply with all applicable state and federal laws, including the California and Federal Endangered Species Acts. This agreement does not authorize the take of any state or federally listed species. Liability for any take or incidental take of such listed

species remains the responsibility of the Operator for the duration of the project. Any unauthorized take of such listed species may result in prosecution and nullification of the agreement.

14. Surveys and relocation shall be done in accordance with the Biological Opinion 1-1-04-F-0115 dated February 28, 2005.
15. The operator shall hire a biologist, with all necessary State and Federal permits, to relocate all fish/amphibians within the work site prior to dewatering. Captured fish/amphibians shall be moved to the nearest appropriate site on the stream. This condition does not allow for the take or disturbance of any state or federally listed species, or state listed species of special concern. A record shall be maintained of all fish/amphibians captured and moved, and the record shall be provided to the Department (c/o 1600 program, Post Office Box 47, Yountville, California 94599) with appropriate Streambed Alteration Notification number.
16. Qualified biological monitors shall be present on a continuous basis for all activities that could result in the take of a listed or protected species. The biological monitors shall ensure compliance with the measures provided in this Agreement. The biologists shall be given the authority to stop any work that may result in the take of listed or protected species. The Department shall be notified within 24 hours by email at mgregsrud@dfg.ca.gov if the biologist exercises this authority.
17. Work must be performed in isolation from the flowing stream. If there is any flow when the work is done, the operator shall construct coffer dams upstream and downstream of the excavation site and divert all flow from upstream of the upstream dam to downstream of the downstream dam. The coffer dams may be constructed with clean river gravel or sand bags, and may be sealed with sheet plastic. Sand bags and any sheet plastic shall be removed from the stream upon project completion. Clean river gravel may be left in the stream, but the coffer dams must be breached to return the stream flow to its natural channel.
18. When any dam (any artificial obstruction) is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain fish life below the dam pursuant to Fish and Game Code Section 5937.
19. Flow diversions shall be done in a manner that shall prevent pollution and/or siltation and which shall provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life. Said flows shall be sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion. Normal flow shall be restored to the affected stream immediately upon completion of work at that location.
20. The temporary stream crossings shall be constructed using a temporary bridge with a gravel approach ramp or temporary culverts backfilled with clean round river cobble and

topped with a gravel road base.

21. Storm drains lines/culverts shall be adequately sized to carry peak storm flows for the drainage to one outfall structure. The storm drain lines/culverts and the outfall structure shall be properly aligned within the stream and otherwise engineered, installed and maintained, to assure resistance to washout, and erosion of the stream bed, stream banks and/or fill. Water velocity shall be dissipated at the outfall, to reduce erosion.
22. The bottom of permanent culverts shall be placed at or below stream grade.
23. Prior to removal of existing culverts they shall be inspected for wildlife. If any wildlife is encountered during the course of the maintenance, said wildlife shall be allowed to leave the maintenance area unharmed, and shall be flushed, hazed, or herded in a safe direction away from the project site. This condition does not allow for the take or disturbance of any state or federally listed species, or state listed species of special concern.
24. Streambank areas receiving rock slope protection (rip rap) shall be back-filled with appropriate topsoil. The topsoil fill should be placed to fill the voids in the rock slope protection and provide a substrate for revegetation efforts where appropriate.
25. Rip rap will be set below grade and keyed into the bank. Rip rap rock shall be of the proper size and weight to withstand high flows.
26. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channel and banks, avoiding areas of concentrated ground squirrel burrows suitable for use by CTS or burrowing owls. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the stream shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles must be moved away from the stream prior to refueling and lubrication.
27. The construction area shall be flagged to identify the limits of the agreed work area to prevent damage to adjacent habitat.
28. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations.
29. Silt control measures shall be utilized throughout all phases of the project where silt and/or earthen fill threaten to enter Waters of the State. Silt control structures shall be monitored for effectiveness and shall be repaired or replaced as needed. Build up of soil behind the fence shall be removed promptly and any breaches or undermined areas repaired at once.
30. A copy of this agreement must be provided to the contractor and all subcontractors who work within the stream zone and must be in their possession at the work site.

31. Building materials and/or construction equipment shall not be stockpiled or stored where they could be washed into the water or where they will cover aquatic or riparian vegetation.
32. Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter a stream or lake, by Operator or any party working under contract, or with the permission of the Operator, shall be removed immediately.
33. The contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.
34. Department personnel or its agents may inspect the work site at any time.
35. The Operator is liable for compliance with the terms of this Agreement, including violations committed by the contractors and/or subcontractors. The Department reserves the right to suspend construction activity described in this Agreement if the Department determines any of the following has occurred:
 - A). Failure to comply with any of the conditions of this Agreement
 - B). Information provided in support of the Agreement is determined by the Department to be inaccurate.
 - C). Information becomes available to the Department that was not known when preparing the original conditions of this Agreement (including, but not limited to, the occurrence of State or federally listed species in the area or risk to resources not previously observed)
 - D). The project as described in the Agreement has changed or conditions affecting fish and wildlife resources change.

Any violation of the terms of this Agreement may result in the project being stopped, a citation being issued, or charges being filed with the District Attorney. Contractors and subcontractors may also be liable for violating the conditions of this agreement.

Amendments and Extension to Expiration Date

The Operator shall notify the Department before any modifications are made in the project plans submitted to the Department. Project modifications may require an amendment or a new notification. To modify the project, a written request for an amendment must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599). An amendment requires a fee. The Fee Schedule can be obtained at www.dfg.ca.gov/1600 or by phone at (707) 944-5520. Amendments to the original Agreement are issued at the discretion of the Department.

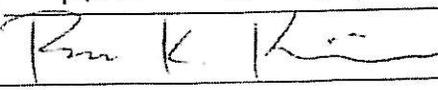
To renew the Agreement beyond the expiration date, a written request for an extension must be submitted to the Department (1600 Program, Post Office Box 47, Yountville, California 94599) for consideration at least 30 days before the Agreement expiration date. An extension requires a fee. Extensions of the original Agreement are issued at the discretion of the Department.

This Agreement is transferable to subsequent owners of the project property by requesting an amendment.

Please note that you may not proceed with construction until your proposed project has undergone CEQA review and the Department signs the Agreement.

I, the undersigned, state that the above is the final description of the project I am submitting to the Department for CEQA review, leading to an Agreement, and agree to implement the conditions above required by the Department as part of that project. I will not proceed with this project until the Department signs the Agreement. I also understand that the CEQA review may result in the addition of measures to the project to avoid, minimize, or compensate for significant environmental impacts:

Operator's name (print): RON K. KIAAINA

Operator's signature: 

Signed the 13th day of JUNE, 2006